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*SHARING CITIES. GOVERNANCE MODELS AND
COLLABORATIVE PRACTICES IN
THE URBAN CONTEXTS*

Ph.D. Thesis
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ABSTRACT

The dissertation describes and investigates the collaborative practices and the governance model adopted by cities that choose the sharing and collaborative economy as frontier of experimentation to try to solve some of the main urban challenges in economic, environmental and social terms. The widespread dissemination of ICTs, among the other effects, is generating solutions more open, transparent and participatory, based on sharing and collaboration and voted to savings, money redistribution and socialization. More and more cities are wondering about the potential of the emerging new service models, reflecting on their organizational and cultural weight and on how to integrate them into existing regulatory frameworks without limit or stifle their development.

The work starts from an in-depth analysis of the concept of sharing economy, given its innovative nature that makes difficult to find a clearly, established and shared definition. The research highlights its benefits, potentialities, weaknesses and limits trying to offer a better understanding of the phenomenon and an overview of its intrinsic features, what, who and how to share in the city. The second part is dedicated to the analysis of the city context that is better able to embrace this type of alternative economy. The focus is on the smart and slow nature of the so-called *sharing cities*, on its governance model and on the role of the Public Administrations, extensively discussed. The third part presents two cases of cities that in a well-shaped way are supporting sharing economy services and platforms and are promoting themselves as sharing cities: Milan in Italy and Seoul in South Korea. These cities adopted two different approaches: in Milan the reflection has emerged spontaneously from the bottom and has found in the Public Administration an attentive listener and a strong supporter; in Seoul the initial push came from the Mayor and his administration, that launched a wave of innovation that is generating a real ecosystem of sharing. Even if the cities are different for culture, features and dimensions, the same rhetoric, labels, epistemic communities and strategies can be detected.

The research was conducted adopting specific methodological tools: the analysis of the institutional and scientific materials and of other sources on the topic; the adoption of the participant observation's approach in the study contexts; the administration of a questionnaire and the tool of the semi-structure interview to the key players of 'Milan Sharing City' and 'Sharing City Seoul'. All these elements allowed retracing the origin of the process, its general framework, current outcomes and future possibilities.

The dissertation aims to reconstruct the phenomenon in its constituent factors, given its recent insurgence, the momentum that is gaining and the lack of a mature scientific reflection on the topic. The ICTs penetration, the civil society engagement, the openness of the government, together with the emphasis on social innovation and the growing attention for the social economy, seem to be key ingredients to build a collaborative and sharing city. Local solutions adopted in the two case studies show the importance of the above ingredients and the absence of a "one-fit-all" solution. Instead, it is possible to build customized solutions, starting from the key ingredients, because the phenomenon allows to renegotiate with the local communities alternative governance practices more suitable for the context, and overcome established practices but less efficient.

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INTRODUCTION

Cities are on the move. Everyone can feel the tension building. Urban dynamism can be grabbed on the streets, in the gardens, in the squares, and in the urban variations revealing within the very structure of the city, thanks to the new experiments that groups of citizens are thinking and creating. Cities are by definition places of collaboration, sharing, exchange. They are multipliers of experiences, able to transform in a flexible and resilient way to the mutated economic, environmental, and social conditions. And people are their fuel. Thanks to the people, to the citizens, and their bonds, the cities have grown, prospered, and changed through time. Today, due to the economic crisis, and thanks to the mass diffusion of new technologies, we are making these bonds even bigger, and creating new opportunities. In troubled times, people start questioning again on the models that move the system in which they live in, and about the possibilities of overcoming, in resilient and proactive way, the difficulties established by a capitalistic model, perhaps going through a crisis, or perhaps stronger than ever. They reflect on how extract value from what they possess without ruining their surrounding environment even further, and hopefully saving some money. They recognize one more time the power of sharing and collaboration, using them as a fuel for change and grow, as well as the values along with that. As citizens of this time, they face a life permeated by technology, which amplifies the intrinsic potentials of new collaborative impulses, and provides constantly connections.

The collapse of the main brokering mechanism, the rise of new online services and platforms, and the discovery of new “peer to peer” modalities of consumptions and production have begun a market transformation, as well as economic processes, unthinkable merely ten years ago. Sensors reveal, map, monitor, and process hundreds, millions of information which, if shared, allow to rethink the action modalities, the interventions, and the very policies of hundreds of subjects in human existence. Furthermore, the flow of information is multichannel, mutual, and constant; people, objects, and data are all connected in the “Internet of Things”. A virtual space where it is possible to access resources that would otherwise be wasted; where it is possible to communicate and create new relations that have the potential to affect even the life people lead offline. There are always more people, in fact, who, strengthened by these new motivations, and by the new efficient, fast and immediate tools of communication, meet with others to collaborate and share their time, resources, money, and competence, creating “*new service models (cooperation services) but also new forms of reciprocity and public management (Social Street)*” (Mainieri, 2014a). It’s the citizens, therefore, who promote and activate new services, from the bottom, putting together goods and recourses, trying to save or to earn some money, to reduce the environmental impact and to feed new nets of sociality.

New platforms arise to exchange children clothes but also utensils, furniture, competences, self-productions and artisanal products. Online it is possible to learn a new language just by exchanging your time for time spent conversing and learning. Houses can be swapped; spare rooms or apartments can be rented to the advantage of some journeyer in search of something different. You can access a net of local guides, authorized citizens willing to show off the culture of their land. You can open your own house to strangers, organizing dinners in the name of social eating, or start a shared cooking program. You can access services of peer-to-peer landing, stimulate collaborative insurances, or start a campaign of crowdfunding to financially support an idea or project, and use complementary currency for trading and purchasing. You can access a free open course or participate in online lessons. You can rent out a car or get a complete stranger to give you a lift. And there’s more: you can make sure that cars or other ways of transport are always free to everyone, by using special applications that let you know where the nearest free vehicle is, and where to leave it. You can get to know

people from your side of town and organize local events to make your town a nicer place to live in, improving its social liveliness, and promoting local activities. You can organize urban allotments shared by the community, or conceive shared productions that later come together in FabLab and in Makerspace. You can find spaces to give to the community, for work, for production, for consumption. You can give to people anything that you do not need any more, or offer your resources and time for personal gain. The list could go on and on, confirming the spirit of initiative and the innovative turmoil, which follows this period of time, defined by many as one of transition. A transition towards a model of development and consumption more sustainable, in which relations are more valued by objects, and in which, or so several authors claim, the economy of sharing might become easier. Sharing and collaboration are in fact two words that are possible to put into practice, and which, although their impacts are often hard to predict, would allow us to act against the three main areas currently in difficulty: economic development, environmental changes, and social bonds.

However the news, the opportunities, the new practices and services of production and consumption, to grow and develop inside the urban puzzle, need to face regulatory, management and cultural challenges, for which a change of institutional paradigm is necessary. New services sometimes drive disruptive innovations, and clash with the classical normative modalities of the traditional market (Johal and Zon, 2015), requiring a thorough change in the laws of business, city planning, taxation, insurance and job laws, territory usage, as well as the internal logics of the Public Administration, to work. The latter becomes a key player to decree the success of the new practices, which are diffusing and multiplying in the urban world, and it is asked that it reacts in an open, transparent and innovative way through an inclusive approach, having an open and not defensive state of mind, to make sure that, instead of dying, the innovations will bloom. It is also asked that it leaves its past role of “guard dog” behind, and the following one of services dispenser typical of the Welfare State, to get close to the far better state known as the Partner State. A state that embraces the principle of horizontal subsidiarity, foster the creation of value by its citizens, letting the innovations to break in and believing in the specific capabilities of each citizen. A clear sign of a new social class emerging from the era of the social economy, one which has been defined the Nudging class (Iaione, 2015), made by active citizens, social innovators, creative makers, service designers, co-workers and co-production experts, urban designers and professionals of sharing and collaboration services. The collaboration in this class, the Public Administration, the no-profit organizations, the businesses and the university, otherwise known as the five souls of the polycentric or collaborative governance (*ibidem*), can liberate and show the full potential of the shared urban goods, cultural and environmental, encouraging the development of a sustainable paradigm, voted to commons and sharing.

The role of the Public Administration, could be, can be, that of the mediator, enabler, connector, so as to let all these realities confront each other and express their own innovative potential, for the benefit of the entire community. The Public Administration, if it grasps the intrinsic value of the practices of sharing and collaboration, can foster their development (or declare their end), and it can become a hub of innovation connecting all the existing practices, by knowing them, following them, monitoring them, and benefitting the development of collaborative ideas. The power of this state has changed through time, and the collaboration between the five souls of the collaborative governance is today fundamental to develop plans coherent with times and new emerging necessities. It is a collaboration which literature and experts deem necessary, if willing to rethink cities in a sharing dimension, creating new ecosystem devoted to collaboration. As April Rinne, one of the biggest sharing economy experts in the world, reminds us, “*A shared city lets its residents put competence and goods together in a sure, efficient way – from spaces to cars, from competence to utility – to create stronger, better connected communities*”. According to several authors, cities should rely

upon one vision that should be systematical, explicit, and clear, to lead development of this phenomenon in their own territory, and to facilitate communities to achieve this aim. Lots of today's cities know the full potential of the sharing economy, and are starting to profoundly reflect on how best to approach this phenomenon, and how to get the best from this new scenario; some are doing this in a more structured and institutional way, welcoming the people dynamism, whilst other are at the beginning of their reflection and are comparing their ideas and plans with those of other cities and administrations so as to work out their strategies. At the same time, experts, wary of the difficulty that could arise from administrations welcoming change in paradigm, are trying to offer practical solutions. The same social innovators are trying to work out how to turn this into a fluid, natural transition, and formulating hypothesis on guidelines and general guidance that will benefit, not only the local administration, but also emerging social enterprises, traditional business, citizens, and the civil society. Authors such as Aygeman (2014), emphasize the fact that, for most cities, to reflect on sharing, means to think of common goods, and, consequently, of explicit politic matters such as shared public sphere, and the processes of democratic participation. Sharing, from the author's point of view, is tightly bound with a working democracy, and, in this case, a vibrant and dynamic sharing economy can respond to the political apathy that symbolizes the modern consumptive communities. If we strengthen our collaborative values and sense of community, instead of worrying about the singularity, which defines our current culture and identity, our participation, might even be reflected onto the political aspect of things. A public shared environment is essential to express participation in democracy, and for the development of a healthy society. This also provides the necessary space for the popular debate and public reasoning, and is able to influence even politic decisions (Parsons, 2014).

The present work wonders precisely about processes affecting cities in terms of enhancement of the new mechanisms and practices of consumption and collective production. The paradigmatic change necessary to optimize the presence of a new sharing economy is not a simple process from an institutional point of view and would need the search for an ideal empirical model. Also, seeing as the new practices break market tradition, of production and consumption, the innovation they bring hasn't been thoroughly studied or researched yet on an academic level, in terms of effects, impacts and implications. The evolution of this phenomenon continues rapidly, and the debate evolves with the same rapidity, needing continuous revisions of the questions that emerge. This evolution in the sharing economy and a desirable modelling have not been theorized, tested, or applied yet, although interesting experiments are beginning to emerge, such as the Bologna case with the Regulation on Collaboration between Citizens and the City for the Care and Regeneration of Urban Commons.

With an approach focused on the detection of every nuance of such an heterogeneous and fluid panorama, the present work tries to make clear the concept of sharing/collaborative economy to better understand the object of the debate, and the possible replies of government and Public Administrations to its spread, so that it can actually be a sustainable solution in the current economic, environmental and relational crisis. The dissertation seeks to rebuild the framework of the initiatives that the Public Administrations are taking around the sharing economy comparing two exemplifying and emblematic cases of city: Milan and Seoul. Two cities that are taking up the challenge posed by the sharing economy, defining and applying well-framed models of support and development; two cities that are adopting different approaches, one that embrace the bottom incitements of the city and one that solicit from the top the emergence of a sharing culture, in order to reach the same goal: offer to the citizens a more inclusive, sustainable and communal place to live.

The dissertation is divided in three parts.

The first part “*The Rise of The Sharing Economy*” seeks to provide an overview, as much as possible complete, on the meaning of *sharing economy* in order to favor the understanding of the matter of concern. Chapter 1 “*Sharing Economy and Sharing Practices*” proposes a review of the main definitions given to the concept by some of the major experts on the topic. It describes the different declinations and forms of expression that ‘sharing’ can assume, letting emerge a kind of continuum of practices that go from genuine forms of collaboration and sharing, based on people active involvement and on the strengthen of the sense of community, to more commercial evolutions and reinterpretations of the sharing values inside the market. Given the rapid evolution of the phenomenon, its changing features, and the variety of forms of expressions, and in the absence of a univocal and clear definition, an effort is made in order to distinguish among the different terms that almost interchangeably are used talking about sharing (peer-to-peer economy, gig economy, collaborative economy, collaborative consumption...). The inventory of definitions allows to detect the main features of the phenomenon and to identify its foremost aspects, in order to drive the reader in a holistic comprehension of the phenomenon itself. “*Beyond definition. Why, who, what is shared*”, chapter 2, tries to understand the roots of its birth in the urban context pinpointing the drivers that have favored its emergence and spread. In addition, this section outlines the features of the sharing economy in terms of objects (mode of delivery and distribution of goods and services and trade agents), subjects (general profile of the so-called sharers), and contents of the sharing (what can be shared in a city). The part 1 closes with chapter 3, “*Sharing Yes, Sharing No. All that glitters ain't gold!*” underlining the critical sides of the sharing economy and the related risks, since often the phenomenon has been proposed as “magical” solution to reply to all the economic, environmental, and social problems without consider that in its evolution it is also conveying risks of different nature.

The second part, “*New Challenges in the Digital Era*”, starts proposing the urban setting in which the *sharing* is developing, and in “*Different Idea of City. The Path Toward the Sharing City*”, chapter 4, the concept of “Smart City” is introduced as natural background of development and spread of the sharing economy. The evolution, over time, of this conception led to the identification of another approach to the city, that of the “Human City” in which the smart and slow dimensions seems to become overlapping and more attention is given to people. The importance assumed by the ‘human flourishing’ inside the cities drove to a further vision of the nowadays city, that of the “Progressive City” and the chapter ends identifying the “Sharing City” as the most actual and realistic interpretation of the potentialities of today’s cities. The last frontier of the reasoning about the city is the concept of co-city, briefly presented to reason in terms of further development of the idea of city that shares.

This new idea of city poses new challenges in terms of governance and management, since the disrupting phenomenon of the sharing economy, to be well integrated in the society, requires prompt replies at the new questions and doubts that it is opening. The chapter 5, “*Governance Issues*” reminds to this necessity to find the best form of governance able to fuel and support the identification of new solutions to old problems. It begins retracing the origin of the *governance*’s concept and its main definitions in the official literature, underling the differences among *governance and government*, the features of the *urban governance* and the *multilevel governance*, to end up with a focus on a new interpretation, the idea of *collaborative governance* as stated in the main literature on the topic. Since the new solutions that the sharing economy is fueling in the society make almost all these definitions not completely suitable, new definitions and forms of governance are required. Forms more in line with the societal changes and with the spreading of new energies that go in the direction of collaboration and sharing. The chapter presents the concept of *collaborative governance of the commons*, or polycentric governance. It is related to the idea of the emergence of a Partner

State and on the necessity to create a system in which many different actors (the so-called five souls of the collaborative governance) collaborate for a real switch of paradigm that goes in the direction of collaboration and sharing. Using some examples taken from the Italian experimentation ground, the last part of the chapter identifies the main ingredients of this new form of governance.

Reflecting on new models of governance, and having identified the Public Authorities as one of its key actors for the blooming of the sharing economy practices and services and for its regulation, chapter 6, “*The Role of The Public Administration*”, focuses on the challenges that government have to face at this time. It opens presenting a brief catalogue of some international experiences in terms of support to the sharing economy and development of services in the city, and then proposes an analysis of the main problems that Public Administration (PA) encounters, to end up with some of the main indications, documents, guidelines and tools that are springing up to help local authorities and policymakers.

The third and last part “*Case Studies and Research Work*”, offers an empirical analysis in support of the theoretical part. It begins with the explanation of the methodological approach (chapter 7), composed by two types of analysis. A qualitative main part based first of all on the analysis of the scientific and institutional materials. Given the novelty of the phenomenon, and the absence of a mature scientific reflection many references come from the non-academic experts studying and following the phenomenon, and from their online magazines and portals, such as Shareable.net, Collaborative Labs, LabGov, Collaboriamo.org, Ouishare.net, Fastcoexist.com, etc. In addition, the participant’s observation has been used too, and semi-structured interviews have been administrated to the key actors of the ‘sharing city projects’ implemented in the two cities at institutional level. The research has also a quantitative part, based on the drafting, administration, and analysis of a questionnaire on the propensity, use, and knowledge of the sharing economy practices. Then the two case studies are described in depth. The first case presented is the City of Seoul, and chapter 8 proposes: an overview on the general features of the city in terms of urban context; a description on its *smart* equipment looking at the project Smart Seoul 2015; and a portrayal of how from this setting has been then developed the “Sharing City Seoul” project. Describing the project, the chapter presents the beginning of the reflection, the creation of a specific vision and the core of the activities implemented. The same scheme is followed for the city of Milan (chapter 9): a brief introduction frames the city in terms of urban context, a second part contextualize the Milano Smart City project offering a description of its development and features, and a third part presents the project “Milano Sharing City”. This last one is described from its birth conditions and then developed in terms of vision and activities.

Chapter 10 enters in the core of the analysis drawing up the model of governance turned on in the cities and the corresponding scenarios, highlighting their features and recognizing the elements that go in the direction of the so-called *collaborative* or *polycentric governance*. The analysis is led based on institutional and scientific materials and of other sources on the topic, and enriched by the information collected thanks to the participant’s observation and during the interviews. Talks directly with the main key actors that launched the reasoning in the cities, or that are involved in the projects, allowed a better understanding of the ongoing processes and of the city’s vision. Chapter 11 presents the questionnaire created in order to detect the citizen’s propensity to use the sharing economy services and platforms, the actual adoption of the lifestyle related to sharing and collaboration, and the general knowledge about the sharing city activities. This chapter allows detecting if the efforts of the city in supporting sharing economy services and practices get answer in the citizenship. The dissertation ends summarizing the main output gained through the analysis, in terms of elements that make a city sharing, ingredients that create the right environment for an actual collaborative governance, and efforts that Public Administrations are implementing (and could implement)

to favor a real switch of paradigm in the direction of collaboration and sharing. All the considerations open to the idea of a co-city, a new label in the age of collaboration. The very last pages let emerge new queries, arisen from the present work, that wonder in which extent the sharing economy and the sharing city will not become another new meaningless labels but will be able to really promote a new sensitivity and activate actual forms of collaboration, co-operation, co-management, co-design, co-planning and co-creation, involving all the citizens in a perspective of social inclusion and social innovation.

PART 1. THE RISE OF THE SHARING ECONOMY

1 SHARING ECONOMY & SHARING PRACTICES

The current global context is characterized by strong urbanization and industrialization, a widespread economic crisis, a world population constantly growing, especially in urban areas, and a growing emphasis on the issue of environmental sustainability with related search for alternative sources. In this context, new resilient and adaptive answers, almost unimaginable a few years ago, are spreading: new practices, more open, transparent and participatory, based on sharing and collaboration; new service models that enable people to exchange and share goods, space and skills, promoting lifestyles that prefer saving, redistribution of money and socialization. Jeremy Rifkin (2014) even talks of a historic transition: from ownership to access, from purchase to reuse, a passage that sees ownership of property replaced by the experience of using that good. So to listen music and watch movies you can use the peer-to-peer, to go on holiday you can rely on local people or use house exchange, to dress children its possible exchange clothes according to age and season, and to travel you can use car-sharing or carpooling. The exchange and barter possibilities are many and of all kinds, from drills to bicycles, not only of material objects but also of time and expertise, skills and knowledge; it's possible to share workspaces (co-working), to use the Web for the purpose of raising funds and finance projects (crowd-funding) and to brainstorm creative resources to produce new ideas (crowd-sourcing). Nowadays sharing practices are more and more becoming a dominant trend and, although this is not a real news, but almost the “*continuation by other means, the network, of ancient communities of proximity practices*”, as noted by Aldo Bonomi (2015)¹, the concept of sharing economy is spreading and we talk more and more about the many experimentations that are labeled with this term.

For The Guardian (2013)² it is “*a sustainable alternative at a time of energy crisis, with a financial system that benefits few at the expense of many, and with a looming environmental degradation*”; the Economist talks of a possible alternative answer to the economic crisis, and I would add relational; and the Time of one of the 10 ideas that will change the world³. Yes, because the benefits of these new patterns of consumption and production, emphasized by media and experts from around the world, are environmental (reduction of waste and environmental impact), economic (savings, earnings, facilitation and possibility to create enterprises), and social (sharing of values, socialization, community building) and the turnover generated by new digital sharing platforms is around 26 billion dollars, with a perspective of growth around 335 billion dollars by 2025 (PWC, 2014b).

The following pages, albeit without claiming to be complete or wanting to cover all the existing aspects, wishes to be a first introduction to the phenomenon. I will try to focus on the meaning behind the term Sharing Economy, subjects and objects involved in the practices of exchange and sharing, through a review of the main categorizations and definitions given at the phenomenon.

¹ The article of Aldo Bonomi tells about the new identity of the city of Milan and its initiatives related to innovation, inclusion and sharing economy. It is available on the Il Sole24ore website at the address: <http://www.ilsole24ore.com/art/impresa-e-territori/2015-03-01/la-nuova-milano-old-ansaldo-all-ansaldo-20-081246.shtml?uuid=AB1npV2C>.

² The article of The Guardian, published in August 2013, proposes the sharing economy as a new way of living. It is available on the official website at the address: <http://www.theguardian.com/technology/2013/aug/04/internet-technology-fon-taskrabbit-blablacar>.

³ The article of the Time proposes the sharing economy as one of the ten ideas that will change the word. It is available at the online address: <http://content.time.com/time/specials/packages/0,28757,2059521,00.html>.

1.1 What is exactly the Sharing Economy? Definition' Problems

The phenomenon, started in the USA around 2008, has had a veritable explosion in 2013 also in Europe and Italy. But what is exactly meant by the term *sharing economy*? It was what I asked myself after a while reading the first articles appearing on the web. I soon discovered that, as often happen with the key words of the social innovation, a clearly, established and shared definition was missing. And the more time went on, the more heated and passionate became the debate about defining what services *sharing economy* includes and its real meaning in terms of applications and impacts. The vague definition and the wide spectrum of possibilities embraced by the term *sharing economy*, make assessing and understanding its true potential difficult. Without a clear and shared definition, there is a risk that under the big umbrella of *sharing economy* can be found practices, procedures and approaches of a vast variety and very different from each other.

Sharing economy is of course a great innovation, but an agreement on its direction is yet to come, its meaning and extension are still to be defined and agreed upon. As underlined by Rachel Botsman, considered a guru of the sharing economy, “many terms are being used to describe a broad swath of startups and models that in some way use digital technologies to directly match service and goods providers with customers, bypassing traditional middlemen”⁴ (Botsman, 2015).

The absence of a precise definition generates confusion for the way the term is used and for the possible perspectives, not just for experts, but also for governments, that are inevitably perplexed and in doubt between promotion, regulation and prohibition. Large companies are left in doubt between considering it an opportunity or a threat and citizens wonder whether or not it is a good practice for them. Terms like *sharing economy*, *collaborative consumption*, *peer to peer* merge the concept of Sharing Economy, which brings together practices and approaches very different and distant from each other, from open source to Social Street, through the current giants like AirBnb or Uber. The label, in fact, is used today to identify a wide range of activities and organizations based on the idea of building “a socio-economic ecosystem...around the sharing of human and physical assets. It includes the shared creation, production, distribution, trade and consumption of goods and services by different people and organizations”⁵ (Botsman, 2013).

Generally, the conventional interpretation of the sharing economy is at present focused on its financial and commercial aspects, with continuous news reports proclaiming its rapid growing market size and potential as a “co-commerce revolution” (Parson, 2014).

⁴ In this article, Rachel Botsman wonders on what is and what is not the sharing economy, as the Oxford English Dictionary has recently introduced the term but “sharing economy” is frequently incorrectly applied to ideas where there is an efficient model of matching supply with demand, but zero sharing and collaboration. In her opinion the *Uberfication* of everything is bringing with it confusion about what is true sharing. The article is available at the address: <http://www.fastcoexist.com/3046119/defining-the-sharing-economy-what-is-collaborative-consumption-and-what-isnt>.

⁵ In 2013 Rachel Botsman tries for the first time to clarify the concept of sharing economy underlying the differences among the different terms used as they have the same meaning. The article published by Fast Co.Exist is available at the address: <http://www.fastcoexist.com/3022028/the-sharing-economy-lacks-a-shared-definition>.

In Italian, as underlined by the Committee of “Sharexpo – Milano città condivisa per Expo 2015⁶”, given the Italian linguistic richness, *Sharing Economy* can be translated with two terms stating its main manifestations:

- *Collaboration*, an intermediate form between reciprocity and exchange: more people gather in a network with the aim of creating a project from which everyone will benefit even individually; it is a concept that works on network logics.
- *Sharing*, an intermediate form between reciprocity and redistribution: a group of people put in common the resources for the production of goods or services useful for the entire community; it is a concept that works on community logics.

However the first term used to describe the dynamics that the sharing economy carries on was *collaborative consumption*, appeared in 1978 in an article published by the journal “American Behavioral Scientist” and signed by Loe Spaeth and Marcus Felson, from the University of Illinois. The authors define the actions of collaborative consumption as “*events in which one or will more persons consume economic goods or services in the process of engaging in joint activities with one or blackberries others*”⁷ (Felson, Spaeth, 1978 p.614). Spaeth and Felson contextualize the concept in the behavioral science frame and, more specifically, they explain the consumption through the ecological human theory of the community structure. Human ecology is therefore defined as “*interdependence among people, other species and the physical environment, especially as people seek to gain sustenance from their environment*” (ivi, p.615). According to this theory, technology and organization are key elements to support the population in adapting to its environment, while the community is seen as a structure of relationships through which a population ensures its daily needs at the local level. The authors use this framework transposing it to the consumer theory, and they argue that the collaborative consumption reflects the symbiotic interdependencies of the population, analyzable both in terms of human coordination and in terms of human competition (Rasia, 2013). Therefore, the consumer behavior not only expresses his individual inclination but also the collective efforts putting in common activities with other people, and collaborative consumption implies not only the allocation of resources but also the expression of personal tendencies that are translated into actions (*ibidem*).

Nevertheless Rachel Botsman a leading entrepreneurial thinker on the potential of collaboration and sharing through digital technologies to change our lives, is the first to attempt to clarify what the sharing economy actually is in order to prevent further confusion over the different terms in general use. She notes how the term is often muddled with other new ideas: “*definitions are hard, especially when they are trying to capture new ideas never expressed before. As Bertrand Russell famously once said: «Everything is vague to a degree you do not realize until you have tried to make it precise».* When I first began writing about this space nobody knew how big it might get. Its growth and expanding nature are, for the most part, a good thing but we need clear definitions that will enable us to move forward with a common understanding” (Botsman, 2013). She is the author, with Roo Rogers, of the book “What’s mine is Yours”, published in 2010 and became a must-read on the topic, even if only after the book she publicly clarified the term. She considers the sharing economy as a new complementary economic model able to give a concrete and practical answer to the challenges

⁶ The initiative ShareExpo will be better explained in the chapter 9. The official web site, that collects many useful information is <http://www.sharexpo.it> and the official report is available at the address: <http://www.sharexpo.it/il-documento/>.

⁷ The 1978 article is titled “Community Structure and Collaborative Consumption: A Routine Activity”. Acts of collaborative consumption such as drinking or eating together with friends and using a washing machine for the family are considered by the authors as routine activities.

created by the world economic crises, not just a temporary reaction. A new model able to foster forms of consumption more aware, based on the reuse rather than purchase and access rather than ownership. A veritable structural rethinking of the relationship between economy and society, based on the creation of social ties at the base of the economic exchange. The authors' definition declaims:

“An economic model based on sharing underutilized assets from spaces to skills to stuff for monetary or non-monetary benefits. It is currently largely talked about in relation to P2P marketplaces but equal opportunity lies in the B2C models” (ibidem).

She underlines that terms such as *Collaborative Economy*, *Collaborative Consumption*, *Peer Economy* e *Sharing Economy* are often use interchangeably, as synonymous, even if they diverge by meaning, and she offers a description of the features of each one, briefly presented here below.

The **COLLABORATIVE ECONOMY** is the big set that encompasses all: *“an economic system of decentralized networks and marketplaces that unlocks the value of underused assets by matching needs and haves, in ways that bypass traditional middlemen...an economy based on distributed networks made up of interconnected communities and individuals, as opposed to centralized institutions, which transforms the way in which we produce, consume, finance and we learn” (ibidem)*. Production, consumption, financing conditions, and education are the four areas that the collaborative economy hosts in his universe.

- The **Production** (collaborative production) occurs between groups or networks of people who work in the *design* (collaborative design) of a product or service (eg. Quirky⁸), in the *production*, contributing to the creation of a project/product (eg. OpenStreetMap⁹) and in the *distribution* through collaborative networks (eg. Yammer¹⁰);
- The **Consumption** (collaborative consumption) concerns the maximum utilization of resources through models of efficient redistribution and shared access (see below);
- The **Finance** (collaborative finance) refers to financing services, loan and investment services offered outside of traditional financial institutions. See for example: the crowdfunding through which groups of people contribute directly to finance a specific project (Crowdfunder¹¹, Schoolraising¹²); the peer-to-peer lending: people with money to invest directly connected with people who are trying borrowed funds (Zopa¹³); complementary currencies, alternatives to the current legal and state-run currencies that allow an alternative way to measure and recognize value (Economy of Hours¹⁴,

⁸ Quirky is a crowdsourcing platform (www.quirky.com).

⁹ OpenStreetMap is an openly licensed map of the world being created by volunteers using local knowledge, GPS tracks and donated sources.

¹⁰ Yammer enables companies to create their own private social network, requiring a company email address to access the community.

¹¹ Crowdfunder is the leading equity crowdfunding platform, based in Los Angeles, CA. Its mission is: “empower thousands of entrepreneurs to grow high-impact ventures” through access to capital and education (www.crowdfunder.com).

¹² An italian crowdfunding service targeted at young students and schools, in order to help them in realizing projects otherwise not possible since the fundings cuts (schoolraising.it).

¹³ Zopa is the UK's leading peer-to-peer lending service (www.zopa.com).

¹⁴ Economy of Hours (Echo) is a marketplace without the money, in which members buy and sell their skills, services and resources, using a currency called Echoes. The exchange rate is 1 hour = 1 Echo (economyofhours.com).

TimeRepublik¹⁵); and the collaborative insurances created by groups of people coming together to build their own team insurance (Bought by Many¹⁶). In general these are forms of peer-to-peer banking and new investment models driven by people (crowd) and able to decentralize finance itself;

- The **Education** (collaborative learning) refers to the new models of open education and peer-to-peer learning that make education more democratic, allowing everyone to access and share knowledge to learn together. They are divided into: open courses and free educational materials (FuturLearn¹⁷); sharing of expertise (skillsharing) offered by the owner (Skilio¹⁸, Coursera¹⁹) and crowd-sources knowledge, as in the case of Wikipedia, where people aggregate publicly their knowledge for the resolution of collective questions.

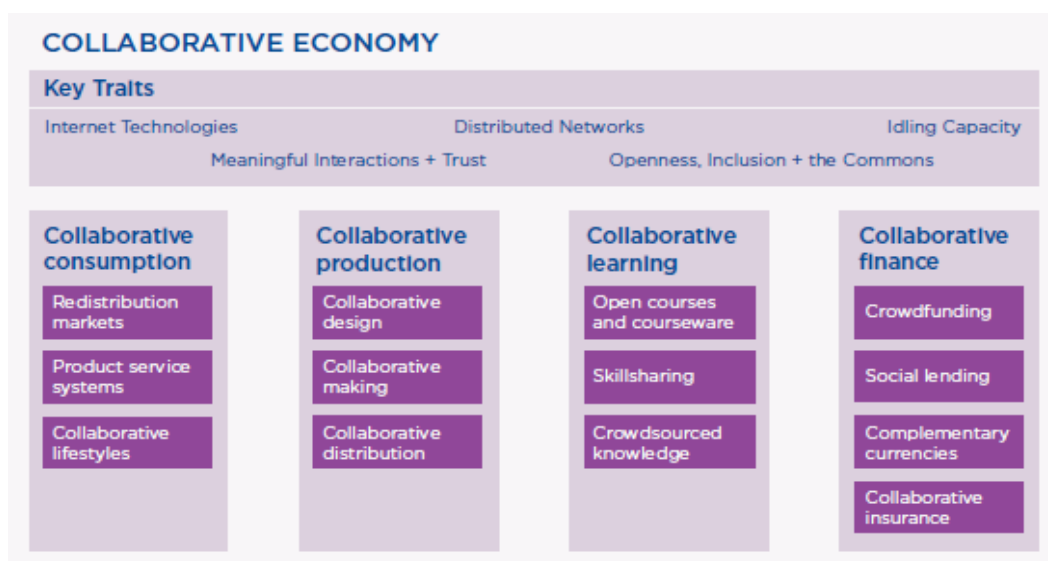


Figure 1 The four components of the collaborative economy in Botsman’s definition. Source: www.collaborativeconsumption.com

The **SHARING ECONOMY** is “an economic system based on sharing underused assets or services, for free or for a fee, directly from individuals” (*ibidem*). It is a specific subset of the collaborative economy, where underutilized resources, the so-called *idling capacity* – ranging from physical spaces to vocational and professional skills – are shared by some users for a monetary or symbolic benefit, allowing a more efficient use. An example is LYFT, a platform of ride-sharing on demand that bring together nonprofessional drivers (students, unemployed...) with people looking for a ride, allowing small gains.

The **PEER ECONOMY** identify markets person-to-person based on mutual trust (between peers precisely) that facilitate the sharing and the direct exchange of goods and services. It is the pure peer-to-peer part of the sharing economy, but it also includes the craft markets (like

¹⁵ TimeRepublik is a global time banks in which exchange time for talents (timerepublik.com).

¹⁶ Bought By Many is a free, members-only service that helps in finding insurance for things out of the ordinary, since everybody is different and has different needs (boughtbymany.com).

¹⁷ FutureLearn is a platform to access many different type of educational and training courses from leading universities and cultural institutions from around the world (www.futurelearn.com).

¹⁸ Skilio is a peer to peer skill sharing marketplace, where members share their knowledge and expertise with others on any subject - be that philosophy, bread making or Start Up advice (www.skilio.com).

¹⁹ Coursera is an education company partnering with universities and organizations worldwide to offer free massive open online courses (MOOCs) (www.coursera.org).

Etsy²⁰) that bring directly together the manufacturers/makers of goods with buyers and therefore also includes a slice of the Collaborative Production sector (marketplaces dedicated to the DIY). We are in the middle of the horizontal production, as defined by Benkler(2007): a new economic model of production in which the creative energy of a large number of people (networks of unknown people), is coordinated (thanks to Internet and digital platforms) without the traditional hierarchical organization, but around peer-to-peer business models (see below for the explanation of horizontal production).

Botsman recently specify also the **ON-DEMAND SERVICES** as “platforms that directly match customer needs with providers to immediately deliver goods and services” (Botsman, 2015).

And to close there is the **COLLABORATIVE CONSUMPTION**, one of the key elements of the collaborative economy, defined as “an economic model based on sharing, swapping, trading, or renting products and services, enabling access over ownership. It is reinventing not just what we consume but how we consume” (Botsman, 2013). It is a sort of reinvention of traditional market behaviors (renting, lending, swapping, sharing, bartering, gifting) through technology, taking place in ways and on a scale not possible before the Internet. It has three distinct systems:

1. **Product Service System – PSS:** *Pay to access the benefit of a product versus needing to own it outright.* It implies a mental predisposition to the concept of access in substitution to that of holding/ownership. People pay to get the benefit of a product without owning that product. A good example is the ride-sharing, where people share the places on their cars with those who need that service for their mobility. This system extends the life cycle of the product and at the same time has a positive environmental impact because a product individually owned (with use often restricted) is replaced with a shared service to maximize their utility. Users also benefit by saving on purchasing costs and maintenance. There is also another benefit in switching from ownership to use, an increased possibility to satisfy our needs (linked to job or free time or travels or food or children). This system is putting a strain on the traditional industries, based on the models of individual private property. Some businesses, the wisest, are trying to offer new services to answer to the new demand, reconsidering their business model. An example is BMW’s “Drive Now”, a car sharing service that offers a viable alternative to owning a car. Members can use their driving license (with embedded electronic chip) to access a car when and where they need and pay for the use by the minute.
2. **Redistribution markets:** *Unwanted or underused goods redistributed.* It allows the redistribution of products underused or unwanted from where they are not needed to any place or to any person who needs them. These markets have always existed but the current technology and social networks are fueling this type of collaborative consumption, increasing the scale of its manifestation. The exchange can take place for free (Freecycle²¹, Kashless²², in Italy Barattopoli²³, Permute²⁴), through points

²⁰ Etsy is a peer-to-peer (P2P) e-commerce website focused on handmade or vintage items and supplies, as well as unique factory-manufactured items (definition from Wikipedia, <https://en.wikipedia.org/wiki/Etsy>).

²¹ The Freecycle Network is a grassroots and entirely nonprofit movement of people who are giving (and getting) stuff for free in their own towns. It's all about reuse and keeping good stuff out of landfills. Each local group is moderated by local volunteers. Membership is free. Information from freecycle.org.

²² Kashless is an online marketplace to find and redistribute used items to local communities for free. (www.kashless.org).

²³ Barattopoli is a community dedicated to barter, possibly without the use of money. (www.barattopoli.com).

²⁴ Permute.it is a free announcements site where all users can exchange goods, objects and services freely.

(Barterquest²⁵, in Italy Reoose²⁶, CoseInutili²⁷), in return for money (eBay²⁸, in Italy LocLoc²⁹) or the market is a mix of various systems (Gumtree³⁰, Craig list³¹). Goods can be of any kind (accessories, books, clothes, games, etc.) and can be exchanged with similar stuff (SwapStyle³²) or of similar value (Swap, SwapSimple, SwapCycle, ReadItSwapIt³³). Often the exchanges take place between strangers, sometimes in markets where people know each other (Share Some Sugar³⁴, NeighborGoods³⁵). Generally, a market redistribution encourages the recycling/reuse and resale of old items that are not thrown away but put back on the market, reducing waste and consumption. Redistribution, according to Botsman, is the fifth 'R' - reduce, recycle, reuse, repair and redistribute - and it is increasingly seen as a form of sustainable trade. It challenges the traditional relationship between the producer, retailer and consumer, causing disturbance to the capitalistic doctrines of the “buy more” and the “buy new” (Botsman, 2013). An example is the company thredUP that buys unwanted consignment-quality kids and women clothing and then resells it online, paying the supplier 40% of the resale value.

3. **Collaborative Lifestyles:** *Non-product assets such as space, skills and money are exchanged and traded in new ways.* Not only tangible goods but also intangible resources. Exchanges take place mostly at the local level and include systems for shared workspaces (The Cube London³⁶, in Italy Cowo³⁷), products (ThingLoop³⁸), books (Green Books Club³⁹ in Italy), time and tasks (Southwark Circle⁴⁰), gardens (Landshare⁴¹, Edinburg Garden Share⁴²), capacity (Brooklyn Skillshare⁴³, Coursera),

²⁵ Barterquest.com: swap goods, services, and real estate; trade for a car, swap a timeshare or apartment, exchange for design services, massage, or dentist.

²⁶ Reoose.com is the first free eco-store for exchanging and re-using, based on credits.

²⁷ CoseInutili is a platform of asynchronous online barter, exchange, and reuse, it is based on a credit system (1 credit=1euro). At the registration each new member receives 30 credits as bonus to start (www.coseinutili.it).

²⁸ eBay is an online auction and e-commerce marketplace, probably the most famous in the world, that enables people and businesses to buy and sell a wide variety of goods and services (ebay.com).

²⁹ Locloc.it is the first Italian portal dedicated to the sharing of goods between individuals. It allows everyone, from consumers to professionals, to rent or rent out any type of object (www.locloc.it).

³⁰ GumTree is an online classified ads and community site that provides users with a platform to find and advertise rooms, flats, and houses (www.gumtree.co.za).

³¹ Craigslist is a classified advertisements website for jobs, personals, for sale and wanted items, services, résumés and discussion forums (www.craigslist.org).

³² SwapStyle.com is the oldest and most well-known of clothing swap sites.

³³ Swap, SwapSimple, SwapCycle, and ReadItSwapIt are all online swapping communities.

³⁴ Share Some Sugar aims to strengthen communities by enabling people to share the stuff that they already own and borrow the stuff that they need (see the interview to the founder on Collaborative Consumption website at the address: http://www.collaborativeconsumption.com/2010/09/01/keara_schwartz_founder_of_share_some_sugar/).

³⁵ NeighborGoods is a community where share stuff saving money and resources and connecting neighbors in meaningful ways (<http://neighborgoods.net/>).

³⁶ The Cube London is a coworking space with meeting rooms in Shoreditch East London (thecubelondon.com).

³⁷ Cowo is an Italian coworking chain. (www.coworkingproject.com).

³⁸ Thingloop is a service that enables people to share their physical possessions easily within their social network (www.thingloop.com).

³⁹ Green Books Club is a network designed for students, parents and schools in order to encourage the exchange of school books used without intermediaries (www.greenbooksclub.com).

⁴⁰ Southwark Circle, a local social network for over-50s (now probably closed).

⁴¹ Landshare brings together people who have a passion for home-grown food, connecting those who have land to share with those who need land for cultivating food. Since its launch through River Cottage in 2009 it has grown into a thriving community of more than 55,000 growers, sharers and helpers. <http://www.landshare.net>.

⁴² Edinburgh Garden Partners (EGP) is a charity established to develop garden sharing in Edinburgh. It matches garden owners who are unable to manage or enjoy their gardens, with local volunteer gardeners who want

food (Neighborhood Fruit⁴⁴) and even space for parking (ParkShare⁴⁵, in Italy Spaeky⁴⁶). Thanks to the Internet, collaborative lifestyles are spreading globally. The focus of trade are not products but interactions between people, therefore requires a high level of confidence with the result of generating a myriad of relationships and a strong social connectivity.

The plurality of terms and definitions provided by the author can destabilize, and perhaps create more confusion, since Botsman tries, in a meticulous way, to catch all the nuances of very similar practices. In any case, all these nuances gain strength from the new technologies that are making possible the development of collaborative consumption in other physical areas of daily life in which the same principles and collaborative behaviors apply. The collaboration, although declinable in many forms, reflects the values of openness, community, accessibility, sustainability, and collaboration, which derive directly from the digital culture. Often technology is the differentiator that gives new form to such behaviors and practices, making these solutions more accessible and exciting, technology is an enabler. Botsman with Rogers, in their book, stress the idea that cooperation in the collaborative consumption does not occur at the expense of individualism, but rather creates an economic system in which people can share resources without being deprived of their personal freedom and without sacrificing their lifestyle. *“That the Internet is driven by altruism it’s an axiom. It’s not true. It’s driven by an enlightened self-interest. People don’t contribute because they are kind or good, but because they have their reasons to do so. Generosity is not was driven our community. What drives the community is what people want for themselves and if the system allows to make for themselves and for others at the same time they do so, since they want to belong to something, they want to be recognized and they want to have an impact⁴⁷”* (Anderson, 2010 in Botsman and Roger, 2010).

In the vision of the two authors, collaborative consumption should not be considered anti-business or anti consumption, what changes is only the way in which business and consumption are made. In addition, the emergence and spread of the phenomenon show that if there is a system that facilitates sharing, reuse and participation, the society will adopt it. It is simply the system to be changed to meet the needs and desires of the consumer’s demand in a more sustainable and attractive way. Even if the new consumers are driven by the traditional motivations of *homo economicus* (rationality and self-interest, such as saving money and time), the system converts them into results that have a positive impact both at social, environmental and economic level. This system also has an overall impact on the consumer behavior with consequences potentially able to promote sustainability not only in the consumption choices and methods, but also, and especially, at the enterprise level as sustainability becomes *“not only an opportunity of competitive advantage but also a responsibility that characterizes their way of being in their socio-economic background”* (Mio, 2001 p.28).

Talking about sustainability is interesting to report what is stated in “What’s Mine is Yours” (Botsman, Rogers, 2010 p.73-74): across the three systems, Product Service System,

space to grow their own food and have no garden or allotment. Produce is shared between the garden partners (see www.edinburghgardenpartners.org.uk).

⁴³ Brooklyn Skillshare is a community-based, community-led, & community-building learning events organized and taught by Brooklyn residents (brooklynskillshare.org).

⁴⁴ Neighborhood Fruit helps to find and share fruit locally (neighborhoodfruit.com).

⁴⁵ ParkShare is an online community for sharing parking spaces (www.parkshare.net).

⁴⁶ Sparky is an Italian community that offers an alternative circuit of parking at low cost (www.sparky.club).

⁴⁷ Botsman and Roger report a piece of the interview of C. Anderson by Wired. Interview retrieved on www.wired.it (30 November 2010).

Redistribution Market and Collaborative Lifestyle, “*motivation range from saving money to making money, from convenience to meeting friends, from saving space to saving time, from feeling a part of a community to ‘doing the right thing’*. Sustainability is often an unintended consequence of Collaborative Consumption”. The starting or driving motivation for a company/consumer may not be about ‘being green’, but consequences might be. As an example, Botsman remembers the announcement of eBay at the Earth Day 2008: “*We never set out to be a green business, we realized it’s intrinsic*”. An unexpected and positive consequence based on the fact that sustainability and community are inherent and inseparable part of the collaborative consumption, not an add-on. Only when consumers and company are both motivated to change their behaviors a real and meaningful progress happens in terms of sustainability. The power of collaborative consumption to change behavior is well shown by the experiment “*Low-Car Diet Challenge*”⁴⁸, a marketing campaign by Zipcar (the world largest car sharing service). “*Zipcar members can reserve a car twenty-four hours a day, seven days a week on the Internet, by using an iPhone app, or by phone for periods as short as one hour in any of the forty-nine US cities it operates in*”. On 15 July 2009, 250 participants from thirteen cities around the world (some of them car addicts) undertook to not using their car for a month and replace it by public transport, bike or just walk (except in case of emergency). The survey conducted after the challenge showed that living without car had a positive impact on pocket money, on bodies and on communities. +98% in their use of public transportation, -66% of miles travelled by their own cars, +93% of miles they walked and +132% of miles they biked. And the 43% of participant even lost weight. But the most relevant result was that 61% decided to continue to live without car and 31% consider the same commitment. The meaning is that in only one month an alternative mobility can become a habit, without considering that when you try a service of collaborative consumption also other behaviors gradually start to change.

All the seen practices have some elements in common (Pais, 2013a):

- The first one is the *sharing*, the common use of a resource that allow the maximization of the resource itself; it is different from the traditional forms of reciprocity, redistribution and exchange.
- The second is the *peer-to-peer relation*: the sharing happens between people (or organizations) at horizontal level and out of professional logic, and the traditional borders between founder, producer and consumer disappear.
- The third is the presence of a *technological platform* that supports digital relations and disrupt geographical distance giving instead new importance to the social distance. The trust is conveyed through forms of digital reputation.

The authors underline that, in addition to these common elements, as emerged from the previous description, the experience of sharing differs along some specific axes.

- *Forms of sharing*: in addition to sharing in the strict sense, there are also the bartering, defined as private barter (swap) or between companies, with a view to direct or indirect reciprocity, and the crowding, when more people contribute to the creation of a good or a service, through creative (crowdsourcing) or financial (crowdfunding) resources.
- *Object of sharing*: physical assets (means of transport, from bicycle to car, to boats and trucks but also clothing, accessories, telephones etc.) or digital products (books,

⁴⁸ The original article “Zipcar Rolls Out National Low-Car Diet”, by Zipcar press release (July 21, 2009) is available at the address: <http://green.autoblog.com/2009/08/25/zipcars-low-car-diet-results-savey-money-lose-weight>.

movies, songs, shows), spaces (homes and workplaces/coworking) but also time, expertise, ideas and money.

- *Time of sharing*: shared use can be synchronous (for example I share my house with another person) or delayed (I leave my house temporarily to another person).
- *The property of sharing*: is the most controversial criterion, the shared good is always of its owner (for example if I offer hospitality to a stranger), it change ownership (I barter my bag with a pair of earrings) or it be owned by a third party in the peer network (such as car companies and Public Administrations that offer car sharing services).
- *The value* of goods and services can be given in cash or by credit/complementary currencies or even be part of a gift relation (as in couchsurfing). The price may take into account factors often excluded from the logic of exchange, as the polluting impact of an underused object.

The description offered by Botsman and Rogers and the further clarification of Botsman, elucidates some aspects of the sharing economy. However, many other authors attempted to give their own definition of what is the sharing economy and tried to explain what is happening today in the economy. Here below a short review presents a comprehensive picture of this phenomenon. What is emerged is that, in a way or in another, all the definitions are pretty similar, identifying the same relevant aspects and elements.

The really first appearance of a *sharing economy* definition is that of Lawrence Lessig, an American academic, attorney and political activist, released in 2008 in “*Remix: Making Art and Commerce Thrive in the Hybrid Economy*”. Lessig classifies the economic system in three categories: commercial economy, sharing economy and hybrid economy. The commercial economy is based on ownership, for this reason it can be considered the contrary of the sharing economy. Lessig looks at the Yochai Benkler’s definition: “*The economy wherein money or price is the key of daily exchange*”. In this sense money or price, approach the system according to the demand and supply and the price is the major source and incentive of information for source allocation. Sharing economy instead can be accessed and defined by non-price-based social relations that become the criteria of resource distribution and incentive.

Russel Belk (2007), an academic professor from the Schulic School of Business, has written a lot on how we share and what it means. He defines sharing “*an alternative to the private ownership that is emphasized in both marketplace exchange and gift giving. In sharing, two or more people may enjoy the benefits (or costs) that flow from possessing a thing... Sharing, as used here, includes voluntary lending, pooling and allocation of resources, and authorized use of public property, but not contractual renting, leasing, or unauthorized use of property by theft or trespass. We can share not only places and things, but also people and animals (to the extent they are ours to share), as well as our ideas, values, and time.... [it is] the act and process of distributing what is ours to others for their use as well as the act and process of receiving something from others for our use. The receipt of shared goods may be for an indefinite or prescribed period of time. And our share may be for our exclusive use or for use by us as well as others*” (Belk, 2007 p127). Belk believes that there are things that one can share without losing them, like a song, a joke, a story, our bodies, things we put on our web sites... (ivi, p132) and he also observes whilst in the traditional economic activities there aren’t feelings of commitment, they are promoted in sharing economy: “*Even though notions of customer relationship management might have it otherwise, in economic theory commodity transactions are balanced with no lingering indebtedness and no residual feelings of friendship. ... If we conceive of a continuum*

involving these constructs, commodity exchange lies at one end and sharing at the other, with gift giving somewhere in the middle”. (ivi, p127).

Ray Algar (2007)⁴⁹, a popular Strategic Business Analyst, connects the term *sharing economy* to the concept of platform of collaboration in the frame of the leisure industry (in particular related to airlines and hotels) speaking about collective purchases: “*Consumers collaborate on-line to exchange goods and services through web sites such as Ebay and Gumtree, share hospitality experience through Trip Advisor (five million reviews and rising) and pool their collective purchasing power*”. For Algar collaboration between consumers is a sort of strategy to obtain discounts and subsidy, and today it is strongly facilitated by the greater access and sharing of information allowed by the new IT platforms: “[...] *what happens when pricing insight becomes accessible and consumers begin to share knowledge? Welcome to the world of collaborative consumption*” (ivi, 72).

Benita Matofska, founder of the global movement “The People Who Share”⁵⁰, describes it as a socio economic system based on the sharing of material and immaterial resources not used by the owner – goods, services, information and skills – with a monetary or non-monetary purpose. It is a system that therefore foster the optimization of resources (access versus ownership, reuse versus purchase), a P2P relation (peer mediation fails and there is no distinction between founder, producer, consumer and citizen active) and it is based on the presence of a technology platform to support digital relationships, able to convey trust through forms of digital reputation.

Michel Bauwens, founder of the P2P Foundation⁵¹ uses the term Sharing Economy as a synonymous of Collaborative Consumption and considers it one of the new way of production based on forms of collaborative and distributed organization definable “horizontal productions” (Bauwens and Kostakis, 2014) (commons-based peer production or social production). This term has been coined by Yochai Benkler⁵², Professor at Harvard Law School, to describe a new economic model of production in which the creative energy of a large number of people is coordinated (usually through the Internet) in major and significant projects mostly without the traditional hierarchical organization and a centralized scheme (Benkler, 2006). In this sense, networks of strangers interact in ways highly “mediatized” (through media) and coordinate their interactions adhering to a set of shared values to look after their project/problem. The peer production and the sharing practices would then recover very deep and ancient human abilities, from which the globalized technology strengthens the skill to create, manages in sustainable way and reproduces a pool of shared resources. In particular, he believes that “*we are moving from an economy of scale, suitable for a historical period in which abounded energy and raw materials, to an economy of purpose, based on the principle of sharing knowledge. [...] This economy is based on the spread of open source practices in the domains of culture, information technology (free software), design (cars based on open source projects, object-based motherboards Arduino). The practices of collaborative consumption - more commonly known as Sharing Economy - consist of the*

⁴⁹ Ray Algar is a Strategic Business Analyst known all over in the worlds working in the wellness industry since 25 years.

⁵⁰ “The People Who Share” is a global movement focused on the sharing economy. TH official web site is <http://www.thepeoplewhoshare.com/blog/what-is-the-sharing-economy/>.

⁵¹ P2P Foundation is an international organization focused on studying, researching, documenting and promoting peer to peer practices in a very broad sense. The founder is Michel Bauwens and the web site of the foundation propose useful information and analysis to better understand and track the development of sharing economy and peer to peer practices. Official website: <http://p2pfoundation.net/>.

⁵² For Benkler horizontal production, peer production and social production are synonymous and are used without exception.

sharing of infrastructure, goods and tools (eg online platforms for sharing peer-to-peer workspaces, tools, cars, and so on)” (Bauwens and Kostakis, 2014).

In the Bauwens meaning (2007), the concept of peer-to-peer is dilated, since the author includes all the relational activities typical of the World Wide Web, but also those forms of cooperation and sharing that occur outside the cyberspace. The horizontal production represents an alternative model to the corporate or market production, where peers – the horizontal producers – organize their activities through communication and social motivations, instead of responding to a managerial order or to the system of prices.

In addition, Bauwens highlights the shift from a context in which the economic advantage is based on economies of scale⁵³ and on mass production, to one where the competitive advantage is given by the decrease of the costs of a common infrastructure for enterprises connected in a net, in the network, based on economies of scope⁵⁴. According to the author the economies of scope have two forms: the ‘open source’ model in which there is “*the mutualising of knowledge*” (Bauwens, 2007, p. 54), and the collaborative consumption model that consist in “*mutualising of physical resources in order to mobilize idle resources*” (*ibidem*). This is possible thanks to the Internet that allows a *horizontalisation* of the communication and the creation of common value. The collaborative consumption therefore appears to be a form of economies of scope through which redeploy the potential of the distributed and collaborative peer-to-peer forms of production. From here, the **peer economy** (peer-to-peer, P2P) has spread with regard to the organizations built around peer business models, through which people use platforms to rent, loan, sell or share things with other people, without the involvement of shops, banks or agencies. I would like however to stress that this definition does not cover the whole collaborative economy, in fact it includes sometimes more traditional aggregators and new patterns of consumption: business-to-consumer, business-to-business and even consumer-to-business.

In Italy, Collaboriamo.org⁵⁵ defines collaborative economy “*a very large world which includes the digital platforms that put directly in connection people but also cohousing, coworking, open source, Social Street, phenomenon that within them show very different aspects even if all promote forms of collaboration among equals*”. This definition takes into account only a phenomenology of Sharing Economy, the one related to digital platforms that directly bring people together to exchange, share, sell used items. By this definition, the economy of the collaboration is “*a new form of economy that promotes the esteem of resources thanks to all the digital platforms that enable people to exchange and share goods, time, money, space and skills; promoting new lifestyles that prefer saving or redistribution of money and socialization*”. It retraces four possible scenarios:

⁵³ Economies of scale refer to the decrease in average costs of production in relation to the growth in size of the structures; they are made by large enterprises for organizational and technological reasons.

⁵⁴ Economies of scope refer to the savings determined by the joint production of different products or the pursuit of different goals using the same inputs of production (same resources, same facilities and structure, same know-how).

⁵⁵ www.collaboriamo.org deals with sharing economy offering studies, information, training and consulting to start ups and public administrations that want to know the opportunities offered by the collaborative economy, to design a new service or to develop partnerships with existing platforms.

1. Access to a resource temporarily and without money transactions (as TimeRepublik);
2. Access to a resource temporarily through a monetary transaction (AirBnb, or services of temporary hiring of skills as Tabbid⁵⁶);
3. Barter an asset in exchange of another without mediation of money (Baratto Facile⁵⁷, Zerorelativo⁵⁸), or through alternative currencies, such as time or credits (Timerepublik, Reoose, Sardex⁵⁹);
4. Give permanently used objects (Sharoola⁶⁰, Subito.it⁶¹, but also eBay at the beginning).

The European Commission itself, in a recent report of the Observatory on Business Innovation (2013), proposed a definition of Sharing Economy, narrowing it down to “*those companies that develop business models based on the accessibility to markets peer-to-peer and their community of users*”. That is companies “*whose value proposition consists in creating a match between a peer who owns a particular resource (goods or skills) and a peer who needs that resource, on time and in the face of reasonable transaction costs*”.

In the same year of Rachel Botsman’s book, Lisa Gansky coined the term *the mesh*⁶² to identify collaborative consumption, alluding to the way digital technology is used to provide people access to goods and services, as they want, in new and interesting ways⁶³. She defines the collaborative consumption as “*a network-enabled sharing on access rather than ownership*” underlining the fast growing of these networks based on sharing goods and services (Gansky, 2010). For the author is a kind of emerging business model that takes advantage of “*mobile, located-based capabilities, the web and the social network growth and the changing consumer attitudes*”. The model is based on the recognition of a global community characterized by an excess of “unused value” (that can be a tangible asset - such as cars, bicycles, drills, etc. - or an intangible asset - such as time, skills and knowledge) and it considers it totally a waste. The goal of the model is therefore to make available such “unused value” of the local and global economies through the Internet connectivity (*ibidem*). Among the various different business models starting from this assumption, the author identifies some common characteristics:

1. The offered products, services and raw materials are shared within a specific market by a community or by a value chain⁶⁴;
2. Web 2.0 applications and mobile technologies are used to track assets and aggregate information on customers, products and on their use;
3. There is a strong focus on the shareable physical assets, including those of second hand. In this way the local distribution of the goods/services, and its recovery, are perceived as an additional and relevant value;

⁵⁶ Tabbid is the social network of odd-jobs (www.tabbid.com).

⁵⁷ Barattofacile is an Italian platforms to exchange idling items, without commissions of registration fees (www.barattofacile.com).

⁵⁸ Zerorelativo is a community to trade, lend or donate items or time (www.zerorelativo.it).

⁵⁹ Sardex.net is an integrated circuit designed to facilitate economic relations between economic entities operating in a given territory, and to provide them with payment instruments and parallel and complementary credit. It is an Italian platform. (www.sardex.net).

⁶⁰ Sharoola is an Italian platform to exchange kids clothes (sharoola.com).

⁶¹ Subito.it is a kind of Italian eBay, it hosts announcements of houses, cars, bikes and any kind of used item.

⁶² Lisa Gansky (2010), page 15: “*The mesh describes a type of network that allows any node to link in any direction with any other nodes in the system and it is a metaphor to describe a whole new phase in information-based services.*”

⁶³ An article by Lisa Gansky on meshing.it described the mesh and its features. See <http://meshing.it/about>.

⁶⁴ A value chain identified a model that describes the structure of an organization as a limited set of processes: it allows to represent the entire business of acquiring, design, produce, sell, deliver and assist its products.

4. Proposal, news and recommendations are transmitted primarily through word of mouth, thanks to the spread of information and advices between consumers and the online social networks that amplify them.

And yet, Anne-Sophie Novel, a French journalist and a pioneer in research on the Sharing Economy, talks about collaborative economy as “*a tendency to share in the net the resources owned*”, identifying five “working principles”: confidence, simplicity, multiplicity, localization, community spirit (Novel, 2013).

April Rinne, Chief Strategy Officer at Collaborative Lab and a leading expert at international level of the Sharing Economy, points out that all the different terms used refer, albeit in a variety of ways, to the same phenomenon: *the reinvention of traditional market behaviors, such as loan, exchange, barter, gift... that are reformulated, thanks to the technologies, in new ways and to a scale unthinkable before*. The technologies allow it to unlock the “*idling capacities*” (unused/underutilized resources), putting them back into circulation, and making them accessible and usable again. In Rinne’s opinion, sharing resources, instead of owning them, is more efficient, sustainable and helps building community. These three elements are crucial in the frame of the sharing economy, as shown below in the document.

Julian Agyeman, Professor of Urban and Environmental Policy and Planning at Tufts University in Medford, Massachusetts, in the *Friends of the Earth* briefing paper on Sharing Cities asserts that what is missing in the main current definitions and categorizations is a consideration of “*the communal, collective production that characterized collective commons*”. His “sharing spectrum” is focused not only on goods and services within the mainstream economy (which is often related to affluent, middle-class lifestyle) but includes the non-material or intangible aspects of sharing such as well-being and capabilities. He has a wider perspective from which the cutting edge of the sharing economy is often noncommercial and includes informal behaviors like unpaid care, support and nurturing people, shared use of infrastructures and shared public services (Agyeman et al., 2013). (This aspect will be taken into account in discussing the role of governments).

1.2 Backgrounds elements

The different definitions presented touch, each in its way, the main feature of the *sharing economy*, allowing us to better understand the meaning of our conversation, and it’s quite clear that anyhow there are, at the base, some background elements that can be summarized as:

- The presence of a critical mass
- The use of idling capacity, underused resources
- The sharing of goods
- The trust between strangers

No principle is more important than the others, in some cases one in particular makes it possible the system itself, while in other cases has the lower value. Let’s see them in detail.

Critical mass

The critical mass is a multidisciplinary concept that we find in physics, politics, and social dynamics; because it triggers a phenomenon, it is generally defined as the amount or level threshold, i.e. a minimum quantitative threshold beyond which you get a quality change. In

social science we talk about critical mass referring to “a sufficient number of adopters of an innovation in a social system so that the rate of adoption becomes self-sufficient and create further growth” (Rogers, 1983, p.8)⁶⁵. It described the existence of enough momentum in a system to make it become self-sustaining (Ball, 2006).

Assuming that innovation is an idea, a practice, or a goal that is perceived as new by the individual or by a group, the novelty of innovation depends more on how the individual or the group itself react to it. They can possibly already know the innovation but decided not to adopt it, they may have already developed a positive attitude for it or they can even have simply rejected it.

Therefore, the aspect of novelty of innovation moves at the level of knowledge, persuasion, or decision of adoption. The “adoption rate” indicates the relative speed of innovation’s adoption by the members of a social system, in order to solve a common problem and reach a collective goal. The diffusion of innovation occurs at the level of communication between the members of a social system, through specific channels that convey messages imbued with new ideas (Rogers, 1983; Lynne Markus, 1987). Through the communication process, participants create and share information with each other in order to reach a mutual understanding: the spread is therefore set up as a kind of social change, a process by which both the structure and the work of the social system modify themselves. When a critical number is reached (see *the hundredth monkey effect*⁶⁶) you create an idea so powerful that it can enter the consciousness of almost every member of that group. At this very moment, the diffusion of innovation has reached the threshold level that allows the transformation of the social system, which allows a new social system to become self-sufficient and prosper (Rogers, 1983). Malcom Gladwell named the point of reaching popular critical mass the “tipping point”⁶⁷ (Gladwell, 2000).

The concept of critical mass fits perfectly with the various types of collaborative consumption, since they may be represented as innovations and as such, to ensure that the system becomes self-sufficient, they need a certain level of diffusion precisely given by the critical mass. A magic formula that can determine the exact point of critical mass for the various types of collaborative consumption does not exist (Botsman and Rogers, 2010, p. 78). In fact, there is no quantifiable levels for the critical mass and many variables come into play,

⁶⁵ Everett Rogers, a professor of communication studies, proposed the theory “Diffusion of an innovation” explaining how, why and at what rate new ideas and technologies spread through cultures. He popularized his theory in his book *Diffusion of Innovations*, published first in 1962. He argues that the diffusion is the process by which an innovation is communicated through certain channels over time among the participant in a social system. He proposed that four main elements influence the spread of a new idea: the innovation itself, communication channels, time and a social system. This process relies on human capital and the innovation must be widely adopted in order to self-sustain. Within the rate of adoption there is a point at which an innovation reaches critical mass. The categories of adopters are: innovators, earlu adopters, early majority and laggards.

⁶⁶ The *hundredth monkey effect* is a studied phenomenon in which a new behavior or idea is claimed to spread rapidly by unexplained means from one group to all related groups once a critical number of members of one group exhibit the new behavior or acknowledge the new idea. See Amundson Ron (1985) and Kendrick Frazier, (edit by). *The Hundredth Monkey Phenomenon. Skeptical Inquirer*. p. 348–356.

⁶⁷ “*The tipping point is that magic moment when an idea, trend, or social behavior crosses a threshold, tips, and spreads like wildfire. Just as a single sick person can start an epidemic of the flu, so too can a small but precisely targeted push cause a fashion trend, the popularity of a new product, or a drop in the crime rate*”. *The tipping point* is an acclaimed bestseller, in which Malcolm Gladwell explores and brilliantly illuminates the tipping point phenomenon, and it is already changing the way people throughout the world think about selling products and disseminating ideas. See <http://gladwell.com/the-tipping-point/>.

such as the context, the needs to be addressed and the user expectations; however, we can refer to the concepts of *social proof* (*ibidem*) and *consumer choice*.

Social proof and consumer choice are related concepts, indeed the first one can be seen as an application of the second at behavioral level. More than thirty years ago, Robert Cialdini, psychologist and marketing professor at the Arizona State University, was one of the first social psychologists to study the role of the *social proof* in motivating people to care for environment (Botsman, 2010, p 81). The social proof⁶⁸ is a primitive instinct, a psychological effect, and a kind of cognitive shortcut that leads us to make decisions reproducing actions and behaviors of others. Cialdini explains that “*On some base level, it’s survival recognition: these are the people who are most like me – we share the same circumstances*”. The social proof is crucial to Collaborative Consumption because most forms often require people to do something a little different and to change old habits. For people to be convinced to make the little change, most need to see or experience a critical mass of consumers making the switch. The message is “everybody else is doing it”. We believe that the actions of others reflect a correct behavior for a given situation and therefore such social proof indicates essentially a type of conformism.

Granovetter (1978) refers to the assumption of a new behavior in relation to the threshold level of adoption of the same by the people. The widespread adoption of a new behavior starts once a certain number or a proportion of people begin to adopt that behavior. The threshold level is obviously different from individual to individual and it depends on various factors, such as social status, education, age, etc. Some actions can become more attractive when performed by an individual that in this way overcomes his threshold level. Seeing others making a particular choice indeed gives the impression that this choice is safe (Rasia, 2013). Also Granovetter uses the concept of “tipping point” referring to the emergence of civil insurrection, claiming that it is effected by the presence of some specific conditions: agents with binary choices (I participate/I don’t participate), preferences influenced by the behavior of others (I participate only if a certain number of other participate), maximization of utility, heterogeneous thresholds (the amount of agents considered as optimal to participate). (*ibidem*). The effects of threshold (radical change within a given system) determine choices that maximize the utility of the individual when it is subject to others’ choices, i.e. one perceives the intrinsic value of being like the other (as in fashion). Think at the game theory⁶⁹: see others choose X instead of Y inevitably makes X more attractive, given that individuals’ choices are mutually reinforcing, even if individuals are different. Therefore a change within a system can be also activated by a subset of participants through a modification of their choices, which generates a new balance (Heal and Kunreuther, 2010). In light of this, it is possible to explain the structural change happened in our reference system with the

⁶⁸ Social proof, also known as *informational social influence*, is a psychological phenomenon where people assume the actions of others in an attempt to reflect correct behavior for a given situation. This effect is prominent in ambiguous social situations where people are unable to determine the appropriate mode of behavior, and is driven by the assumption that surrounding people possess more knowledge about the situation.

⁶⁹ Game theory is the study of strategic decision making. Specifically, it is “the study of mathematical models of conflict and cooperation between intelligent rational decision-makers”. Myerson (1991) in *Game Theory: Analysis of Conflict* suggests that an alternative term “as a more descriptive name for the discipline” is *interactive decision theory*. Game theory is mainly used in economics, political science, and psychology, as well as logic, computer science, and biology. The subject first addressed zero-sum games, such that one person's gains exactly equal net losses of the other participant or participants. Today, however, game theory applies to a wide range of behavioral relations, and has developed into an umbrella term for the logical side of decision science, including both humans and non-humans (e.g. computers, animals).

emergence of the paradigm of collaborative consumption: peer-to-peer digital practices have opened the way to this new concept of consumption, economy, and society.

The critical mass is also related to the theme of the *variety of choice*. As underlined by Anderson (2006) we have gone from a world of scarcity of choice, that is the mass market – made of inefficiencies distribution, geographical restrictions and so on – to a world of plenty of choice, made by niche products and supported by IT platforms and by the Internet in the distributing processes. The author asserts that the abundance is due to three main concomitant factors:

- The globalization that has brought the development of a distributing chain able to overcome the geographical barriers and capable of supplying a comprehensive assortment of products;
- The demographic change that has created an ethnic heterogeneity in the major advanced economies, and is changing people's aspirations in the direction of greater mass customization;
- The diffusion of economic and business models defined of "long tail". These models are based on the concept of efficient economy use of online retailing to aggregate a large inventory of underselling articles. In according to the author this online retailing creates a high number of niche markets, because products with small demand can be easily purchased, satisfying the testes also of minorities and supplying individuals with wider choice (thanks to digital distribution network). These niche markets have always existed, but today the cost to reach them has reduced significantly, so they represent a new cultural and economic force. A combination of factors (such as the digital distribution, the technology research, and the extensive penetration of broadband Internet) has drastically reduced the cost to connect supply and demand. Number and nature of the market have changed, determining a quantitative and qualitative modification at the same time. The niche products are now available to everyone, letting emerge a demand remained latent so far. In Anderson's opinion, when demand shifts toward niche products, the economy develops further, creating a positive feedback loop that will have the power to transform the entire socio-economic system moving from a mass market to a market of niches not influenced by geographical discrimination, but only by personal interests.

About the consequences related to the increase of the variety of choice, the author suggests that "*the more choice we have the more we have to decide what it is we really want. The more we reflect on what we really want, the more involved we get in the creation of the goods we buy and use (via customization). The more we participate in the creation of products and services the more choices we end up creating for ourselves*" (Anderson, 2006, p. 174). When there is a wide range of possibilities, the customer needs more information to be able to choose. Here come into play the dynamics of critical mass and the social proof: especially at the level of collaborative consumption (and more generally for all that concern the Web 2.0) the dissemination of information comes through the recommendation and the reputation systems within a community of individuals who share common interests. In addition, in Anderson's opinion, if the collaborative consumption system aims to become a real alternative to the traditional consumption system, it must be able to offer a greater variety of choice, so to satisfy the consumer's needs, which in buying looks for satisfaction and convenience.

Hence, to be self-sustaining and grow, the system of collaborative consumption must have a critical mass of users able to provide the assets required to create an offer not only convenient, but also satisfactory according to personal interests (Botsman and Rogers, 2010).

Reach the critical mass is the only way for an online platform to survive and thrive, because people are its mainly source of grow, its real asset, without which the platform would die.

The power of Idling Capacity

The idling capacity refers to spare or unused capacity identified as an underused “excess value” (Benkler, 2006; Gansky, 2010), caused by over-consumption and over-production. The practices of exchange and sharing aimed at maximizing the use of available resources are based on these surpluses. It should be underlined that the peer-to-peer systems are grounded on the fact that each user has in his pc, large amounts of excess resources: peer-to-peer networks have developed “architectures” that give users the ability to share them. This concept of excess capacity can be shifted to other aspects of daily life thus recognizing a waste of capacity spread throughout modern society. There are, for example, cars and bikes that sit idle for most of the day, underutilized spaces and office equipment or appliances (for example mower and drills - there are over 50 million power drills in American homes) used only few times per month (Gansky, 2010). Reckoning that idling capacities can be redistributed is at the core of collaborative consumption. Modern technologies, as social networks and GPS devices, offer several ways to favor this redistribution. The ubiquity of low cost connectivity can maximize productivity and usage product and can absorb the surplus created by hyper-consumption without creating additional costs or inconvenience (Botsman and Rogers, 2010, p.84). “*The advantage given by the use of sharing as a structure for transactions is directly proportional to the number of transactions necessary to reach the level of resources needed for an operation*” (Benkler, 2006, p.75). If in a given society, the surplus capacity is widely distributed and divided into small parts and if it is necessary to put together the potential of thousands or even millions of individual users, then the transaction’ costs of sharing system are significant. However, thanks to the Internet this inefficiency can be overcome, because it is possible to globally connect different and distant individuals and companies facilitating communication between them. The Internet allows to reduce the transaction costs, i.e. all those costs related to the organization of an activity, and the exchange is more efficient, not only in terms of time and money to make an agreement but also in terms of costs to honor the agreement itself (Williamson, 1998).

Also Rifkin (2014) in his latest text “The society at zero marginal cost” emphasizes this aspect, noting that it is through technology that we can maximize the unused capacity. The Internet appears as a platform for instant sharing of excess capacity among people. Real-time technologies allow to identify what we need and recognize what things are available to loan, rent or share, proposing the best solutions for sharing. This is true, as already stressed by Botsman and Roger, both for physical goods (bikes, cars, drills...) and for less tangible assets like space, time, skills or commodity (such as electricity) (Botsman and Rogers, 2010, p. 86). For example today there are many programs and schemes like Landhsare, YardShare, Urban Gardenshare that connect gardenless would-be growers with unused spare land, as well as people with extra time or skills who want to help. Without the social networking capacity of the Internet, these programs and schemes had little chance to match ‘want’ with ‘need’ and to reach scale fast, but now these programs operated like ‘dating agency’ (*ivi*, p. 87).

Belief in ‘the Commons’ and Trust between strangers

The concept of “common goods” in economy originally indicates those exhaustible goods such as natural resources (water, fauna, etc.), from the exploitation of which nobody can be excluded. They are “beni di proprietà comune” “goods of common ownership” “joint

property”, not to be confused with public ownership, i.e. of the State. The original problem of the commons was (and still is) to establish the rules for a universal exploitation preventing resource depletion. As stated by the microbiologist Garret Hardin in a 1968 *Science* article, “The tragedy of the commons”, the problem of preservation of the commons is in their free access. It is a metaphor of the abuse and degradation of common resources: people, in taking advantage of shared resources, do not think in the long term but act according to their own current interest. People have the tendency to take too much even though it is not for anyone’s collective or long term good. People use resources to have an instant and as big as possible benefit without cooperating unless forced by an external authority (Botsman and Rogers, 2010, p.89). As Hardin stated “*Freedom in a commons brings ruin to all*”.

The work of the Nobel Prize winner, Elinor Ostrom (1990), nevertheless, debunks Hardin’s certainty that “tragedy is inevitable”. She demonstrated that self-organized communities could overcome this dilemma, in fact, people develop systems of communication and coordination to work together precisely in order to manage the common wealth. They are able to create mutual trust and social norms for a fair allocation of scarce resources, and they can draw effective rules and assign sanctions to punish free riders and vandals⁷⁰. The issue of trust is crucial. We can define it as “*the expectation emerging from a community of regular behaviors, honest and cooperative, based on social norms widely shared*” (Fukuyama, 1995, p.26). There is a close link between the cultural identity of a community and its ability to generate social capital. The social capital is to be understood as “*the set of values and beliefs shared by a community that help its members to overcome problems of free riding pursuing activities useful for the whole community*” (De Blasio and Sestito, 2011, p.27). It is not only a set of relationships and values, but it is also about specific rules and beliefs shared by the community, that persist over time (and therefore are predictable) and are transmitted from generation to generation through the family education, the education system and the processes of socialization (*ivi*, p.30). The members’ behaviors are regulated by ethical codes⁷¹ that identify the very culture of this community. As Fukuyama underlines “*despite the differences, all cultures seek to limit the self-interest of human nature through moral unwritten rules*” (Fukuyama, 1995, p.34). For this reason belonging to a community and sharing its ethic, social and spiritual values influence both the ability of people to perceive and interpret the social duty and their expectations about the behavior of others (Zamagni and Sacco, 2006).

Looking at the processes behind the creation of rules of conduct in the context of collaboration, when some people believe that other individuals will conform to a behavioral rule, an agreement began to establish (a rule that allows the coordination of individual actions); and this agreement can also spread from one context to another for analogy (Granovetter, 1978). So if in some specific situations people tend to follow a certain convention, then the convention will likely be used for other similar situations (Sugden, 1989, p.93). If to solve common social problems people cooperate, it’s possible to assume that this will positively affect the adoption of collaborative behaviors also in other context, thanks to the creation of trust. With this in mind is therefore possible to think that participatory and collaborative behaviors developed in the digital sphere can move to the physical one. Then, when people start to think that a norm is a moral duty to follow the norm become a social norm. Who breaks the rule, preventing the coordination, attracts the resentment of the other

⁷⁰ The free rider is a member of a group that avoid to give his contribution for the common good, thinking that the group can work well even without his contribution.

⁷¹ The term ethical code is used to define the set of written or usual rules regulating an activity or a behavior in relation to a specific cultural, social or professional context, with specific adequacy criteria.

members of the community, because is violating a convention and this generates a cost for the whole community. This violator suffers a loss of well-being, that is exactly the effect and the very origin of the moral duty for following the convention. For this reason, the meaning of the *regulatory (normative) expectation* is that people follow a convention because others expect this from them, and disapprove a different behavior. The expectation of the others (that acts as a mechanism of implicit reinforcement too), makes the convention a social norm so, a social norm can be defined as a mechanism that allows people to coordinate their behaviors without communicating with each other because supported by actions that constitute the normative expectation (Rasia, 2013). In this conceptual framework, the common goods become a paradigm to create value and to organize communities with common interests. The peer-to-peer platforms are an enabling tool for the transparent and decentralized communities that allow creating and strengthening trust between strangers (*ibidem*). In this way, people are empowered to develop communication and coordination systems to work together for building and managing collective wellness. They promote the mutual trust and the social norms necessary for a fair allocation of scarce resources (Ostrom, 1999; Bollier, 2009a).

When the value for the community is created by digital experiences, also the individual value increases. Rachel Botsman underlines that, when we post a picture on Flickr, we get knowledge through Wikipedia or we acquire information through Public News, we realize that we need ‘to give to receive’. As Bollier underlined in *Viral Spiral* (2009a) “*The commons – a hazy concept to many people – is a new paradigm for creating value and organizing a community of shared interests*”: so, if the relationships and the social capital are the heart of the exchanges, the trust between peers is relatively easy to create and organize. In addition, thanks to the network effects, the more are the participants in shared services and the better the system will work for all.

Also Lawrence Lessig dealt with the idea and concept of commons. In 2002 he launched Creative Commons, which provides free copyright licenses to encourage sharing and collaboration, but at that time the usage was still restricted by the creator (Botsman and Rogers, 2010, p.90). Today more than 1000 million licenses have been issued all over in the world. Thanks to Lessig and Creative Commons the creation of a significant culture of online socialization that encourages sharing has begun (Lessig, 2009).

Another important elements emerged from the Ostrom’s research in terms of collaborative consumption is the idea that the *commoners* can self-organize themselves and sharing resources if they are well empowered and if they have recognized themselves the right of a mutual supervision (Rasia, 2013). It’s interesting the opinion of David Bollier about the Ostrom’s work. He notes, “*although Ostrom has not written extensively about the Internet and the online commons, her work clearly speaks to the ways that people can self-organize themselves to take care of resources that they care about*” (Bollier, 2009b). The system seems to be utopic, but just think to *self-managed* and *peer-policed systems* like Ebay o Airbnb: here disagreements are largely solved within the community itself. In these new markets, mechanisms of top-down control have been removed, along with authorization levels, systems of decision-making and middlemen. In their place peer-to-peer platforms allow communities to shape and build trust between strangers, in a decentralized and transparent way.

In many forms of collaborative consumption, we need to trust strangers. In services such as ride-sharing it is necessary to believe that the person who will give us a lift is reliable and harmless; in markets such as Ebay or Craigslist we are asked to believe that the goods sold, traded or given are in the conditions described by the seller, etc. In the world of hyper-consumer middlemen have always a function of “the actor in-between other two actors” as a kind of bridge between production and consumption. We are not asked to trust anyone,

because from sales assistant to traders, from manager to broker, from agent to distributor, usually in the middle there are trusted agents that manage and control all transactions. There is a specific set of rules. But in the collaborative consumption intermediaries are no longer needed. With an infinite market of direct and equal exchanges, the role of the intermediary is no needed, since the platforms of collaborative consumption act as curators and ambassadors, creating the conditions to facilitate self-managed exchanges.

The issue of trust between strangers is a very important point, so much that Rachel Botsman considers it “*the exchange currency in the new economy*”. Indeed, it is the trust that drives us to share a ride in the car with a stranger, or sleeping in someone’s house ... and it is, at the same time, the major concern in using the services of the shared economy, as shown by the main researches. According to the Pew Research Center⁷², only 19% of Millennials⁷³ (those born between 1980 and 2000) believe they can trust the majority of people, while the percentage rises to 31% for Generation X⁷⁴ (1960-1979) and 40% for those born between 1946 and 1959.

However, if the economic model of the Sharing Economy intends to expand, more innovative and reliable methods to verify the identity of peers are required. Businesses are beginning to understand the importance of trust, and they are introducing into their own platforms mechanisms that allow more transparency and intend to verify the identity of users, favoring people’s confidence and the building of their online reputation. Reputational algorithms calculate the user reputation, within a community or a platform, collecting opinions and feedbacks that the members of the community express⁷⁵. In this way, each user receives a rating that gives an approximate measure of the trust that the community has placed in that user. Based on feedbacks it is therefore spreading a digital reputation on which the forms of “symbolic capital”, (to use Pierre Bourdieu words), are converted into economic capital, because receiving a good reputation will mean a greater flow of earnings or more savings.

1.3 Conclusion

To conclude this short review about how sharing economy has been defined until now, it’s important to highlight that the different definitions allow to frame the phenomenon and its features, but beyond the defining nuances, one should remember that we are talking about an ongoing process still in evolution. For this reason the same definitions could change and progress, shaped by practical experiments rather than by theoretical calculations. The term cannot be curbed in a strict and stiff definition. Even if the vagueness creates confusion, an excessive closed and univocal definition can bridle the phenomenon with the risk to lose its variety and heterogeneity (Pais, 2013a). It is useful going in depth with its features and study different experimentations of sharing economy, in order to grab its countless aspects and

⁷² See Pew Research Center, “Millennials in Adulthood”, at: <http://www.pewsocialtrends.org/2014/03/07/millennials-in-adulthood/>; and Doxa Duepuntozero, “Sharing Economy da moda a modello”, at <http://www.sharitaly.com/speeches/sharitaly2014-capeci-ricerca.pdf>.

⁷³ Wikipedia refers to Millennials, also know as Generation Y, as “*the demographic cohort following Generation X. There are no precise dates when the generation starts and ends; most researchers and commentators use birth years ranging from the early 1980s to the early 2000s*”.

⁷⁴ Generation X is the generation born after the Western Post–World War II baby boom. Demographers and commentators use birth dates ranging from the early 1960s to the early 1980s.

⁷⁵ After using a service all the people involved leave a comment, a feedback, about the service and about all the members involved, in order to show if the service and the people are reliable. This process allows the creation of a personal online reputation and it is at the base of the online trust.

sides, but it is also useful to remain open to see how its potential unfolds. Moreover, aside from the taxonomic issue, the ontological question is also relevant, in terms of the real meaning and the concrete relationship between the emergence of new models, like platform companies, networks and peer-to-peer marketplaces, disintermediation services, under-regulated market, micro- entrepreneurship, and the impacts generated on the society as a whole.

In this dissertation, the concept of sharing economy will be used in a broader sense, sometimes accompanied by the term collaborative to stress the wide typology of practices that incorporate, to avoid to be limited by rigid boundaries, and to highlight its underlying value. The choice allows maintaining an open vision on the practices implemented on the city, and considering the big companies such as Uber and AirBnb, the local emerging startups, and the community's initiatives as parts of a bigger picture that compose the set of sharing practices in an urban context.

2 BEYOND DEFINITIONS. WHY, WHO, WHAT IS SHARED...

The exploration of the different meanings given to the buzzword *sharing economy* allows moving on with other questions, strictly related to the existence in itself of the sharing economy in the urban context. The theoretical chapter goes into details showing the connection between the wave of smartness in the cities, the spreading of the social innovation and the dissemination of more and more practices and services that in some way can be considered part of the sharing economy. This section tries to understand the roots of its birth in the urban context, and its features in terms of objects, subjects, and contents of the sharing.

2.1 At the origin of the Sharing Economy. Key drivers.

Other important questions that arise analyzing the phenomenon of the sharing economy are: what has determined its birth and spread, and which motivations push people to share?

It has already been disclosed that the **new technologies and the Web 2.0** (social, Geolocalisation, mobile...) have played a pivotal role in the growth and expansion of the new practices of sharing, consumption, and production, transforming the Sharing Economy in a global phenomenon. Technologies are the real enabler that made possible the emergence of this new system based on the shared use of unused or in excess services and goods. The Internet of Things and the billions of sensors that connect people, objects, and data allow to use what is needed only for the time that needs, thanks to technologies, to the spread of platforms and to the constant access to the net.

Another key element is the **environment** and the desire to reduce the environmental impact. This is one of the motivations that people signal to explain their interest for the sharing and collaborative practices. The capitalist model of consumption led the system crashing down with obvious negative impacts on the environment; evidence that enhanced sensitivity to the issue of environmental sustainability and sustainable development by finding convergence in the principles of sharing and collaboration (higher efficiency, lower consumption, and waste).

In addition, the emergence of the **financial and economic crisis**, since 2008, has challenged the traditional assumptions of economic and social growth and the entire capitalist system, pushing people to wonder what they really need and how to extract value from things/skills owned. The success of the sharing economy is partly linked to the possibility offered by this new approach in terms of reducing consumption and growing financial opportunities. Anyone can get a small profit simply sharing their assets and can access, at low cost, to a range of goods and services which otherwise would remain barred/blocked. Each property can turn into a potential profit, every person can become a potential entrepreneur.

Finally, the weakening of social bonds and the erosion of solidarity, caused by massive urbanization and strong industrialization, have generated individualism and high level of social exclusion (see the latest work of Piketty, 2014, denouncing the enormous inequality levels currently achieved by Western societies, USA first). Sharing resources allows to rebuild **community** and to create a sense of belonging both online and offline (Rinne, 2014). There is a strong need to come together to tackle the crisis, both economic and relational, and thanks to new technologies, social networks and digital platforms, new networks and relationships can be created, the trust among strangers can be rebuilt and the bonds of community can be recomposed, in a process that, starting from the web pours in real life.

2.2 Who shares?

In a model in which intermediation fails and the end-users become active and participative actors, there is also a change of the mode of delivery and distribution of goods and services and of the trade agents. Nesta⁷⁶ and Collaborative Lab⁷⁷ identified four systems.

The first one is the already seen **Peer-to-Peer (P2P)** or **Consumer-to-Consumer (C2C)**. It foresees equal relations among people in the exchange/sale of products and services and it can be considered the most common model of sharing in the collaborative economy. See for example BlaBlaCar. The first model of P2P market has been even introduced in the 90s by Ebay, Craigslist, and Napster, and allowed people to share, sell or give away their goods directly to other people without intermediaries.

Another approach is that of **Business-to-Consumer (B2C)**. The interaction takes place between companies and the end-consumers in a direct way through online platforms where a company is the provider of goods or services to the members. Carsharing and bikesharing are two meaningful examples: the managing authority makes available its own car fleet or bike fleet for the registered members, in this way even who doesn't own a car or a bike can access to the use of it in case of necessity, relieve themselves from the cost of purchase and maintenance.

Finally, the approach **Consumer-to-Business (C2B)**. It allows companies to extract value from consumers and vice versa. It is the consumers themselves who offer a specific good/service (produced by themselves and offered for free or for an agreed price) to companies, through forum, blogs or intermediaries sites. An example: eBay, AirBnb, Uber.

Another subject that access to the practices of sharing is the **Public Administration**. It seems to be out of place in this context, but is entering more and more in the debate around sharing since it can play a key role. It normally interacts with citizens, companies and other administrations and in the Sharing Economy can represent a crucial player, influential and valuable. It can be an enabler in promoting the sharing economy opportunities, in creating awareness in citizens and in facilitating the processes of the economic model, regulating without slow down and suffocate the phenomenon. First experimentations start to come up (see chapter 6) from sensitive Public Administrations all over the world. For example in Bologna the *Regulation for the Management of Commons* has been designed and implemented in collaboration with citizens. It offers practical rules to overcome bureaucratic obstacles at the collaborative services and to favor the experimentation of new forms of shared management of the city. In Mantua, the project Co-Mantua⁷⁸ is based on "Collaborative Pacts" for the regulation of the culture management in the city. Milan is carrying out an interesting path, started from the experience of Sharexpo, to push the social innovation in the city in order to improve the social inclusion, and it is implementing the first Italian forms of collaborative policymaking. Abroad there are many examples: Washington is working a lot in the sector of mobility, implementing a bikesharing funding strategy and offering free on-street parking spaces to carsharing operators and auctioning curbside spots to three operators. Amsterdam is developing a protocol on the Sharing Economy involving citizens and institutions; it's the first city to have signed a resolution with AirBnb and in 2015 it gained the label of first European Sharing City. Seoul in 2012 has launched the "Sharing

⁷⁶ Nesta is a charity that represents the main organization dealing with social innovation in UK.

⁷⁷ Collaborative Lab is a global network of collaborative and sharing economy experts that develop analysis and researches on the topic, offering also advising programs and coaching to enterprises and government.

⁷⁸ The case of Bologna and Mantua are experimentations of LabGov – Laboratory for the Governance of the Commons, and will be better explained in chapter 5.

City Seoul” project creating a new internal department, Social Innovation Division, to manage in efficient way the administrative resources and the relations with the external actors, in order to favor the creation of a sharing environment and improve the quality of life of their citizens; it is financing the development of new sharing business and promoting events to spread the knowledge of the phenomenon among citizens; it wants to create a sharing ecosystem and it has a 360-degrees approach. For the Public Administration, the sharing economy is of course an interesting challenge with high potential.

2.3 Who are the *sharers*?

Having regard to the categories of subjects moving in the sharing transactions let’s see who are the sharers, the people who share, and what features they have.

It seems that the new model of production and consumption that the Sharing Economy conveys has in itself the potential to increase savings and make consumers active participants in the economic cycle, responding to the need to reduce environmental impacts and make access to forms of sociality otherwise inaccessible. The path of sharing is not just a choice for monetary reasons, although it remains one of the key drivers, but also for the interest in the novelty and innovation and for value-driven reasons related to the care and the environment, to the implicit ethics in sharing and for a renewed need of sociability. These hypotheses are confirmed by the results of the survey commissioned by AirBnb and BlablaCar to Ipsos and published in July 2014. Ipsos identifies various types of subjects decided to use sharing services and platforms for different reasons:

- the “*pragmatists*” who seek stability and, together with the “*anonymous*”, prefer the experience of things rather than the possession for economic reasons and to save costs;
- the “*adventurouses*” who like challenges and to discover novelties;
- the “*social*” that want to grow at social level;
- the “*educators/teachers*” and the “*value-driven*” who are moved by ideals and aspire to a process involving social responsibility and environmental sustainability.

The profiles follow a kind of evolutionary timeline of personal growth that goes from the individual focus to the interpersonal one, to finally touch the collective focus. According to 38% of the respondents, the key elements that describe the Sharing Economy are the convenience and the cost saving, for the 26% environmental sustainability, while 22% considers innovation the main driver.

Not for everybody the reasons for sharing are so varied. For example, the *Los Angeles Times* in an article of June 2014 argues that the Sharing Economy is just a consequence of the hyper-capitalism and of the economic crisis, a pure effect of what Susie Cagle⁷⁹ defines the Disaster Capitalism, so the pressure to share is the result of the need over any other motivation.

In the Italian case, Ipsos, Collaboriamo.org⁸⁰ and PHD Media⁸¹ researches show outputs in line with the international studies⁸². Both men and women share, especially who lives in

⁷⁹ Susie Cagle is an American journalist and editorial cartoonist whose work has appeared in The American Prospect, AlterNet, The Awl, GOOD, and others. Interesting is the “The Case Against Sharing” available at the address: <https://medium.com/the-nib/the-case-against-sharing-9ea5ba3d216d>.

⁸⁰ See Collaboriamo.org, “Sharing Economy: la mappatura delle piattaforme Italiane 2014”, Dicembre 2014.

⁸¹ PHD is a media and communication agency well known at global level for its ability to innovate in planning and buying with specific communication strategies. PHD Media and Collaboriamo.org have presented a research about the collaborative platforms in Italy, during the second edition of Sharitaly, December 1st, 2014.

urban contexts and with a medium-high level of education. The age ranges between 18 and 24 years old, but there is a large proportion of participation also between 35 and 54 years old. They are usually people strongly focused on change and innovation, curious and with a profile very similar to those who usually surf the web. Men and women that use the sharing services not only to save money and reduce consumption, but also to gain random revenue that would complement their own personal income. The willingness to share is high: the *Rapporto Coop Consumi e Distribuzione 2014* shows that 55% of Italians are ready to share (already used or well prepared to use the new services), a higher percentage of that of European cousins: 53% for Spaniards, 46% for German, 29% for English and French. A propensity not only high but also growing: according to a research conducted by Doxa Duepuntozero 2014, 6.5 million of people have used online services on sharing platforms (offering or “consuming”), 69% more than all previous year, amounting to 3 million individuals. According to this research, Italians are now at the tipping point that means that the necessary critical mass, which will lead to a real paradigm shift in a few years, has been reached. Obviously, there are some barriers and researchers underline the necessity to work on them. For example many people are still afraid of scams and they don’t feel completely safe; specific protections and guarantees will be necessary. In addition the act of purchase will must be replaced by an emotional experience, rewarded as well as that in the real life. Finally the operation and the dynamics in the services will must be as clear as possible to leave no doubt about the use of these new services.

The recent 2015 mapping of the collaborative and crowdfunding platforms, presented during Sharitaly 2015 (November 9-10)⁸³ has updated the 2014 data⁸⁴ with the aim to portray the Italian collaborative economy state. From the users’ side the information and the results of the previous mapping and of the International Studies are confirmed. Women and men attend collaborative platforms in equal way, although women (52.8%) slightly exceed the male audience (47.2%). In a quantitative sense there are no differences, but from the qualitative point of view men and women choose different platforms. Men are the main users of transport and sport services, while women prefer platforms to reply at domestic needs and social and cultural interests. Women are the main users of personal services (small jobs or domestic help as a babysitter or pet sitter), general marketplaces (to work off clothes and children’s toys), social eating platforms, and also tourism, culture and training services. 49% of users have 34-54 years, 44% 18-34 years, only 6% is over 54 years and only 1% is under 18 years. Compared to the previous mapping the phenomenon involves more and more the adult groups (from 43% in 2014 to 49%) and less the young group (from 51% in 2014 to 44% in 2015).

In Italy, as the research underlines, there are many entrepreneurs that are looking at the sharing sphere in a business perspective. The Italian platforms mapping presented by Sharitaly 2014 has the aim to understand how many experiences there are at national level, how many active users and where they are located. The outputs show the presence in Italy of 138 platforms in total (at December 2014) and 41 of them are crowdfunding providers’ services⁸⁵. In any case, it is a growing phenomenon, hence the esteems are liable to go up and change in a very fast way and the number of platforms is of course increased in the last months. The 97 platforms (excluding the 41 crowdfunding services) comes in 81% of cases

⁸² Nesta, “Making sense of the UK collaborative economy”, September 2014; Vision Critical-Crowd Companies, “Sharing is the new buying”, 2014.

⁸³ The research is made by Collaboriamo.org and PHD Media. To consult the 2015 mapping see the link: <http://www.collaboriamo.org/risorse/sharing-economy-la-mappatura-delle-piattaforme-italiane-2015/>.

⁸⁴ The 2014 research is made by Collaboriamo.org and PHD Media.

⁸⁵ The mapping of the crowdfunding online platforms has made by Castraro D. and Pais I. in “Analisi delle piattaforme italiane di Crowdfunding”, ICN, maggio 2014.

from Italian companies and in 11% from foreign companies without offices in Italy, 65 are indeed foreign companies with offices in Italy and 2% are experiments sponsored by organizations and institutions. The platforms are divided in 11 different areas among which the most interesting are crowdfunding (with 305 of the platforms), consumer goods (20%), transport (12%), tourism (10%) and employment sector (9%). There are no platforms in the cultural sectors, although it is expected that soon services in this area will be launched, since this sector is always been sensitive to testing models of collaborative development: just think to Wikipedia, or file sharing music in general. Some of these platforms already have a good number of users, but the majority are young and often with difficulties in reaching the critical mass. They are realities that arise mainly in large urban centers, even if some of them are located in islands and in the center of Italy, while the south is the least covered at the moment. The life cycle of those platforms appears often short and although there are many boring initiatives, only less are able to survive.

The updated mapping of 2015 reveals an increase in number of the platforms, from 138 to 187 (35,5% more than the 2014). Among these platforms 118 are sharing economy platforms, while 69 (28 more than the previous year, + 68,2%) are crowdfunding platforms⁸⁶. The main fields of the sharing economy platforms are the same of the previous year: transport (19%), consumer goods (15%), tourism (15%), food (9%) and the new entry culture (9%) that was absent in the previous research. The increase of the platforms confirms that “*the sharing economy is not a field but a service model, applicable in any area*” as underlined by Mainieri (2015a), the coordinator of the mapping. The research reveals also the growth potential of these platforms: 51% has less than 5,000 users, even if the 11% has more than 100,000. For the crowdfunding platforms only 9% has more than 50,000 donors, half of the sample has less than 500 donors showing the margin of growth. The entrepreneurs of these platforms are mainly men, under 40 (73%) with a high level of education (economy or engineering). Women are 32% for the crowdfunding and 27% for the sharing. The main result showed by the research is the growing trend even if is still missing an ecosystem and the entrepreneurs ask for more funds, more culture, and more partnership with private businesses. The research has also highlighted the normative issue, asking for more regulation.

2.4 What is shared?

As advanced, the Sharing Economy allows several opportunities of sharing, tangible and intangible goods, as well as various services. In addition to the already mentioned Bootsman’s and Roger’s proposal, that distinguish redistribution markets, rental products and cooperative lifestyles, including in every system different sharing contents, other authors tried to categorize the type of shared goods.

Jeremiah Owyang, renowned guru of social business and founder of *Crowd Companies*, has presented in may 2014 his **Collaborative Economy Honeycomb**⁸⁷, a tool in which the collaborative economy is organized into 6 families: goods, services, spaces, transports, money and nutrition, and 14 subclasses (custom-made goods, personal services, job area, workspace, etc.) and dozens of examples of societies (AirBnb, Uber, Shapeways, etc). Owyang uses the honeycomb since it is a resilient structure; his approach is a visual representation of how collaborative economy enables people to an efficient access, share and resources growth

⁸⁶ The research “Il crowdfunding in Italia. Report 2015: statistiche, piattaforme e trend” has been realized by the University Cattolica del Sacro Cuore” in collaboration with Tim and Starteed, under the coordination of Ivana Pais.

⁸⁷ The Honeycomb was presented at the OuiShare Fest 2014 in Paris.

within a common group. In his vision, the crowd is becoming like a company: self-funding, designing, producing, and sharing what people already have. In his previous taxonomy he noted five families, then he realized the significant growth in the food sector and added a new hexagon. The company listed in the graphic are just a small representation; at the time of his first Honeycomb there were over 9,000 companies, from different countries and geographical locations⁸⁸.

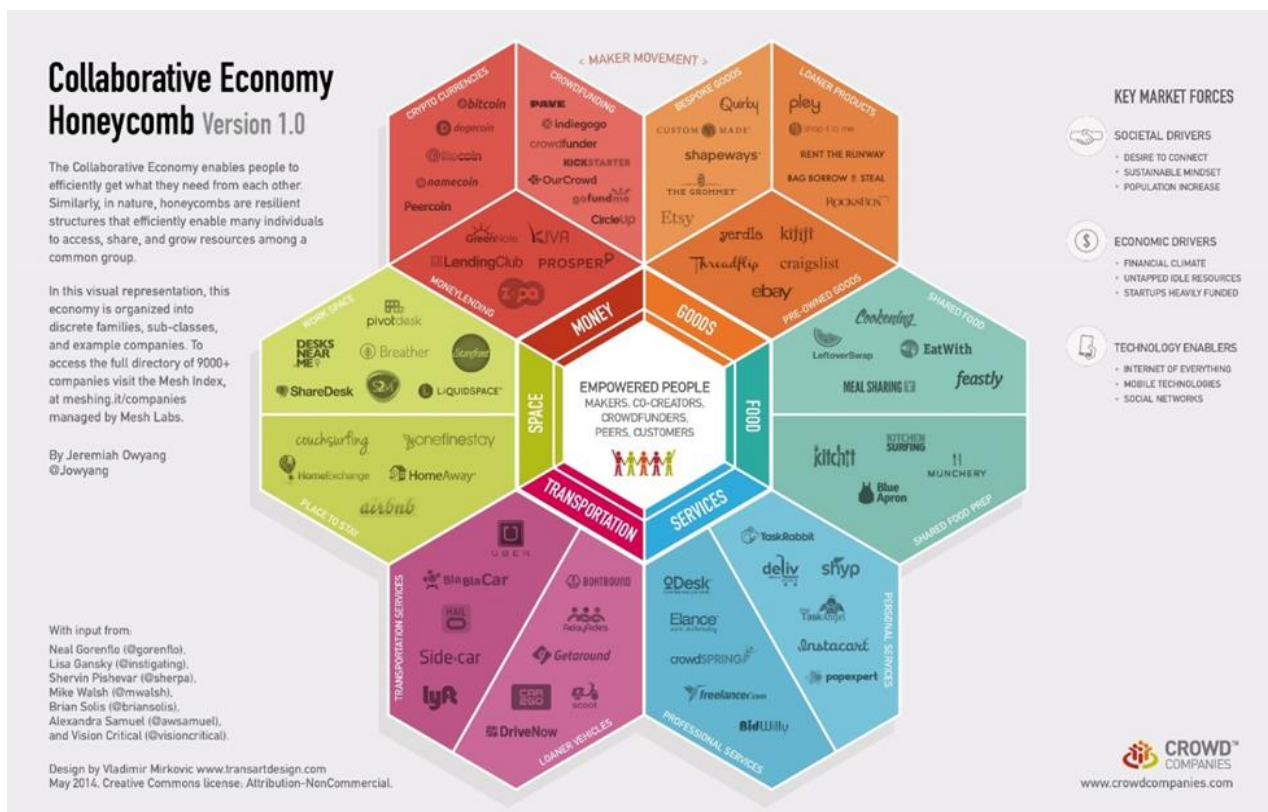


Figure 2 Crowd Companies, Honeycomb 1.0, by Jeremiah Owyang, 2014

The author has then developed a second Honeycomb adding 6 new families since he realized that more industries are being impacted by P2P commerce. In the new Honeycomb, there are additional startups in the six original hexes and six new areas of expansion:

- Health&Wellness, such as Helparound.co that enables P2P diabetes care, sharing of insulin and pumps;
- Logistics, such as Postmates that enables the final mile of delivery and Roost that enable P2P home storage;
- Corporate, startups like LocalMotion or Near-me allow corporations to have their own Uber-like experience or build their own AirBnb;
- Utilities, power sharing with startups like Vandebrom, crowdfunded solar with Solar Mosaic, WiFi sharing with Fon;
- Municipal, cities are sharing street cleaning vehicles on Munirent and public bike systems are heavily funded with Velib for example;
- Learning. Many startups enable students to share books (on Chegg for example) and online training led by instructors and peers.

⁸⁸ To access the full directory companies visit the Mesh Index run by Lisa Gansky (Mesh Labs) at meshing.it/companies.

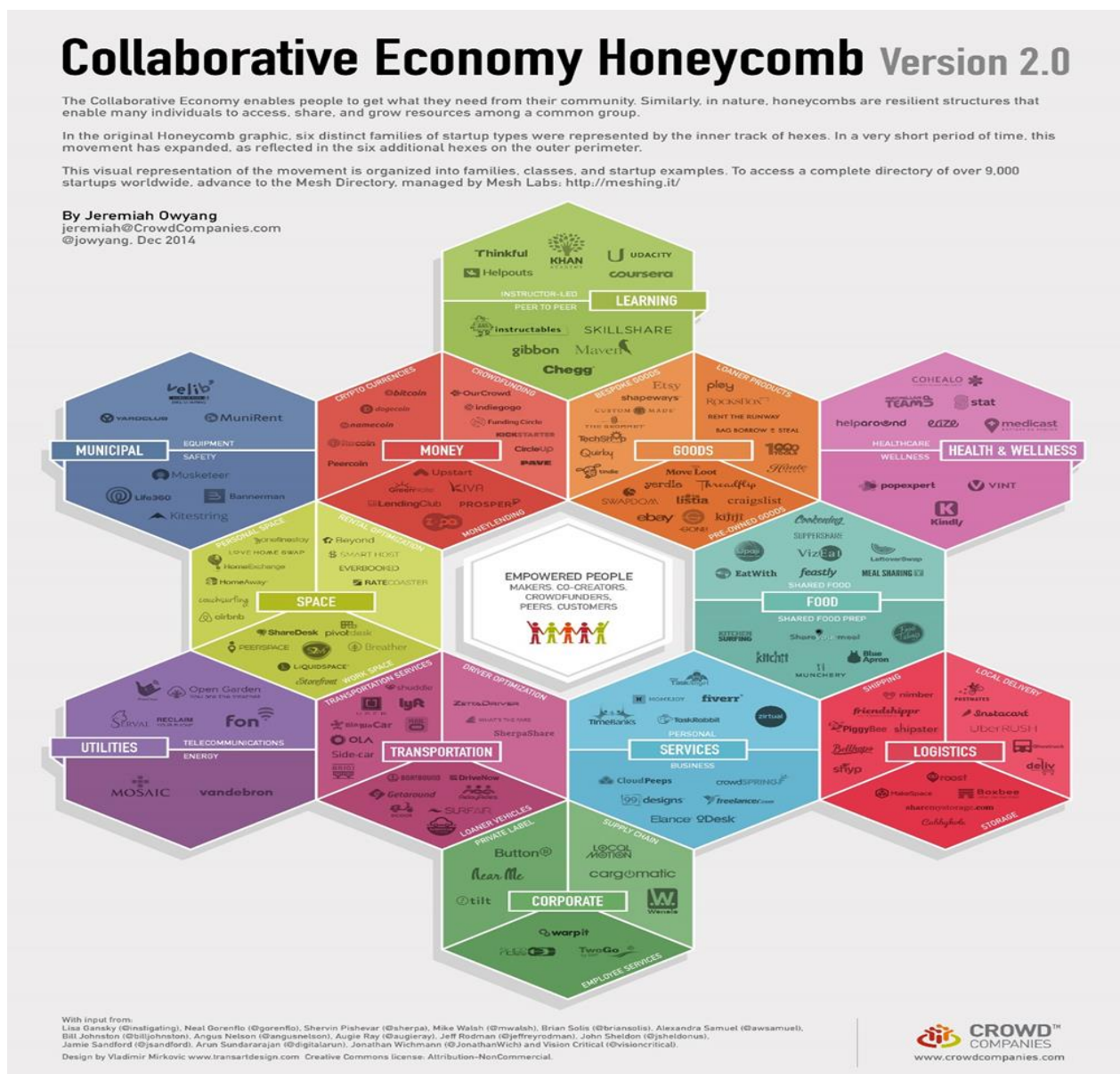


Figure 3: Honeycomb 2.0 by Jeremiah Owyang, 2014

The second version reports fewer logos in the honeycombs, a sign of a very infant, young market, in Owyang’s opinion. While many logos have been removed from the honeycombs in the central area for excessive market crowd (a sign of market saturation in one area) and for more advanced markets. Owyang expects that in the near future, industries like Finance&Insurance will also be added. The startups indicated in the Honeycomb have been chosen thanks to the recommendations of Crowd Companies’⁸⁹ members, industries and experts among that have received notable funding and they have a Western market focus.

Agyeman, McLaren and Schaefer-Borrego (2013) propose a *Sharing Spectrum* that separate the sharing options into the most tangible and the most intangible assets and further into five categories:

1. **Materials** (more tangibles), includes concepts as recycling and reuse (paper, glass...);
2. **Product**, it refers to redistribution markets (flea markets, charitable booths ...);

⁸⁹ See the site of Crowd Companies at the address <http://crowdcompanies.com/>.

3. **Service**, it essentially refers to Product Service System, therefore to the rental goods (Zipcar, Netflix...);
4. **Wellness**, it ties to the concept of Collaborative Lifestyles, such as peer-to-peer travels (AirBnb);
5. **Efficiency** (less tangible), it concerns the common goods, from the Internet to participatory policies.

Table 1 Sharing Spectrum (Agyeman, McLaren, Shaefer-Borrego, 2013)

What is being shared?	Concept	Examples	Participants (typically)
Materials	Recovery and Recycling	Glass and paper banks, scrapyards	Many suppliers, few users
Product	Redistribution Markets	Flea Markets, charity shops, freecycle	Single provider to single users
Service	Product Service Systems	Zipcar, Netflix, fashion and toy rental, libraries	Single provider to many users
Wellbeing	Collaboration Lifestyles	Errand networks, P2P travels	Many single providers to many single users (P2P)
Capability	Collaborative Commons	The Internet, safe streets, participative politics	Collective providers to collective users ⁹⁰

Finally, Lamberton and Rose (2012), propose a sharing typology, distinguish in two varieties: *rivalry* and *exclusivity*. In the first case, the consumption of a good by a person excludes other from consumption of the same good; in the second case, the use of a good is restricted to a specific group (Agyeman et al. 2013). Just to give an example: bikesharing redounds into the third quadrant, since it has a low exclusivity (low participating cost), but a high rivalry, as the access to the shared bike by a consumer depends on the conditions in which the previous consumer left the bike.

Table 2: Shared goods typology adapted from Lamberton and Rose (2012)

	<i>Lower exclusivity</i>	<i>Higher exclusivity</i>
<i>Lower rivalry</i>	Quadrant 1 Public goods (public parks, open source software ...)	Quadrant 2 Club access (country clubs, gated communities...)
<i>Higher rivalry</i>	Quadrant 3 Rental and reuse (car sharing, Freecycle, toolbanks...)	Quadrant 4 Closed commercial (frequent flyer mile sharing schemes...)

⁹⁰ Collective as well as community based (e.g. community street watch or local political/social movements etc.).

3 SHARING YES, SHARING NO. All that glitters ain't gold!

Reading the growing number of articles online about sharing economy and collaborative economy, and listening to the main statements of experts, it seems that the sharing economy is the 'magic bullet' that will solve all the ills of the world, or at least, people is wondering if this new type of economy will do it. 'Can the sharing economy solve the global hunger?'⁹¹, 'Is Sharing Good for the Environment?'⁹², 'Is the Sharing Economy Creating Quality Jobs?'⁹³, 'Can the Sharing Economy Provide Good Jobs?'⁹⁴, 'Sustainability Implications of the Sharing Economy'⁹⁵, 'Global justice, sustainability and the sharing economy'⁹⁶, 'Is the new sharing economy in travel a democracy or a republic?'⁹⁷, 'Is the sharing economy a pathway to greater economic democracy?'⁹⁸, 'Can the sharing economy help slow down climate change?'⁹⁹... and the list could goes on and on, since the disruptive power of this new paradigm seems to be able to reply at the main pressing problems of the humankind.

One must start from the consideration that, as showed by the many definitions given by a plurality of authors, the sharing economy encompasses a broad range of activities; for this reason, it is so hard to define and to regulate it. It is something not completely new but with a staggering power thanks to the new technologies and with innovative features. In addition, as Janelle Orsi¹⁰⁰ underlines already in 2009, "all the sharing economy activities are tied together in how they harness the existing resources of a community and grow its wealth". There is an evident contradiction with the traditional economy that usually generates wealth for people outside their communities and that produces extreme inequalities and ecological destruction. Orsi believes that the sharing economy can reverse the capitalistic and consumeristic current processes. The main problem for the author is that the so-called sharing economy we usually heard about in the media is built upon a "**business-as-usual foundation, which is privately owned and often founded by venture capital**" (Parsons, 2014), as AirBnb, Uber, Taskrabbit, Zipcar, Lyft, etc. In this vision, shared by many other authors, there is no differences between new and old business. The big companies that created the current economic problems are buying up the new sharing economy companies, transforming them in large and centralized enterprises without consider a series of elements, such as the people's wellbeing, the impact on different local economies, the social and community cohesion, the sustainable job creation, the risk to re-create stock valuation bubbles and so on (Parson, 2014). Actually, these new sharing companies have moved from the values of sharing and

⁹¹ Article of Bradley Kreit, retrieved at <http://www.fastcoexist.com/1680265/can-the-sharing-economy-solve-global-hunger> (July 30, 2012).

⁹² Article of Cat Johnson, retrieved at <http://www.shareable.net/blog/is-sharing-good-for-the-environment-it-depends> (November 19, 2014).

⁹³ Article of Jeff Tennery, retrieved at <http://www.psfk.com/2015/07/sharing-economy-jobs-on-demand-economy-uber-airbnb.html> (July 8, 2015).

⁹⁴ Article of Rachel Botsman, retrieved at <http://www.wsj.com/articles/can-the-sharing-economy-provide-good-jobs-1431288393> (May 10, 2015).

⁹⁵ Article of Matthew Yeomans, retrieved at http://www.sustainablebrands.com/news_and_views/next_economy/matthew_yeomans/trend_briefing_sustainability_implications_sharing_econo (April, 21 2015).

⁹⁶ Article of Rajesh Makwana, retrieved at <http://www.sharing.org/information-centre/articles/global-justice-sustainability-and-sharing-economy> (June 3, 2014).

⁹⁷ Article of Andrew McConnell, retrieved at: <http://www.tnooz.com/article/sharing-economy-democracy-or-republic/#sthash.PFO7yy6b.dpuf> (October 22, 2014).

⁹⁸ Article of Adam Parsons, retrieved at <https://libertytreefoundation.org/news/common-dreams-sharing-economy-pathway-greater-economic-democracy> (January 22, 2014).

⁹⁹ Article of Channal Fleischfresser, retrieved at <http://www.zdnet.com/article/can-the-sharing-economy-help-slow-down-climate-change/> (May 6, 2013).

¹⁰⁰ Janelle Orsi is a California-based 'sharing lawyers' and the author of *The Sharing Solution* (2009).

collaboration and they have built their wealth exactly using the sharing flag but, in any case, the traditional capitalistic structures are re-created. For Kallis (2013), to call sharing economy activities that only apparently have in common sharing features is a big mistake. In his opinion, these entities are mostly *rental economies*, far from the original meaning of sharing. AirBnb for example for Kallis is a real capitalistic corporation, since is valued 10 billion \$ and has an estimated value of growth around a billion per year; in addition most of its transactions are pure rental based on money. Something very different from Time Banks, urban common gardens and peer exchanges with no commercial mediation or profit. Other detractors on this line are the authors Koen Frenken, Toon Meelen, Martijn Arets and Pieter van de Glind (2015). They stress the fact that there is a substantial difference between sharing economy in a strict sense and other economic forms. Sharing, in their opinion, is about consumer-to-consumer (C2C) platforms and not about renting or leasing goods from a company, that are business-to-consumer (B2C) models. In this case, they talk of *product-service economy*, since the consumers access to a product owned by the provider, like the car-rental. The *second-hand economy* is also excluded from their definition of sharing economy, because sharing is only about temporary access to a good, again C2C, and not about the transfer of ownership of the good, as for Ebay or Facebook. Finally, it is not sharing the *on-demand economy*, because the latter is related to a more efficient use of physical assets only that can go unused, whilst the former is based on platforms that bring consumers together to provide each other with services, like Taskrabbit, and people cannot go unused (*ibidem*). In the image below the authors well distinguish *product-service economy*, *second-hand economy* and *on-demand economy* from the sharing economy¹⁰¹.

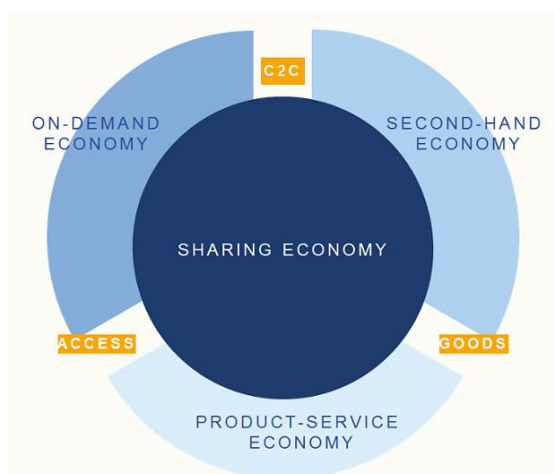


Figure 4. The sharing economy and other related economic forms

In particular, the profit issue is a matter many have discussed, considering that should be accepted as sharing only those entities that do not provide any money exchanges, or mediation of any kind. Moreover, Kallis asserts that corporations such as AirBnb should be regulated and taxed, since they are rental-based companies and they operate as capitalist venture, with a commercial mediation. He asks “*why is it ‘peer-to-peer’ when you rent at AirBnb but not when you rent in the rental market?*” and continues “*It is one thing to host someone in your home with the prospect of someday being hosted in theirs too, as is the case*

¹⁰¹ This categorization is proposed in an article of The Guardian of May 2015, available at the address: <http://www.theguardian.com/science/political-science/2015/may/20/smarter-regulation-for-the-sharing-economy>.

with Couchsurfing, or to exchange your home, as in HomeExchange (in both cases without the mediation of money), and another one to rent or pay to rent”.

The **regulation issue** is on the agenda of the main American and European cities and it is another critical point. It is in the opinion of Orsi and of many other experts that the sharing economy exists almost entirely in legal grey areas and it needs a kind of regulation. Trebor Scholz, author of the book “Digital Labor: the Internet as Playground and Factory”, in his blog affirms that “*there is a difference between practices that are not trade inclined, such as Craigslist and Fairnopoly, on the one hand, and Uber and AirBnb, on the other hand, which generate profit from peer-to-peer mediations*” (Scholz, 2014a). He invites not to confuse projects of real sharing, with others that “*exploit workers for profit*” (Scholz, 2012). Forms of sharing that must be regulated to avoid problems of security and negative externalities that can involve workers, social relations, and urban settings. Bauwens himself underlines the difference between extractive and exploitative sharing forms, which he defines “netarchical capitalism”¹⁰² (Bauwens and Kostakis, 2014) and cooperative forms in which technologies serve the local communities. Often the efficiency of sharing services and its benefits make lose sight of the existing difference between various collaborative economy forms. In Orsi’s opinion (2013), the only way to ensure that the new sharing economy companies fulfil their potential to create empowerment for users and communities is becoming cooperatives, that is changing their business models. In her article “The Sharing Economy Just Got Real” she highlights the democratic, non-exploitative, redistributive and truly sharing potential of workers and consumers cooperatives (Parson, 2014). Also other authors such as Trebor Scholz and Neal Gorenflo, recently indicate the cooperatives as the better form of development for the sharing economy realities. Scholz imagines a different ownership model, based on fair working conditions, “*as a humane alternative to the free market mode*” (Scholz, 2014b) and suggests to apply the power of ICT to practice forms of cooperation and collaboration. “*Worker-owned cooperatives could design their own apps-based platforms, fostering truly peer-to-peer ways of providing services and things, and speak truth to the new platform capitalists*” (*ibidem*). For Scholz it is time that worked-owned cooperatives design and launch their apps-based platforms, since they have the power to promote a genuine sharing, a fair labor context that dignified workers and ethical threads, without, at the same time, reject the market. He speaks about *platform cooperativism* in opposition of what Sascha Lobo (2014) defines *platform capitalist*¹⁰³, an evolution of the digital economy. Gorenflo instead, in an article of November 2015, has adopted the term *Death Star*¹⁰⁴ to identify realities such as Uber and AirBnb. In line with Scholz, he calls cooperative platforms entities that combine a cooperative business structure with an online platform to deliver services. Like

¹⁰² In Bauwens’s opinion the netarchical capitalis is a form of capitalism that “*matches centralized control of a distributed infrastructure with an orientation towards the accumulation of capital. Netarchical capital is that fraction of capital which enables and empowers cooperation and P2P dynamics, but through proprietary platforms that are under central control. While individuals will share through these platforms, they have no control, governance or ownership over the design and the protocol of these networks/platforms, which are proprietary. For example, think of Facebook or Google*”.

¹⁰³ Lobo is a German technology blogger for *Der Spiegel*. He suggested that what is defined sharing economy is nothing more than an aspect of a more general development, a new quality of the digital economy, that is the platform capitalism. Platforms like Uber and AirBnb are an example. “*The platform is a generic ecosystem that match potential customers to anything and anyone, from private individuals to multinational corporations. Everyone can become a supplier and sell all sorts of products and services. We are far from the original meaning of sharing, it is more a mutation of the economic system due to the digital technology application*” (Olma, 2014).

¹⁰⁴ The article “How Platform Coops Can Beat Death Stars Like Uber to Create a Real Sharing Economy” is available at the online address: <http://www.shareable.net/blog/how-platform-coops-can-beat-death-stars-like-uber-to-create-a-real-sharing-economy>.

saying that Uber drivers, as member of the cooperative Uber, own and govern the company, which would indicate that the platforms share value with whom make them valuable (Gansky, 2014).

Going on with other detractors and black sides of the sharing economy, we cannot forget the **labor exploitation issue**. As underlined by a New York Times' article¹⁰⁵, in Sharing Economy workers find "both freedom and uncertainty". If it is true that everyone can make available its own time, proficiency and resources, actually there is also a risk in being a small self-made businessman in the new exuberant Sharing Economy platforms, the risk of not having power of control if fares and procedures are changed from the top. Once again the example is given by Uber and AirBnb that, as underlined by Bonini¹⁰⁶ in the article "C'è Sharing e Sharing", "*right now they are a paradise for travelers and ride-hunters, and a hell for who is forced to rent himself and all his belongings without any right or guarantee. It's the neoliberal dream becoming true, finally able to outsource all the risk of enterprise on individual's body with no duty compensation.*" Having said that, this part of the sharing economy, once again, seems to be perfectly in line with the neoliberal economic development: it fosters an instable and unprotected labor market, in which someone's privileged schemes of access and other's deprivation schemes are repeated tactics that tend to replicate themselves. According to the Byelorussian sociologist, Evgeny Morozov, the sharing economy is accelerating the transformation of workers into "*always-on self-employed entrepreneurs who must think like brands*". In this sense, the statements of some Uber's drivers are enlightening, since they affirm to be forced to declare satisfaction for their working conditions to their clients, but, actually, they are deeply broken for the precariousness in which they are. The platform in fact holds the 20% of the earnings, reduces prices as it like, and can "disable" (fire) workers whenever it wants¹⁰⁷. Other corporations try to gain from the unqualified work of their own members/partners/microentrepreneurs, as they like to call them, and Tilman Baumgärte¹⁰⁸ mentions the spread of a "shadow economy", more and more distant from the original purpose of the Sharing Economy. This phenomenon is particularly obvious in the USA where there is an emerging industry in which companies gain from the low wages of their workers, overexploited and forced to take on the business risk. "*Among other, these workers, compelled to slave, each to their own, to earn some money, have no chance to organize and fight together against these injustices*"¹⁰⁹. At the 2014 edition of the American Digital Labor Conference, McKenzie Wark, talking about sharing economy, affirmed that the modes of production in which seems we are entering "*... is not capitalism, this is something worse.*" Of the same opinion is Evgeny Morozov, that dubs sharing economy as a kind of "*laissez-faire/liberalism under steroids*", appropriating and using the solidarity and sharing language, but hiding, actually, the same logic of neoliberal markets: "*to the users of sharing economy is given the exiting impression of a protracted youth, emancipated from the usual traps of the middle-class existence: there is no need to settle in one place, own a house, buy a car, collect bulky appliances. And the one who has the fortune to own something, can earn some money by renting it! At the same time the*

¹⁰⁵ "In the Sharing Economy, Workers Find Both Freedom and Uncertainty" http://www.nytimes.com/2014/08/17/technology/in-the-sharing-economy-workers-find-both-freedom-and-uncertainty.html?_r=1.

¹⁰⁶ Tiziano Bonini is a media study researcher at the Iulm University of Milan and expert of new media trends.

¹⁰⁷ Avi-Asher Schapiro in the article "Contro lo Sharing" makes a clear report about the situation of Uber workers.

¹⁰⁸ Tilman Baumgarte is a freelance writer in Berlin since 1995 and editor of the daily newspaper Berliner Zeitung, where he cares since 1999 a section dedicated to new media.

¹⁰⁹ Recently in USA the Uber's drivers are self-organizing in a kind of labor union to jointly propose their claims, although they are in competition with one another. To deepen the topic see the article <http://contropiano.org/articoli/item/28095>.

inefficiencies of the old system would disappear” (Morozov, 2014). Morozov believes that, without the economic crisis, no structures of the sharing economy would work, but the crisis exists and behind a promise of an alternative, more democratic and fair-trade economic exchange system, disparities are re-growing. In his opinion the real problem is the pretension to reason on the crisis’ consequences without a mature reflection on its causes.

Baumgärte speaks also of the tendency to **commercialize relationships** as another perverse effect of this machine: people are encouraged to consider their own life as a capital and experiment themselves as small businessmen, giving value only to what they can gain something from, interpersonal relations included. The contrary of the original altruism of sharing and exchange, since we give less value to relations and less value to ideals. Lastly, he also underlines that only who owns (goods, proficiencies, knowledge, resources, etc.) can have the chance to earn something, and, the more valuables or luxury goods one owns, such as chic flats in attractive cities, the more probability there is in having an important and secure economic return. For the author, on one hand, we witness the birth of a new rich class of people that transform its advantages in additional source of income; on the other hand, the position of the self-made man and neoliberalism are exasperated, leading to a new army of occasional workers with high responsibilities and no form of protection.

In this overview of the dark side of the sharing economy, there is also the impact that new services and dynamics can activate on the city context in terms of urbanity and socio-cultural changes, such as **gentrification** processes. Gentrification is a common and widespread controversial topic and term in urban planning (Hamnet, 1991)¹¹⁰; it refers to the shift of lifestyle in an urban community, with wealthier residents and/or businesses, which increase the property values. This improvement of the property values often generate a displacement of low-income families and small businesses. AirBnb is considered the main responsible of new gentrification processes spreading up in the main cities in which the AirBnb’s service is operated. If the profit of a real estate increases thanks to AirBnb’s short-period rentals, it increases its value, as well. This can produce a general increase of the prices in the real estate industry, speeding up the gentrification process. It is the case of San Francisco, in the core of the Silicon Valley, or Marfa in Texas, or Berlin and Barcelona in Europe, where entire neighborhoods have been affected by the implications of the short-term-rental economy. Here the average rental prices have grown so much to push away entire section of the population, the poorer pre-gentrification residents, families, and small businesses, unable to pay increased rents or property taxes and for this reason relocated elsewhere. Gentrification is typically the result of increased interest in a certain environment. Early “gentrifiers” may belong to low income artists or boheme communities, which at the beginning increase the attractiveness and flair of a certain quarter. Then, the real estate interests affect the area increasing investments, attracting in this way several businesses, and reducing the crime rates (Monroe, 2014). The Shoreditch district in London is a clear example: this district was born as a hub for technology innovation and later become an extension of the financial complex dominated by Google, Cisco, McKinsey and Intel. Artists, designers and startupper that have launched the regeneration process in the district, have been “removed”, due to a strong process of commercial gentrification. In addition, it might be considered that some private businesses like Bed&Breakfasts and hotels use to register on platforms like AirBnb and Booking.com just to increase their number of clients, and many private individuals are renting houses through these services preferring short-term rental instead of the normal rental market. These phenomena are strengthening as well the gentrification process.

¹¹⁰ Hamnet broadly explains the concept of gentrification in his book *The blind men and the elephant: the explanation of gentrification*.

So, as there are many articles wondering on the benefits of the sharing economy, there are also many reflecting on the shadow side of the phenomenon. Jeremiah Owyang (2013) in the article “The dark side of the sharing economy” even highlights seventeen good reasons to doubt about the power of the sharing economy. From the safety and quality control aspects (as unlicensed drivers acting like taxi drivers and putting those around them at risk, or home restaurant and the uncertainty of the food origin), to the lack of standardized reputation systems (currently, the startups don’t share reputation systems). From the reinforcement of oligarchy to startup saturation in every category, that confuses the market. From the lack of spending that reduces the overall market, affecting jobs and general economy (if nobody buy new staff, just share, the taxable revenues decrease) to the artificial injections of funds from venture capitalists that inflates an artificial marketplace. In Neal Gorenflo’s opinion (2013) some of Owyang’ downsides are overblown, overall the assertion that the sharing economy marks a resurgence of socialism.

The question is: does the sharing economy is good or bad? Gorenflo (2013) thinks the focal point is not about the negatives of the sharing economy, but “*about what we value and whether what’s gained is better than what’s lost in light of those values*”. It’s clear that the traditional economy doesn’t work anymore, “*it’s a stunning failure as a mechanism to allocate scarce resources*” and the system is collapsing. In his opinion, if we do not change our consumption behaviors as soon as possible we are in danger of extinction. An alternative, or at least a complementary way, can be the sharing economy: for Gorenflo its negative side disappears looking at the negative side of the traditional economy and within the sharing economy people win, whilst multinationals lose. A 2010 study of the Berkley University, shows the benefits for a city in supporting car sharing (Buczynski, 2011) for example: one shared car can replace up to 13 owned cars and a city can keep \$127 million in the local economy annually for every reduction of 15.000 owned cars. Eventually multinationals that produce cars can be worried about their future. Also for Marta Mainieri of the Italian platform Collaboriamo.org, there is no “good” or “bad” Sharing Economy, since “*the profit cannot be demonized; a business model is a necessity, otherwise these start-ups can’t move on*”.

What is sure is that we are facing a kind of continuum of experiences with many features and different degrees of sharing, so to say. From one side there are experiences of real exchange and sharing, incited by the people’s desire of finding collective solutions in resilient, participative, and communal way, also together with institutions. Some realities offers solutions that strives more for common wealth rather than profit, and point to live the transition in their own interest as citizens, with everyone’s engagement, participation, and dialogue. On the other side of the continuum, there are growing corporations, real capitalistic ventures that exploit the sharing flag to gain profit from people’s work, instigating a wave of precariousness. In between there are many realities: from open source (in which the smart data sharing allows significant improvements in quality of life), to urban gardens, passing through time banks, Social Streets, platforms to share knowledge, or clothes, or staff, crowdfunding, co-housing, ride-sharing ... in other words different experiences that cover all the spectrum of people needs and all the commodity sectors. Experiences that, thanks to communities they develop, create a sense of belonging, gathering people and approaching them in their desire of sociality, and allow to save by earning, and to live the environment in a fair, responsible, and dedicated way. Gorenflo explains the variety of practices remembering that exists a *Transformational Sharing Economy* and a *Transactional Sharing Economy*, not to confuse (Scancarello and Mainieri, 2015). Using the Matrix metaphor of the red and blue pill, Gorenflo refers to two possible choices: passive reception of an already packaged reality, the Matrix, or the choice of a reality resulting from a common fight; the convenience of the Transactional Sharing Economy, the blue pill, versus the hard transformational work, the red

pill. The first one reinforces the existing inequalities, in line with neoliberal market and its processes. That kind of corporations are real commodities, managed by few, with the aim to obtain the best return possible, where the users are just means to sell the business, and the access to the offered service is possible with just one touch on the smartphone screen. The second wishes for solid and enduring social connections, based on mutual support, on shared responsibilities and benefits. In this case, the resource management or management of the corporation itself, is collective and common, the support mutual and the goal is to produce benefits for the whole community. Unlike the previous case, users are the *reason why* of the corporation, that exists to respond to their needs and more and more acquire elements of cooperatives. In the transformative corporations, citizens are called to work together in a cooperative way, it is not that easy like a touch, but it really allows a better reality.

As notable supporters of the sharing economy recognize, like Janelle Orsi or Juliet Schor, this phenomenon seems to bring both opportunities and reasons for optimism as well as traps and concerns. From one side the sharing economy reflects a real and growing shift in our values and social identities as ‘citizens vs consumers’. In time of private interests and debt, waste, finite resources, socio-economic inequalities and disparities, it enters in our lives inspiring a reconsideration of concepts like ownership and prosperity, and a reflection on our over-consumption lifestyle and materially intense exploitation (Parsons, 2014). It could be seen as a first step of a transitioning process to switch from the current consumeristic model to another based on relationships instead of things, new politics, and a more participative democracy. On the other side, its detractors believe that it will not bring the radical changes the supporters rely on. In fact, it suffers the risk to be subverted by conventional business practices, to be co-opted by private interests and venture capitalists, to be cannibalized by the race for profit, to degenerate in an intrusive control and extreme surveillance, and to increase the already dangerous privatizations. Thinking that the sharing economy can solve all the ills of the world, transforming society for the benefit of everyone, bringing equity, democracy, social justice and environmental solutions, can sound as an unfounded utopia or an empty rhetoric. “*Sharing [...] is, in and of itself, a generally positive phenomenon that deserves to be enjoyed and fully participated in, but let’s not pretend that car shares, clothes swaps, co-housing, shared vacation homes and so on are going to seriously address economic and climate chaos, unjust power dynamics or inequitable wealth distribution*” (*ibidem*).

The sharing economy has of course big potentialities, that means 1. it ‘potentially’ might reduce inequality, favor social inclusion, rebuild social bonds and spread cooperative feelings; 2. it might transform our way of production and consumption in a more ethic and fair way, enhance the environment and improve well-being; 3. it might, democratize governance, defend and promote the global commons and subvert the current model of competitive neoliberal globalization. But we are not yet at this level (*ibidem*). Many experimentations are going in this direction, and the fact that governments are more and more involved in reasoning about sharing is a hopeful indication that the emerging sharing movement is not only made by *platform capitalism*, *Death Star* (Gorenflo, 2015a) and *Netarchical capitalism* (Bauwens, in Bollier 2014; Bauwens and Kostakis, 2014), but is slowly moving in the direction of the red pill.

PART 2. NEW CHALLENGES IN DIGITAL ERA

4 DIFFERENT IDEAS OF CITY. THE PATH TOWARD THE SHARING CITY

4.1 Smart City

The concept of *Smart City* seems to act as a background for the development and the spread of the sharing economy (Agyeman and McLaren, 2014). The new technological infrastructures that characterize a smart city are the same that currently are favoring the 2.0 sharing practices spread. As already seen, the evolution of technologies, and the penetration of mobile devices in the everyday life of people, has created the conditions for the development of sharing and collaborative practices in their 2.0 version. ITCs can be considered a driver of the great circulation and evolution of the sharing economy. To have a look on the concept of Smart City become mandatory, since the rise of networked society, networked cities and related networked governance (Castells, 2008), included the Internet of Things and the constant mobile connection, has driven a persistent interest in Smart City (Townsend, 2013, 3). In addition, the recent evolution in the direction of the prioritization of citizen in smart governance models, that some city are trying to implement, makes the issue even more relevant (Sadoway and Shekhar, 2014).

There are many different definitions of the concept, and does not exist a “one-size-fit-all” definition (O’Grady and O’Hare, 2012). The most well-known comes from IBM and Giffinger et al. (2007), even if there are many different nuances of definition that move from ‘intelligent’ to ‘digital’.

IBM considers Smart those cities fully-equipped in technological terms that apply technology to innovate and drive sustainable economic growth, “*instrumented, interconnected and intelligent cities*”, as defined by Harrison et al. (2010) in an IBM corporate document. Where *instrumented* is related to the capability of catching and integrating live-real-world-data using sensors, meters, appliances, personal devices. *Interconnected* refers to the integration of these data into computing platforms to spread and communicate the collected information for the city services use. *Intelligent* indicates the inclusion of complex analytics, modelling, optimization, and visualization services to make better operational decisions (Harrison et al., 2010). Technologies and data are used to leverage information to make better decisions; anticipate problems in order to solve them proactively; coordinate resources and processes to operate effectively. From the perspective of IBM, and Cisco System and Siemens AG too, technology is the key component of a Smart City.

Giffinger et al. (2007) go beyond the merely technology and consider Smart a city well performing on specific issues, built on the ‘smart’ combination of endowments and activities of self-decisive, independent and aware citizens. The authors propose a deep research work by which the main dimensions of a smart city are identified. It includes *Smart Economy, Smart Mobility, Smart Environment, Smart People, Smart Living, and Smart Governance*. These six dimensions “*connect with traditional regional and neoclassical theories of urban growth and development. In particular, the dimensions are based on theories of regional competitiveness, transport and ICT economics, natural resources, human and social capital, quality of life, and participation of citizens in the governance of cities*” (Lombardi, 2012). The model proposed by Giffinger with the University of Vienna develops and evaluates metric to rank 70 European medium-sized cities, using specific indicators for each of the six dimensions of smart. The resulted classification represents the first methodological attempt to measure the degree of smartness underlining the driving forces behind it and has become an important reference in the debate about Smart City. Nevertheless the authors themselves admit that the classification has a number of limitations, such as the inability to measure properly all the

indicators or the presence of a significant number of indicators (35%) available only at national level (Giffinger and Gudrum 2010). In addition, the concept of Smart City is set within the neoclassical theory of regional and urban development (De Santis, Fasano, Mignolli, Villa, 2014)¹¹¹.

In general, looking at the main definitions adopted by institutions and places, we can refer to Smart City as a city with two common features:

- the use of technologies of communication and information (ICTs) and of innovative solutions to address issues in one or more aspects of the city (such as governance, mobility, economy, environment, living and people);
- and the goal to improve the quality of life of the citizens and enhance the sustainable growth and competitiveness of the city through “smart” initiatives.

Other authors, such as Nam and Pardo (2011) underline the difference between the concept of smart city and the similar terms of *digital*, *intelligent*, *virtual* and *ubiquitous city*. Terms that refer to more specific and less inclusive levels of city (Albino, Berardi, D’angelico, 2015).

- A *digital city* alludes to “*a connected community that combines broadband communications infrastructure to meet the needs of governments, citizens, and businesses*” (Ishida, 2002); its ultimate goal is to create an environment of information sharing, and interoperability.
- An *intelligent city* matches the concept of knowledge society with that of digital city (Yovanof and Hazapis, 2009) in order to use ICTs to support learning, technological development, innovation, and in this way transform life and work in the city. As Woods (2013) underlines, a digital city cannot be intelligent, whilst every intelligent city has digital components.
- A *virtual city* is a kind of hybrid composed by a physical part (structures, entities and inhabitants of the city) and a cyber-part.
- A *ubiquitous city* can be considered an extension of the digital city concept in terms of wide accessibility (Greenfield, 2006), and allows citizens to use any service anywhere and anytime thanks to technological devices and sensors in the urban context (Lee et al., 2013).

These definitions seems to be focused essentially on the technological component, and with the approach of IMB, Cisco and Samsung, have recently received many critiques, since they seems to be driven by a sort of technological determinism. In general they don’t consider other important aspects, indeed mandatory in a city, such as the role of people and the importance of human capital/education, the social and relational capital and the environmental interests that are definitely important drivers of urban growth (Komninos, 2013; Nam et al., 2011, Deakin, 2014). On the contrary, other authors are investigating and considering these components as key elements in a city that strives for being a smart city. Deakin (2011) and Caragliu et al. (2011), highlight both the importance of a consistent ICTs presence with advance technologies and the prominence of human factors. Also Hollands (2008) underlines the added value of human infrastructures and stresses the importance of social learning and education. In his opinion ICTs themselves cannot automatically transform and improve cities,

¹¹¹ Looking at the measurement system, in 2013, Zygiaries proposed a new system based on six layers of a smart city: the city layer, that emphasize the focus on the context of city; the green city layer, referred to the urban environmental sustainability; the interconnection layer, corresponding to the city-wide diffusion of green economies; the instrumentation layer focused on real-time system and sensors; the open integration layer, referred to the necessity that smart city applications communicate and share data and info; the application layer referred to responsive operation; the innovation layer, looking at the innovation environment that create new businesses opportunities.

they can be enabling factors but not the ultimate goal of a city. Nam and Pardo (2011) consider three orders of elements in a smart city:

- the technological factors: Physical infrastructure, Smart technologies, Mobile technologies, Virtual technologies and Digital networks,
- the human factors: Human infrastructure and Social capital,
- the institutional factors: Governance, Policy and Regulations / directives¹¹².

In this sense, a smart city puts citizens always at the core of its urban policies and promotes the maturation of forms of capacity building at different levels (Paskaleva and Deakin, 2014). At micro level in the relations among individuals and at macro level in the relations among the stakeholders of the territory (included local, regional, national and supernatural actors). Komninos (2013) is of the same opinion and stresses the importance of people-centered smart cities. He talks about smart city as “*an area with a high capacity for innovation and learning built on the creativity of its community, its institutions for the creation of knowledge and its digital infrastructure for communication and knowledge management*” (Komninos 2008). Included in this definition there are all the fundamental components of a smart city: *innovation, creativity, knowledge, technology, people and communities*. Items that can be divided into two categories:

- **social infrastructure** - the social fabric of a city (human and social capital): people, relationships, culture and ways of doing things (Caragliu et al., 2011); this infrastructure can be associated with soft community.
- **Intelligent infrastructure** - composed by information technology and communication. These technologies when effectively integrated into the urban fabric and communities can ensure an efficient use of resources by reducing waste and maximizing the recovery of existing, and at the same time can create an environment socially and economically attractive for citizens, businesses and government.

Other studies (Nijkamp et al., 2011) focus on the interrelationships among the components of Smart Cities, including human and social relations that connect intellectual capital, health, and governance through an approach based on the Triple Helix Model. Looking only at the technical side cannot be considered thorough and exhaustive. The load-bearing part of the model is the social infrastructure. Without a prepared, organized, and participatory community, any technology solution is not very useful because not integrated into the daily lives of people who, sometimes, are not able to understand the real benefits or how they work. The infrastructure, cloud computing, tablets, social networks are nothing more than enablers for smart initiatives, but they don't create in themselves a smart city. The city to be smart has to bet on people, who are the real *generator of contents*. It is easy to attribute the intelligence of the smart city simply to its technological equipment, but going beyond technology there are three important dimensions of a smart city:

- the *economic* one – related to the presence of innovative activities, research and attraction of business and professional capital;
- the *human and social capital* – referred to the presence of smart people in terms of skills, relational skills of inclusion and tolerance;
- the *governance* – related to the adoption of governance models featured by centrality of relational goods, people and attention to common goods and able to promote civic participation and create public value.

Assuming this perspective, the concept of smart city is inextricably linked to that of social innovation. The Smart cities are cities that create the conditions of governance, infrastructure, and technology to produce social innovation, that is, to solve social problems related to

¹¹² Concerning institutional factors see: Healey, Innes, Cars G., Healey P., Madanipour A., Borrelli.

growth, inclusion, and quality of life through the listening and the involvement of various local actors: citizens, businesses, and associations (De Santis, Fasano, Mignolli, Villa, 2014).

4.2 Human City

From these perspectives, that highlight the importance of the human and institutional capital beside technologies, new approaches are developing. For example some authors (Diamantini, Borrelli, Bernardi, 2014) are reconsidering the smart city in terms of *human city*, matching *smart* and *slow* elements in this new vision of the city, in which the human capital and the capacity building of people are at the core of an environment able to offer a good quality of life in a sustainable way. The slow city¹¹³ concept was introduced to enlarge the philosophy of slow food to local communities and to municipalities (Carp, 2012) and even if smart and slow have always been considered as opposite, some overlapping and converging elements can be retraced, as shown in the following image. Both the models, smart city and slow city, put people at the core of policies and reasoning, considering how to give space, improve, and enhance their capabilities to act, change and develop innovative practices. Both consider the development of human capital and institutional capital a central aspect for a healthy and smart city evolution.

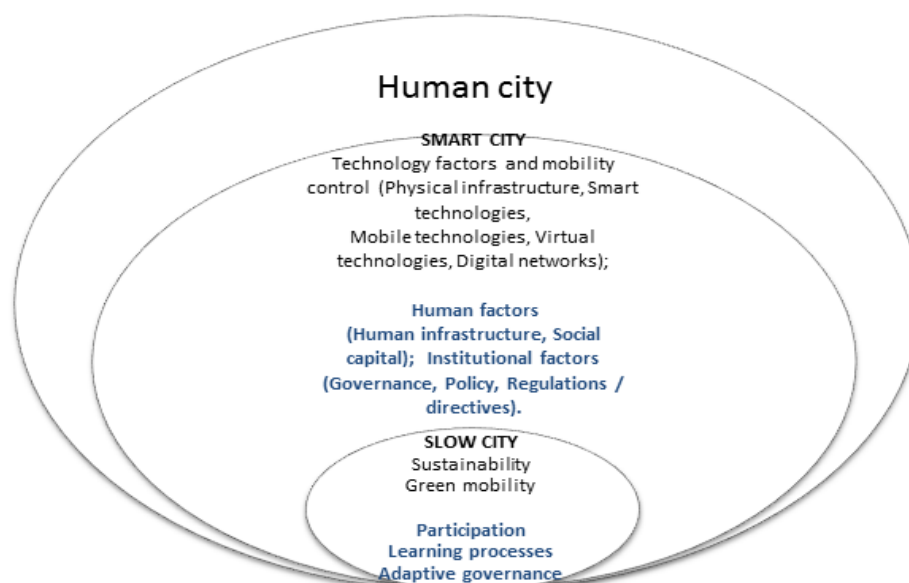


Figure 5 Smart and Slow in the creation of a Human City (Diamantini, Borrelli, Bernardi, 2014)

Carp, in particular, in her vision of a slow city, refers to two conceptual frameworks: adaptive co-management and adaptive governance. The former is based on a specific balance between the coordination capacity of centralized structures and the learning capacity of decentralized structures and the core elements are learning, collaboration, and multi-level governance (Schultz, 2009 quoted in Carp, 2012 p.115). The latter is based on an effective production and participation in the collaboration of multi-stakeholder; on the identification and connection between the community, the market and ecological and management issues; on the relation with distributed capacities and the evaluation of local knowledge (Carp, 2012, p.116). Among the required capacities of participants, the learning aspect is the most important, that is they need to learn how to learn (Bateson, 1976). In addition, the concept of resilience is strictly related with adaptive governance, indicating the ability of a community to *adaptively* respond to change rather than simply returning to a pre-existing state (Carp, 2012).

¹¹³ A slow city embodies a sustainable approach to urban development and aims to link social and ecological dimensions of places (see Mayer and Knox, 2006).

Especially the latest literature on the Smart City topic tends to embrace concepts that until now have been typical of the Slow City topic, in particular the concepts of social and institutional capital (Diamantini, Borrelli, Bernardi, 2014). In this sense, a new city model corresponding to a *Human city* is emerging (Martinotti, 2010).

4.3 Progressive City

Further evolutions of this perspective, even if not directly related, talk about a *progressive city*. These approaches consider a Smart city more in terms of technology and see the version of Human city as the result of a progressive aptitude spreading in the city (Cho and Douglass, 2014). There are not many researches on this topic but some indications can be retraced in the work of Clavel (2014) and in the analysis of the Asian cities proposed by Cho and Douglass (2014, 2015)¹¹⁴. In general the term *progressive* gained attention in US at the turn of the 20th century (Douglass, 2015), as a reaction to the so-called “Gilded Age” (Twain and Warner 2006) marked by the high levels of inequality, misery and corruption. The civil society movements pushed for progressive reforms in order to guarantee more inclusion, social justice and environmental protection. A century later new global inequality, corruption, and environmental crisis even worst of before spread, and even the United Nations pushed governments for “good governance” and progressive reforms based on civil society involvement, in order to promote “*equity, participation, pluralism, transparency, and accountability*”. A Second Progressive Movement is emerging in US, Europe and Latin America, led by cities rather than governments (Clavel, 2010, 2014). Asia¹¹⁵ is also facing the emergence of progressive cities, such as Surakarta and Surabaya in Indonesia (Padawangy, 2015b), Chengdu in China, (Cabannes and Yi, 2015), Taipei in Taiwan, Klaeng in Thailand and Seoul in South Korea (Cho and Douglass, 2014). In this work, we refer mainly to the researches of Cho and Douglass that have deepened the Korean case. The authors consider a progressive city a city successful in redistributing public benefits, with an economic system that tends to equality and grassroots mobilizations able to gain effective voice in urban governance coalitions (Cho and Douglass, 2014). A progressive city is mainly based on the concept of *human flourishing*, considered by Cho and Douglass (2014) “*a ‘universal claim’ that depends on reciprocity and cooperation among people*”. They judge it a central organizing concept for arraying and assessing interactions between four dimensions: *inclusion, distributive justice, conviviality and environmental sustainability*. These dimensions are considered the main pillars in the construction of a city that is more than smart, precisely progressive.

- About *inclusion*, as Cho and Douglass underline, the reference is to the capacity of a civil society to engage in political discourses. The inclusion can be a spontaneous process of political engagement through social encounters or a more formalized practice through direct or indirect form of participation, but in any case, an inclusive social and public life remains a basic component of a progressive city.
- About *distributive justice* the importance is on the processes of redistribution of wealth, assets and income to marginalized, poor, oppressed, invisible or in some way excluded from the benefits and services of the city’s economy. The topic of social justice in the city has largely addressed in the academic debate from different point of

¹¹⁴ Cabannes and Ross in 2013 presented a *Progressive Manifesto*, for “any town, city or neighborhood”, in which they affirm that all residents and city dwellers are equal and owner of the city and underline the importance of energy efficiency and carbon neutrality .

¹¹⁵ Douglass (2015) underlines that “*progressive cities in Asia are appearing at a particular juncture in history that is marked by Asia’s massive urban transition and the rise of civil society at a time of widespread discontents that find insufficient resolutions at national scales*”.

views: Castells (1977) underlines the relationship between social justice and the production of urban space, Lefebvre (1991) and Fainstein (2005) are concentrated on the right to make and change the city itself. In terms of progressive city, it refers to an ongoing process of empowerment of citizens and inclusive engagement that embeds redistribution in citymaking.

- About *conviviality*, the vitality of social and cultural life is strictly related to the human flourishing and to the dimensions of human creativity, efficacy and self-awareness, intended as a processes of validation coming from the discussions and debates, and not only as individual simple act. This is the position of Lisa Peattie (1998) that, from this perspective, considers the human flourishing not the final point but an “*ongoing practice of engagement of people with people*” (Cho and Douglass, 2014). Conviviality for the author is the ultimate purpose of citymaking, based on shared public and common spaces, “*the very nourishment of civil society itself*” (Peattie, 1998 p. 250).
- About the *environmental sustainability*, it can be considered the result of a good inclusion, a right distributive justice and a fervent conviviality. In our century, the entire world is under pressure for the devastating effects of the climate change and of the environmental disasters, therefore the environmental sustainability represents the most important form of progress that humanity has the responsibility to realize.

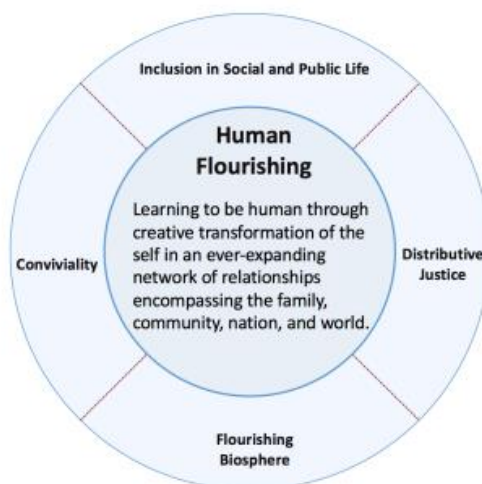


Figure 6 Urban Dimension of Human Flourishing in Progressive City. Source: Douglass (2015)

Cho and Douglass, in general, and along with other authors, such as Piyapong Boossabong and Rita Padawangi, think to a “city by and for the people”, a kind of “vernacular city” (Padawangi, 2015a) in which people are strongly involved in the city life, also thanks to institutional tools such as the participative budget (Cabannes, 2004).

4.4 Sharing City

These different points of view are all converging on the importance to include people in the management of the city and in its daily creation, looking at inclusion, equity, sustainability as main frame for the human development. The human dimension acquires a crucial relevance and become a central point from which policies and initiatives should be developed. Its importance is traceable also in other analysis of the city that proposes human-cantered visions, such as the work that Agyeman and McLaren (2015) are conducting under the name of *Sharing Cities*. Their forthcoming book, “*Sharing Cities. A Case for Truly Smart and Sustainable Cities*”, will be published in December 2015, and it promises to be a compelling

analysis, given the previous researches of the two authors and the first reviews released by the main international experts of the sharing economy. The book will be a far-reaching, global account of sharing initiatives incited by concern for social justice and human connection. It will present stories of real cities (San Francisco, Seoul, Copenhagen, Medellin, Amsterdam, Bangalore...) that are successfully making the sharing city real, as announced by one of the reviewer, Brent Toderian¹¹⁶. As the two authors underline in the book's presentation: "*the intersection of cities' highly networked physical space with new digital technologies and new mediated forms of sharing offers cities the opportunity to connect smart technology to justice, solidarity, and sustainability*"¹¹⁷. They propose a new "sharing paradigm" that overcomes the mainstream concepts of sharing economy, and their degeneration in commercial models, to envision forms of sharing more communal and based on collaboration and trust. Using detailed case studies, they contextualize the concepts of collaborative consumption and production, the shared public realm, the design of sharing to enhance equity and justice, and the possibility to scale up the sharing paradigm thanks to proper city governance models. In other words, with their work becomes clear the ability of the sharing economy to favour the shift of values and norms, to enable civic engagement and political activism, and to rebuild a shared urban commons. These potentialities of the sharing economy are at the base of the creation of a new city, namely a city that uses the sharing economy as complementary tool in order to reply at the urban challenges. The final goal is always try to give citizens better opportunities and an improved quality of life, allowing access to the new possibilities generated by collaboration and sharing in the 2.0 era. From this perspective, we can consider the ***Sharing City a sort of human way to the Smart City, which seeks to endorse the human potential and moves from marketplaces to commons***. A city in which technologies are really an enabling tool to open alternatives for citizens. When cities deploy technology to build "*a new urban commons to support communal sharing*" (Agyeman et al., 2013) truly smart cities emerge, and can become sharing cities, giving space to collaboration and sharing practices and services. "*When mayors and developers focus on technology rather than people, smart quickly becomes stupid, threatening to exacerbate inequality and undermine the social cooperation essential to successful cities*" (Agyeman, McLaren, 2014). In this frame, technologies gain a new role and can be used to shape more just, inclusive and environmentally efficient economies and societies. If today people live walled up inside their house having lost trust in stranger, with an overconsumption lifestyle featured by commercialization, and try to survive at the economic crash working all the time, sharing economy can be the breakthrough to gain new opportunities at the intersection of urban space and cyberspace (Agyeman and McLaren, 2014). Through the raising chances offered by collaboration and sharing, create a different world starting from people, neighbourhoods and cities seems to become possible. Just think to 'Repair Cafes'¹¹⁸, to 'Freecycle'¹¹⁹, to 'Shared

¹¹⁶ Brent Toderian is an urbanism consultant, TODERIAN UrbanWORKS; former Director of City Planning, Vancouver, Canada.

¹¹⁷ The book's presentation is available on the web site of the MIT at the online address: <https://mitpress.mit.edu/books/sharing-cities>.

¹¹⁸ Repair Cafes are places dedicated to the repair of objects and organized at a local level between people living in or frequenting the same location (a neighborhood or village, for example). They meet regularly at a particular place (café, village hall or local associations) where tools are available and where they can repair objects that they brought, assisted by volunteers. The goals of this alternative approach are diverse: reduce waste, preserve the art of fixing things or strengthen social cohesion among the inhabitants of the area. Shareable proposes an article on how to start a repair café <http://www.shareable.net/blog/how-to-start-a-repair-cafe>.

¹¹⁹ Freecycle is already a huge network (Freecycle Network™), made up of over 5 thousand groups with more than 9 millions of members around the world. It's a grassroots and entirely nonprofit movement of people who are giving (and getting) stuff for free in their own towns. It's all about reuse and keeping good stuff out of landfills. Each local group is moderated by local volunteers. Membership is free. <https://www.freecycle.org/>.

Garden¹²⁰, to new forms of social landing¹²¹ that are now spreading, to crowdfunding platforms, to Social Streets, to Shared public Bus Rapid Trans¹²², to co-housing, to co-working spaces, to car-pooling, to swap, exchange and barter platforms and many others. These sharing occasions, clearly based on open access, equity and justice, are growing more and more. This type of sharing system, in Agyeman and McLaren's opinion (2014), will naturally shift cultural values and norms towards trust and collaboration, bringing people together and giving them new resources to tackle the economic crisis, to fight the social isolation and exclusion and to reduce the environmental impact at the same time. Nevertheless, the authors (and in general the current debate) are aware that sharing, if co-opted by venture capital interests, can have perverse effects too, as shown in the first chapter of this dissertation. Namely, it is not a panacea to global problems (Rinne, 2015) and can have contradictory developments. Sometimes sharing is "*too narrowly conceived as being primarily about economic transaction*" (Agyeman and McLaren, 2014) and the demands for rapid growth and big profits can destroy the positive externalities and cannibalizing virtuous practices of the sharing and collaborative economy, fuelling job insecurity, enabling gentrification, and deepening inequalities and injustice. In short, reproducing the old ideology of neo-liberalism with its negative outcomes. A sharing city to really be worthy of its name, and avoid *uberification* processes, should be able to dissolve the gap between *transformational* and *transactional* sharing (Gorenflo, 2015, De Stefani, 2015, Scancarello and Mainieri, 2015) as explained in the first chapter. It should be designed around equity and social justice, prioritize and favor the so called human flourishing (Cho and Douglass, 2014) and social initiatives, and avoid forms of re-adaptation of the old capitalist paradigm to the new economic trends (as Uber and AirBnb are doing recreating old monopolies). A truly sharing city, as Gorenflo underlines, is about the resurgent collaborative experimentation, is about an open city, available for use, and able to create a city environment and an economy "by and for" the people. April Rinne (Pais, 2013b) talks about *civic trifecta*: better economics, better environment, and better for community. "*When we can look at all assets in a city from a shared perspective, our entire view of the city and sustainable urban growth improves*".

From this point of view, the previous labels of *smart*, *human* and *progressive*, with their specific and similar features, seem to acquire a new sense flowing into this new fresh label, which, on its side, gains a strong relevance in the direction of commons, of people, of justice. There are overlapping meanings among the concepts that make *sharing* the most actual and realistic interpretation of the potentialities of today's cities.

As emerged in many conferences and debates on the *sharing city* topic (such as Sharitaly 2015, The City as Commons 2015 among the others), the ability of a city is to switch from mechanisms that foster profit and reproduce inequalities, to a vision in which collaboration, sharing, cooperation, sustainability, inclusion, equity and access are the main key words for a fair and sustainable development. It requires important reflections, the involvement of new actors and the adoption of a different model of governance based on the capability of the public authorities to re-think themselves and the interests at stakes. Create a sharing city

¹²⁰ Garden sharing or urban horticulture sharing is a local food and urban farming arrangement where a landowner allows a gardener access to land, typically a front or back yard, in order to grow food (Wikipedia). Web-based projects facilitate matchmaking. In some cases, garden sharing projects are launched as a way to shorten community garden waiting lists that are common in many cities.

¹²¹ An example is Kiva City, a non-profit organization oriented to connect people through lending to alleviate poverty. Leveraging the internet and a worldwide network of microfinance institutions, Kiva lets individuals lend as little as \$25 to help create opportunity around the world. It is a form of social lending and microfinance via web born in USA. <http://www.kiva.org/>.

¹²² A bus rapid transit (BRT, BRTS, busway) is a bus-based mass transit system, the shared option allows a wider access to the services. This type of service is transforming the city of Medellín in Colombia, by providing previously marginalized communities with access to jobs and facilities.

needs a clear vision, a strategy, a “road map” for the long period, and a strong commitment, and in this process the all-too familiar concept of smart city can be restored. In the chapter 10 this issue will be extensively analysed and presented, showing difficulties and benefits in supporting sharing economy tools and practices.

The last frontier of this concept is the idea of creating a “co-city”, a city “... *based on collaborative governance of the commons whereby urban, environmental, cultural, knowledge and digital commons are co-managed by the five actors of the collaborative/polycentric governance, through an institutionalized public-private-citizen partnership*” (Iaione in Bauwens, 2015). The concept of *collaborative governance* (inspired by the work of Elinor Ostrom), on which lies and takes strength the “co-city” idea (Foster and Iaione, 2015), is broadly explained in the next chapter, proposing the example of Bologna as first experimentation of the application of a new modality for governing the city not only for, and in name of, but overall with its citizens. The partnership proposed is threefold, overcomes the popular dichotomy public-private, and include the citizens, promising to be able to lead to the creation of a local p2p physical, digital and institutional platform with three main aims: *living together* (collaborative services), *growing together* (co-ventures) and *making-together* (co-production). These are the three big areas on which a sharing city, and even more a “co-city” can be founded according to the proposition of LabGov and Iaione (2015).

5 GOVERNANCE ISSUES

Deciding which governance model can be more efficient to provide an answer to the current institutional and economic crises in the 2.0 web society, has been intensively discussed, given also the social, cultural, political and economic mutations. This has happened not only through debates and discussions but also with experimentations and the formulation of new tools and models. Furthermore, the massive spread of the sharing economy at global level requires to consider and include this new variable in the definition of suitable governance strategies.

Having extensively seen the features of the sharing economy it is known that it can take many different forms and in particular two different paths, one in the direction of the red pill (*transformational sharing economy*) and one in the direction of the blue pill (*transactional sharing economy*) (Gorenflo, 2015). To dissolve the gap between the two paths the governance issue becomes even more crucial, in order to create a common homogeneous vision on what kind of city develop, a city oriented to profit which reproduce old monopolies and maintain social hierarchies or a city “by and for” the people that becomes itself a commons (Iaione, 2015). One has to ask what are the key players today and what are their roles, whether and how the sharing economy is a challenge for policymakers, and how governments can approach it, what policies work and what should be modified, what models must be reinforced and what changes are most needed. Not everything around sharing economy is new, as seen, and if governments in the past have been able to implement some changes they can also do it today. Obviously, the speed of change of the phenomenon, the limitations of the existing regulatory systems and the specific contexts of government make the sharing economy a challenge, first of all, but not only, in terms of management and regulation. To overcome these problems, governments must define if they want to play and with which role, exploring new normative approaches and new forms of system interaction. Sharing economy and new technologies can also represent something new but the dynamic of competing interests is something familiar (Johal and Zon, 20015).

The debate around the role of government in the sharing economy era is growing, in general and especially for those cities that declare to be sharing cities. Experts, innovators, policymakers, and researchers are trying to go in depth with this question and to find a suitable governance model to fully capitalize the sharing economy in the city. There is an increasing talk about a new type of governance, the so-called *collaborative governance*. Even if, crossing the phenomenon of the sharing economy, it appears to be less appropriate and starts to assume new meanings. For a good understanding of this last reflection, and in order to catch the evolution of the governance issue alongside the time, as well as the best context for a new form of government, it is useful to have a brief look at the concept of *governance* in general.

5.1 Origin and definition of Governance

The term governance has been known to hold multiple interpretations and refers to “what can in practice be rather different things” (Jordan, 2008 p.21).

The meaning of the term governance, beyond definitions, can be comprehended within the frame of important societal changes like the economic globalization, the birth of the European Union, the demographic and technological changes, the transformation of the welfare capitalism asset and the compression of the space-time relation in the flow of people, goods and information (Harvey, 1997). The local governments’ behaviour and the role of the involved social actors has changed, opening to the nation-state new challenges. After the Second World War cities and local governments didn’t have a big or important role in the

decision making over the territory, they were only “agents” of the nation-state and their role was to supply the required services (Le Galès, 2003). But the transformation of the society questioned the traditional role of the nation-state of “*single manager of the social benefits*” (Vischi, 2009, p 217-221). The government, intended as the state ability to take decisions, keeping order and simplifying the collective action, was no longer enough to regulate the cities’ dynamics. In fact, new actors, diverse in nature, dimensions and interests, were more and more involved in the internal organization and the nation state had to find a better way to coordinate such large number of institutions springing from different territorial levels and to collaborate with the private sector and the civil society.

The financial crisis, that has been effecting capitalistic states since the 80s, and especially in the 90s, has forced the public authorities to try to play the role of helmsman (steering) and coordinator, linking public resources to the private ones. The idea of ‘steering’ has inspired the re-definition of the public sector’s role. The political authority operated on strategic levels without obligations for the operational management performed by the administrative machine. The political and administrative action promoted consultations between public and private, abandoning the adversarial vision of the relationship between the public authorities and the private business (Osborne, 2010).

So, in order to understand the origins and the different meanings of the concept of governance it is necessary, on one hand, to contextualize it in the historical framework of the enterprise and of the capitalist system and, on the other hand in the contemporary state, both affected by a crisis of the hierarchical model of relations’ regulation process (Stoker, 1998). Both the Taylor-Fordist model inside companies and both the bureaucratic model of government did not seem adequate to manage the complexity of the current system. The states’ financial crises, the emerging paradigm of New Public Management and also the increasing complexity of social and political phenomena have led to structural and ideological changes that have fostered the current relevance of governance (Marin, n.d). In this new context the theory of “New Public Management” has spread, questioning the existence of a specific culture and specific forms of management of the Public Administration. This theory supports the idea to implement principles and techniques of private management to the Public Administration. Applying business rules has encouraged the development of the hallmark of the governance: attention to the stakeholders’ participation; coordination of the different stakeholders involved; systematic application of the principles of effectiveness, efficiency, consistency and transparency in the policy action (*ibidem*). Additionally the processes of “sovra-nationalization” and “sub-nationalization” have increased the proliferation and differentiation of branches and levels of the government. The former appeared in Europe through the passage of skills from the nation states to the European Union; the second displayed with the devolution of power and responsibilities to a number of subordinated levels of government, such as regions, provinces and local authorities. A plurality of levels interacting together and needing coordination under the umbrella of a national government. The cooperation and the openness is not only related to public-private relations, but also to the relations between the different levels of the public institutions (*ibidem*).

5.2 Governance and Government

Many authors and researchers dealt with the differences between Government and Governance and tried to establish a workable definition of governance that is bounded and falsifiable, yet comprehensive. (Rhodes, 1997). During the 70s the two terms were used as synonymous, in the 80s the switch from government to governance indicates a change due to the reform of structure and institutions of the US metropolitan government and the terms were

used in opposition. Also In Italy from the 80s government and governance were considered in opposition (Marin, n.d).

The concept has established itself in the political and academic debate in the last twenty, thirty years and in the long has been integrated and changed several times. Economists, political scientists and experts always used governance in opposition to government, intended as institutions and activities of the state. In this sense, it refers to forms of government in which the State is no longer the political epicenter but has a lower role. The State is not the only actor, expert, and in charge of the process and development, furthermore there is a reduction of authoritative approaches in favor of concertation, negotiation and contractual attitudes. In this sense, the role of political institutions and public authorities is no longer enough to ensure appropriate arrangements for local development. To integrate the action of the local public power is clearly necessary a wider mobilization of actors of different types and a project able to create synergic initiatives (Ansel and Gash, 2008). How? Not so much through the use of normative regulation, but mainly building a common representation, a “vision” of the future shared and desirable. In addition, the involvement of so many actors, both individual and collective, opens a space also for the civil society that in this way could enter in the decision-making process. Thus, *governance* is such a broad concept embracing the multiplicity of actors, for instance the community, businesses and non-governmental organizations that can contribute to the process of societal steering (Lemos and Agrawal, 2006). As such, governance acts as an umbrella term that covers the entire array of institutions and relationships that take part in the process of governing (Pierre and Peters, 2000). The local dimension gains a new relevance in the regulatory context, starting new processes of economic and social development and becoming competitive in the global market (Ruzza 2004, Della Sala e Ruzza 2007).

For some researcher, as Chiara Vischi, the government paradigm involves only political and administrative actors with hierarchical principles and bureaucratic rigidity; on the contrary, the term governance opens up and become available to economic and social actors creating a model based on decentralization, fluidity and flexibility (Vischi, 2009, p.217). The formal and informal processes of the governance allow groups of actors to take binding and satisfactory decisions, making a regulated negotiation. This would also include the principles of subsidiarity, exchange, participation and cooperation.

For others (Farinòs Dasi, 2009) government refers to the state’s power organized in public authorities with hierarchical relations and burocratic functioning rules, while governance indicates a complex system of relations that includes also those actors usually excluded from the political arena.

Other researchers think that there is not a real opposition between the two terms. Sibeon (2001) for example considers the governance a sort of “continuum” of the government. In his opinion, the governance is “*a social activity in which no actors can guide alone the interaction*” and the government is “*a way of hierarchical interaction guided by formalized rules and by an authoritative role of the public body*”. For Sibeon the public actor acts as a network manager that encourage interactions among the other actors, it also connects actors through nonhierarchical relations and enhance the self-organization ability of the social systems. The public actor is a sort of facilitator and it pilots the social and political dynamics.

Imrie and Raco (1999) consider the switch from government to governance as a transition process and not as a drastic change or an alternative. The transition includes “*the structures, the political styles and the direction of the government action*”.

Stoker (2000) is the author who most clarifies the importance of the governance and its consequences. The main problem is not to understand the innovation in itself but rather the ability or not of the government structures to learn how to work with a governance logic. Also

for him there isn't a complete change from government to governance but it's more a sort of adaptation of the government structures to the governance paradigm. For Stoker "*governance refers to the rules and the forms that guide collective decision-making. That [...] implies that governance is not about one individual making a decision but rather about groups of individuals or organizations or systems of organizations making decisions*" (Stoker, 2004). He also suggests that the main interpretations of the term agree "*that governance refers to the development of governing styles in which boundaries between and within public and private sectors have become blurred*" (Stoker, 1998).

Dente (1999, p.112) introduces a new term: governability, to describe the ability to "*make coherent decision, develop effective policies and implement programs*". He also considers governance an alternative to government: a new set of phenomena other than government. From government to governance there is a shift, a transition, from a "*formal legal vision of the exercise of government*" to an "*empirical survey of actors and interaction mechanisms through which to describe the different forms of conflict or cooperation process for the construction of new policies*".

James Rosenau (1992) looks instead to the actors involved in the two models: "governmental actors", coming from the government institutions, are the only actors in the government, in the governance there are also "non-governmental actors", new actors coming from outside the political arena (such as private companies, supra-national organizations, mass media) (Painter e Goodwin, 1995). For him both the concepts refer to intentional behaviors and systems of rules. But in the government model activities are supported by formal actors that ensure the implementation of policies regularly constituted, while the governance looks at activities, with shared goals, that can or cannot derives from responsibility formally prescribed.

Again, for Mayntz the government is related to a more institutional approach, while the governance is related to interactions and organization processes, to the public policies and to a tendency to overcome a strictly institutional perspective. He defines governance as "*a new style of government, distinct from the model of hierarchical control and characterized by a greater degree of cooperation and interaction between the state and non-state actors in decision-making networks mixed public/private*" (Maynz, 1993), with "game-interactions", based on trust and governed by rules negotiated and agreed among participants (Rhodes, 1996).

Lynn, Heinrich and Hill (2001) consider the governance as "*a regime of laws, rules, judicial decisions, and administrative practices that constrain, prescribe, and enable the provision of publicly supported goods and services*". Their definition includes both the traditional governmental structures and the new emerging forms of public/private decision-making bodies.

Additionally, for someone (Rhodes, 1999) the reduction of the State power and increasing interdependence of governmental and non-governmental actors in solving social and economic problems, is an act of delegation by the State that transfers its function to the top (EU), to the bottom (local governments) and outside (specialized agencies). For others (Vadelago, 2002) it represents instead a different way of being of the state, based on institutional and functional decentralization and on negotiation and contracting as fundamental for the regulation of relations among the parties.

Following this reasoning, Segatori (2002) considers the governance as a "*process of processing, determination, realization and implementation of policy actions, made following consultation and partnership criteria between public and private actors or the third sector*". This process assumes two different forms of coordination among actors: one between institutional actors and one between public authorities and local stakeholders. The former can

be horizontal or vertical, horizontal between actors of the same levels but from different territorial areas, vertical between actors that act at different size scale. The second type of coordination can take place only through a model that enhance the role of citizens administered, that means promoting democracy in the administrative action, gaining citizens' agreement, reinforcing their responsibility and implementing decisions with high standard quality.

5.3 The Urban Governance

The frame from which the governance concept can be understood, with its economic, political and social transformations, influenced also the physical morphology (cityscape) and the social structured (mindscape) of the contemporary city (Amendola, 1997) and activated a deep evolution. Metropolitan areas are increasingly large and it is difficult to define them, also in cultural and institutional terms (Castells, 2003). Some cities become social, economic, political actors able to create unions and to affect the economic development (Le Galès, 2001). The administrative decentralization, from the political side, determined a new autonomy and an extension of the role of the government. In addition, the territorial institutions acquire new functions of local development promotion (not only of supply of services). Cities and regions become leading actors of the development policies, in relation to the central government and on an international level too, by increasing their competitiveness (Vicari Haddock, 2004). They become more and more competitive, not only at economic level but also at political and social level, through new form of governance and strategies to create changing opportunities.

The transformations happened in the period between the end of the Second World War and the 80s, as seen, changed the existing structures in terms of hierarchical institution (Magnier and Russo, 2002), but cities remained the place of concentration of people, goods, services and information, the place of development and growth of the society (Martinotti, 1999). They are, of course, also the place of conflicts, poverty, and marginality for some social groups in the demographic scenery.

In the postindustrial era, the transition from an industrial economy to a service and knowledge¹²³ economy, the economic globalization and the political-institutional transformations, triggered a process of restructuring the urban space and functions. In this context, cities became more and more competitive and launched real operations of “urban marketing” to attract private capitals, human and financial resources, international organizations, big events and manifestations. All this has led to concrete measures with the purpose of defining new institutions, experimenting new governance forms and designing innovative policies (Guzzo, 2006). As already seen, the decision making process involves new actors, before excluded, such as associations, stakeholders and local private actors. The role of nation-state decreases and cities are incited to assume a central function in the national system. Local authorities acquire sovereignty and decision-making power (Magnier and Russo, 2002). Urban élites try to transform the city in a collective actor, in other words in a social and political actor, autonomous and strategic. This assumption allows the articulation of the city as society¹²⁴. However, this possibility does not always occur; political autonomy and the consequent capability of social structure of the city are in fact fully possible only

¹²³ Knowledge becomes a key economic resource because the organizative business structure requires more and more production, organization and transmission of knowledge and info. In Castells opinion, the city becomes more and more “informational” (Castells, 2002).

¹²⁴ It is a Weberian vision. Max Weber sees the city as an ideal type, a complete society, like the state or the ancient polis. For this reason he analyzes cities as social structures. From the political side he sees the city as autonomous from the outside.

when the central organs are in crisis, or when the superior powers are weak or uncertain (Bagnasco and Le Galès, 2001). In addition, it is not possible to consider contemporary city as a stable entity, structured in a functional way, *a priori* able to launch strategic projects and actions. That's also why individual and collective groups in the city are not necessary a cohesive group just because they live in the same place, as in the past, rather the cohesion must be designed and created. For Le Galès (2006) cities have not a common determination to take action and conflicts are at the center of social and political dynamics.

In this framework, there are two analytical field related to the study of the city: the problems of the urban integration and the *urban governance* (Bagnasco and Le Galès, 2001).

The former refers to the ways and conditions able to make the city the place of economic and social relations stable in time. The urban integration, functional and spatial, acts in the definition of the program and in the design of the urban project, but also in the decision-making and bureaucratic-administrative process that goes with it (Cecchini, 2004). Without integration, there is no project.

The latter, the urban governance, concerns the ability to regulate interests and represents them outside. The reference is the mobilization of social groups, institutions, public, and private actors in their process of coalition and elaboration of collective projects (Bagnasco and Le Galès, 2001). The urban governance can be defined as a process of coordination between different actors, institution and social groups that try to reach their goals, discussed and defined in collective way and in fragmented settings (Le Galès, 2001). It is related to the building of a social and political order, in which decision making process are not the result of a single actor decision, but the effect of a strategic interaction between a plurality of actors with different resources (Rosso, 2004). Not only many actors but also more flexibility and differences in terms of organization and management. However, as mentioned, cities cannot be considered *a priori* collective actors, some prerequisites are needed. Pichierri (2005) believes that five elements are necessary to talk of collective actors¹²⁵: a system of collective decision-making, common interests, an integration mechanism, an internal and external representation of the collective actor and the ability to innovate (Le Galès, 2006).

In Le Galès' opinion the urban governance has two different dimensions: a dimension of internal integration and a dimension of external integration. In the first case, the governance refers to the ability of the city to assimilate the different actors involved. In the second case, the external integration refers to the ability of the city to represent itself outside and to defend strategies and collective projects towards institutions, companies and other collective local actors. From this definition of governance, two aspects must be highlighted. The first is the overcoming of the hierarchical logic of the State as the regulatory decision-maker; the second is the aspect of consultation/planning/concerting among different actors with specific resources, powers, and responsibilities. Summarizing, the governance is a new model of government marked by less hierarchical control and more cooperation amongst actors. As underlined by Peters (2000), in this form of governance, the State has no longer an executive function and the plurality of cooperation and interaction types between formal and informal actors, public or private, became the main feature of the new model.

In the logic of competitiveness among cities, the public actors' role should aim to the creation of governance models able to give the city the status of actor and therefore allows it to:

¹²⁵ Pichierri (2005) gives two definitions of collective actors: a weak definition for which the collective actor is a group of people with similar behaviors; a strong definition, taken from Budon (1992), in which the collective actor exists only if there are a collective making decision mechanism with an actor speaking for the rest of the group.

- implement strategies to attract capitals, funds, qualified human resources;
- promote alliances and cooperation with other cities or regions;
- strengthen the social capital and the urban quality.

Nevertheless, this doesn't mean that different actors are always able to reach unified agreements (Les Galès, 2006). To design and implement policies able to foster the competitiveness and the life quality, it is necessary to create a net of relations between the relevant actors of the city. This is the main innovation of this governance model: concertation, cooperation between actors with interests potentially in conflict. That does not mean that conflict of interests disappears, but there is the ability of finding cooperation, even remaining in competition for other issues (Pichierri, 2005). That also means that the role of the state is redefined, from a merely decision-making role to the function of "partner" or "guide" in the interaction amongst different actors (Jessop, 2005). About cities, they can be considered competitive if they are able to attract funds and new companies: the improvement of urban quality, urban regeneration activities and policies to increase social equity became key factors to attract new jobs, activities and important functions (Catalano, 2005). So the challenge of the urban governance is to create competitive public goods or use, in a competitive way, public goods not competitive at the origin (Pichierri, 2005). The main goal of this type of governance is to create the right conditions to improve the competitiveness of the territories through the local collective action, thus promoting territorial cohesion at different scales. It also has peculiar features related to its territorial context and to the European institutional framework in which is embedded (Dasi, 2009, p.31). For this reason, another main goal of the urban governance is to create a cooperation among the different government levels, amongst the sectorial policies and between governmental and non-governmental institutions and the citizens. The link between urban governance and cohesion is crucial for the local development; in fact, a spatial planning based on the subsidiarity principle establishes a special relation with the local development.

Having said that, the urban governance can be defined as a process of coordination of the local actors, public and private, institutional and non-institutional and of the related initiatives directed to the sharing of a vision of common sustainable development and to the promotion of design and implementation of territorial initiatives, coherent with the common vision. Territorial socio-economic cohesion, sustainability of the development and competitiveness are the three main objects of the urban governance.

5.4 The birth of the Multilevel Governance

The presence and the growing importance of a variety of different levels of government and arenas of interaction and normative production determine another nuance of governance, the multilevel governance. In addition these different levels interact with each other in direct and univocal way, often without mediation and this is probably the more innovative and interesting aspect. In multilevel governance systems, the national level is no longer the key filter between the bottom level (regional and local authorities) and the above or external level (government and territorial authorities) (Borghetto, 2006). This type of governance is very flexible and allows the decision makers to modify the governance levels, manifesting its heterogeneity. There are also other benefits: the multilevel governance reflects the preferences of its actors and is able to follow changes in these preferences, it is open to experimentations and innovation and makes easier and plausible commitments (Hooghe and Marks, 2007). Conversely as negative points the information is often incomplete, there are coordination problems of different jurisdictions, and there is also the risk of lobbies and corruption. There are two types of multilevel governance, one engages jurisdictions only for a limited number of levels (international, national, regional, local); the other one, and the more flexible one, is

composed by a large number of specialized jurisdictions working on a plurality of territorial levels.

Stoker (2000) underlines that the multilevel governance should not only be identified by the exercise of the government and the policies elaboration at different scales, but it should be pinpointed by the relationships and the interconnections established between them. The main features of the multilevel governance are the networks self-organization and the vagueness of horizontal, vertical and diagonal relations among different actors and at different scales. In conclusion, when talking about “good governance” vertical subsidiarity should be also considered, because each issue can be addressed at different scales, supranational, national, regional and local depending on its nature. A good governance action must identify the right level of working and solving the issue without wasting resources and time.

In general, we can see that governance involves the increased blurring of boundaries between and within public and private sectors (Stoker, 1998). Emphasize the fundamentality of governance is not a way to advocate the absconding of the role of the state, but rather that there is an acknowledgement of the existing limits and of the actors with the necessary competences to fill the gaps to shore up Public Administration. Additionally, as seen, there is a spreading out of power “upwards” to regional and international organizations such as the EU; “downwards” to regions and devolved localities; and “outwards” to international corporations, non-governmental organizations and other private or quasi-private bodies (Pierre and Peters, 2000). In other words, trends of recentralization, decentralization and privatization are simultaneously changing relationships in the governance arena. Efficiency can be improved if tasks are carried out at the optimal level and are thus flexible to relevant dynamics. In the context of the EU, this feature has been known as the principle of subsidiarity that I’ll analyze in the next paragraph given its importance. This of course implies some relinquishment of power in order to best situate the parties for them to act, have the power and means to do so.

5.5 The Collaborative Governance

This paragraph enters in the heart of the reasoning. All of the previous descriptions represent the basic structure to understand the current situation about management and governance models. In fact, to replace the adversarial and managerial modes of policy-making and implementation, over the past few decades, a new form of governance is starting to emerge (Ansel and Gash, 2008). A form called *collaborative governance* that found its conceptual meaning in the societal changes and in the spreading of new interesting energies that go in the direction of collaboration and sharing. The emergence of a common-based economy, the sharing economy, justify the reflection on it and its same existence, because the new forms of sharing and collaboration need appropriate institutions and incisive forms of decision-making to thrive. “A model of collaborative governance could have the powers to bring public and private stakeholders together in collective forums with public agencies to engage consensus-oriented decision-making” (Ansell and Gash, 2008).

A number of scholars and policy-makers, all around the world, become interested in *Collaborative Governance* as an innovative strategy useful to respond to the different type of problems of contemporary societies (Huxham and Vangen, 2005). Many studies on the topic have been undertaken on different fields of the public policy domains, from environment (de Bruijn and Hofman, 2002; Hartman et al., 2002) to public health (Roussos and Fawcett, 2000), and housing (Boyle, 1989); and collaboration has grown in importance as a key element for sustainable development also in the studies about environment and sustainability, (Lozano, 2007).

Even if the concept is becoming more and more popular, the literature on collaboration remains untidy, probably because it is mainly coming from local experiments or as a reaction to previous governance failures (Ansell and Gash, 2008). For this reason the governance literatures is composed of single case studies focused on sector-specific governance issues, and many theoretical accounts are focused on specific types of collaborative governance. Nevertheless, experimentation is gaining great attention and consideration, and after a brief description of what can be considered “Collaborative Governance” the dissertation will go in depth with these disruptive initiatives, considered relevant in the international debate (Bollier, 2015).

At taxonomy level, it’s not easy to define “collaborative governance” and the first question is “*how broadly collaborative governance should be defined? Considering that, there are dangers at each extreme*” (Donahue, 2004). Since, in general terms, governance is what government does, we can consider it a kind of amalgam of public, private and civil-society organizations engaged in some joint effort (*ibidem*).

Collaborative governance is often used to describe how public agencies collaborates with non-state stakeholders in the process of solving public problems or creating public value (Ansell and Gash, 2008; Bryson, Crosby, and Stone, 2006). However, collaborative governance also often involves partnerships between public agencies and may incorporate interagency and intergovernmental partnerships as well (Emerson, Nabatchi, and Balogh, 2012).

In Ansell and Gash’s opinion, the origin of the Collaborative governance comes from the failures of implementation and from the high cost and politicization of regulation. It appears as an alternative to the “*adversarialism of interest group pluralism ant to the accountability failures of managerialism*” (Ansell and Gash, 2008). It has also arisen from the knowledge and institutional capacity, in fact, with the specialization of knowledge, more and more distributed, and the interdependence of institutional infrastructures the demand of collaboration increases. Moreover, the city can be considered more and more as a collaborative commons and for this reason is important to try to understand new experimentations starting from this point of view.

For a general definition of collaborative governance, I refer to Ansell and Gash working definition. They consider the collaborative governance as: “*a governing arrangement where one or more public agencies directly engage non-state stakeholders in a collective decision-making process that is formal, consensus-oriented, and deliberative and that aims to make or implement public policy or manage public programs or assets*”. This strict definition stresses six important criteria:

1. The forum starts thanks to public agencies and institutions;
2. Forum participants are also non-state actors;
3. Participants are engaged directly in the decision making, not just consulted;
4. The forum is formally organized and meets collectively;
5. Decisions are made by consensus;
6. The focus of collaboration is on public policy or public management.

Taking up the claim of Stoker (2004), for whom governance is also about collective decision making, that includes both private and public actors, and the definition of Lynn, Heinrich and Hill (2001, p.7) for whom public and private actors collaborate to establish laws and rules for the provision of public goods, Ansell and Gash consider the Collaborative Governance as “*a type of governance in which public and private actors work collectively in distinctive ways, using particular processes, to establish laws and rules for the provision of public goods*”. There are many forms of collaboration that involve non-state actors but in this case the definition states a specific role for the public agency: to start or to foster collaborative

governance. However, what matter is the participation of non-state stakeholders, which can be both individual citizens and organized groups. (Here the term stakeholders is used to refer to both public agency and non-state stakeholders). In their definition, the collaborative governance is never merely consultative, but it implies two-way communication and influence between agencies and stakeholders and also opportunities for stakeholders to talk with each other in a deliberative and multilateral process. So governance can be considered collaborative when permits two-way flows of communication or multilateral deliberation. Furthermore, the non-state actors are involved with full responsibility in the policy decision-making process and in the policy outcomes, and their engagement is strictly direct. The collaborative governance involves a process in which diverse stakeholders are engaged to bring together their individual inputs for collective goals (Cordery, 2004; Hartman et al., 2002). Ansell and Gash in their definition also impose the criteria of *formal* collaboration to highlight that this type of governance is not just a “*casual and conventional forms of agency-interest group interaction*”. The influence between public agency and interest groups is always present, also in normal and conventional interactions, but in this case there is an explicit and public strategy of organizing this influence. That of *consensus oriented* is another criteria included in the definition, because even if public agencies have the ultimate authority to make a decision, “*the goal of collaboration is typically to achieve some degree of consensus among stakeholders*”. They talk about consensus oriented because sometimes is not possible to achieve full consensus, but it is in any case the final goal of any deliberative, multilateral and formal forums. The definition concludes focusing on public policies and issues.

Following the reasoning of Ansell and Gash is important not to confuse collaborative governance with other terms. For example, the term “policy network” refers to public agency and stakeholders groups, implies cooperative mode of decision or decision-making amongst actors in the network, and so can be considered similar to collaborative governance. However, in policy network the cooperation can be informal or implicit, while in collaborative governance there is an explicit and formal strategy of incorporating stakeholders in multilateral and consensus-oriented decision-making processes. Also “public-private partnership” must not be confused with collaborative governance, even if sometimes seem to refer to the same phenomenon. The former simply represents an agreement between public and private actors to perform services and tasks and the collective decision-making process is secondary. The latter, the collaborative governance, instead sees the institutionalization of a collective decision-making process as central. Other terms are often used in place of collaborative governance, in interchangeable way, such as participatory management, interactive policy-making, stakeholders governance, collaborative public management (Bingham and O’Leary, 2008; O’Leary and Bingham, 2009), new public governance (Osborne, 2010), or simply new governance (Salamon, 2002). Nevertheless, governance is broader than management for example, and includes aspects of the governing process such as planning, policy-making and management itself; and collaborative is more indicative of the deliberative and consensus-oriented approach than other terms.

A broader and interesting definition comes from Emerson, Nabatchi and Balogh. They define collaborative governance as: “*the processes and structures of public policy decision making and management that engage people constructively across the boundaries of public agencies, levels of government, and/or the public, private and civic spheres in order to carry out a public purpose that could not otherwise be accomplished*”. This definition takes into account all the emergent forms of cross-boundary governance and does not limit collaborative governance to only formal, state-initiated arrangements and to engagements between government and non-state stakeholders. The definition, for example, includes “multipartner governance”, based on partnership among the state, the private sector, the civil society, the

community and other hybrid arrangements such as public-private and private-social partnership and co-management regimes (Agrawal and Lemos, 2007). It encompasses collaborative community-based initiatives and intergovernmental collaborative structures as well (Emerson and Murchie, 2010). The authors underline that this definition can be also applied to inform participatory governance and civic engagements (Emerson, Nabatchi and Balogh, 2012).

Apart from the engagement of a broader spectrum of interdependent actors beyond national government (local governments and non-state actors for example, such as business organizations or local communities) (Ansell and Gash, 2008; Cordery, 2004; Cuthill, 2002; Eweje, 2007), in collaborative governance there are other crucial factors. For example a strong emphasis on information sharing, the respect for dissenting views, a commitment to a long-term interacting process, and the achievement of not only individual ends but also additional, shared benefits (Thomson and Perry, 2006).

All these definitions try to give a frame in which rethink the interrelations among different actors, statal and non-statal, public and private, and also coming from the civil society. Actually, the changes and the new solutions that the sharing economy is fueling in society make this definition not completely suitable, since it was unaware of what would happen in a few years. The phenomenon is the result of our time. Its transformation is quick and unexpected, surfing the possibilities created by the Internet and the ICT, and there is a necessity to think out of the box to tackle the economic, environmental and also social crisis. The spread of the sharing economy, and its integration in the system, is probably unstoppable, and itself is transforming the way we consume, produce, work, and live in the city. To address all the new changes in the economic system, in the job market, in the community building, and in the environment, brought by the sharing economy, we need a better interpretation of the meaning that *collaborative* can have combined with the word *governance* and also a better implementations of governance trials.

5.5.1 *The Collaborative Governance of the Commons*

To catch the meaning that *collaborative* can have in identifying new form of *governance* at our time, and to clarify its meaning in the urban context, I want to take a step back and briefly summarize the framework of the state forms and the appearance on the scene of other new actors and of a renovated activism. This can give us the right frame in which contextualize the new meaning of a form of governance that can be collaborative. To do this I refer to the proposition of Professor Iaione¹²⁶ presented among other initiatives and conference, also at the “First Sharing School” held in Matera in January 2015, and in general to his perspective. In fact, he is currently recognized as a pioneer of a new understanding about governance and he is running the main Italian experimentations in these terms (Bauwens, 2015, Bollier, 2015).

As seen it is no longer the time of the *Minimal State*, in which the State holds the authoritative and administrative power with the possibility of affecting the sphere of domestic law of citizens even without their consensus; a time in which the governance was a way to redefine the extension and the forms of the public action and the old adagio of Hobbes “*homo homini lupus*” worked well. The next step was the *Social State*, developed by the emerging of a new social class, the working class, asking for an equal redistribution of wealth. At that time

¹²⁶ Prof. Iaione runs LabGov – LABORatory for the GOVERNance of commons dealing with new commons-centric urban governance, which is part of an important Italian academic institution, LUISS University, and, in particular, the International Center on Democracy and Democratization led by Leonardo Morlino, a prominent international political scientist.

the State gave services and support to people in need that were not peer actors in the free play of social and economic relations, for their different social, economic, cultural and race starting conditions. The article 3 of the Constitution states the principle of equality according to which everybody is equal under the law. The second paragraph states that the Republic has an essential task: to remove barriers that prevent the full development of the human person, to ensure full participation of all workers in the social and economic life of the country. This is the principle of substantive equality on which is built the welfare state: the state provides benefits and considers citizens as passive and in need actors, with problems to solve through a state performance. This administrative activism then degenerated. People, considered lacking in skills and energies (just problems-generators) started to act in a passive way, waiting for the state intervention, and a sort of gradual disaffection and carelessness to public spaces or public/collective services emerged. They were perceived as places or services that don't belong to anyone (or at most to the local public entity), instead of considering them for everybody, useful to satisfy common needs (Iaione, 2013). At the end of the 1900s with the spread of literacy and schooling, and then thanks to the Internet, became clear that was not possible expand the public offer indefinitely, but was necessary start to work on the demand side of services and goods, to consider people and communities as holders of competencies and resources, ideas, skills and talents.

The horizontal principle of subsidiarity

In Italy, this frame was synthesized with the **principle of subsidiarity**¹²⁷ (art. 118 of the Italian Constitution) that states that the public authorities, the Republic, and all its ramifications must foster the autonomous initiative of citizen, active for the care of the general interest. The switch is from public or personal interest to general interest. The action required to the public sphere is not just order or supply services but foster and encourage the civic autonomy, stated in the paragraph 4 of the article 118 as **horizontal subsidiarity**¹²⁸. *“The city and its public and private institutions must give citizens the opportunity to take care of their own city in first-person”* (Iaione, 2013). This opportunity can help citizens to improve their individual and social capabilities and to build social cooperation, reciprocity and solidarity networks (Amin and Thrift, 2005; Nussbaum and Sen, 1992). With the horizontal subsidiarity principle, citizens are not anymore simple passive actors who suffer administration with its obligations and prohibitions. They start to become aware, responsive and responsible, they realize that can choose a different lifestyle to minimize the cost for the community and understand that, as citizens, they can offer knowledge, skills, resources, solutions to the administration. They have energies and ideas that can help the administration in the management of the urban commons. They are able to create inner value for the society. At the same time, the government becomes collaborative, creates relations and has the obligation to encourage participation. It is aware of the positive consequences that participation can have for people and communities in terms of material and immaterial wellbeing, and even for itself since the active participation of citizens can help to improve the capacity of institutions to give better responses to the needs of people and the satisfaction of

¹²⁷ The principle of subsidiarity is ruled by the article n. 118 of the Italian Constitution that provides that “the State, regions, provinces, metropolitan cities and municipalities shall promote the autonomous initiatives of citizens, individually and in combination, for the performance of activities of general interest, on the basis of the principle of subsidiarity”. This principle implies that the various institutions should create the conditions necessary to enable the person and the social groups to act freely in the performance of their business. The intervention of the entity of higher level, if necessary, must be temporary and aimed to restore the autonomy of action to the lower level entity.

¹²⁸ Horizontal subsidiarity demands all levels of governments to find ways to share their powers and cooperate with single or associated citizens willing to exercise their constitutional right to carry out activities of general interest. see <http://www.labgov.it/cities-as-commons-the-italian-constitution-find-application-in-bologna/>.

social rights that the Constitution recognizes and guarantees. When the Constitution states that public authorities “*promote the autonomous initiatives of citizens, individually and in combination, for the performance of activities of general interest, on the basis of the principle of subsidiarity*”, from one side it legitimizes the traditional volunteers, that have always acted for the public interest, and from the other side those people defined as active citizens, responsible and supportive people who care of the commons.

We are in the realm of urban commons and the city itself become a commons. Urban commons represent glue for local societies, are functional for the wellbeing of the local communities and for the quality of life, and their maintenance or regeneration needs a strategic alliance between institutions, civil society and community in all its aspects (they have the responsibility of their care). Donolo (2005) defines the commons as “*a group of goods necessarily shared. They are goods because they let the social life develop, the collective problems solution, subsistence of human being about his relationship with the ecosystem whereof he is part of. They are shared because they provide their better qualities when they are treated and so ruled and regaled like “in common goods”, accessible to everybody at least as a matter of principle. The common goods are shared although it is often possible and this is a reality more and more frequent, that someone or some group is excluded from their use*”. This is a ‘relational’ definition: commons exist only because they are part of a qualitative relationship with one or more subjects. “*In other terms object and subject cannot be separated when you speak about common goods. You don’t have got a common good, you share in common good. You cannot expect to ‘have got’ a square, a public garden, a park, you can only aspire to ‘be’ active part of an urban ecosystem*” (Iaione, 2013, Mattei, 2011). In the concept of commons fits all urban spaces and services that we usually consider “local common goods” or “community goods”, seen as everybody’ spaces and services and so as “common spaces and services”. They are public only because, until now, they have mainly been put in some Public Administration’s keeping, care or supervision. But not necessarily the formal ownership should be public. Common goods in private hands can also exist.

The Partner State

The role of the state, in an ideal form of collaborative governance, switch (or should switch) to the so-called **Partner State**, a state that allows the creation of value from citizens and looks at the commons and not at the advantages that can be generated from big capitals and big companies, but helps citizens to produce inner value in the society (Bauwens, 2012). The concept was first theorized by the Italian political scientist Cosma Orsi, as a state that enables and empowers the social creation of value by its citizens and reclaimed by Bauwens that underlines its sustaining role in in the ‘*direct creation of value by civil society*’ (i.e. sustains and promotes commons-based Peer Production). Bauwens affirms that the “*Partner State can exist at any territorial level as a set of institutions that protect the common good and enable citizens to create value*” (Bauwens, 2012). The Partner State Approach, proposed by Bauwens and Kostakis, can be considered as “*a cluster of policies and ideas whose fundamental mission in to empower direct social-value creation, and to focus on the protection of the Commons sphere as well as on the promotion of sustainable models of entrepreneurship and participatory politics*” (Kostakis, 2011a, 2011b). With this approach, the state becomes an ‘arbiter’ that leaves the dilemma of binary ‘state/privatization’ to fall back to a triarchical choice that mix government regulation, private-market freedom and autonomous civil-society projects. For the authors the role of the state is living an evolution from the post-World War II welfare state model to the partner state model that lies on win-win sustainable models for both civil society and market. In addition, they affirm that the concept transcends and includes the best of the welfare state, such as the social solidarity

mechanism, the high education attainment, and a vibrant supported cultural life. Allowing citizens to add value at the society means that there are the prerequisites to leave citizens their space of expression (Bauwens and Kostakis, 2014).

The new activism of citizens that we are registering, reminds to a new emerging social class that we are witnessing in the era of the sharing economy; a **nudging class**, as it has been called in the Iaione's proposition (Iaione in Bauwens, 2015). This class is a key element of the possibility to reach an efficient and effective model of collaborative governance, since it is able to replace the current ruling class and it is essential to "*convince and nudge society and institutions towards a sharing and collaborative paradigm*" (*ibidem*). This class is composed of active citizens, social innovators, makers, creatives, sharing and collaborative economy practitioners, service designers, co-working and co-production experts, and urban designers. Since the change cannot be forced, the presence of such a class can be the breakthrough to "*nudge people to share and collaborate*" (*ibidem*), to push society, business, and institutions towards new frontiers.

Role of the State, times and actors have changed, and it is clear that the conventional governance structures cannot understand or organize the needs, the capabilities, and the energies of these people. A renovation of the existing structures, a reconceptualization of how government might work in cooperation with citizens, is required. As seen in the previous description of governance, today all the main actors of the urban ecosystem, coming from different arenas, are called to collaborate for the improving of the society quality of life, to create the right environment to live and to build the urban wealth (Iaione, 2013). According to Iaione, it is time for "*a cultural shift in terms of how we think about government, moving away from the Leviathan State or Welfare State towards collaborative or polycentric governance*" (Iaione in Bauwens, 2015). It is necessary try a new path in which the government is no longer the only actor that plays alone, but there are many actors involved, citizens first of all, social innovators of any type and other governance institutions. "*Ordinary people acting as commoners are invited to enter into a 'co-design process' with the city to manage public spaces, urban green zones, abandoned buildings and other urban issues*" (Bollier, 2015). This path requires new public policies able to promote the civic collaboration and to put together in collaboration the different civic autonomies and stakeholders with the public autonomies, namely public and democratic authorities.

In this context, the city must be rethought "*as an open platform*". As David Bollier asks: "*What would it be like if city governments, instead of relying chiefly on bureaucratic rules and programs, actually invited citizens to take their own initiatives to improve city life?*" The frame is that of the "city as commons". This conceptualization represents, in David Bollier's opinion, "*a serious shift in thinking. Law and bureaucratic programs are not seen as the ultimate or only solution, and certainly not as solutions that are independent of the urban culture. Thinking about the city as commons requires a deeper sense of mutual engagement and obligation than "service delivery," outsourcing and other market paradigms allow*". A city can pursue "public/commons partnerships" and bring people together in close, convivial and flexible collaborations instead of relying on the familiar public/private partnership (that often waste public resources). The **horizontal subsidiarity principle** is at the base of this potential change in the role of the state and in this sense we can speak of ***collaborative/polycentric governance or governance of urban commons***.

At the base of the Italian Experimentations implemented by LabGov

The conceptualization just disclosed, was elaborate by Iaione in Italy, within LabGov – Laboratory for the Governance of Commons, and first experimented at the level of public spaces intended as commons in the city of Bologna. Iaione and LabGov recognize the importance of citizens and other actors, in managing the changes and overall the relevance of the Public Institutions as enabling platform and accelerator of opportunities. They elaborated a model that switch from the well-known Triple Helix to a sort of “Quintuple Helix approach”. In the Triple Helix model, there is a convergence of three worlds, usually separated: government, business, and university. Etzkowitz has well explained the model and Leydesdorff has provided a theoretical system by which is possible to develop the idea (Etzkowitz and Leydesdorff, 1995, 2000)¹²⁹. The model refers to “*a spiral model of innovation that captures multiple reciprocal relationships among institutional settings (public, private and academic) at different stages in the capitalization of knowledge*” (Lassila, Lindroth, Rantanen, 2013). Iaione and LabGov not consider university, industry and government as the only important players. In their Quintuple Helix model first of all the role of university is revitalized; university becomes more catalytic and active; and secondly it has the task to facilitate the creation of new forms of relations with the other incoming actors: no-profit sector, social innovators, citizens and other institutions such as schools, academies, research and cultural centers. In this *penta* model, enter five actors that can be considered the five souls of the collaborative governance:

1. Citizens and social innovators
2. Business (profit, low-profit, non-profit)
3. Cognitive institutions (schools, universities, research centers, academia, cultural institutions)
4. Civil society organizations (social parties and third-sector actors)
5. Public authorities

The image below shows the graphics used by LabGov to explain the co-existence of these five pillars:

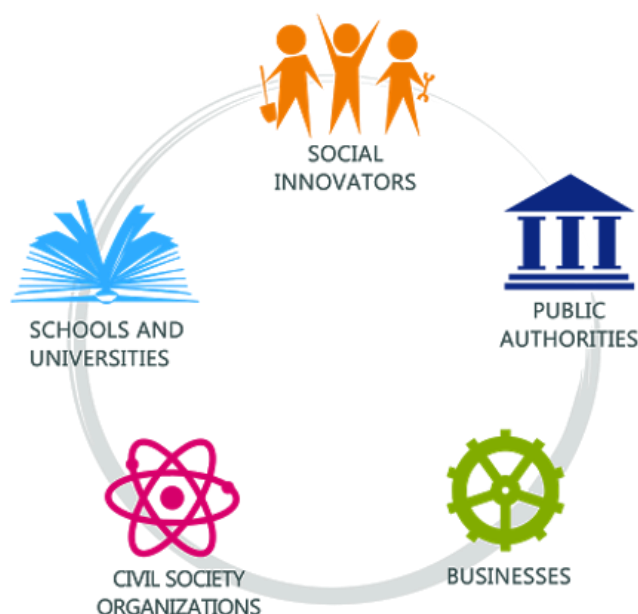


Figure 7 The five pillars of the collaborative governance. Source: LabGov.

¹²⁹ Etzkowitz and Leydesdorff (1995 and 2000) proposed the model of a Triple Helix of university-industry-government relations for explaining structural developments in knowledge-based economies.

From this proposition, clearly emerged that the government is no longer an isolated actor playing alone, but it can and should move in synergy with the other four members of the model, the communitarian part. According to Iaione, the collaborative governance requires the creation of physical and institutional spaces where the five souls can gather each other to discuss, compare, share strategic guidelines and policy directions, but overall where implement these agreements activating collaborative dynamics based on reciprocity, exchange, service co-design for the community, urban transformation processes, industrial and productive innovation. To do this nothing can be left to chance: clear statutory regulations are required, together with a specific regulation of functions, activities, modes of collaboration, a sustainability plan and an institutional fundraising plan (to collect equity capitals). What emerge is a local and collaborative developing agency, a research center and communities development for all the actors of the collaborative governance. This entails inevitably an innovation of the democratic process. The representative democracy circuit is thus complemented by a dynamic and collaborative circuit of sharing of the political orientation with all members of the local community.

The collaboration among the five souls of the collaborative governance generates, or should elicit, a consulting deal, a partnership formulation, a **collaborative pact**. This is the legal form acquired by the collaborative public service. The collaborative pacts are a kind of ruleset that establish, with the agreement of everyone, the role of each actors and the way to find a shared collaborative solution for the city. It lays on the concept of commons, intended as goods that citizens and administrations, through deliberative procedures, recognize (not establish) as functional to the individual and collective wellbeing, and for whom they decide to work together (Iaione, 2013, 2015). The ultimate goal is guarantee or improve the collective fruition. The goods at the heart of the pact gain new life. The collaboration pacts are based on the idea that the whole process is co-designed, from the beginning of the collaboration until the conclusion of the pact. A co-designing in the spirit of inclusion, connection, incorporation of the city energies. Many estimated authors, such as Bollier and Bauwens, consider this proposition a big news and a great revision of the ways of administration. The traditional administration, in fact, was essentially bipolar because treated all the external actors in the same ways, as holders of private interested. For this reason, a common practice of the traditional administration is the selection as well as the promotion of competition among the external actors (through the well-known public calls/contracts). According to Iaione, this is called *public evidence* and it is centered on the idea of competition that brings at the drawing of a public contract. The choice to use the term “pact” is precisely to underline that it is something different from the traditional contracts. The public evidence is always necessary when administration decides to work with external actors, but the perspective is no more that of selection, tender, and concession. The idea is work together in a transparent and collaborative way. To draw the *collaboration pact* the administration must give full transparency to the project/idea. Full transparency goes beyond the laws on transparency, it becomes (or should become) an attitude, an ethic for the administration. In Iaione’s opinion, this is the end of the public announcements that killed the civic creativity, experimentations, and innovations. In his perspective in fact, announcements should be replaced by co-design processes. The tools of co-design are crucial since they represent the fundamental skills to define the right modeling of the governance process. Without these will not be possible to realize the collaborative governance.

What are the ingredients for an efficient collaborative governance?

Trying to summarize, it is possible to retrace the main elements at the core of the collaborative governance.

To answer the question, of course the presence and the involvement of the **five souls** before mentioned is a fundamental element. But their presence should be based on a **great commitment** to meaningful inclusion of all the stakeholders, “*all individuals and interest groups in all sectors of society have the right to meaningful participation in the decisions that affect them*” (Schuman, 2006). If people have the opportunity to participate in a collaborative process, they easier develop a real commitment (Ansel and Gash, 2008) and have the possibility to include in the agendas their needs and interests, enriching them. There should be also a commitment to change, a driving force to collaborate, that overcome potential conflicts among stakeholders or conflictual stalemates. Social psychologists underline for example that conflicts (Sherif, 1966) can be solved and collaboration can be achieved identifying a super-ordinate goal that all participants perceive as beneficial for each and every one, a sort of “shared vision” or “clear and strategic direction”.

If there is an **alignment of visions** based on shared purposes, also the **trust** will grow. Trust is at the base of all social interactions (even more for virtual interactions); it refers to our level of confidence that other person will act as we expect and it is crucial in collaborative processes (Powell et al., 1996). Trust and participation become natural if the negotiation process itself has seen as legitimate, fair and transparent (Leach and Sabatier, 2005). So the trust is not only related to a super-ordinate goal but also to the collaborative process itself.

Another key ingredient is the presence of a **flexible leadership and a shared authority**, able to safeguard the process (and from here the relevant role of the Public Administration). Not a classical leader as in the traditional understanding, but a leader able to give a contribution in the creation of a strategic synergy that foster participation and the desire to make changes in the existing system. From this point of view “*a collaborative network is not about accomplishing tasks but rather finding new ways (by developing new systems and/or designing new institutional arrangements) to get tasks accomplished*” (Mandell and Keast, 2009, p.165-166, in O’Brien, 2012).

This approach requires high trust and efforts to develop and sees the **leader as a catalyst, a connector, a facilitator**, rather than a director. It is not exactly a person but more likely a process and the leadership is more a balancing act or an alliance that inspire, nurture, support, build trust and share responsibilities; it is a shared process able to push the collaboration and facilitate the common ground.

An additional ingredient is a commitment to **authentic face-to-face dialogue**, as Page (2010) underlines “*if participants in a multi-stakeholder process are to govern collaboratively, they must articulate their views on key issues, [look and listen] to one another’s views, and formulate a joint approach to address the issues*”. They must have an open mind about their propositions and the collaboration, looking for win-win solutions and enter in direct exchanges on each other’s interests and ideas. Innes and Booher (2003) talk about “authentic dialogue” among stakeholders to foster collaborative processes of governance and they underline that stakeholders must be willing to “*seek mutual gain solutions*” (ivi, p.38) in order to reach agreements acceptable to most parties. Three dynamics must be present to have an effective dialogue: disclosure, transparency and effective process (including clearly established and agreed methods, ground rules and techniques that govern the interactions).

Also a commitment to a **culture of learning** is at the base of a good collaborative governance: to maintain a culture of collaboration a commitment to ongoing learning is

required (Harris and Strauss, 2006; Silva Parker, 2006) and a strong belief in the power of collaboration is essential. From this, they can develop also the commitment to identify common ground and frame the agenda in a fair, legitimate and transparent way. The facilitation can be also considered a core element in the collaborative governance, since it can ensure the integrity of the consensus-building process itself and increase the possibility to reach win-win solutions.

Lastly the presence of the already mentioned **nudging class** is crucial to push the society in the direction of a real paradigm switch based on collaboration and sharing. The switch cannot be pushed, for this reason this class of active citizens, social innovators, makers, creatives, sharing and collaborative economy practitioners, service designers, co-working and co-production experts, and urban designers, represents the potential driving element to nudge the society and the institutions to consider the sharing and the collaboration as new ways to face the urban challenges and find proper alternative.

To better understand what I'm talking about, and also the projects of Iaione and LabGov broadly mentioned, is necessary to present their experimentations in the city of Bologna before and in Mantua after.

5.5.2 LabGov and the collaborative governance's experimentation

LabGov means LABORatory for the GOVERNance of Commons. It was created on the impulse of the LUISS Guido Carli – Department of Political Science, in collaboration with Labsus, Laboratory for Subsidiarity, as educational and research platform to gather and train a brand-new breed of professionals, scholars, and practitioners in the governance of commons, collaborative/sharing economy, and social innovation. These “expert in the governance of urban commons” are people able to create forms of partnerships between NGOs, citizens, Public Administration, local business fostering the smart specialization of urban and local communities. The main goal of LabGov is to create a new institutional and economic system based on the model of “civic collaboration”, “collaborative governance of the commons” and “circular subsidiarity”, according to which public institutions shall favor all citizens, as individuals or in association, to take care of the general interest¹³⁰. Iaione defines LabGov an “*in-house clinic for social, economic, institutional and legal innovators that carry out empirically work to implement innovations in public policy based on collaborative governance and public collaboration for the commons, subsidiarity, active citizenship, sharing economy, collaborative consumption, shared valued and collective impact*”. LabGov involves about thirty students in a yearly series of workshop called to developed project of innovation and. It is based on the idea that in pursuing a social and institutional regeneration it is necessary to create collaborative relationships between citizens, administrations and business in order to share the scarce resources and take care of the commons of urban and local communities (O'Brien, 2012).

The focus for 2015 is the green governance, “Land as a Commons: environment, agriculture and food”. In 2013 the subject was “The city as a Commons” and in 2014 the focus was on “Culture as a Commons”. Here below are presented the experimentation made in Bologna and Mantua.

¹³⁰ More detailed information about LabGove can be retrieved on the official web site at the address: <http://www.labgov.it/about-labgov/>.

BOLOGNA. Regulation on Public Collaboration between Citizens and the City for the Care and Regeneration of Urban Commons

Bologna, with the project ‘City as a Commons’ is the first experimentation demonstrating that a partnership between Public Administrations and citizens is possible¹³¹. It shows that Public Administration can really govern with citizens, and not only in behalf of citizens, recognizing their role of powerful and reliable ally in improving the quality of life of the community, thanks to their talents, resources, energies, capabilities, skills and ideas.

The project ‘City as a Commons’ started in June 2012 thanks to an initiative of Del Monte Foundation of Bologna and Ravenna led by professor Marco Cammelli. It is based on the “City as a Commons” background study presented in Imola on December 11, 2011, after which the idea was shared with the City of Bologna finding a good reply from the Mayor, Virginio Merola, who decided to run an administrative experimentation program.¹³² The experimentation was realized thanks to a partnership composed by the Municipality of Bologna for the political and administrative support, the Foundation del Monte, for the economic support, the Antartide Centre for the local support, and Labsus (Laboratory for the Subsidiarity) for the scientific direction.

The ‘Cities as a Commons’¹³³ project aimed to make the active citizens participation for the care of urban commons a hallmark of the administration of Bologna. To reach the goal the work focused on the mode of operation of the Public Administration and on the operative experimentation of new forms of civic management of public spaces, selected with the involvement of the neighborhoods. In fact, citizens have been directly involved in three neighborhood’s laboratories and together with the Municipality have identified the areas of intervention: the Zucca Park, the Bentivogli Garden and the Santo Stefano neighborhood¹³⁴.

The project applied an empirical approach. The first step was the collection, study and analysis of cases already carrying at least some collaborative governance features in Bologna, and in other cities, to show how this model of government could be useful to update the traditional paradigm of government and to demonstrate that was already being implemented by Bologna without be fully aware. As reported in the web site of LabGov, the research unit organized a training program for the internal administrative task force coordinated by the coordinator of the Active Citizenship Office and established within the Institutional Affairs and Decentralization Department. The research unit and the administrative task force formed a “Project Steering Committee” and together designed experimentations to obtain a prototype of a governance/regulatory’s tool based on the principle of horizontal subsidiarity and on the collaborative governance mechanisms. City officials, with the help of a local partner, facilitated the birth of experimental partnerships between the City and local residents with regards to the management of three urban commons (e.g. a public square, a piece of the lengthy network of the so-called “portici” and a public building, all assets in need of cooperative placemaking). Thanks to lessons learned on the field through the experimentations and after the all necessary tests and analysis on the current national, regional and regulatory framework, three City Officials and two external experts received from the

¹³¹ More information about this project are available at the online address: <http://www.labgov.it/governancelabs/bolognalab/>.

¹³² The project’s supervision was entrusted to Commissioner Luca Rizzo Nervo and Director General Giacomo Capuzzimati.

¹³³ The Italian name of the project è “Le città come beni comuni” and the address of the official website of the project is www.cittabenicomuni.it.

¹³⁴ Gregorio Arena, the president of Labsus, underlines that the three neighborhoods identified present the same typology of problems of other Italian cities. So the result of the project can be useful for other municipalities. The text of the final Regulation elaborated can be downloaded, from the website page of the project, so that each interested municipality can use it as it stands or with contextual modifications.

Mayor of Bologna the mandate to draft an innovative piece of local regulation. The draft was then subject to public consultation and reviewed by some of the most prominent Italian administrative law scholars. On February 22, 2014 the results of the project were presented in Bologna. On that very day the draft of the *Regulation on collaboration between citizens and the city for the care and regeneration of urban commons*¹³⁵ was unveiled and submitted for final approval to the City Council, receiving the approval on May 19, 2014.

The Bologna Regulation is the first implementing provision that incorporates the constitutional principle of subsidiarity and makes clear that it can be really implemented. The City of Bologna already recognized in its statute the possibility for citizens to contribute directly to the administration of the city under the articles. 1 and 11. Thus, the Regulation has exactly the aim to give implementation to the horizontal subsidiarity principle in the action and organization of the administration.

The Regulation is a 30 pages regulatory framework outlining how local authorities, citizens, and community can manage public and private spaces and assets together. Its 36 articles propose the adoption of non-authoritative acts expressed by the stipulation of *collaboration pacts* (article 5, paragraph 1.1 of the Regulation). These pacts are the normative tools through which Public Administration and citizens can establish what is necessary to implement interventions of caring and regeneration of the urban commons. In other words, the Regulation gives the rules to create collaborative pacts and provides solutions that transform the Public Administration in an enabling actor, able to convince people to work together without using coercive power. It is a sort of handbook for civic and public collaboration and offers a completely new vision for government. It reflects the Iaione's belief that we need a cultural shift to move from the Leviathan State towards collaborative or polycentric governance and it represents the actualization of Iaione's studies, in particular of the ideas stated in his work "City as a Commons", a paper in which city is re-interpreted as a collaborative commons.

According to the regulation active citizens (i.e. social innovators, entrepreneurs, civil society organizations and knowledge institutions willing to work in the general interest) can enter into a co-design process with the city, leading to the signing of a "pact for the collaboration and the care or regeneration of urban commons" ("patto di collaborazione per la cura o rigenerazione dei beni comuni urbani"). Urban commons are mainly public spaces, urban green spaces and abandoned buildings or areas. In the view of LabGov "*using the institutional technology of public collaboration ("co-design" or "shared administration") Italian cities and communities can transplant Elinor Ostrom's idea of 'governance of the commons' in urban contexts, as Sheila Foster¹³⁶ has already theorized*"¹³⁷ (De Nictolis, 2014).

The Regulation is the instrument through which fill the normative gap between the horizontal subsidiarity principle and the Public Administration, intercepting the new way of acting of the Public Administration itself. Its core is represented by the "*collaboration between citizens and Public Administration founded on principles like mutual trust, transparency, responsibility, openness, informality, and autonomy of citizens*" (Arena, 2014). Principles really innovative that reflect an administration more flexible and open at the contribution that each single local actor can give to enhance and regenerate the territory. The Regulation is a concrete instrument that translates the horizontal subsidiarity in administrative

¹³⁵ See the Bologna Regulation at <http://www.comune.bo.it/media/files/bolognaregulation.pdf>.

¹³⁶ Sheila Foster is an Albert A. Walsh Professor of Law and Co-Faculty Director at Fordham Urban Law Center of New York.

¹³⁷ The Regulation is available at the address: <http://www.labgov.it/bologna-regulation-on-public-collaboration-for-urban-commons/>.

and normative dispositions to favor the peer collaboration between citizens and administration. The outcome is a new type of administration (next to the administration of performance and the authoritative administration): the *shared administration*. Arena talks about a “*unusual combination of known factors*” to stress the idea that citizens and Public Administration (known factors) no longer interact following a one-way hierarchical model, but according to a relationship of collaboration (unusual combination) in which the citizen is a bearer of skills and competencies that administration can use for pursuing the general interest. The Regulation also encourage a “nudge regulation”, or rather regulations based on policy that boost (and not require) people to act together, to collaborate and to make better choices. The term comes from the book “Nudge”, of the behavioral economist Richard Thaler from the University of Chicago and the Harvard Law School Professor Cass R. Sunstein¹³⁸.

The City of Bologna is now working on a new public policy called “Collaborare è Bologna”¹³⁹ that includes collaborative initiatives also in the economic, cultural, educational and work fields. This policy is based on the regulation on public collaboration for urban commons and is willing to act as a mutual learning laboratory for any city official, public servant, expert, scholar, activist, or citizen willing to work on the advancement of the social, economic, political, urban transition towards the “co-cities” paradigm¹⁴⁰.

CO-MANTUA. “Culture As A Commons”

If in Bologna efforts have been made to establish the rules necessary to create the dialogue, in Mantua the focus was the identification of an organizational formula. Bologna was centered on urban commons, Mantua on culture as a commons. Culture was recognized the commons on which work directly from people that activated the process. Culture has been interpreted not only as cultural heritage, material or immaterial, but overall as identity paradigm, as the tool to rebuild the urban identity and retrace the citytelling able to put together the five souls of the collaborative governance. Co-Mantua can be considered a prototype of a process to run city as a collaborative commons, a kind of co-city. “A co-city should be based on collaborative governance of the commons whereby urban, environmental, cultural, knowledge and digital commons are co-managed by the five actors of the collaborative/polycentric governance, through an institutionalized public-private-citizen partnership” (Iaione in Bauwens, 2015). This partnership is leading to the creation of a local p2p physical, digital, and institutional platform with three main aims: *living together* (collaborative services), *growing together* (co-ventures) and *making together* (co-production), the three big areas on which a sharing city can be founded in Iaione’s opinion.

The project is supported by the local Chamber of Commerce, the City, the Province, local NGOs, young entrepreneurs, SMEs and knowledge institutions (such as the Mantua University Foundation and some very forward-looking local schools).

The first step was the collaborative call for “Culture as a Commons” with the aim to bring out social innovators in Mantua and seed the social innovation. The second step was the co-design laboratory “Enterprises for the Commons”, an ideas camp where seven projects from

¹³⁸ The book “Nudge: Improving Decisions about Health, Wealth, and Happiness” draws on research in psychology and behavioral economics to defend libertarian paternalism and active engineering of choice architecture. It received largely positive reviews. The Guardian described it as “never intimidating, always amusing and elucidating: a jolly economic romp but with serious lessons within.” (see Jean Hannah Edelstein’s article: “Review: Nudge: Improving Decisions by Richard H. Thaler and Cass R. Sunstein” on the Guardian). It was also named one of the best books of 2008 by The Economist (“Pick of the pile” The Economist. Retrieved 21 September 2014).

¹³⁹ For additional information see <http://www.comune.bologna.it/comunita/beni-comuni>.

¹⁴⁰ For additional information on the experimentation of Bologna and the concept of “co-city” see the official web site of LabGov at the site: <http://www.labgov.it/governancelabs/bolognalab/>.

the call were cultivated and synergies created between project and with the city thanks to different experts, on communication, Europe design, service design... The third step was the “Governance Camp”, a collaborative governance prototyping stage that brought to the draft of the Collaborative Governance Pact, the Collaboration Toolkit and the Sustainability Plan. The next and last step is the Governance Testing and Modeling through a public consultation on the text of the Pact and a roadshow to generate interest in the project and attract possible signatories from the five souls of the collaborative governance. It is also in program a Commons Schools.

The **Collaborative Governance Pact** was inspired by the principles and rules embedded in the Bologna Regulation. Its aim is the local economic development of Mantua starting from the commons, and focusing on sharing, collaborative services, culture and creativity (Iaione, 2014). It provides a code of definitions, values and principles that I wholly report from the official website <http://www.labgov.it/co-mantova-co-cities/>. Definitions contemplated by the Pact are among other:

- Commons - *“Commons are goods, tangible, intangible and digital, that citizens and the Administration, also through participative and deliberative procedures, recognize to be functional to the individual and collective wellbeing, activating themselves towards them pursuant to article 118, par. 4, of the Italian Constitution, to share the responsibility with the Administration to cure or regenerate them in order to improve their public use¹⁴¹”*.
- Social innovation - *“social innovations are new ideas (products, services and models) that simultaneously meet social needs (more effectively than alternatives) and create new social relationships or collaborations”* (Murray and Mulgan, 2010);
- Collaborative governance of the commons - *“collaborative governance of the commons is a legal/institutional device whereby the five actors of the collaborative governance – social innovators, public authorities, businesses, civil society organizations, knowledge institutions – co-manage urban, environmental, cultural, knowledge and digital commons of a city through an institutionalized public-private-people/community partnership”*.

Values and principles of the Pact are:

- Mutual trust: *“based on the public prerogatives regarding supervision, planning and control, the Administration and the active citizens shape their relationships to the mutual trust and they presuppose that the respective will of collaboration is oriented to the pursuit of purposes of general interest”*;
- Publicity and transparency: *“the Administration guarantees the largest knowledge of the partnership opportunities, of the proposals received, of the forms of aid assigned, of the decisions taken, of the results and of the valuations made. It recognizes in the transparency the main tool to ensure fairness in the relationship with the active citizens and verifiability of the actions made and the results obtained”*;
- Responsibility: *“the Administration values its responsibility and the citizens’ responsibility as a key factor in the relationship with the citizens, as well as a necessary prerequisite in order for the partnership to be effectively oriented to the production of useful and measurable outcomes”*;
- Inclusiveness and openness: *“the interventions of care and regeneration of the commons must be organized in order to allow any interested citizens to join the activities at any time”*;

¹⁴¹ The definition of urban commons is provided by the “Bologna Regulation on collaboration between citizens and the city for the cure and regeneration of urban commons”.

- Sustainability: *“the Administration, in the exercise of discretion in making decisions, verifies that the collaboration with citizens does not cause greater costs than benefits, and that it does not determine negative consequences on the environmental equilibrium”*;
- Proportionality: *“the Administration ensure that the administrative requirements, the guarantees and the quality standards required for the proposal, the preliminary investigation and the execution of the collaborative interventions, are commensurate with the real needs of protection of the public interests involved”*;
- Adequacy and differentiation: *“the forms of collaboration among citizens and the Administration are adequate to the needs of care and regeneration of the urban commons and they are differentiated depending on the type or on the nature of the urban common and on the people whose well-being it is functional to”*;
- Informality: *“the Administration demands that the partnership with the citizens takes place in accordance with the requested formalities only when it is provided for by law. In the rest of the cases it ensures flexibility and simplicity in the relationship, as long as it is possible to guarantee the respect of the public ethic, as it is regulated by the code of conduct of the public sector employees, and the respect of the principles of impartiality, efficiency, transparency and judicial certainty”*;
- Local democracy: *“the pact guarantees equality between parties and subscribers and the attribution of reciprocal rights and duties. The pact pursues the improvement of the quality of local democracy”*;
- Public autonomy: *“the pact signatories act as “public actors”, holding the ability to take care of the general interest”*;
- Horizontal subsidiarity: *“the pact was made possible thanks to the participation of all the parties, which got activated in a collaborative and mutually supportive way, even delegating specific functions if acquitted by others more effectively, in the pursuit of the common good. According to this principle the care of collective needs and the activities of general interest are provided directly by private citizens (both as individuals and as members) and the entities involved in ‘subsidiary’ function, programming, coordinating and possibly managing”*;
- Legality: *“the compliance with the principles and rules dictated or accepted in the legal system is the cornerstone on which the entry and stay in the pact is based. The law is intended not only as a means of guarantee for civil coexistence within and outside of the pact, but also as a fundamental tool of cultivation of social cohesion and competitiveness of the territory”*.

The pact is not the only key element, CO-Mantova in fact is based on an internal and an external governance. The Pact itself can be considered an external governance tool open to whoever wants to join the Pact. In addition, there are a series of other instruments (Iaione, 2014).

The **Collaboration Handbook or Toolkit** to oversight day-by-day the collaborative life within the Pact. It is a fundamental instrument to shape the collaborative process among the three groups of actors: social innovators, technical unit and collaboration community. The Toolkit contains the main rules to follow: rules to inform social innovators about collaboration, rules for the use of Co-Mantua as a physical and economic collaborative service, and rules of collaboration for partners and external entities (*ibidem*).

In terms of economic and financial sustainability, the **Sustainability plan** has the aim to ensure a long-term sustainability to the platform Co-Mantua. Mantua has a high number of SMEs (as typical in the Italian system) but unlike the Italian trend, these SMEs account for a larger proportion of working population. It can be a limit because in case of instability of these companies a great number of people could be involved. Nevertheless, it can be also a

positive element, because the morphology of the business system can be maximized through networking and collaboration tools (that is exactly the goal of Co-Mantua) (*ibidem*).

Last but not least, the **Communication Plan**, another important outcome of the project that allows the public consultation process and informs about initiatives.

5.5.3 *Map, connect, experiment, prototype, amplify, evaluate*

Both the Bologna Regulation and the Co-Mantua project are based on key elements such as social innovation, collaborative services, urban creativity and digital innovation (art. 7, 8, 9 of the Regulation). The goal is at the same time “bonding” – create relations among actors that collaborate – and “bridging” – reach the new and different communities of the change and of the social and public innovation to try to put together new synergies in a new regulatory scheme that goes with and facilitate collaboration. Rules are fundamental, without them collaboration cannot survive and even less thrive. They cannot result from a top-down process, neither copy from other contexts. They must be co-produced and co-designed each time. A final and efficient modeling is still missing and today we are in the experimentation stage and in the phase of the cultural transfer to administrations. Iaione underlines that at this stage we must steal from experiences, take ideas, customized the right model looking at the local context and then experiment in our specific context the most suitable collaborative model. It really depends on the local context. In any case, he stresses the importance of people, since they are what matters the most. He suggested finding people or groups that really believe in change. As already explained, Iaione refers to a “nudging class” able to replace the current ruling class. It is about a class that can drive, convince, and nudge society and institutions to start processes that take in consideration sharing and collaboration as elements of a new paradigm to implement. The collaboration between this class, the Public Administration, the no-profit organizations, businesses and universities (the five souls of collaborative governance) can unleash and reveal the full potential of urban, cultural and environmental commons, encourage a sustainable commons-oriented development paradigm and update the concept of government. Iaione also underlines that in this context the economic and market actors too are understanding the scale of the phenomenon, realizing that “*they should invest in producing collaborative value and create collaborative economic ecosystems that foster creativity, knowledge, identity and trust*” (in Mantua for example it is relevant the role of local Chamber of Commerce, local cooperative movement, local businesses and young entrepreneurs that are investing and looking for other new innovative approaches).

Bologna can be considered the first city in a multi-city urban commons movement that LabGov is leading, to quote Gorenflo (2015a). In fact, many other Italian cities are taking the route experimented by Co-Mantua and opened by the Bologna Regulation. The cities of Siena, Ivrea, L’Aquila have already approved almost identical regulations. Other cities like Genova, Florence, Bari, Salerno, Rome are considering the adoption of the Bologna regulation and in general cities like Naples, Palermo and Battipaglia are decided (or are deciding) to invest resources and energies on the challenge of collaboration.

We are talking about cities that believe in co-design and bottom-up processes of civic and economic empowerment as instruments to face problems like urbanization, density, agglomeration, congestion, isolation, exclusion... Cities that are aware of the necessity of a radical and cultural change in which the Public Administration can, and have to play a crucial role. Cities that can become co-cities, overcoming and going beyond the concept and the frame of the *sharing city*, enhancing its key elements and ingredients. In few words the *mantra* can, should be: map, connect, experiment, prototype, amplify, evaluate.

6 THE ROLE OF THE PUBLIC ADMINISTRATION

6.1 The new face of the city

As seen in the theoretical chapter the government, the Public Administration (PA), is one of the key actors within the framework of the sharing economy, a distinguished player, particularly influential and of great value. It can promote the opportunities offered by the collaborative services, create awareness among citizens on sharing practices and simplify the processes of the new economic model, regulating it without slowing down and repress the phenomenon. The PA usually interacts with citizens, businesses and other administrations and government levels, so it can really be a privileged subject of the active actors of the collaborative economy. It has the power to enter in the process, in the movement of the sharing economy, and to play its role to the fullest: govern and push the spread of positive impacts for the communities (Foster and Iaione, 2015; Iaione, 2015). Public administrations can be an enabling and promotional platform that connects all the actors, the needs and the services in the processes of the sharing economy.

The process of course is not something easy and immediate. However Public Administrations are becoming more and more aware of the potential of the sharing economy, they are understanding that the challenges posed by the collaborative economy, if correctly dealt with, can generate benefits for the citizens and cities, in terms of economic growth, costs saving, reduction of environmental impact and social cohesion. This awareness is proven by the increasing discussion on the topic at the global level: policymakers, experts, social innovators, researchers are more and more engaged in reflections and debates on the role of the Public Administration and on the models that can be applied to manage in efficient way this new boundary of paradigm change. It can be considered a social paradigm change, since is modifying the way of being in social relations within cities, an economic paradigm variation, as is changing the rules of market, and an institutional and juridical paradigm transformation, as underlined by Iaione (2015). From this point of view new reflections become necessary: considerations on how to help cities and city governments to re-imagine the potential of the sharing economy applied to the everyday life, how to redefine public services, how re-imagine public innovation and civic engagement, how partnership with the other actors involved, from private companies, startups, cooperatives and citizens itself.

Cities have always been about sharing: shared spaces, exchange of goods and services, sharing of activities, and they are historically a shared entity; “*all cultures across the globe share and have socially accepted code for sharing*” (Agyeman at all, 2013, p.1). Cities are intrinsically built for sharing and, if well connected, they have the capacity to raise per capita production and innovation. Today the new circumstances seen have created the unprecedented opportunity to amplify their role of platform for sharing. But now it is time to rethink and reimagine politics and public intervention in relation with the private interests and the new forms of collaboration and cooperation that are spreading; it’s time to redefine the function of cities as places for sharing and exchange (Rinne, 2015). Agyeman talks about a *cultural rebalancing* in order to give much greater recognition and credit to the share public realm in our cities, to support a revival of ‘conventional’ sharing (of the city as a whole as shared space) and to recognize and affirm “*the ways in which the opportunities afforded to individuals in cities are founded on the collective efforts and actions of whole communities*” (Agyeman at all, 2013, p. 2).

Policymakers cannot just concentrated on the simply question of whether the sharing economy is good or bad, but they must go deeper in the topic, craft policies for the broader public interest and take into account the various actors and interests at play. The unfamiliarity

with sharing economy models can hinder the ability of governments to recognize the potential benefits such as innovation, economic growth, more efficient networks for urban mobility and for social cohesion (Johal and Zon, 2015). And the reply of cities didn't take time to arrive. Looking at the global landscape, in fact, one can see that more and more cities are taking up this challenge and are trying to support the collaborative economy to experiment new way of function of the urban ecosystem, to reinvent public services, to glean the energy of communities and emerging innovative businesses (Rinne, 2015).

In this sense is normal wonder if the Smart City of the future will be or not a Sharing City, an enabling platform for producing and sharing value (material, cultural, social) from the bottom. In this work, as explained in chapter 4, sharing is considered a kind of human way to the smart city, a citizens-centered approach based on cooperation and collaboration for the creation of an intelligent urban ecosystem, more resilient and sustainable.

Just to name few cities attempts

- **Bologna**, as seen, with the *Regulation for the management of the commons* offers practical rules to overcome the bureaucratic obstacles to the realization of collaborative services and to the experimentation of new form of shared management of the city;
- **Mantua** with the project Co-Mantua is proposing a new institutional governance model and supporting the Pact of Collaboration between citizens and institutions for the city development;
- **Amsterdam**, the first European city to be labeled with the name of *Sharing City*, is developing a sharing economy protocol involving institutions and citizens;
- **Copenhagen** with its attention to the environment is focused on sustainable lifestyles and on co-housing system;
- **Medellin** in Colombia promotes shared public spaces as focal in the relation between citizens and institutions and it is trying to improve also the transportation system in a sharing way;
- **Bogotá** with its bikesharing system and a new vision about the collaborative services;
- **Vancouver** features by a growing group of sharing organizations (from P2P lending or borrowing of physical media, to sharing transportation companies and community organizations to borrow or access space or equipment);
- **Milan** with its MilanoIn project focused on social innovation and compression of the social exclusion and the push from Sharexpo;
- **Bordeaux** highly concentrated on open data, open government and mobility;
- **Cleveland** that is trying to organize a new ecosystem based on cooperatives;
- **Seoul** with the well-known project “Sharing City Seoul” to manage in an efficient way the administrative resources and improve the quality of life of its citizens...

And many more... it's quite difficult to report all the new ongoing experimentations, because in every corner of the globe cities are implementing attempts to reply at the general societal and economic transformations looking at the sharing practices in their personal way. Some city are focused on public space sharing, others on the logistic and transport level, yet others highlight the environmental issues or the social cohesion topic. Every city in its own way. With an organic and well-shaped structure or simply promoting a first step of institutional change towards a big model of management of the new existing actors and forms of sharing and collaboration. Every day one can read articles about what a city is doing in this sense and the list is growing every day, including experimentations coming *from the bottom* thanks to the active involvement of citizens or attempts more *top-down*, or even more *peer-to-peer* as can be considered the case of Bologna with its Regulation. We are facing a real dynamism of cities that, even without a systemic vision at the base, are becoming hotbeds of

innovation: from subsidiary welfare to handcrafted digital production (FabLab), from innovative managements of commons to the re-use of space for the public enjoyment. We are talking about new opportunities ranging from the public-private-civic partnership in collaborative and horizontal government experimentations of commons, to the development of a new model of management for businesses and public organizations that honor the drive and the proactivity. And also new perspectives of urban sociability and new spaces of gathering as co-working or FabLab where citizens develop a new awareness, become active protagonist of the production and can cooperate in order to create new jobs, at global scale, thanks to creativity and creation ability. Many tools and toolkits are spreading to help cities in this sense, and Coalitions are springing up too to reply at the sharing economy challenges.

This last is the case of the ***Shareable Cities Resolution***, signed by 15 US Mayors, including San Francisco's Ed Lee and New York City's Michael Bloomberg, at the US Conference of Mayors 2013. With this resolution, which legally is more of a goal than a guarantee, they undertook to make their city more shareable, understanding the potential benefits of this choice. "*The Sharing Economy is redefining the ways that goods and services are exchanged, valued and created amongst citizens by enabling affordable access as an alternative to ownership*" states Resolution n.87. Signing the Resolution,

- the 15 US mayors assure that they will focus on creating local task forces to review and address regulations that may hinder participation, as well on proposing revisions that ensure public protection;
- they also guarantee to encourage a better understanding of the sharing economy and to play an active role in making appropriate publicly owned assets available for maximum utilization by the general public through proven sharing mechanism.

The Resolution is a shared acknowledgment on the function of the sharing economy; it declares that the sharing economy serves a purpose, and it affirms cities should encourage such behavior. In fact, a sharing marketplace empowers citizens and makes city living an affordable option in today's unstable economy; it also "*promotes entrepreneurship, innovation, job creation, and cost-effective urbanization*". As seen, many cities are taking steps towards the sharing economy, introducing car and bike sharing, co-working spaces, consumer cooperatives, home-swapping, tool lending libraries and so on. The Resolution aims to push initiative further using ICT platforms and social tools to connect citizens, since the digital peer-to-peer platforms "*dramatically increase the scale for sharing previously occurred in a narrow sphere among friends*" (Hagel and Seely Brown, 2013).

From the European side, on 25 September 2013, during a public hearing in the European Economic and Social Committee (EESC), the ***European Sharing Economy Coalition*** (EURO-SHE) was launched. It takes inspiration from the Shareable City Resolution n.87 and comes from the awareness that sharing economy and EU have common goals, such as increase resource efficiency, create jobs and prosperity, build community participation and advance social innovation. The Coalition's purpose is to bring together into a critical mass the most active organizations at European level and support the creation of European policies that go in the direction of collaboration and sharing, in order to build a more prosperous, sustainable and competitive European economy. In fact, without a strong alliance of private, public and civil society players the needed transformation of the EU economy will not take place. The Coalition wants to explore synergies with EU policies and ongoing programs and how EU decision makers and other stakeholders can work together to create the right policy framework conditions and the enabling environment for Sharing Economy to be a success for

Member State, businesses, consumers and local communities in UE. Marco Torregrossa¹⁴², Euro Freelancers Managing Director, explains that “*the narrative of the Sharing Economy is typically framed as a **bottom-up**, grassroots action. All of the proliferating Sharing Economy organisations in Europe are focused on a small piece of a much larger puzzle and considerable change will never come from a disconnected group and a fragmented start-up scene along the value chain. However, if these organizations join forces to share a compelling agenda, an inspiring long-term vision and coordinate their EU policy approach, they could pave the way for **top-down** framework conditions needed to scale-up the Sharing Economy in Europe as well as the Member States.*” (Euro Freelancers, 2013). The European Sharing Economy Coalition can be considered the first multi-stakeholder European network shape to bring together companies, NGOs, academia, local authorities and consumer groups, and to drive an agenda along the whole value chain of the Sharing Economy in Europe. It aspires to become an independent and non-partisan resource for Members of European Parliament Commission officials, Council Presidencies and other EU bodies looking for information about the Sharing Economy. It also seeks to inform the European audience by hosting events, building capacity and providing educational materials and tools in order to make the Sharing Economy thrive. How? The Coalition proposes a four-point list of actions:

- **Mainstream the Sharing Economy.** By campaigning to raise awareness and improve visibility.
- **Sustain the Sharing Economy.** By advocating for fair and sensible regulations, ensuring the Sharing Economy becomes a political priority at European level.
- **Scale Up the Sharing Economy.** By promoting leadership and best practice exchange, aiming towards scalability and transferability in the EU Member States.
- **Finance the Sharing Economy.** By raising EU funding to kick start relevant pilot projects and platforms all over Europe, above all in cities.

The main problem is the absence of regulatory measures that inevitably creates uncertainty with the risk to inhibit investments and the development of the sector. For this reason, the same European Sharing Economy Coalition considers mandatory to design appropriate rules and policies, also in view of the EU2020 strategy. This last proposes that “*the consumption of goods and services should take place in accordance with smart, sustainable and inclusive growth and should also have an impact on job creation, productivity and economic, social and territorial cohesion*”. The Coalition suggests European policy makers to support the Sharing Economy moving on four address lines: creation of awareness, regulation, transferability, and investment, and by following these indications:

- Encourage the EU to become **early adopter** of shared services by supporting users and providers of the Sharing Economy;
- Commission **impact assessment studies** and life cycle analysis on sharing assets in the EU to identify opportunities and help to create more standardized methods for measuring the impact and the benefit of the Sharing Economy for public and private sector, above all in cities;
- Embed Sharing Economy principles into **curricula** across primary, secondary, vocational, higher and adult education and training programmes;
- Set up **networks with leaders from cities** (using the already existing networks such as the EU Covenant of Mayors¹⁴³ or the European Innovation Partnership on Smart

¹⁴² Marco Torregrossa is Managing Director at Euro Freelancers, a synergic network of independent EU affairs professionals and investors specialized in sustainability, collaborative innovation and crowdsourcing. In addition, Torregrossa is Lead Administrator at the European Sharing Economy Coalition, EU Connector at OUIShare and Global Curator at Collaborative Consumption.

¹⁴³ For the EU Covenant of Mayors see http://www.covenantofmayors.eu/index_en.html.

Cities¹⁴⁴) to build capacity, spread information and ideas about successful sharing economy models;

- Create **local working groups** to review and address regulations to redefine public services, innovation and civic engagement, with the participation of residents and neighborhoods;
- **Facilitate the transferability** of best practice solutions across Member State and **incentivizing public investments** for pilot projects and sharing economy initiatives;
- Supporting the development of one **regional Sharing Economy Cluster in the EU**, together with research institutes, start-ups, financiers and end-users, to accelerate the innovation process.
- **Encourage cities** to develop sharing and collaboration actions plans to stimulate a recognition of the Sharing Economy across local policies;
- **Regulate** the sharing economy on a sector-by-sector basis, using feedback from sharing companies and consumers and consultations of stakeholders;
- **Mitigate the impact of existing regulations** that unintentionally obstruct sharing ventures and allow permits to support new sharing business models.
- Introducing **mandatory requirements on existing legal frameworks** instruments for shareable products;
- Enacted a **European public procurement system** that favors Sharing Economy enterprises;
- **Rewarding the best sharing economy solutions** (through a specific scheme) to facilitate market penetration.

The Coalition takes inspiration from the report “Policies for Shareable Cities” too (see below), underlining that EU policymakers should play an active role in making publicly owned assets available for maximum utilization by designing shareable infrastructure, services, incentives and regulations that facilitate the spread of the sharing economy at local level. Especially in:

- transportation and shareable forms of mobility,
- in the sector of food (supporting urban agriculture, re-use of vacant lands, food redistribution programs, local commercial kitchens and food enterprises),
- in the housing sector (helping the establishment of housing cooperatives, supporting short-term rentals, co-habitation, co-housing and eco-villages)
- and in the field of shareable jobs (reducing fee to allow shared workspaces and community-owned businesses, facilitating the temporary use of empty commercial spaces, integrating topics of sharing economy in the educational system).

¹⁴⁴ For the European Innovation Partnership on Smart Cities see <http://ec.europa.eu/eip/smartcities/>.

Here below is reported the Manifesto of the European Sharing Economy Coalition.

Manifesto

We want to mature policies, markets and sectors in Europe for the Sharing Economy to become mainstream.

Sharing Economy can make Europe an incubator for new business models that create jobs, empower citizens, improve resource efficiency and a more sustainable economic development.

We require a smart policy framework and enabling environment for the Sharing Economy to prosper.

We wish to inspire European policy makers by providing them with a tangible narrative, available scalable solutions and an innovative vision for faster uptake of the Sharing Economy.

We believe the absence of regulatory measures creates uncertainty that may inhibit investments, consumer trust and development of the sector.

We want to encourage the EU to become an early adopter of shared services by supporting users and providers with the tools that can facilitate growth for the Sharing Economy.

We are on a mission to create a resilient European Union and achieve shared value.

We request to regulate on the Sharing Economy on a sector-by-sector basis, incorporating feedback from sharing companies and end-users, involving a broad set of stakeholders in consultations.

We need to mitigate the impact of existing regulations that unintentionally obstruct sharing ventures and allow permits to support new sharing business models.

We demand appropriate legal mechanisms, insurance products and tax provisions for collaborative forms of consumption, production and exchange, without creating disadvantages to traditional businesses.

We desire to kick start pilot initiatives and public/private partnerships between Sharing Economy platforms and local governments.

Public and private players must develop a full range of suitable financial instruments and intermediaries that support the Sharing Economy throughout its life-cycle.

We encourage EU cities to create working groups and action plans to stimulate greater endorsement of the Sharing Economy across local policies.

We need further research and statistical collection for a better understanding, recognition and visibility of the Sharing Economy sector, both among policymakers and the general public.

EU Commission must ensure its commitment to create an eco-system for the Collaborative Economy is mainstreamed throughout its policies.



Figure 8 Manifesto of the European Sharing Economy Coalition

At European level also Regions are moving in order to highlight the role that the sharing economy is playing day by day. *The Regions Committee* (CoR) is working on an Opinion called “**The local and regional dimension of the sharing economy**”. The Opinion has been already approved during the ECON Commission of September 2015 in Germany and now the process of drafting is going on. The Regions Committee through the Opinion does not give a precise definition of the phenomenon, but offers some indications. It considers the sharing economy a vector of a new paradigm, based on social models, new or brand new, with important implications on the business, legal and institutional framework: the social practices of sharing, collaboration and collaboration. Being by nature innovative and dynamic concepts escape ultimately to a definition, but nevertheless incorporate a series of phenomena

characterized by the following traits: mode of action of the principal agents; typical approach of platforms (trust, regulation, relations, reputation...); developed through technology; it can be organized both on a model of market economy as well as on a model of social economy. For the Opinion, the sharing economy can improve the quality of life of citizens, it must be preserved and not suffocated, it is based on trust and reputation, sectorial normative approaches are required, it can promote also the care and regeneration of commons. With the Opinion the Committee will ask to the EU Parliament

- to adopt a methodological protocol
- to finance new pilot projects
- to offer training courses to socialize people
- to implement a program to certify practices and initiatives of sharing economy
- to analyse with attention its perverse effects
- to act in terms of regulation in a jointed way with the urban and local governance

The Opinion identifies also the critical points for the traditional market and four type of sharing economy: gig economy, access economy, pooling and collaborative economy. The normative aspect is a crucial element since the support to the sharing economy does not generate phenomena of tax evasion or unfair competition. The relation and comparison among territorial entities has emerged as fundamental as well as the necessity to identify forms for the reputation evaluation and recognition. The rapporteur of the Opinion on the sharing economy is Benedetta Brighenti, deputy mayor of Castelnuovo Rangone (Modena). The Opinion has been also discussed during Sharitaly 2015 (see chapter 9), where participants have had the possibility to give opinions and suggestions in a logic of co-drafting of the document. The final document will be presented at the plenary of the Regions Committee in December 3-4, 2015. During Sharitaly has been also officially presented the European platform that will host the sharing ideas and propositions. It has been planned by LabGov and promoted by professor Iaione.

These examples of resolutions and coalitions highlight the awareness of the public bodies in recognizing the Sharing Economy as a real economic, social and cultural shift that requires a rethinking of the legal, economic and societal assets. At city level, of course each city starts from its own background and from its level of sensitivity, and develops a reflection based on its previous framework and points of interest, even if almost all start from the whole picture of the Smart City. In addition, having a supranational framework of reference can be useful and fruitful for cities.

What is sure taking up the challenge of the sharing and collaborative economy is that cities are reacting in proactive way and are changing; as April Rinne (2015) reminded, they are becoming more:

- *Supportive*: an example is Portland in Oregon that in 2014 announced its ‘Shared City partnership with AirBnb’ and took on a very open and proactive approach to enabling the sharing economy. Portland is also the first city in the world persuaded Uber to cease operations in the city for a period of three month in order to access policy options.
- *Resourceful*: like Seoul in South Korea that in 2012 launched its “Sharing City Seoul” project enabling sharing business but overall putting its underutilized assets into shared use. Thanks to this openness in 2014 there have been more than 23.000 groups using the shared places made available by the Municipality with the result to unlock social value in the process and generate more than 9.000 occasions of shared use of spaces.

- *Engaged*: are growing in number cities more and more engaged in the sharing economy issues. Looking at European cities, we can see cases like Milan and Amsterdam that are launching sharing economy platforms, research agendas and public consultations. They are clearly asking themselves how reply in a proactive way to the citizens needs and how strive for; they are considering a large range of activities, such as changes to open up public procurement to include sharing economy platforms, mapping city-owned assets and educating the public about what is locally shareable.
- *Defensive*: some cities are resisting, like Barcelona or New York. The former consider AirBnb the cause of large process of gentrification in some neighborhoods of the city, the latter in the same way is battling the service asking the name of all privates registered in the platforms to discover case of miss taxation. They justify their behavior with the desire to promote local economic growth and preserve city from gentrification and other urbanization not wanted processes.

Not only cities but also entire countries are thinking at the sharing economy as a way of experimentation to reply to some urban problems; it is the case of the **UK government** that in 2014 commissioned an **Independent Review On Sharing Economy** with the goal to make United Kingdom the Europe sharing capital (see below). In the UK review, recommendations outline a plan of action for national policymakers.

In this work, I choose two explicative cases of cities that are supporting services and activities of sharing and collaborative economy in an articulated and well-shaped way in order to see the different and possible applications and the outcomes of a real attempt to rethink and reimagine cities through the sharing lens. Later in the research, we will see how these cities are reacting at the phenomenon of the sharing economy trying to integrate it in their system, starting from their background of origin.

6.2 New challenges for the Public Administration

The task to face the sharing and collaborative economy and to integrate them in the institutional frame remains hard. There are still many steps to do to yield the maximum benefits from the sharing economy. April Rinne (2015) suggests some key points that city should consider going in the direction of a sharing city:

- *Develop a sharing economy vision*: in her opinion, even if some cities are understanding the importance of the sharing economy, a clear vision is still missing and in general they are still doing very little. The sharing economy is not yet considered a tool for the smart urban planning and the result is a loss of benefits.
- *Connect and collaborate*: exchange sharing economy experiences among cities and create networks of collaboration can be a great way to accelerate the ongoing processes. But it's not something easy and at the moment there is lack of clear guidelines, learning platforms or other mechanism to facilitate the relations. A good idea could be start from city networks already existing for other purpose, assuming that they share the principles of the sharing economy.
- *Fully utilize technology*: cities have many resources that can be put in shared used creating a benefit for the whole community. The use of technology can support and expand the processes of sharing. Sharing platforms and apps can be very useful in this sense and some solutions can be customized making the access to information easier.
- *Engage with sharing economy companies*: sharing economy companies usually work for the resolution of some social problems that affected the society, the social impact is their core. For this reason, cities and policymakers can gain a lot collaborating with these companies, offering partnership to better develop community solutions. Rinne

underlines that AirBnb from this point of view is very open and wish to collaborate to develop appropriate policies for new business models.

Reaching these goals implies a fully involvement of the Public Administration and a strong commitment among the policymakers, as well as guidelines and roadmaps, and is not free from difficulties. For Johal and Zon (2015) the difficulties that policymakers can encounter in reaching the goals suggested by Rinne are ascribable to:

- The unique features of sharing economy enterprises
- The limitations of existing regulatory models
- The political and cultural context of governments.

Unique features of sharing economy enterprises

The new sharing economy enterprises are featured by speed and scale of change that makes difficult their categorization. Johal and Zon (2015) that deepened the topic, affirmed that peer-to-peer marketplaces have always existed but with limitations that made them not competitive with traditional business in terms of convenience and reliability (see Craigslist and eBay e.g.). Today, thanks to ITCs and to the driving innovation of the new sharing economy enterprises, much of the friction from the peer-to-peer experience has been removed and with a simple touch on a smartphone you can connect with an incredible number of people in the world and close a transaction without intermediation. The marketplaces are more dynamic and efficient and this enables an expansion of scale and speed no possible before. The infrastructures required are minimal and the growth of sharing platforms can be incredibly quick compared to the past models and businesses. This poses a problem of categorization. New models in an existing market have to face existing structures of regulation not necessarily fitting for them. For example,

- is AirBnb a travel agency or a hotel chain? or something again different?
- is Uber an alternative taxi service, a capitalistic venture, or a temporary employment agency?

In some cases, the new sharing economy enterprises are something so new and disruptive that is quite difficult recognizes them and over all put them into the right category. Alternatively, maybe new categories are needed. Regulate these new subjects is not easy if government still use the old existing models and categories. Again,

- if I pick up passengers in my car three day per week or if I rent my house four/five times in a year am I acting in a legal framework or some license and tax regulation are required?
- If I sell my idling resources do I need to declare my gain and in which way?

These last examples are something not completely new, also 30 years ago people offer lifts, rent the house for few days, or sell unused items, but today the difference is the scale of the phenomenon that is threatening the existing markets and the regulatory models. There is a real lack of clarity, because existing legislations often do not cover certain activities and transactions, or legislations developed for conventional industries are applied wrongfully to markets in the sharing economy. “Regulators are no longer able to run away from the sharing economy and must adapt their current approaches if they are to avoid stifling innovation or even in the long term, their own obsolescence” (Johal and Zon, 2015, p. 14).

For policymakers to distinguish between sharing economy activities and conventional business activities is a challenge. “There is a sort of misalignment between newer peer-to-peer business models/roles and older guidelines developed with existing ways of providing the same or similar service is mind. For example, an entrepreneur (‘host’) who provides short-

term accommodation occasionally via a platform like Airbnb is not a traditional ‘hotelier’. Similarly, individuals who occasionally offer rideshares via a platform like Lyft or Sidecar are not traditional ‘taxi drivers’” (Sundararajan, 2014). It is clear that the boundaries between personal and professional in the provision of commercial services are blurring, so for government becomes difficult understand if we are moving at professional level or personal level, with the consequence that is challenging to apply the right rules.

Limitations of existing regulatory models

Existing regulatory models are often very rigid and at the same time slow in responding to new ways of doing business or new forms of sharing staff. The general debate underlines that if governments keep applying regulations and policies of traditional business to disruptive innovations, like sharing economy, we will have soon many problems and tensions. Also because these regulation systems often have remained relatively static and unchanged over the past several decades and in general they are based on prescriptive approaches. So it is practically impossible that these regulations can fit with the new models of the sharing and collaborative economy. There is a lack of “*tailored policy framework*” for regulating new sharing economy businesses (Business Innovation Observatory, 2013) that, as result, keep moving in a grey normative zone. If there are not certainties and is not clear who has the liability, individuals can be unmotivated to pursue new form of production or consumptions (Sundararajan, 2014). Moreover, without clear frameworks, some innovative ideas could be stopped or hold back and social innovation would result slowed down. Lacking a frameworks, companies can try to exploiting loopholes in the legislative vacuum with the result of damaging consumer trust. The Business Innovation Observatory, in its 2013 report on Sharing Economy, highlights that create and preserve consumer trust is particularly important for European sharing economy because “*most Europeans are still relatively uncomfortable with online activities and transactions compared to their American peers*”. The main risk is that without a tailored policy framework policymakers adopt conventional industry standards and legislations to the new sharing economy or measures suitable for B2B and B2C transactions but not always applicable to the newly created C2C market. For the sharing economy in general it could be good have minimum safety and quality standards, kind of certificate of trust that could help to convince consumers to participate in peer-to-peer activities.

In addition, there are some areas completely not regulated, for example there aren't insurance models around the shared use, so an insurance framework for the new particular cases of use is absolutely requested and welcome.

Political and cultural context of government

The political and cultural context of government itself can hinder policymakers. Governments are always lobbied by vested interests, just look to the Uber case: taxi companies in North America and Europe have joined up efforts to oppose Uber and have lobbied politicians to introduce legislation to penalize drivers of illegal cabs (Johal and Zon, 2015). The public sector is characterized by closed processes, rigid hierarchies and a sort of aversion for innovations that are exactly the opposite features of sharing economy, in which openness, collaboration, empowerment and humanness are the main elements (Pick, 2014; Galley at al., 2013). Usually politicians tend to move slowly and in environment that dislike risks, and so not consider innovations. But the general debate highlight that it is time to change address and open to new possibilities, accepting that regulations need to be modernized and new actors need to be taken into account. Tenders and calls for innovation subsidies should be tailored and designed with great accuracy, to be more in line with the new sharing economy approach.

6.3 How to help Public Administrations: guidelines, roadmaps...

For April Rinne (2015) *“It is time to move beyond the binary debate about outdated rules. We are not stuck with a choice of regulating sharing economy platforms like traditional providers, or not regulating them at all. Rather, leaders should take a hard look at the needs of today’s cities, recognize how the sharing economy can help reach cities’ goals, and develop rules that maximize this potential while enabling new forms of business with social value to thrive”*.

In order to help governments and to give them suggestions and directions, many regulations, guidelines, resolutions and toolkits are emerging on the scene. Important counselors and experts, as the same April Rinne, underlines the importance of reflecting on practical tools for the policymakers; Gorenflo¹⁴⁵ clearly encourages community groups and sharing entrepreneurs to create sharing economy summits with officials or city leaders to push the reflection among local administrations; Sundararajan believes that local governments that allow their citizens to participate as suppliers in peer-to-peer marketplaces are going to see faster rates of growth and work, and more healthy employments¹⁴⁶.

This paragraph proposes the main indications, documents, guidelines and tools that are springing up to help local authorities and change-makers among others.

Suggestions from the Forum of the Public Administrations¹⁴⁷ – Italy

In Italy the discussion about the role of the Public Administration facing the sharing economy is largely debated by Forum PA that suggests some broad lines for the Public Administrations¹⁴⁸:

- Set the new realities finding collaborative solutions to cushion the impact on those categories that from these innovations may lose benefits (eg. taxi drivers).
- Training the administrative staff as a facilitator and not just as a provider of services.
- Promote the collaborative culture from the low school and through awareness-raising campaign.
- Open the data simplifying citizens and business in the conception and creation of collaborative services.
- Streamline the legislation around mobility, in particular for the Italian case the articles 82 and 84 of the Highway Code and the law 9/90 on the insurance dimension.
- Favor the tourist accommodation service redefining the current normative about contracts and services management.
- Favor the unbunkable micro-entrepreneurship, thus the actors considered disqualified to use services and/or financial products, thanks to the PA intervention to guarantee the credit granted to new entrepreneurs.
- Map the collaborative services to know them and listen the new requests.
- Launch tables of contamination between traditional categories and start-ups.

¹⁴⁵ Gorenflo on the first approach to the sharing economy of the city of San Francisco.

¹⁴⁶ Video of professor Sundararajan at <https://www.frbatlanta.org/news/paforum/2015/0311-Sundararajan/Q6.aspx>.

¹⁴⁷ Forum PA is a company specialized in public relations and institutional communications. It was established in 2010 as a Istituto Mides srl subsidiarity company, that is specialized in the organization of expositions and meeting from forty years. Forum PA fosters meetings and debates among public administration, companies and citizens about innovation themes through the creation of communities, studies, researches, multimedia communications, events, meetings and training.

¹⁴⁸ See <http://www.forumpa.it/riforma-pa/la-sharing-economy-a-number-fpa14-10-richieste-alla-pa-accettera-la-sfida>.

Forum PA is largely involved in the debate and in the last two years in particular is giving space to experts and experimentations in order to share best practices and point of views and find some efficient solutions for the Public Administrations.

Unlocking the sharing economy. An independent review – United Kingdom

An interesting case of concrete recommendations for policymakers and governments comes from UK, thanks to an independent review on sharing economy. In September 2014, the government commissioned Debbie Wosskow, CEO of Love Home Swap, to review the sharing economy. The report was published in November 2014, making over 30 recommendations on how the UK can become the global centre for the sharing economy¹⁴⁹.

- Among general recommendations, to **foster innovation** in the country is the first: the document suggests the creation of an Innovation Lab, a kind of incubator and research center that should be led by private sector investment and supported by Nesta and Innovative UK. The aims of the Lab is to provide targeted financing for sharing economy services, help these services learn from each other and share best practices, support researches to study how sharing models can improve the delivery of services to the UK public, and work with cities and local areas to see how sharing economy approaches can help areas to work better together and use resources more efficiently. Together with the Office for National Statistic, the Lab should measure the size and the economic impact of the sharing economy in the UK.
- Another key point of the document is to build consumers' **trust in online transactions** to allow sharing economy to develop and to use an identity verification system to check criminal records (UK is working at GOV.UK Verify).
- To have a **clear strategic framework** that consider sharing services as an option to traditional market (see ride-sharing and carpooling as alternatives to trains and taxis and shared accommodations as alternatives to hotels and b&b). Also the previous experiences explained underlined the importance of a clear strategic framework and a starting vision.
- The reviews doesn't forget the importance to **insure the risk** and proposed to refer to the British Insurance Brokers' Association to design new guides of insurance related to the sharing economy.
- **Digital inclusion** is mandatory to reduce the digital divide and reach new audiences, so the government should use the offline communication to inform about the potential benefits of sharing economy and encourage the use of the sharing services.
- The **taxation** should became **easier** and a guide to tax in sharing economy is necessary. The government should also simplify the registration process for Space for Growth to remove the requirement for security vetting in buildings where is not necessary and favor the improvement of online booking systems.
- Of course, local authorities should share their **public spare spaces** with citizens, communities and business.
- The review also recommends to sharing economy business the creation of a **trade body** representative across all sectors to represent the sharing economy to the government, to help to attract investments into UK sharing economy services and make use of the collective buying power of its members. This trade body should also establish a kitemark for responsible sharing platforms setting out minimum standards (acting with integrity, maintaining professional standards, providing insurance for users, assure clear and impartial information to users, ensure unbiased reviews and rating to the users...).

¹⁴⁹ The full report is available at the address: www.gov.uk/government/uploads/system/uploads/attachment_data/file/378291/bis-14-1227-unlocking-the-sharing-economy-an-independent-review.pdf.

A part of these general recommendations, the document gives also specific recommendations that touch the sector of sharing space and accommodation, that of sharing task, time and skills and the sector of transports.

Sharexpo – Milan, Italy

Sharexpo is a project born thanks to Collaboriamo, Eni Enrico Mattei Foundation, Secolo Urbano, MOdaCult and ExpoLab of the Catholic University of Milan. It aims to bring to the attention of institutions, economic players and grassroots the emerging topic of sharing economy and stimulate a cultural reflection on this theme. Sharexpo is rooted in the challenge that the city of Milan (and in general the whole country) faced with the International Exposition and born from the experience of Sharitaly, the first Italian convention entirely dedicated to the sharing economy¹⁵⁰.

Sharexpo in April 2014 have formally created a steering committee of fourteen members from different areas of expertise who drew up a guideline document for the project. Also the drafting of the document has had a collaborative nature, since the manifesto has been written during a public dedicated event with many public and private players (including the Municipality of Milan). Over seventy startups, associations, profit and no profit business participated in the creation of the manifesto, identifying strong points and weaknesses about a wide implementation of the sharing economy in the city, proposing solutions and suggestions and above all launching a clear sign of how Italy is a fertile context to flooding of sharing economy¹⁵¹. For the city of Milan, host of the EXPO 2015, the sharing economy model has been seen from the very beginning as an effective “reaction” to the extraordinary demand of services during the months of the exposition. The number of expected visitors was over 20 million (domestic and foreign) with a considerable part (10.4 million) potentially interested in innovative kind of services, based on sharing and collaboration. This was the driving inspirational motivation that encourages the reflection on a wide adoption of the sharing economy services during the exposition in the context of the city. The manifesto identified six areas of possible intervention and opportunities in terms of sharing and collaboration: the field of space/place to stay (hospitality), the ambits of transportation (mobility), the personal service sphere, the food services system and the free time topic. Sharexpo underlined, from the beginning, the importance both of regulatory interventions, also from a fiscal point of view, and new organizational set-ups and provided the basis to open a reflection in this direction. The implementation phase of the project started in Milan in July 2014 and end in April 2015. The second phase has a trial and evaluation nature and it is still ongoing as soon as I’m writing, the third phase will start from January 2016, when the project is expected to be fully operational.

From the point of view of the suggestions that a partner state can adopt to encourage collaborative services to create a more resilient, sharable and sustainable cities, the manifesto give general indications such us:

- Simplify the drafting of an ***address regulation*** on the sharing economy that allows to build a coherent administrative framework in which take in all citizens, including those who may feel disadvantaged by these services.

¹⁵⁰ The first edition of Sharitaly has been held in Milan in 2013, the second edition in Rome, at Montecitorio, to talk with italian policy makers about the potential of sharing economy in order to find a normative frame and the third edition, 2015, in Milan, lasted one week and involved also the coworking international panorama.

¹⁵¹ This italian propension is confirmed by the 2014 research of Duepuntozero Doxa, retrieving at <http://www.slideshare.net/duepuntozeroresearch/sharing-economy-per-expo-2015-le-propensioni-degli-abitanti>.

- Support the drafting of a ***manual of the collaborative services*** as reference point for those who want to design new services but also to adapt existing ones.
- ***Mapping the existing*** collaborative services, both online and offline, integrating them in a programmatic way in order to increase their visibility, efficiency and scalability.
- ***Facilitate the growth of existing collaborative services*** and the creation of new services with economic aid and incubation processes.
- ***Simplify the involvement of tradition companies*** so that they can understand the benefits of economic collaboration, they may enter into partnerships with the different services and enable the activation of new products to grow the offer and ensure greater reliability to these services.
- Create synergies between collaborative services and ***third sector' services***, to strengthen the relation between digital world and local territories and to allow these services to reach the critical mass necessary to thrive bringing to the third sector new opportunities for growth and change.
- Become an ***early adopter*** of these new platforms giving citizens an example and to experiment opportunities and difficulties before the citizens themselves (the activities of the city of Messina are cited by the project as a best practice in this sense).
- Favor the entire process through a ***communication and information campaign***, dedicated and able to transfer the values of collaboration and show the commitment of administrations in promote them.
- Establish clear ***guidelines on how to respect the law and pay taxes***, to encourage citizens to embrace the various collaborative services in full compliance with the law.
- Build a ***digital platform*** to offer an entry point for all the services in the city in order to facilitate the correlation of services and the common use and share of goods, experiences and users.

Policymaking for the Sharing Economy: Beyond Whack-A-Mole – USA, University of Toronto

Another interesting work, but more oriented on the regulatory issue, comes from Sunil Johal and Noah Zon, of the Toronto University, that in their “*Policymaking for the Sharing Economy: Beyond Whack-A-Mole*” identify four key steps that can help policymakers in developing new approaches to the sharing economy. I report here these steps since they can be considered a valid base to move toward the integration of the phenomenon in the life of a city, and to reply to the complex challenges that governments have to face.

The first step is the ***establishment of a strategic operating framework***. Governments must ask themselves what role they want to play in economy, and in society in general. Design a strategic operating framework allows keeping in consideration a large number of key elements and creates a good base for making specific policy decisions, evaluating their direction and functionality and, in case, changing direction or making adjustments. In Johal and Zon’s opinion, the framework should consider some key questions such as the possible impact that a policy can have on different fields, at a broader level; or the real scope of the underground economy since some activities are really informal, don’t need any regulation. In this, governments should be able to recognize when a sharing economic activity, from an income-generating hobby, becomes a business. “*Establishing a threshold that allows business to thrive while protecting workers and consumers is a critical first step for government*” (Johal and Zon, 2015, p. 20). Finally, governments should also consider the implications of the sharing economy on social programs and policies and have a right open mind protecting users of new technology or business models. Placing strict regulations sometimes, instead of protect users, can stifle and slow down innovation. With a strategic operating framework,

governments can really meet the needs of a range of interested parties and reach the broader public.

The second step is the ***re-alignment of political and cultural incentives***. The presence of new stakeholders requires the adoption of a political leadership approach that is open and transparent. The political transparency allows maintaining the trust of the public and businesses, assuring that decisions taken are made for the right reason. This political leadership should also have an open and active dialogue with all the stakeholders recognizing the new opportunities, instead of be static and stagnant. In addition, it should be very present to avoid that bureaucracy defers, delays or denies change, using all the possible tools, like policy labs and pilot program to test regulatory and policy approaches on a smaller-scale before biggest implementations. Finally, it should have an end-user perspective, putting end-users at the centre of the design. If laws are easier to understand, in fact, will be more respected (OECD, 2000); they should be “easy, attractive, social and timely”, according with the UK Behavioural Insights Team¹⁵².

The third step is the ***modernization of government structures***. We know that the government structures have not been created for a digital world and for this reason, with the advent of the digital era and the sharing economy, a ‘re-programmation’ is needed (Johal and Galley, 2014). Policy cannot be static in a world of rapid and free flows. “*Given the boundary-blurring issues raised by sharing economy platforms, governments particularly need to think about how they can promote greater integration of information-gathering, advice provision and regulation between and amongst different governments*” (Johal and Zon, 2015, p. 23). Governments need to think out of the existing toolboxes to find the right tools for issues that fall between many mandates. They should develop a holistic approach and be able to put at work all their departments in a common way. The UK Independent Review, as seen, recommends for example the creation of an Innovation Lab for the sharing economy and the establishment of an international forum since governments from different jurisdictions are all facing the same problems. Governments should be able to re-organize themselves not only in relation to citizens and new business, but also and overall in terms of inner staff.

The last step is the ***adoption of smarter regulatory responses***. To make smarter the old and pre-date regulations, governments should consider the development and the adoption of performance-based approaches focused on results, market-based interventions and co- and self-regulatory approaches. From the side of sharing business is also suggested to harness reputational information about the platforms (as users normally do using platforms and the provider too to know the users needs) in order to easily reveal problematic service providers. Also temporary regulatory waivers and exemptions could be a good option for governments in order to try if a situation, service, idea could work. A period of trial (one, two years) could give good responses.

There are also other strategies that governments should consider in re-thinking their regulatory approaches for the sharing economy, such as to mandate reviews clauses or to request consultations more transparent, or again to use data to assess risk or cultivate expertise to make informed decisions. Governments and policymakers should have a “*balanced, long-term approach that takes into account the interests of all parties, with a particular emphasis on the broader public interest*” (Johal and Zon, 2015, p. 26).

As already underlined, and as everyone can see, is not always easy, but it is essential, for governance and policymakers, implement structural and cultural changes in order to find a way to keep up with the sharing economy, not only to implement coherent and efficient

¹⁵² See Behavioral Insight Team “EAST: to simple way to apply behavioral insights” (2014).

policies and regulations but above all to create an environment that supports innovation, consumer choice and investment.

Policies for Shareable Cities: A Sharing Economy Policy Primer for Urban Leaders by Shareable and Sustainable Economies Law Center – Oakland, California

Shareable¹⁵³, together with the Sustainable Economies Law Center¹⁵⁴, offers a complete, deep, accurate guide to help administrations, urban policymakers and planner in building shareable cities. The starting assumption is that:

“City governments can increasingly step into the role of facilitators of the sharing economy by designing infrastructure, services, incentives, and regulations that factor in the social exchanges of this game changing movement [...]

so

[...] we believe that fostering the growth of the sharing economy is the single most important thing that city governments can do to boost prosperity and resilience in times of economic crisis and climate change”.

The guide curates scores of innovative, high impact policies that US city governments have put in place to help citizens share resources, co-produce, and create their own jobs. It focuses on sharing policy innovations in food, housing, transportation, and jobs, considering these topics as key pocketbook issues of citizens and priorities of urban leaders everywhere. The guide wants to help cities to develop more resilient, innovative, and democratic economies. I decided to report this incredible work since it details 32 specific policy steps that local leaders can take to benefit from the growing sharing economy and support innovations. The guide for each sector proposes policy ideas to implement and examples of US cities that are going in these directions and it is incredibly detailed.

Briefly for each sectors the indications are the following:

For *transportation*:

1. Designated, discounted, or freeparking for carsharing. The guide recommends that cities designate parking spaces for carsharing vehicles, particularly near public transit facilities and multi-unit housing. Carsharing users most commonly cite convenient locations and guaranteed parking as major motivation for participation, and carsharing operators most commonly cite lack of access to a dense network of parking spaces for carsharing as a limit to expansion. Cities can therefore increase carsharing participation by making parking spaces available for shared vehicles both on streets and in off-street public lots and garages. City policies can include: provisions for on-street parking; exemptions to parking time limits; creation of carsharing parking zones; free or reduced cost parking spaces or parking permits; universal parking permits (i.e., carsharing vehicles can be returned to any on-street location); formalized processes for assigning on-street parking spaces.

¹⁵³ Shareable is an award-winning nonprofit news, action and connection hub for the sharing transformation. Its mission is to empower everyone to share for a more joyous, resilient, and equitable world, as wrote in the site at the address <http://www.shareable.net/>.

¹⁵⁴ Sustainable Economies Law Center (SELC) cultivates a new legal landscape that supports community resilience and grassroots economic empowerment, providing essential legal tools so communities everywhere can develop their own sustainable sources of food, housing, energy, jobs, and other vital aspects of a thriving community. See the site at: [//www.theselc.org/](http://www.theselc.org/).

2. Incorporate carsharing programs in new multi-unit developments. The guide recommends that cities subsidize, incentivize, or require car-sharing programs in new multi-unit developments. Close proximity of a carsharing vehicle relieves many households from needing a second car or from owning a vehicle altogether. The shared vehicle can be administered by a condo-owners' association or apartment management, or by a third party carsharing program.
3. Allow residential parking spot-leasing for carsharing. By allowing residential driveways and parking spaces to be leased as an accessory or permitted use of a residential property, cities can enable homeowners to earn supplemental income for unused or underutilized residential parking, and create room for the growth of carsharing.
4. Apply more appropriate local taxes on carsharing. It's important align taxes on carsharing with the general sales tax for other goods and services. Policymakers should use codified conditions or certification processes to distinguish between traditional car-rental companies and carsharing organizations and ensure that only organizations generating significant public benefits would receive reduced taxation. The guide also suggests to make carsharing tax exempt in lower-income urban area with disadvantaged population and high unemployment.
5. Create economic incentives for ridesharing. The guide suggests the creation and promotion of economic incentives like high-occupancy vehicle (HOV) lanes, discounted or designated parking and waived or reduced tolls.
6. Designate ridesharing pick-up spots and park-and-ride lots. To meet demand for ridesharing, cities can designate convenient locations as casual carpool pick-up spots and par-and-ride lots.
7. Create a local or regional Guaranteed Ride Home program to serve carpoolers in the case of unexpected emergencies, offering free taxi ride or rental car in the event of emergency.
8. Adopt a city-wide public bikesharing program to provide access to bike when need without the responsibility of ownership.

For *food*. Cities can intervene removing legal barriers and facilitating the transition to community-based food production. How?

9. Allowing urban agriculture and neighborhood product sales, with the removal of zoning barriers to growing and selling products.
10. Offering financial incentives to encourage urban agriculture on vacant lots. The guide suggest to cities to provide a tax credit to property owners who farm vacant or under-used lots, such as activities create food sources, economic opportunity and civic enagement in otherwise blighted areas¹⁵⁵. A study form the University of Pennsylvania Schoolf Medicines showed that community gardens contribute to an increased sense of safety in neighborhoods and a contemporary decrease of crime in the surrounded areas.
11. Conducting and supporting land inventories to explore the potential for food cultivation on unused land.
12. Updating the zoning code to make “food membersio distribution points” a permitted activity throughout the city in order to increase access to local food while protecting zoning interests.

¹⁵⁵ Garvin, Eugenia C. et al. (2012). Greening vacant lots to reduce violent crime: a randomised controlledtrial. *Journal of Injury Prevention University of Pennsylvania*). <http://injuryprevention.bmj.com/content/early/2012/08/06/injuryprev-2012-040439.abstract>.

13. Allowing the use of parks and other public spaces for food sharing, removing restrictions that criminalize the poor and reduce the community's capacity to respond to local hunger.
14. Supporting the establishment of food-gleaning centers and programs to reroute the waste of food.
15. Recognizing mobile market and food trucks as a low cost way for food entrepreneurs to enter the market, reach consumers and create diverse and resilient food economy
16. Allowing certain food production activities as a home production. Cottage food can be an important resource of income for underemployed and specific laws can allow home-based food production.
17. Creating or subsidizing local shared commercial kitchens that can be considered economic incubators for budding food enterprises; helping small businesses access commercial kitchens removes a major startup barrier.

For *housing*:

18. Support the development of cooperative housing, which offer an effective participatory approach to affordable housing that can boost urban innovation and resilience. Not to mention that housing cooperatives can lower housing costs and provide social benefits, such as social support, smaller carbon footprints, reduce crime, increased civic engagement, better maintenance and resilient stability. The guide suggests to cities to offer subsidies and accessible financing, bonuses and fee waivers, waiver of burdensome administrative hurdles, support for formation of urban land trusts, agreements associated with housing cooperatives and specific city programs to give legal, financial and technical support.

To promote shareable housing, cities should:

19. Facilitate the construction of accessory dwelling units, reducing fees and simplifying permitting processes for adding new units to existing homes.
20. Encourage the development of small apartments and "tiny" homes, yurts, container homes and other humble abodes. These typology reply at the growing demand of affordable housing and produce also sustainable housing options, while promoting sharing.
21. Allow short-term rentals in residential areas, in order to diversify local tourism opportunities and to help residents cover the high housing costs. Of course some rules are necessary to avoid the risk that residential units become hotel-like, rules such as a limit number of guest nights, or a limit number of paid houseguests per year, and so on... because the purpose is not the profit but the offset of the cost of housing.
22. Reduce zoning restrictions on co-habitation in order to facilitate more affordable, sustainable and shared housing.
23. Create new zoning ordinances to enable the creation of co-housing and eco-villages to facilitate more affordable and sustainable growth and development.
24. Adopt policies to encourage that new housing developments foster sharing and resilient interaction. For example cities can require or foster clustering housing around central courtyards and they can require the inclusion of common areas and common houses designed for shared activities (laundry, space for meals, children's areas, wellness areas, workspaces...)

For *job creation*. The potential of sharing in creating jobs is high but sometimes regulations and other legal barriers limit the development of new small businesses; cities can lower the cost of starting businesses supporting innovation like shared spaces for work, shared commercial kitchens, community-financed start-ups, community-owned commercial centers and space for pop-up businesses. Sharing is also at the core of cooperatives that offer jobs

with dignity, creativity, democracy and fair pay and, as the guide says, “*supporting the growth of cooperatively-owned enterprises may be one of the most important things that a city can do to support stable, fair paying, local job creation*”. Even if cooperatives look like traditional businesses actually they shared profit on the basis of patronage instead of capital ownership and serve the interests of local workers and customers instead of the benefit of absentee shareholders.

The guide proposes some indications to help cities in creating jobs and developing enterprises:

25. Expand allowable home occupations to include “nano-sharing economy enterprises”. The guide suggests cities to survey all the many ways in which residents are able to supplement their incomes in the sharing economy and to adopt policies that allow the activities as an accessory use of residence or giving business licenses.
26. Reduce permitting barriers and fees to enterprises that create locally-controlled jobs and wealth, such as co-workings, cooperatives, community-owned businesses... business owned by a broad range of local community members guarantees that the profit will spread throughout the city and re-circulate locally. New business of sharing economy give low cost access to space and equipment for prototyping new products or services, short-term projects and ongoing day-to-day work.
27. Use idle commercial spaces for community benefit. Cities should facilitate the temporary use of empty commercial spaces by offering incentives for temporary leases and by penalizing property owners and banks that leave spaces vacant.
28. Assist cooperatives with specific economic development departments. If these departments have the right knowledge and resources can better support and assist cooperative and community enterprises. Any staff should be prepared to connect aspiring entrepreneurs to outside organizations that provide technical assistance to new co-ops.
29. Make grant to incubate new cooperatives. The guide recommends cities to work with non-profits and partner with private foundations that have the knowledge of, the expertise and the connection to communities in order to incubate new cooperatives.
30. Provide financial and in-kind resources to cooperatives. Cities should provide grants, loans, and in-kind support to cooperatives, and facilitate or act as intermediaries to secure other financing opportunities for cooperatives.
31. Procure goods and services from cooperatives instead of private businesses. Cities should make an effort to prioritize procurement agreements with cooperative business in order to support local jobs, with formalization in procurement ordinances and policies.
32. Integrate topics related to cooperative in the public education system and other public education programs, especially where the knowledge of cooperative structures and principles is low.

Shareable is a network that is hardly working on the topic of the sharing economy, collecting information and case studies all around the world, and networking the main experts and experimenters. It offers a huge quantity of materials useful to implement and launch sharing projects in the cities. An example is the guide: “*How to start a sharing city*”¹⁵⁶ that suggests to start from three elements, link people, common ground and common action, giving details and clear advices. Another interesting material is the “*Sharing Cities Toolkit*”¹⁵⁷ a comprehensive catalogue of resources from How-to’s, to Project Guides, Policy examples, true Models and Advices, pulling together also resources created by other organizations in the

¹⁵⁶ The guide “How to Start a Sharing City” is available on the website of Shareable.net at the address: <http://www.shareable.net/how-to-start-a-sharing-city>.

¹⁵⁷ The “Sharing Cities Toolkit” is available at the online address of Shareable.net: <http://www.shareable.net/sharing-cities-toolkit>.

last years. In addition, Shareable has also created a *Sharing Cities Network*¹⁵⁸ to connect local sharing activists in cities around the world for fun, mutual support, and movement building.

*The World Bank (IBRD-IDA) Report “Citizen-Driven Innovation. A guidebook for city mayors and public administrators”*¹⁵⁹

A more general work comes from the World Bank. It is a guidebook not directly related to the sharing economy but more oriented to the social innovation. It aims to bring citizen-driven innovation to policymakers and change agents around the globe, by spreading good practices and open and participatory approaches as applied to digital service development in different nations, climates, culture, and urban settings. The report looks at citizens as the driving force of the urban innovation in the smart city context and shows how citizen-centric methods are useful in responding to urban innovation challenges. It is structured in seven chapters:

- The introduction describes the vision of a humanly smart city, in order to give an idea of the kind of result that can be attained from opening up and applying citizen-driven innovation methods.
- Chapter one try to help mayors in launching co-design initiatives, exploring innovation processes founded on trust and verifying the benefits of opening up.
- Chapter two, works in terms of building a strategy and identifies the key steps for building an innovation partnership and together defining a sustainable city vision and scenarios for getting there.
- Chapter three, is based on co-design solutions that look at the process of unpacking concrete problems, working creatively to address them, and following up on implementation.
- Chapter four, to ensure sustainability, describes key elements for long-term viability: evaluation and impact assessment, appropriate institutional structuring, and funding and policy support.
- Chapter five, suggests ways to identify a unique role for participation in international networks and how to best learn from cooperation.
- In the last section, the report provides a starter pack with some of the more commonly used tools and methods to support the kinds of activities described in the guidebook.

¹⁵⁸ The Sharing Cities Network is an open platforms to connect sharing economy experiences all around the world. See more at the online address: <http://www.shareable.net/sharing-cities>.

¹⁵⁹ The World Bank Report is available at the address: <https://openknowledge.worldbank.org/handle/10986/21984>.

Toolkit for Collaborative territories – OUISHARE

OuiShare is a global community and ‘think and do-tank’ with the goal to build and nurture a collaborative society by connecting people, organizations and ideas around fairness, openness and trust. Started in January 2012 in Paris, OuiShare is now an international leader in the collaborative economy field. A non-profit organization which has rapidly evolved from a handful of enthusiasts to a global movement in dozens of countries in Europe, Latin America and the Middle East, with a rich network of expert Connectors worldwide. Thanks to the support of the main founding partner, Forum PA, OuiShare has developed a global project called Sharitories that aims to create a *Collaborative Territories Toolkit*. The toolkit is a tool for policymakers and changemakers that want to start collaborative or sharing initiatives in their local areas and help them thrive. It based on contributions and best practices from across the globe, collected from thought leaders and practitioners who work to speed up the transition towards a collaborative society. The toolkit, using a series of existing and ad hoc created tools, offers local administrations and governments an open platform to understand local opportunities and problematics, in order to define and implement the best policies. It is not a ready-made, prepackaged solutions but a way for governments to start a reflection and a specific path on the issue of collaborative economy. The first step is to create awareness among policymakers and changemakers around local potentiality and problematics; the second step is the facilitation and support from the team to know and understand the local realities; the third step is, after the comprehension of the local maturity, the creation of new solutions and the support for the emersion of these new solutions. The project is an open source knowledge project, it will be always accessible since it is released by Creative Commons and it welcomes info and suggestions and the contribution of adopters, sponsors and collaborators with the final goal of shaping the collaborative future of territories worldwide. Anyone could contributes in several ways, i.e by allocating resources on the kit development as a sponsor, or by testing the approach at local context as administrator or changemaker, by inviting the Sharitories team to hold workshops or just by joining the OuiShare team. In October 2014 the Toolkit has been proposed at the Smart City Exhibition of Forum PA in his first version and tested by 8 tables of work; in January 2015 has been launched the alpha version and in June there has been the first experimentation at rural level¹⁶⁰. It is possible access to the toolkit at the web address: <http://www.slideshare.net/OuiShare/ouishare-collaborative-territories-toolkit-alpha-release-open-for-comments>. The toolkit has five key themes:

1. Collaborative consumption,
2. Crowdfunding and peer-to-peer finance,
3. Open knowledge,
4. Makers, design and open production
5. Open and horizontal governance.

It proposes 10 scenarios, giving for each one a description and an example and underlining the benefits for citizens and local administrations:

- A. Shared Mobility (ridesharing, p2p carsharing, branded car sharing and bikesharing);
- B. Space for shared creativity (coworking and makerspaces);
- C. Community agriculture (urban agriculture and food hubs – community supported agriculture);

¹⁶⁰ From June 29 to July 3, 2015 has been held the Commons Camp (at Rural Hub of Calvanico, SA), a week of research and co-generation of ideas to reinvent the society of commons. 40 young students and researchers have shared their bottom-up experiences and projects enriching them of knowledge about collaborative economy, social innovation, environment and culture, and meeting local and rural communities to reflect with them.

- D. Collaborative Production (Digital fabrication, decentralized energy and users cooperatives);
- E. Collective/shared use, reuse and recycle (swapping, recycling and gift, tool libraries, second hand and repair cafes);
- F. Tourism and sharing experiences and knowledge (p2p local guides, home swapping, short rentals, social eating);
- G. Shared living (co-living and housing cooperatives);
- H. Shared time, knowledge and skills (p2p learning, time banks, massive online opencourse);
- I. Open government (open data and citizen participation);
- J. Collaborative finance (crowdfunding, local currencies and p2p lending).

The Toolkit does not give indications in terms of creation of a legal framework or integration of sharing economy practices, is more a first tool for administrations and change-makers that want to start a line of reasoning in their community and need to know how to begin. For some cities that have already launch a path in the direction of the sharing economy it can result outdated, but for other cities not yet involved in a reflection on the topic, the Toolkit is an initial insight and a clear guideline to move the first steps. In this sense, it is a kind of precursors of other guidebooks that instead attempt concrete instructions on how to regulate the legal context to integrate sharing economy businesses and how to create a sensitive environment for social innovation, citizens' participation and collective and shared use, reuse and adoption.

ONE EARTH - Local Governments and The Sharing Economy

“*Local governments are faced with a tsunami of Sharing Economy activities*”. Starting from this evidence One Earth has elaborated a roadmap to help North American local governments engaged with the sharing economy in order to foster more sustainable cities.

The roadmap was initially created for the Urban Sustainability Directors Network that involves 130 cities and counties in USA and Canada, fostering innovative, sustainable solutions in cities. In the authors' opinion it can be useful also for City Staff and local politicians seeking to understand benefits and scope of the sharing economy; for sustainability practitioners and member of sharing economy movements; for critics and supporters of the sharing economy and for innovators (V.V. A.A., 2015). It provides four key tools for navigating the sharing economy:

1. Defining the Sharing Economy: analyze the different definitions and provides one tailored to local government.
2. Sustainability Filter and Sharing Economy Analysis: describes a sustainability filter based on six dimensions: shared mobility, shared goods, shared community, shared spaces, shared food and shared energy. It also offers recommendations for local governments.
3. Strategic Opportunities for Local Governments: describes key strategic ways that local governments can follow to use the sharing economy to advance sustainable cities.
4. Sharing Economy Resources: provides a list of experts, networks and recommended reading with also materials for local governments in terms of ordinance and laws.

It proposes three messages:

1. The Sharing Economy is not inherently sustainable but local governments can help to make it more so;

2. Community Sharing is a promising area where local governments can play proactive, enabling roles.
3. Addressing data gaps is critical for understanding sustainability impacts on cities.

THE REGULATION ISSUE IN THE HOSPITALITY SECTOR: Two Examples

As seen, the regulation issue is one of the main concerns for an administration and it seems to be one of the most complicated problems requiring answers. The spreading of new disrupting services is posing the question of their categorization between personal and professional provision and related forms of regulation. If the service is not clearly ascribable to a personal or professional level can be very challenging to apply the right rules. In addition, the new peer-to-peer business models have to face existing structures of regulation designed for old services. This misalignment can impede the economic growth and discourage the development of innovative and useful solutions, but at the same time can favor situations of tax evasion, privacy violations, and unfair competition (Cohen and Sundararajan, 2015). From this point of view the debate is gaining more and more momentum especially in the hospitality and mobility sector, thanks to the spreading of services like Uber and AirBnb. The problems related to these two types of services has been sketched in chapter 3, here two examples of practical forms of intervention are proposed, two attempts to integrate the services in the everyday life assuring that laws are followed.

1. The first case is the **ONLINE VACATION RENTAL LEGISLATION**, SB 593, presented by the Senator McGuire in California, USA. His bill found great support among the Senate Governance and Finance Committee and the Senate Transportation and Housing Committee. This legislation covers the hospitality sector, one of the most critical areas, since entire cities are experiencing one-way sharing in which online vacation rental businesses (OVRB's) share all the benefits of a local community's services but not the responsibilities. The case is particularly strong in California where thousands of rental units are being converted from permanent housing for residents to hotels for tourists, often in violation of local zoning laws and avoiding taxes. Online hosting platforms that manage online vacation rental, like AirBnb, currently operate with little accountability and local governments have to afford costs and expenses related to this growing industry. In this frame many conflicts are emerging, because the short-term rental (especially in case of management companies that rent hundreds of apartments in the same neighborhood) impacts on the local life in terms of congested street, lack of parking, loss of affordable units for citizens and loss of revenue that could be invested in local services (Bernardi, 2015a).

The bill "Thriving Communities and Sharing Economy Act" tries to stop property owners from using AirBnb and similar platforms to convert scarce permanent housing for residents into hotels for tourists while avoiding the traditional taxes that hotels have to pay. It aims to empower cities to enforce local policies, ensuring that their laws are followed. Another goal is to force short-term rental companies to make disclosures as required under local law (providing address of host rental, amount of nights stayed, and amount paid by the visitor). The Senator's proposition simply tries to reinforce local laws asking that OVRB's follow them. The idea is very simple: where there are local ordinances that allow vacation rental the bill will assist local jurisdictions in regulating and collecting the Transient Occupancy Taxes (TOT) as for traditional hotels; where vacation rental is illegal the bill will reinforce the local ordinance prohibiting OVRB's from making a rental. In addition, local jurisdictions may choose to have OVRBs collect the taxes and remit them, cities can opt out of their information disclosure process at their discretion and use the TOT to fund critical services in the communities, such as road improvements, fire and police services, public school support, safe neighborhoods... In some cities like Portland, New York and San Francisco, AirBnb is

already providing information that SB 593 required, and in the case of Portland there is an agreement to use the TOT for public utility services. The bill has been received with great enthusiasm as show by the words of Matt Cate, the Executive Director of the California State Association of Counties (CSAC): “CSAC greatly appreciates Senator McGuire’s leadership in making sure local communities have the ability to regulate on-line hosting platforms. In particular, we support the Senator’s legislation to ensure cities and counties can collect transient occupancy taxes that fund critical services in our communities.” This bill marks an important step forward in terms of regulation of new sharing services, at least in the field of hospitality, delegating more regulatory responsibility to the marketplaces and platforms while preserving some government oversight. It ensure that the innovations carried on by the sharing economy could really spread for the benefit of citizens, showing that government, local authorities and sharing economy platforms can truly work together to guarantee that all legal requirements are met¹⁶¹ (*ibidem*).

2. The second interesting case that I want to present is that of the **LOMBARDY REGION**, the first Italian region to acquire a regulation for the home sharing. The discussion between the online portal for rental accommodation, AirBnb, and the Head of Tourism for the Lombardy Region, Mauro Parolini, lasted several months, after that the city of Milan and the Region approved new home sharing rules. Previously the randomly home sharing had no precise rules to follow, since the hospitality rules regarded only people working in the sector. The new agreements, however, recognize that many of the AirBnb host are not companies or professionals, but ordinary people who share occasionally their homes and use the earnings as a resource for their own needs. In this way, the home sharing is classified as a non-professional activity, so that many of the Lombard host no longer have to comply with the complex filing requirements, nor put a sign out of their homes, benefiting from new and simplified reporting requirements with the local authorities. the regulation is related only to the first or second house, who rent more than three accommodation must follow other rules and must meet certain standards of hygiene, space and price ranges, communicating in advance minimum and maximum price. For example, it is not exempted from the declaration SCIA - The Report of Certified Home Activity - which allows companies to start or change a production activity in the areas of trade, craft or industry. The SCIA instead is no longer necessary for those who rent the first and second homes. You must also fill out an online form to be forwarded to the police headquarters of the local council, to denounce to the authorities which and how many people are housed in their own homes.

In this way Milan is aligned with the major European capitals, such as London, Paris, Amsterdam and Lisbon, and created a regulatory framework that regulates the issue of (non-hotel) accommodation privately operated.

6.4 Summarizing...

All the seen guidelines, guidebooks and toolkits are just a first attempt to help administrations to understand the potential of sharing economy if supported and integrated in the everyday life of a city, fostering its development. We cannot talk of a defined modeling to follow, also because, in every case, the territorial context must be considered and for each specific case a tailored path and a framework of reasoning should be developed. But what is clear is that, embracing the opportunities offered by the sharing economy

¹⁶¹ More information at the addresses: http://www.tenantaction.org/airbnb_call_in_action and <http://sd02.senate.ca.gov/news/2015-04-08-senator-mcguire%E2%80%99s-online-vacation-rental-legislation-advances-senate-committee>.

- government could really make its own operations more efficient and make a better use of public resources;
- it can understand the current circumstances and intervene in terms of regulation to better reply at people's expectations and needs in order to create an environment that integrate the sharing services and platforms in the society, in light of its potential.

The key is the creation of an '**enabling environment**', that can be considered "*the single most important step for the long-term success of the sharing economy*" (Lathi, Selosmaa, 2013). It refers first of all at the actions of the Public Administration in terms of openness, innovation, legislation and legal practices to allow the concrete realization of a business activity or an idea. As seen, it is related to laws on business and trade, laws on accommodation, city planning and land use, laws on taxation, insurance and work, laws on food production and distribution, copyright legislation and regulations on collecting money. It refers on how the administration policies enable the birth and launch of new businesses without damage the traditional companies. To summarize, the main points of attention should be

1. the *renovation of the existing legislations* (made in an era of old industrial production and mass consumption), clarifying rules and formulating new policies more suitable in a period of peer-to-peer production and consumption;
2. the ability in raising awareness about sharing and collaborative practices, to spread the voice of sharing, capture new users and open spaces for new services providers;
3. the effort in developing new business and offering financing models;
4. the renovation of physical infrastructures to facilitate the adoption of sharing behaviors;
5. the improvement of the re-use of public spaces and spare spaces;
6. the fostering of already affirmed practices such as car sharing.

PART 3. CASE STUDIES AND RESEARCH WORK

7 METHODOLOGY

The research moves from the assumption that the sharing and collaborative economy are transforming our way to consume, to produce, to work and to live in the city, affecting the economic system, the job market, the community building process, the environment too.

More and more cities are taking up the gauntlet of the sharing economy as a mean to answer, in a resilient way, to the main urban challenges and to the global crisis; cities that are trying to combine the benefits of the sharing economy and collaborative consumption with the urban development and the community building, declaring to be *sharing cities* and implementing supporting plans to favor the spread of the sharing economy or simply launching programs in this direction. Looking at the frame of initiatives of these cities allows to reconstruct the governance models adopted and the role of the Public Administration, and to comprehend which paths could be followed by other cities.

The present research project seeks to better understand the general context of the sharing economy and the concept of *sharing cities* from which it takes shape, offering an insight on its current implementation in the urban context, and on the governance model adopted, in order to detect its features in terms of collaboration and shared practices.

For this reason two exemplifying and emblematic cases of city are here presented: **Milan and Seoul**. Two cities that are working to connect people to sharing practices and each other and to build a more inclusive, sustainable and communal urban environment through the sharing/collaborative tools. One started the reflection (and the actions) embracing the bottom up boosts, the other one soliciting the creation of a sharing environment more from the top. To deepen this topic, various and complex as already mentioned, the research adopted different tools of investigations, both qualitative and quantitative.

7.1 Qualitative analysis

The **qualitative analysis** is based on three elements:

- **the analysis of the institutional and scientific literature and of informative materials.** The panorama of the sharing economy, as explained in chapter 1, is wide and various and includes many different fields and practices. Far since the beginning of the research an evolution of the phenomenon has been observed, together with the appearance of new practices and form of expressions, along two lines of development, one more oriented to the market and to the profit and one more attentive to the community with an approach to sustainability (Gorenflo, 2015). Its rapid development requested to constantly follow the international debate and monitor the analysis and researches gradually emerging from experts, advisors and consultants, discovering also new platforms engaged in the study of the phenomenon, under which new communities of passionate and innovators are developing. For this reason many sources come from these platforms, such as Collaborative Lab, Shareable.net, OuiShare.net, p2pfoundation.net, LabGov.it, Collaboriamo.org' to quote the most famous. At the same time, given the disrupting impact of the sharing economy on our way to consume, produce and work, also many online newspapers, from popular to less renowned, have become interested in the topic. About the academia, on the contrary, scholars just started dipping into the matter and a mature scientific reflection is still lacking. On account of this, along with institutional and some scientific materials, the present work is also based, on its qualitative part, on many online articles retrieved through the network of the

epistemic community that is reflecting on the topic of the sharing economy in a comprehensive way.

- **the participant's observation.** Especially for the case of Milan it was possible to follow the development of the reflection from its very beginning and also take part at the initiatives launched before by Sherexpo and then by the Public Administration. I participated at the starting event (April 1st, 2014), at the consulting event (April, 15th, 2014) and at the presentation of the Official Steering Document (July 2nd, 2014) of Sharexpo. I attended all the events of the Milano(è)IN series (of the Labor Division of the Municipality of Milan) from its very beginning, and I have been selected as member of the experts and operators Register (see chapter 9) . In addition, to deepen the topic:

- I participated at the manifestations Sharitaly 2013 in Milan, 2014 in Rome, and 2015 again in Milan. At this last event I presented the results of the research for the case of Seoul inside the section “Sharing Economy inside the administration”.
- I attended OuiShare Fest 2014, an annual event uniting the global collaborative economy community. A three-day festival, in its second edition, organized in Paris at Cabaret Sauvage from May 5th-7th, 2014. The event gathered many communities, entrepreneurs and social innovators, non-profit and company leaders, grassroots activists and public officials, in order to build a common vision of a collaborative society, produce knowledge, accelerate projects and foster new collaborations to endure long after the event itself. The manifestation allowed collecting more information and discovering the different approaches being developed at global level.
- I also attended the first “Sharing School” held in Matera (Italy) from January 23rd, 2015 through January 26th. A four day full immersion program based on “learning by doing” approach on the topic of the sharing economy to analyze recent trends and best practices of the sharing economy, and learn instruments to design and manage community services and assets through collaborative and sharing scheme. The school was organized by Casa Netural, Collaboriamo, RENA, and LabGov in collaboration with Ouishare, Avanzi and Societing, and with the participation of the main experts on the topic from the Italian panorama (*Davide Agazzi* from RENA, *Simone Cicero* from OuiShare, *Lorenzo Brembille* and *Marta Mainieri* from Collaboriamo.org, *Michele D’Alena* Social Media Strategist of the City of Bologna, *Christian Iaione* from LabGov, *Ivana Pais*, economic sociologist and italian expert from the University Cattolica of Milan, *Carolina Pacchi*, urbanist DASTU- Politechnic of Milan and Avanzi, *Andrea Pugliese* strategic counselor and co-founder of The Hub-Rome, *Daniela Selloni*, service designer and researcher from the Politechin of Milan, *Adam Arvidsson*, sociologist from the University of Milan, *Alex Giordano* president of Rural Hub and founder of Ninjamarketing.it, digital marketing strategist, consultant and scholar, the designer thinker *Guglielmo Apolloni*, *Andrea Paoletti* and *Mariella Stella* founders of Casa Netural). An international host, *Neal Gorenflo* of Shearable, was also present. The school was the occasion to better understand the phenomenon in its evolution, to deepen the idea of collaborative cities as a model for urban transformation and local economic development and to shape the concept of *sharing city* with the main experts of the field.
- I participated at the Forum PA¹⁶² 2013 and 2014, and Smart City Exhibition 2013, 2014 and 2015, to follow the debate on Smart City and the experimentation of the Italian cities discovering the case of Bologna and of its Regulation. The former is the forum of

¹⁶² The previous chapter offers a sketch on Forum PA, more information can be found on the official website: <http://www.forumpa.it/>.

the Italian Public Administrations that in the last 26 years has dealt with the topic of the management of the city in Italy (Public Administration reform, Smart City, digital agenda...). The latter is a European manifestation around Smart City, energy efficiency, Internet of Things, sustainable development, etc. The concept of the 2015 edition¹⁶³ (October 14-16, 2015) has highlighted the role of the cities as enabler platforms for new governance models, new spaces and new practices of collaboration, focusing on the informatics.

- I attended the first IASC (International Association for the Study of the Commons) Thematic Conference “The City as a Commons”, November 6th-7th, 2015, in Bologna, promoted by IASC, LabGov, Fordham Urban Law Center and Luiss ICEDD. The conference gathered scholars, researchers, policymakers, practitioners and social innovators to take stock of the developments in the interdisciplinary study of the urban commons. The thematic conference allowed a better understanding of the idea of urban commons at different scales, circumstances and contexts of origin, proposing also inspirational examples of urban development and a “urban commons narrative” for urban infrastructures, welfare and governance. During the conference I presented the first results of the present research in the track “The Collaborative/Sharing Economy as the Basis for a Commons-Based Urban Economy”.

About Seoul, the short period of visiting (one month) did not allow to take part in events and initiatives. In addition, the linguistic barrier was evident from the beginning; in arranging the interviews (see next point) in some cases, I did not receive reply for evident problems of linguistic comprehension, and for some interviews I adopted an interpreter. The collection of materials and information was difficult since English is not broadly used, especially in some contexts, and the online communication about the project and the related initiatives is available mainly in Korean; only few official materials are presented in English and often in a recap version and the main source of information remain *ShareHub* (see chapter 8.3). To overcome this problem sometimes I work with the interpreter and I established a strict relation with the Responsible of the International Relation of the Social Innovation Division inside the Seoul Metropolitan Government, Ms. Jung A Kim, to be informed about new documents released in English. Her collaboration was also very precious in the phase of arranging the interviews, to be introduced to the key actors of the project, especially the institutional subjects. Other precious collaboration were with the Kyungkee Development Institute and the Seoul University, in particular, with the researcher Mr. Dongwoo Lee, who followed me in the planning of the interviews and accompanied me in some of them.

- **Semi-structured interviews** to the key actors of the projects “Sharing City Seoul” and “Milano Sharing City”, in order to retrace the origin of the process, its general framework, current outcomes and future possibilities, and to investigate the role of the actors, the stages of implementation, the sectors involved.

- The interviews in Milan were administered between April and July 2015. The key actors interviewed are 15:
 1. Renato Galliano, DIRECTOR OF ECONOMIC DEVELOPMENT, INNOVATION, UNIVERSITY AND SMART CITY DIVISION. SUPERVISOR FOR THE MILANO SHARING CITY PROJECT

¹⁶³ More information about Smart City Exhibition 2015 are available on the official website <http://www.smartcityexhibition.it/it/news/il-concept-di-sce2015>.

2. Lucia Scopelliti, SMART CITY COORDINATOR, STAFF OF THE MILANO SHARING CITY PROJECT
 3. Salvatore Caschetto, COUNCILOR'S STAFF, LABOUR POLICIES, ECONOMIC DEVELOPMENT, UNIVERSITY AND RESEARCH, THE MILANO SHARING CITY PROJECT
 4. Caterina Sarfatti, PROJECT MANAGER INTERNATIONAL AFFAIR DEPARTMENT, MUNICIPALITY OF MILAN
 5. Davide Agazzi, MANAGING DIRECTOR IN RENA AND ADVISOR OF THE MUNICIPALITY OF MILAN
 6. Ivana Pais, ECONOMIC SOGIOLOGIST, CO-FOUNDER OF SHARITALY AND SHAREXPO, MAIN ITALIAN EXPERT ON SHARING ECONOMY
 7. Marta Mainieri, CO-FOUNDER OF COLLABORIAMO.ORG, SHAREXPO AND SHARITALY
 8. Bertram Niessen, PRESIDENT & SCIENTIFIC DIRECTOR OF 'CheFare', PROFESSOR OF NEW MEDIA SOCIOLOGY
 9. Tiziano Bonini, LECTURER IN MEDIA STUDIES AT IULM UNIVERSITY, FREELANCE AND RESEARCHER
 10. Ilaria Pais, RESEARCHER WITHIN 'ENI SUSTAINABILITY' PROJECT - ENI ENRICO MATTEI FOUNDATION
 11. Carolina Pacchi, RESEARCHER AT DASTU, POLITECHINC MILAN AND MEMBER OF AVANZI
 12. Giacomo Biraghi, URBAN STRATEGIST, CO-FOUNDER OF SECOLO URBANO, PR OF EXPO
 13. Matteo Bina, RESPONSIBLE FOR STARTUP INCUBATION AND SOCIAL VENTURES PROGRAMMES, IMPACT HUB MILAN, INCUBATION MANAGER AT FABRIQ
 14. Alvise De Sanctis, PR & COMMUNICATION MANAGER FOR "EXPO IN CITTÀ", CO-FOUNDER OF SECOLO URBANO
 15. Sabrina Bianchi, CO-FOUNDER AND MARKETING&COMMUNICATION MANAGER AT "PIANO C"
- In order to interview the key actors of the Sharing City Seoul Project, I spent almost a month (from June 9th to July 2nd, 2015) in the city, interviewing 21 key actors. The larger number of interviews in Seoul in comparison of Milan is due to the necessity to collect as much information as possible about the project in the short period of the mission, overcoming the general linguistic barrier, and to get some general indications also about the Korean culture (and its possible approach at the sharing practices). For this last reason, before the mission, I contacted the Korean Consulate in Milan and the Association Italia-Korea, and I participated at some Korean events in the city, such as the Korean Sport Day in June before the departure. The subjects interviewed are:
1. Prof. Jihoon-Jeong, MEMBER OF THE SHARING PROMOTION COMMITTEE, MD., MPH., PhD, ACTING DIRECTOR, INSTITUTE FOR THE FUTURE OF

HIGHER EDUCATION; PROFESSOR, DEPARTMENT OF MOBILE CONVERGENCE TECHNOLOGY KYUNG HEE CYBER UNIVERSITY

2. Mr. Jung A. Kim, SEOUL METROPOLITAN GOVERNMENT'S SOCIAL INNOVATION DIVISION, RESPONSIBLE FOR THE INTERNATIONAL RELATIONS
3. Mr. Hak Young-Song, PROJECT MANAGER OF SOCIAL INNOVATION DIVISION OF THE SEOUL METROPOLITAN GOVERNMENT
4. Mr. Shin Seong Hoon, PROJECT MANAGER OF TRANSPORTATION DIVISION OF THE SEOUL METROPOLITAN GOVERNMENT
5. Ms. Kyeong Hee Seo, RESPONSIBLE OF CREATIVE COMMONS KOREA & SHAREHUB
6. Ms. Kwon Nan Shil, RESPONSIBLE OF CREATIVE COMMONS KOREA & SHAREHUB
7. Ms. Sung-Joo Yoon, MANAGER YOUTH ACTIVITY SUPPORT OF SEOUL YOUTH HUB
8. Mr. Jum-San Kim, RESEARCH FELLOW, PH.D, KYUNGKEE DEVELOPMENT INSTITUTE (<http://www.gri.re.kr/>)
9. Mr. Doo Won Cha, KOREA INSTITUTE OF S&T EVALUATION AND PLANNING (<http://www.kistep.re.kr/en/>)
10. Prof. Kyung-min Kim, DEPARTMENT OF URBAN AND REGIONAL PLANNING - GRADUATE SCHOOL OF ENVIRONMENTAL STUDIES-SEOUL NATIONAL UNIVERSITY
11. Prof. Alberto Giacchini, SEJONG-SYRACUSE MBA PROGRAM
12. Mr. Sung Nam Wi, REPRESENTATIVE OF SUNGMISAN VILLAGE
13. Ms. Sun mi Seo, CEO OF PLAYPLANET (and Staff)
14. Mr. Man Il Han, CEO OF OPEN CLOSET
15. Ms. Su Hyun Jung, CEO OF SPACE NOAHM AND MANAGER OF YOUTHZONE DAEBANGDONG
16. Ms. Lynn Park, CEO OF ZIPBAB, social dinning service
17. Ms. Han, Goo-Yongng, staff of URBAN HYBRID (urbanhybrid.co.kr)
18. Ms. Haemin Yim, CEO OF CREATRIP(creatrip.kr - Let Local enrich your trip)
19. Mr. Jeong-je Yoo, staff of WOZZOO
20. PROF CANGANELLA FRANCESCO, Scientific Director of ITALIAN EMBASSEY in Seoul
21. Ssdam & SoSo, Staff of MOTIVE HOUSE

The combination of the data gathered through the interviews has allowed to draw relevant conclusion that have been constantly match with the knowledge acquired through the literature review.

7.2 Quantitative analysis

Additionally, to gather comparable data and deepen the understanding of the cross national variable relevant in the defining of sharing economy processes of evolution, the research includes also a **quantitative** investigation.

A specific **questionnaire** was realized to detect the people's propensity to the use of sharing and collaborative services and to observe their effective use and their knowledge of the services in urban area of residence (Milan or Seoul). A first version of the questionnaire was submitted to a sample of experts of this area to verify and evaluate the completeness, clarity and manageability of the questionnaire itself. In addition, an alternative version of the questionnaire was submitted to a different group of respondents. Testing the two versions of questionnaire has been a fundamental step in developing the final version of the questionnaire, as it helped to identify errors in the layout and in the instructions, to determine problems caused by the respondent's inability or unwillingness to answer the questions and to detect refusal problems. This *modus operandi* has allowed to verify the reliability of the tool and to make questions' adjustments obtaining at the end the final version of the questionnaire ready for the data collection. The questionnaire has been proposed in an Italian version for the Milan's case and in an English version for the South Korean's case.

- **Data collection in Milan.** The collection of data was conducted in the month of May 2015, with paper and pen questionnaires that were submitted to passerby that volunteered to participate to the research. The respondents were approached by the researchers in crucial city points, such as business zones, university areas, shopping streets and events spaces. The direct contact with the respondents revealed a greater willingness to be involved in the research among young people, possibly because their greater familiarity with technology made the subject of the research sound less "difficult". A kind of mistrust and skepticism was common among older respondents. Sometimes the simple description of the object of the questionnaire provoked a negative reaction and an unavailability to reply, as if the topic created fear.

- **Data collection in Seoul.** In the case of Seoul, an English and online version of the questionnaire has been prepared and, using the survey online system of the Milano-Bicocca university, a link to the questionnaire was created. This link was sent to the main networks contacted also for the semi-structured interviews, such as ShareHub and CCKorea networks, YouthHub, YouthZone and the Italian Embassy, and contacting new networks such as the Italian Culture Institute, Seoul Lions Section, etc. Thanks to the support of the University of Seoul it has been forwarded also to students. The period of administration started in June 2015 and the link remained open until September. Unfortunately, the first check on the online platforms showed only few replies. To solve the concrete difficulties showed by people in replying to an online questionnaire a two-way solution was attempted. First of all I tried with a direct administration, during the visiting period in June. Helped by the researcher, Dowoon Lee, of the University of Seoul, and choosing residential and university areas we tried to approach people and involve them in the research. However people seemed to be suspicious and nobody wanted to stop and reply. As a second attempt, we expanded the network for the administration, including new organizations as mediators. These further attempts highlighted that the difficulties were not related to the media of submission (online version) but to the language of administration (English), revealing the necessity of a Korean translation of the questionnaire. In this research, time and conditions didn't allow realizing and submitting a Korean translation of the questionnaire and for this reason the analysis of the few Korean questionnaires collected was not significant in terms of quantitative investigation, thus, it was not included in the work. The comparison among the two cases was not possible

for the quantitative data, since the collection of data in Seoul was unable to reach a sufficient number of cases due to contextual variables that prevented the regular implementation of the work planned. A future research might take into account this limit and propose a translated questionnaire to Korean people to detect their propensity of using sharing and collaborative services, their knowledge of the already existing facilities, and their interest in using them.

To analyze the questionnaire the program SPSS was used; the analysis and the results are presented in chapter 11.

The work is the result on an international collaboration, thanks to the support received by the Seoul Metropolitan Government and the University of Seoul before, during and after my visiting period and both for the qualitative and quantitative part.

8 THE CITY OF SEOUL

8.1 Main Context

Seoul, South Korea capital, in less than 50 years has grown from an annual per capita income of \$ 100 to a value of € 23,000, becoming one of the world's major economies. The economic boom, the so-called “Miracle of the Han river”¹⁶⁴, has brought a wave of rapid industrialization and urbanization, a strong technological development, a boom in education, better standards of living and fast modernization. Seoul¹⁶⁵, the second largest metropolitan area in the world, after Tokyo, with over 25.6 million inhabitants¹⁶⁶, is the perfect synthesis of this explosive economic growth, and brings with it both positive and perverse forms of developments.

From one side there are cutting-edge technological infrastructures, with important technological Hub (Digital Media City, Gangnam) and headquarters of global corporations such as Samsung, LG, Hyundai-Kia. According to the “City of opportunities”¹⁶⁷ PwC 2014 (2014a), Seoul is at the top level of technological maturity (Technology Readiness Level – TRL) and has the densest public transport infrastructure in the world, ranked by the Sustainable Cities Index¹⁶⁸ as the better infrastructure in the northern hemisphere. The city is served by high-speed train KTX, and has the longest underground network in the world¹⁶⁹, enriched with 4G LTE connection, WiFi and DMB also inside the wagons. A true “next generation IT mega-city” that is the pride of a nation that has a smartphone penetration rate of 73% and 84% of the Internet, the highest average speed of connection in the world and a staggering 95% of households with broadband connection.

The flip side of this great provision of infrastructures is represented by a busy traffic and a strong industrial pollution, which pushed the Korean Government to draw up specific action plans and strict measures of ecological nature, especially in terms of fighting smog, water and air pollution¹⁷⁰. In addition, the deep urbanization and the demographic growth affect the quality of life of Seoulites. The city is increasingly overworked, in a hurry, stressed and on the verge of a nervous breakdown. Nationally, the divorce rate is rising, young people face

¹⁶⁴ This report explains the origin of the so-called Miracle of the Han River: http://www.eastonline.eu/attachments/article/1590/East_49_II_miracolo_del_fiume_Han.pdf.

¹⁶⁵ The city of Seoul has a special status (‘special city’ - Teukbyeolsi); it is divided into 25 *gu* (districts); each *gu* is split into *dong* or neighborhoods (for a total of 522). The *dong* are sub-divided into 13,787 *tong*, further split into 102,796 *ban*. *Gu* of Seoul consist of 423 administrative *dongs* in total (Source: Wikipedia).

¹⁶⁶ 통계표명 : 주민등록 인구통계 (in coreano). Data from Ministry of Government Administration and Home Affairs. 4 April 2015. http://www.moj.go.kr/HP/COM/bbs_03/ShowData.do?strNbodCd=noti0097&strWrtNo=167&strAnsNo=A&strFilePath=moj/&strRtnURL=MOJ_40402000&strOrgGbnCd=104000.

¹⁶⁷ Cities of Opportunity (www.pwc.com/cities) is a study of 30 leading centers of business, finance, and culture, it is published jointly by PwC and the Partnership for New York City, and based on publicly available information supported by extensive research.

¹⁶⁸ See the Sustainable City Index 2015 at the address: <http://www.sustainablecitiesindex.com/wp-content/uploads/Sustainable-Cities-Index-2015-Press-Release.pdf>.

¹⁶⁹ Info about the metro and subway system of Seoul: <http://www.railway-technology.com/features/featurethe-worlds-longest-metro-and-subway-systems-4144725>.

¹⁷⁰ Ministry of Finance, Ministry of Construction and Transportation, Ministry of Commerce, Industry and Energy, and Ministry of Environment are working with a group of environmental NGOs (The Alliance) and the major car industries, to launch a plan of rerouting the urban air quality. The focus is mainly the metropolitan area of Seoul where the first concern are the PM10 levels that affect both the environment and people's health. More info are available at the address: <http://epi.yale.edu/indicators-in-practice/air-quality-index-seoul-south-korea>.

strong social pressure in which status and image are the key elements of the success and the students suffer from the high academic expectations; the suicide rate is among the highest in the world and the macho corporate culture encourages alcohol abuse after work¹⁷¹. Social pressure and competition are very strong and are generating the spread of stress related pathologies such as depression. So below the surface of widespread prosperity, forms of exclusion, tendency to isolation and weakening of social ties emerge. Moreover, families are getting smaller, social services and retirement funds are inadequate, one-third of the elderly live below the poverty line, unemployment is increasing, the population is aging dramatically and women still suffer discrimination. In combination with this a lifestyle strongly consumerist can be registered, so that the city generates 9,000 tons of waste every day and 49% of the families are in a situation of debt.

8.2 Smart City Seoul

Seoul is one of the most tech-savvy cities in the world and it retains the first place in the UN e-government Survey's ranking since 2003¹⁷². The project Smart Seoul 2015¹⁷³ was announced in June 2011 to uphold Seoul's reputation as a global ICT leader by boosting its sustainability and competitiveness through smart technologies. The project derives from a previous attempt to incorporate ICT in the city development strategies, the u-City project launched in 2004, whereby ubiquitous computing technologies were applied to strengthen the competitiveness of the city¹⁷⁴. To overcome the limitations of u-Seoul¹⁷⁵, in which ICTs are applied only to existing 'traditional' city infrastructure, was adopted the **Smart Seoul 2015** project (SMG, 2014d). In fact, u-Seoul was able to improve the delivery of services, such as transportation and safety, but failed in producing material improvements in the quality of life of Seoulites. Contrary to what is normally seen in a so called Smart City, the Smart Seoul 2015 project is more oriented to people and to the human dimension offering people-centric projects. The goal is not only to implement as many smart technologies as possible but also to create a more collaborative relationship between the city and the citizens (Hwang and Choe, 2013).

The ITU-T Technological Watch Report 2013, that presented the project Seoul Smart City 2015, takes over the definition of smart city given by UN¹⁷⁶: "*a city that strategically utilizes many smart factors such as Information and Communication Technology to increase the*

¹⁷¹ There is also an article of the New York Times that deals with this topic. It is available at the address: http://www.nytimes.com/2011/07/07/world/asia/07iht-psych07.html?_r=0.

¹⁷² The UN E-Government survey 2012 is available at the address <http://unpan3.un.org/egovkb/Portals/egovkb/Documents/un/2012-Survey/unpan048065.pdf>.

¹⁷³ The english version of the report Smart Seoul 2015 is available at the address http://english.seoul.go.kr/wp-content/uploads/2014/02/SMART_SEOUL_2015_41.pdf.

¹⁷⁴ In this sense is useful to read the ITU-T Technology Watch Report "Ubiquitous sensor networks," February 2008, available at the address: http://www.itu.int/dms_pub/itu-t/oth/23/01/T23010000040001PDFE.pdf.

¹⁷⁵ U-Seoul Net is a communication network dedicated to smart services established on 2003 embedding fiber-optic cable along Seoul's subway tunnels to connect the city's main public buildings, its offices and municipalities. However, this net was not equipped to support new smart services since it was designed to connect only public offices in the interests of administrative data exchange. Citizens had no access to this network at all and the system was not able to support the massive volumes of data flowing over a smart city network. The 192-kilometer of the "u-Seoul Net" completed in 2011, overcame these restrictions, providing citizens a full access to public websites, offering free WiFi services and enabling metropolitan government to handle huge amount of data generated from variety of smart devices. In any case, the Smart Seoul Project has further ameliorated these conditions of access.

¹⁷⁶ UN presented this definition of smart city in the text "Our Common Future, Chapter 1: A Threatened Future", clause 49, available at the address <http://www.un-documents.net/ocf-01.htm#1>.

city's sustainable growth and strengthen city functions, while guaranteeing citizens' happiness and wellness" (United Nations, 2012).

From this perspective, a human-centered smart city relies on an advanced ICT infrastructure and ongoing urban development, always taking into account environmental and economic sustainability. In fact, ITCs city infrastructures are used not only in cyber space, but in a range of different city functions and services, that allow the city to become an independent intelligent unit. The smart city is seen as a system of systems that combines many individual and independent systems in meta-systems that become in turn sub-systems. This is the vision presented by the ITU-T Technological Watch Report 2013, which stresses the importance of openness and standardization as key principles in a smart city construction. At the sub-system level the absence of these principles can create problems and make the project of smart city difficult and expansive: the lack of openness can limit the scope of a smart city and the lack of standardization can increase costs of a city's construction. Related to ICTs' infrastructures what distinguish a smart city to a traditional city is precisely the relation with citizens that use these technologies and take advantages from them. What can do these technologies is reply to the economic, cultural and social changes in order to give citizens a better living environment. Even if many lines of thinking, consider a Smart City just oriented to technologies (IBM, Harrison et al., 2010), the city of Seoul reveals a different approach in which a Smart City is considered above all a human-centric city, able to adapt its behavior in response to that of its citizens, the main users of ICTs that constantly interact with the city's infrastructures and services. The graph shows the orientation of the city in terms of Smartness:

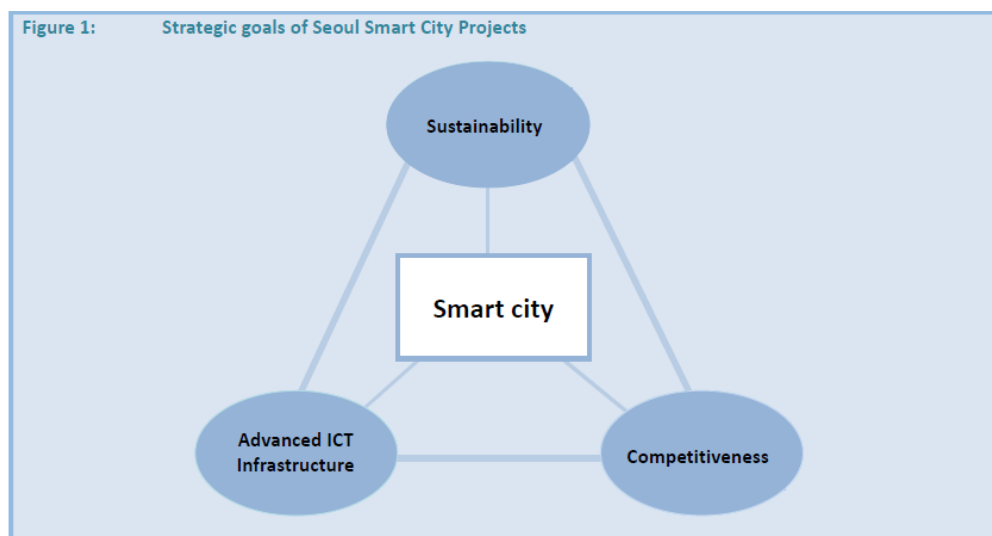


Figure 9 Source: ITU-T Technology Watch Report 2013

The city of Seoul is not *smart from the start*, as in the case of city designed to attract businesses and residents with a master plan based on ICTs to deliver efficient citizen benefit services. It can be considered a city that has experienced a process of *smartization*, reaching its current status in a systematic way, with retrofits and upgrades. In fact, the city has followed a three-phase evolution:

- In the first phase, at the individual service levels, ICTs have been applied to improve individual city operators (transportation, safety, environment, culture...). See the real-time buses information as an example in the public transport sector.
- In the second phase, at the vertical service level, the city has integrated its processes and services by smart technology within the major sectors of a city, enabling the provision of more advanced services. In this case, the smart technologies are not yet integrated across all sectors, but people start to experience leaps forward in the quality of the offered services.
- In the third phase, at the horizontal service level, there is no longer a distinction among different services areas, since all sectors and parties seem to be integrated in an efficient smart city ecosystem (Hwang and Choe, 2013).

In the second and third phase many B2B (Business to Business) and B2C (Business to Consumer) models develop, since, thanks the smart technologies, new advanced and improved services can be offered.

In the Seoul Smart 2015 project, three main pillars, considered essential traits in planning every smart city, are underlined:

1. ICT infrastructures: they must be secured in order to let emerge smart-city services and it is important to develop ICT infrastructure anticipating future service demand, instead of responding only to those most apparent.
2. Integrated City-management Framework: it is always fundamental to start from a well-defined 'integrated city-management framework' in order to have common standards that integrated subsystems, meta-systems and individuals can follow in a transparent way.
3. Smart Users: ICTs are enabler tools, and not just a tool in pursuit of efficiency. But they cannot function without smart-tech users able to interact with smart devices. For this reason, one of the main priorities in creating a smart city is always the education in the use (across income levels and age groups) and the increasing access. IT in the Smart age interacts with people and helps people fully display ingenuity and sensibility.

Paraphrasing the words of the Smart Seoul 2015 project, *from a technical perspective*, the paradigm shift that ICTs are pursuing, offers many opportunities to nurture knowledge-creating industries. *From a social perspective*, the importance of citizens is crucial: developing user-oriented IT strategies can further enhance the role of Seoul in ICTs, responding to people's expectation and moving away from a concept of Smart City only oriented to technologies. The project underlines also the need to develop new business models for collaboration and division of work between public and private sectors. The public sector can benefit, in terms of informatization/computerization, from public-private partnership and create a new market of public services by opening public information to citizens and private sector. *From a policy perspective*, the city of Seoul aims to become one of the five more competitive cities in the world and the project Smart Seoul 2015 can be considered a new IT strategy able to support Seoul's effort to enhance its competitiveness. Another crucial point is the determination of the city in integrating IT with other important areas, such as job market, welfare system and green growth. To this end the project links Smart technologies to operating system of Seoul (SMG, 2014d). The graph below shows the phases of development of the Seoul e-government:

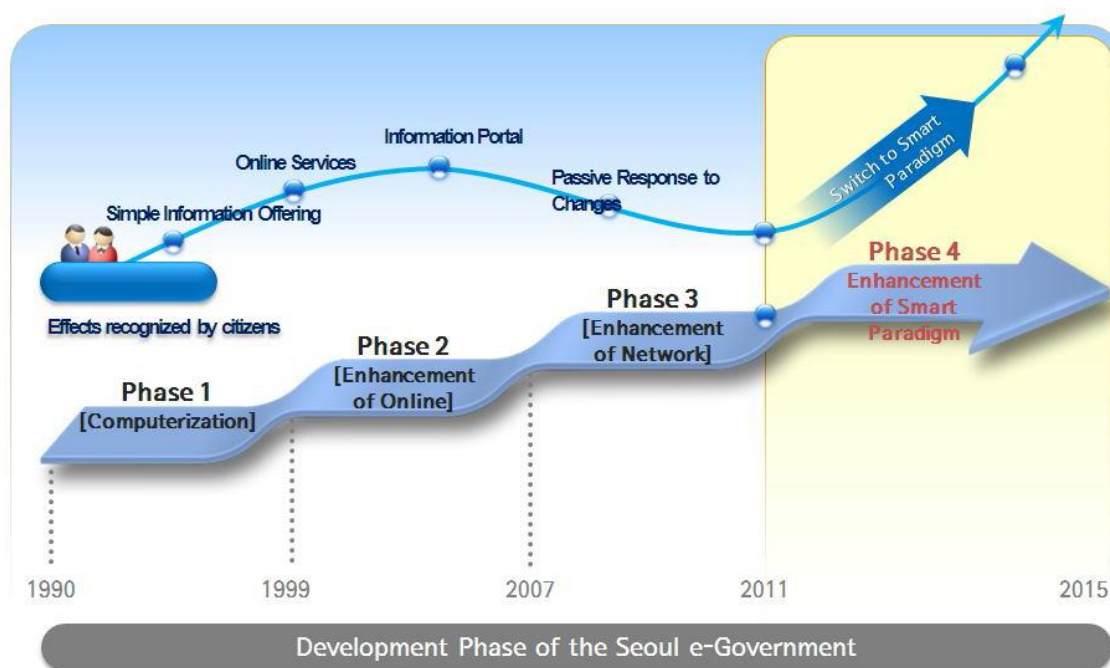


Figure 10 Development phases of the Seoul e-government. Source: Smart Seoul 2015 report.

In order to favor its growth Seoul has set the goals and the task to follow for informatization:

- Make Seoul a city that best utilizes Smart Technologies in the world. To this end, the city has built smart environments where people can use **free WiFi** anytime and at any place, such as parks, streets, school zones, residential areas, libraries, public buildings and, from 2012, on subways, trains and buses too, with high accessibility, and offering welfare and public facilities. The public WiFi, in addition to the commercial one provided by private mobile network operators is a way to enable citizens to have easy access to public services, life information and leisure activities. Public WiFi is used also for the safety of the city to establish a comprehensive disaster response system (**u-Seoul Safety Service**)¹⁷⁷.

In the report of the project, another goal set out was the education for citizens in the use of smart technologies, including elderly, low-income families and disabled. Since 2009, the city of Seoul has provided **education courses on smart ICTs**, offering both city-run lectures and city-founded smart ICT classes through private education institutions. Over 2009-2011 these classes attracted over 47,000 people, among immigrants, low-income individuals and elderly people using smart devices for the first time. Using smart devices among citizens is significantly reducing the digital

¹⁷⁷ As part of u-Seoul, a safety service has been operating since April 2008. This service employs state-of-the-art Location-based service and CCTV technologies to notify authorities and family members of emergencies involving children, people with disabilities, elderly, and people suffering from Alzheimer's disease. A smart device has been developed for this purpose. When the holder of the device leaves a designated safe zone or pushes the emergency button, an alert is sent to guardians, police, fire departments and CCTV control centres. To make use of u-Seoul, citizens are required to register with mobile carriers specifically designed for this purpose. Supporting low-income households and especially vulnerable groups, Seoul often provides emergency-alert devices free of charge or at significant discounts. There is also a service entirely dedicated to children: "U-Children Safety System" that provides 'children safety zones' using a multiple-input and multiple-output (MIMO) wireless infrastructure mesh network. Real-time CCTV networks and children's smart devices allow Seoul to make use of wireless networks in locating missing children as quickly as possible. See the density and the growing population it can be considered an useful service for all the families.

divide¹⁷⁸. A key pillar of the project, in fact, is precisely to increase access to smart devices and to educate new users on their operation, so that every voice can be heard. In 2012, Seoul began distributing second-hand smart devices to low-income families and others in need. Citizens are encouraged – in particular by tax deduction in the range of USD 50 to USD 100 per device – to donate their old devices when buying new ones. The **donated devices** after the necessary inspections and reparations are distributed free of charge to vulnerable populations, such as beneficiaries of Korea's National Basic Living Security. Going around the city today one can see that everybody, from young to elderly, from immigrants to native, have and use without problems their smartphone to access at the main social networks, transportation services and city info.

Seoul's open governance model seeks to extend citizens the opportunity not only to be informed but also to participate in the administrative life. For this reason, it established the "**Community Mapping**"¹⁷⁹, a peer-to-peer communication service that uses ICTs, such as geographical information systems and the m.Seoul (mobile Seoul¹⁸⁰) social networks. The first experimentation was useful especially for disabled people, to marked streets or shops without wheelchair access on a map shared by a community of smart device users. The city consider Community Mapping a tool with high potentiality and plan to apply it to a wide range of citizens' concerns, empowering people to develop solutions to these concerns in collaboration with their peers.

- Realize a Smart government that actively interacts with citizens. The city has made all efforts to make all the online civil administrative services available from mobile in line with its desire to shift to a **Smart administration**. These services include authentication-based civil applications, issuance of administrative documents and other payment related services. Public service reservations, civil application procedures, mobile safety services, real-time emergence messaging and other public services are provided. The city also developed mobile administrative services customized to every citizens and encouraged citizens to participate in city affairs, for example by building **two-way network of Seoul and Private social network service (SNS)** providers for communication with people. City news, living information and other information can be delivered to citizens in an easier and more precise way through the official Twitter or Facebook account of the City of Seoul.

In general the city considers the **public-private partnership** essential to establish joint system to share public content. Private portals can display living information on city news, welfare, housing, traffic and many more real-time info. Furthermore, the sharing government information with the private sector enables to produce innovative

¹⁷⁸ The information are taken from the official report "Smart Seoul 2015" and "Smart Cities. Seoul: a case study".

¹⁷⁹ See info and picture of an experiment of Community Mapping at the web site: <http://epd372.blogspot.it/2012/03/community-mapping-in-seoul.html>.

¹⁸⁰ Mobile Seoul (m.Seoul) makes use of Mobile Web technology and mobile applications to provide Seoul's citizens with 62 unique services over 11 types of mobile device. m.Seoul apps support location-based services pinpointing nearby public offices, restrooms, hospitals, supermarkets or bus stations. Other services include live real-estate listings, daily job-search updates, and notifications of free cultural events. Apps also enable citizens to suggest actions to improve the city, participate in yes/no votes, and freely exchange city information over social networks; and another service, "Staying Safe in Seoul", alerts citizens of emergency situations brought on by heavy rain, snow, typhoons or fires.

solutions to basic public needs. The **Seoul's open governance 2.0 strategy**¹⁸¹, in line with similar Government 2.0 strategies of Europe and US, encourages transparent city governance and open communication between citizens and government (Suntai, n.d). Very interesting is the **Seoul Open Data Square**¹⁸² (added to the city website on April 2012), a mechanism through which Seoul discloses administrative documents and people can uncover new job and business opportunities¹⁸³.

The Smart Seoul 2015 project also included the use of **Smart TV** as one of three major channels for e-Government services by providing the same public services as offered through online and mobile devices. For this reason, the Municipality has developed TV-based administrative services. The mobile-based geo-spatial information are useful not only for administrative information services, but also for real-time procedures of civil petitions. For example, when citizens see someone littering or illegally parking, they can directly report to a relevant office through a mobile device, speeding up the procedures for civil complaints. Seoul can count on specific Location-Based Services (LBS) and among these new technologies, it owns the **Geo Tagging**, from which it has developed many services for civil petitions. In this frame, the security once again is crucial, for this reason the city has built a security system for subways, waters and other heavily-used public services (**U-Integrated Security Center**¹⁸⁴), and the project aims to develop also systems to protect from cyber terrorism¹⁸⁵ and guarantee the privacy issue (Lee and Kim, 2014).

From the point of view of the Smart Public Administrative Infrastructure, the Municipality is working to establish extra infrastructures for Smart administration, including building data centers based on energy-efficient cloud computing and Smart Work Centers. About the latter, employees have been allowed to work from ten offices (**Smart Work Centers**) located closer to their homes and equipped by sophisticated groupware and teleconferencing systems, ensuring good job performances even outside the City Hall (Cha, 2014). This form of flexible and remote working is accompanied by the development of standard models of smart work for the pregnant and child-rising public employees as well as private sector employees. In addition, offices spaces are changing to better facilitate the future work arrangement as part of energy-saving green growth initiatives. Also the cloud computing has significantly contributed to the spread of the smart work (*ibidem*). In general, Seoul operates data centers based on cloud computing which has high energy efficiency: the city can save costs for system setting and operation by virtualizing IT assets such as servers and

¹⁸¹ About the Seoul's Open Government 2.0 it is recommended the paper of Suntai Ahn of the Institute of Inter-Korean Reconciliation "The implementation of the OPEN System by Seoul Metropolitan Government. The experience and lessons of the OPEN System".

¹⁸² More info on the Seoul Open Data Square can be retrieved at the address: <http://data.seoul.go.kr/index.jsp>.

¹⁸³ The information disclosed by the Open Data Square are of ten categories: general administrative work; welfare, culture and tourism; city management; environment; safety/security; education; health; industry, economy; transportation. Within these categories, 33 public information systems and 880 different datasets provide information on child-care services, public transportation routes, bus arrival times, parking availability, weather conditions by regions, and Seoul's recommended restaurants; all accompanied by maps, internet links, graphs or statistics. The project is growing a new public information system are adding day-by-day.

¹⁸⁴ To go into details the suggestion is reading the article "A Study on a Better U-Security Service Including CPTED Design Concept" of Inae Lee and Kabsung Kim, presented at the 3rd International Conference on Management, Behavioral Sciences and Economics Issues (ICMBSE 2014) February 11-12, 2014, Singapore.

¹⁸⁵ The cyber-attacks are a great concern for the Municipality, for this reason the project declared the will to improve cooperation with CERT (Computer Emergency Response Team) including other countries such as Japan, China and US and also strengthen relations with relevant government agencies like the National Intelligent Service and the Ministry of Public Administration and Security.

storage devices. In fewer words, the city has established an eco-friendly data center based on low carbon green growth initiative (Hwang and Choe, 2013). Talking about sustainability the **Smart Metering Project** can not be forgotten: it aims to reduce the city's total energy use by 10 percent. In 2012 Seoul has installed smart meters in 1,000 households. As stated in the report 'Smart cities. Seoul: a case study', "*smart meters provide home, office and factory owners with real-time reports of their electricity, water and gas consumption. This information is presented in monetary units, and is accompanied by detailed information on a household's energy-consumption patterns and means of adjusting those patterns to reduce energy costs*"¹⁸⁶. These smart living initiatives help to promote energy conservation and reduce the environmental impact of the city.

Among other services one to mention is the **Online Reservation System For Public Services**¹⁸⁷, that allows citizens to search for, book and pay for public services instantly. The one-stop, integrated reservation system lists over 150 services under different categories, such as education, infrastructure, culture, tourism, commodities and medical treatment. Over time the city has also improved its **3-dimensional (3D) spatial information system**¹⁸⁸, a mapping application providing 3D street information and enabling the provision of new smart services.

- Build infrastructure for future urban life. As already seen the city gives a great importance to the issue of safety, and manages and integrates **CCTV control system** for children's safety, crime prevention and traffic control, disasters and accidents, and many other concerns. The real time monitoring is a key element and is applied to all CCTV cameras in the city. The camera installations are increasing in order to provide citizens a social safety net, especially in school areas. To strengthen this service, it has been associated to other similar safety services provided by the Ministry of Public Administration and the Ministry of Education, Science and Technology, in order to avoid investment overlap and improve service efficiency.

From the point of view of disasters and accidents, the service is able to inform in real time citizens via website and mobile phones, and in a huge city like Seoul, this facility reassures citizens. In addition, the city is strengthen the system based on the integrated disaster database and geo-spatial analysis for safety control, in order to better prevent disasters and accidents as well as analyze and respond to situations immediately.

From the point of view of traffic, the **TOPIS service** (Traffic Operation Information Service) is responsible for comprehensive operation of traffic-related information in Seoul, providing traffic info in real time. The main traffic areas are constantly monitored and the TOPIS works as a huge mobile-information collecting system, thanks also to GPS installed in taxis and cars. Furthermore the info are combined with those provided by other agencies including Seoul Regional Construction Management Administration and Korea Highway Corporation. The

¹⁸⁶ A national smart-metering pilot was completed in 2008, and Korea is currently replacing homes' meters with more sophisticated equipment. The Integrated Automatic Meter-Reading Pilot Program found that 84 per cent of the participants checked their energy information status once a day or more; 60 per cent reported that the Pilot Program was helpful in reducing their energy use; and 71 per cent expressed a willingness to participate in similar projects in the future.

¹⁸⁷ More info on the Seoul, one-stop, integrated reservation system at the address: <http://yeyak.seoul.go.kr/english/main.web>.

¹⁸⁸ More info on the Seoul 3-dimensional spatial information system at the address: http://3dgis.seoul.go.kr/SearchMap_3D/ (in Korean).

traffic data can also be used to provide customized traffic information services. Also the bus information system provides users with real time locations and expected arrival time of buses, giving a better service and improving in punctuality. In addition, the **u-Shelter bus stops** incorporate state-of-the-art ICTs (meteorological sensors, remote terminal unit, video image...) to offer citizens a variety of smart services (check traffic card balance, destination search, digital map, weather forecast, traffic broadcasting station...).

From the side of the environment, the city analyzes environmental data (climate, air, water quality) using an **integrated environmental data system** that manages the currently dispersed and fragmented information and sensor networks. The city has also set up a management system for renewable energy with the promise to reduce its carbon footprint.

- Build a creative Smart Economy and a global culture city. The Municipality **supports businesses** that develop new technologies and operates **incubator programs**. In the first part of the project, the attention was essentially on smart information security since the city aims to become the third most competitive city in this sector. Today, as will be show in the next paragraphs, other topics, related to social innovation and promotion of social inclusion, are at the core of the funding. In general, the city has an open and supportive approach towards companies, startups and individuals that propose creative businesses and innovative solutions. It wants to nurture smart applications and foster innovations. Also the investment in the smart information security industry are relevant since the city wants to be safe from hackers' attacks. In this frame, the education covers always an important role, and the city provides courses and classes to those who want to start businesses, in cooperation with the existing private application development centers. This aptitude will be seen also in the field of sharing economy, since the same approach of caring for innovation, people and communities is reproduced around the concept of sharing and collaboration.

To conclude, Seoul launched the **WeGo** project (World e-Governments Organization of Cities and Local Government) in September 2010 along with 49 member cities around the world, playing a leading role in promoting international collaborations in e-government. The WeGo members signed a memorandum of understanding (MOU) with the United Nations for the cooperation of the United Nation Public Administration Network and with the World Bank for e-government collaborations.

The initiatives that the city is carrying out under the frame of Smart City are many and touch different areas, from civil engagement to high-tech infrastructure, from sustainability to participation... they can be divided following the traditional categorization elaborated by the university of Vienna: Smart Environment, Smart Governance, Smart People, Smart Living, Smart Economy, Smart Mobility. Here, only the main initiatives are named and described in order to give an idea of the city's commitment in creating a real smart city. Moreover, day-by-day new strategies and policies emerge in order to enhance the quality of life of Seoulites. The examples presented, and in general the wide range of policy initiatives (and also the amount of resources invested in developing smart initiatives), reflect the great commitment to transform Seoul into a smart city. In this process, the city has involved also the private sector and encouraged it to develop innovative applications using the open data released through the Seoul Open Data Square to benefit its citizens. Moreover, Seoul has not forgotten the importance to have smart citizens able to use and take advantages from the technologies spreading in the city. It has increase the access to smart devices and supported education

programs on their use for all its citizens, young, old, rich and poor, assuring that also the disadvantaged could benefit from the smart city initiatives.

As the Mayor of Seoul, Park Won-soon, said “*the key to becoming a smart society is ‘communication’ on a totally different level. A smart city, for instance, involves communication between person and person, people and agencies, and citizens and municipal spaces, with human beings always taking the central position in everything. A smart city is also characterized by its unprecedented level of sharing*”.

8.2.1 *The attention to People: from Smart City to Progressive City*

The city may seem a Smart City just focused on technologies forgetting people and the human dimension; on the contrary the technological equipment is not considered the final purpose, but simply an enable factor, a tool to improve the life quality of the citizens, especially during the current administration (SMG, 2014d).

One of the main slogan of the Mayor, Park Won-Soon, is “**making Seoul as a city for the citizens and by the citizens**¹⁸⁹”, a catchphrase for getting the citizens included as the subject of city in his administration and the governance of Seoul. The city agenda switched from an economy-centered development agenda to a people-centered living welfare agenda (Cho and Douglass, 2014), thanks to a Mayor, really pro-people, with more than 30 years of human right activism’s experience. He created alternative organizational model such as the Citizen’s Participatory Alliance, Beautiful Shop, the Hope-Making Institute, ecc... bringing social activism into the City Hall. So, the city in the last years has demonstrated a great attention and will of care of its citizens, recognizing the importance of the human capital for the thriving of the society.

The concept of smart city, usually related to communication and information technologies, here acquires a new value and significance, since it is based on people and on policies and tools able to recognize the importance of the human dimension and in particular of the **human flourishing**. This latter concept is a key element in the reflection around the Seoul Smart City project and it is related to a fundamental shift from neo-developmental to progressive governance (*ibidem*). For the city of Seoul, the election of a progressive Mayor, in 2011, can be seen as the opening of an era of “civicism” as antipode of “statism”, as underlined by Cho and Douglass (2014). To define civicism can be useful the definition given by Bell and De-Shalit (2011, p.4-5) with reference to China, in which the concept is intended to capture the idea of residents of a city “*struggle to promote its particular identity and morally justifiable forms of political life*” that generate a civic culture rising above parochial divides (Cho and Douglass, 2014). Hamilton, back in 1900, defined the civicism as the deeper human nature, “*the birth of the community spirit*” through “*closer interrelation of the lives of the members of the community, a larger stock of common enjoyments*”. Bell and De-Shalit (2012) in addition state that “*a city’s particular ethos can also inspire social and political theorizing of global importance*” and they also underline that in the current global age, that sees nations more and more uniforms under the hegemony of global capital, “*cities may come to the rescue*”. Talk about a progressive Mayor and a new era of civicism is strictly related to the concept of *progressive cities*. As seen in chapter 4, there are not many academic researches on this topic and in general, the subject largely remains in online daily newspaper and popular magazines. Here the authors of reference will be Cho and Douglass (2014) and their analysis of the few articles that composed the work of Clavel on this subject (1986,

¹⁸⁹ Koreans use to apply slogans to make the communication sharper.

2010, 2014). This last author considers a progressive city a city successful in redistributing public benefits, with an economy system that tends to equality and grassroots mobilizations able to gain effective voice in urban governance coalitions (Cho and Douglass, 2014). For Asian cities, the appearance of *progressive cities* goes with the massive urban transition and the discontents for the national scale's performances that move the attention to the locale scale, where ordinary people have more likely political voice. Of course, there are many differences among cities, some of them are upheld to corporates' mechanisms and empowered elites, and others are able to build up from neighborhood and community's mobilizations and to open spaces for visionary leaders. (*ibidem*). As saw in the chapter 4.3 the *human flourishing* is "an universal claim that depends on reciprocity and cooperation among people" (Cho and Douglass, 2014) based on four dimensions: *inclusion, distributive justice, conviviality and environmental sustainability*. These dimensions can be retraced in the city of Seoul. In fact, the Park Won-Soon's administration has inaugurated a new era featured by the switch from an agenda based on an economy-centered development to an agenda founded on people-centered living welfare. In addition, a model based on "civicism" has replaced the bureaucratic governance of "statism", recognizing civil society as a new form for social harmony and progress and citizens as main agents of municipal governance. In this frame, human flourishing has become priority over economic growth, the prosperity of people more important than the prosperity of places, the welfare provision more necessary than mega development, and democratic governance more useful than bureaucratic governance.

- In terms of *Inclusion*, the catchphrase of the Mayor "***Making Seoul as a city for citizens and by the citizens***" nicely captures the intention of the Municipality to bring people back at the center. Inclusion and engagement in the city public life and in the local governance are the fuel of social actions (Mumford, 1961) able to improve the existence in the city for everyone. As the Mayor uses to say, every "citizen is a mayor", every citizen, and the civil society in general, drive the action of and gives authority and power to the Public Administration, that acts in behalf of people and not as embodiment of constitutional authority. The mayor also appointed several "citizen mayors" and opened his office for encounters with ordinary citizens. He also used to meet people in their neighborhoods to collect info and concerns and try to find solutions at the community specific issues together with city dwellers. The administration organizes many events and encounters, round tables, consensus conferences, public hearings, citizen's open conventions, to let people meet up each other, with the Municipality too, and to direct engage them in the policymaking¹⁹⁰. This aptitude to include ordinary people in the reflection for the reshaping of city policies was clear from the beginning, when the Mayor made public his 3-years Plan for Municipal Administration, containing 337 agendas for social innovation tailored to a people-centric administration. In addition, at his second terms, 47 Citizen Committees have been officially formed to implement the multitude of projects in archive, related to social economy, green footprint, participatory budget, etc. These committees want to empower and enable citizens to be part of the citymaking, to overcome the classical passive participation and to become active members of the society embracing social innovation as a way to express their voices and rights in the city. The two most famous citizen committees are the *Citizen Planning Board for '2030 Seoul Plan'* and the *Citizen Committee on Participatory Budgeting*. In addition, there are also intermediary organizations established in form of partnership organizations to mediate between public and private sectors, for example the *Supporting Center for Social Economy* and *Supporting*

¹⁹⁰ In the first term of Mayor Park (October 2011 – June 2014) a total of 100,000 citizens have been engaged in social innovation projects and events to discover issues and direction for policy and action.

Center for Community Regeneration. This makes the city a kind of *Human city*, a sort of Korean version of the progressive city in the opinion of Cho and Douglass (2014).

- From the side of *Distributive Justice* the motto is **“Welfare is not charity, but the endowed right of citizens”**. Under Mayor Park the welfare budget has risen up over 30 percent of the total, a result never reached before, and at the same time the budget for mega development, considerable in the previous administration, has been incredibly reduced. That's in order to replay at the rising presence of marginalized, excluded, disadvantaged and poor people that increasingly sprinkle the urban landscape. Inclusion of marginalized and underprivileged citizens in the processes of participation, in the access to resources and policymaking paths and in the redistribution, goes in parallel with the achievement of distributive justice and they cannot be separated. The big amount of encounters, events, meetings that the Municipality has organized and is still organizing, move in this direction and are all featured by a great open access to every citizen. This approach is fundamental, since participation alone is not enough to guarantee equity (Cho and Douglass, 2014). As will be shown in the next paragraph, the “Sharing City Seoul” Project follows the same line of reasoning, is made on the same premises and is part of this big strategy of inclusion and promotion of justice. Sharing, collaboration, cooperation, promotion of community life and communal livelihood are key ingredients in this big picture, since they can favor and strengthen a socially fair city. Alongside the Sharing City Project, other ambitious policies were launched, such as programs to train and form 957 village communities all over Seoul by 2017 and 3,180 community builders, and to create 8,000 cooperatives over ten years. The social economy is an extremely important and serious issue, which fits with the efforts to create a Sharing City and to upgrade Seoul into a social city. For this reason many institutional organizations have been created, such as the *Supporting Center for Social Economy* and the *Social Fund for Social Business Venture*.

- About *Conviviality* the slogan of the Mayor is **“I want to make Seoul a city full of fun”** or **“My dream is for all Seoulites to be happy”**. As stressed by Peattie (1998) conviviality is the ultimate purpose of a progressive city making and is perfectly in line with the vision and the strategy of the Mayor to transform Seoul into a *Human-centered city*. Happiness not just *per se*, but in combination of human creativity and innovation, to promote a new behavioral aptitude focused on wellbeing. The Mayor also manifested the desire to publish a book with specific policies to increase happiness and planned to develop some happiness index. In addition, the culture is being used as a main tool to make Seoul a place of conviviality. A great number of small cultural hubs, laboratories of creativity, open theaters events and cultural events in general, have taken place and still are organized around the city, in order to involve people in happy moments in which rise their awareness, will of participation, desire to spend time together and capacity to be active for their own city. This sparkling atmosphere is nourishing citizenship, triggering a vivacity more and more coming from the grassroots. Citizens are constantly encouraged to propose and implement projects and express their creativity and cultural interests. The Dongdaemun Design Plaza, an incredible modern building designed by Zaha Hadid and strongly endorsed by the previous administration, from polemical symbol of extreme development is becoming a place of city dwellers' planning, hosting citizens initiatives (also The Sharing Economy Fair is hosted here). The Mapo Power Plant is at the center of a participatory design project of conversion into a cultural plant (in London Tate Gallery's style). One of the most incredible projects is considered to be that of the reconversion of the elevated road near Seoul Station into a pedestrian green way; the road had to be destroyed and a city initiative has proposed its remodeling into a space for citizens enjoyment. Similarly, many other projects, based on citizens ideas and marked by a lively and

proactive people participation, have been proposed and/or implemented in the city. Many of them are at lower scale and involve neighborhoods in the urban design, in the field of culture as well as of history, enriching in this way both the cultural and the historical identity of the city. For example a *Future Heritage Committee*, composed by civilian experts, has been set out to review and select the most promising heritages in the city.¹⁹¹ Till April 2015, 1,500 potential heritages have been selected and 345 of them designated as “Future Heritage” tanks to the citizens’ recommendations.

Cho and Douglass, who have deepened with their researches the frame of the Seoul Smart City, believe that a real consequence of these efforts is to “*convert individual happiness and pleasantness into collective creativity and innovation in the corporeal and political community of city*” (2014).

- The last dimension of the human flourishing is the *Environment* and the related catchphrase is “**Make Seoul a City of Sunlight**”. Korea’s leading environmental NGOs have supported the Mayor and his progressive approach from the beginning, since he has always pushed for the adoption of a sustainable development strategy, opposite to the tendencies of the previous administration more focused on the mega urban development projects. In 2012 a meta-governance body, the *Committee on Sustainable Development*, was established to maintain alive the attention inside the administration on the topic of sustainability. It produced the Master Plan for Sustainable Development in 2014, and the Mayor presented it at the 2015 World Congress of International Council of Local Environmental Initiative (ICLEI), hosted precisely in Seoul in April 2015. The document was applauded as a concrete sign of the commitment of the city to sustainable development since it outlines a path of urban sustainability, setting out the steps to implement a reply at the environmental main problems. The Mayor is now a globally recognized leader in the challenge of global climate change and sustainable development. The “One Less Nuclear Plant” is another project that underlines his extreme sensitivity in this topic and his commitment on the energy issues. In line with this, among others interesting projects, there are the Eco-Mileage System, the Led Lighting Devices, the Building Retrofit Project and the Renewal Project. Projects that are gaining incredible numbers in terms of citizens participation, devices installed, photovoltaic power generators and buildings involved.

All the results that the city is reaching in these fields come of course from a highlighted Mayor, and his leadership is worldwide recognized, but in addition, as Chang and Bae (2012) underline, the highly educated population and the pervasive access to social media have played and are still playing an important role, making the difference. Not to mention the success of grassroots movement in supporting the Mayor’s vision. Cho and Douglass affirm that the city is demonstrating that the push for progressive governance does not come only from economic and welfare crises, but also from the desire to regain conviviality, communal life and social ties, fostering the development of civicism. This means, in their opinion, that a progressive city can emerge also “*from non-crisis driven cultural and social forces and can thus prevail long after the crisis is over, which is the hope of the future*”.

This focus on the concept of progressive city and on its realization in the city of Seoul offers a frame to better understand the city vision and deepen the ‘anatomy’ of the Sharing City.

¹⁹¹ The heritage are selected in five categories: politics and history, industry and labor, culture and arts, citizens’ living and urban planning.

8.3 “Sharing City Seoul” project

8.3.1 *Birth and features of the “Sharing City Seoul” project*



Figure 11 Alimteo, the Blue Peanut, log of the project

The city is aware that, soon, the so-called breaking point will be reached. For this reason, the last and current administration, led by the mayor Park Won-Soon¹⁹², has started a deep reflection on the strategies to reply to the current urban challenges. The reflection was based on the existing infrastructures and on the city’s potentialities. Back in 2008, in conjunction with the global economic crises, the city started to talk about the Sharing Economy, but it was not until 2012 that the issue was introduced in its political agenda, as a complementary and experimental way to

- support the economic development,
- reduce the environmental impact and
- strengthen the social cohesion.

In the opinion of the Public Administration indeed

- Sharing allows to gain more benefits with fewer or less resources since enhances the usefulness of resources.
- Government can provide more services to the citizens at lower price. In addition, once reinvigorated, the sharing economy can create new jobs and added values: new types of jobs can emerge through ITCs linking resources to those who need them, enabling new venture businesses to become viable with small businesses and allowing citizens to earn extra money offering knowledge, services, resources.
- The third benefit that the Municipality identifies in the sharing economy is its ability to recover the disappearing sense of community, increasing interpersonal exchanges and restoring broken relations, since sharing promotes trust-based reciprocal economy.
- Lastly, for the City Councilor the sharing economy can also contributes to the settlement of environmental issues caused by overconsumption since allows to save resources without limiting their use (multiple people use one resource) and reduce waste.

Therefore, it was the Municipality to first recognize these opportunities, and the incitement to embrace the sharing economy came directly from the Mayor, who has a long experience of activism (more than 30 years) and a strong orientation towards citizens and their wellbeing. The previous administration was more focused on infrastructures and technologies, and created the proper setting that today is allowing the sharing economy’s services to thrive. As

¹⁹² Mayor Park Won-Soon has a track record of being a visionary leader: human rights and social justice activist; lawyer; founded the Hope Institute, a think tank designed to promote grassroots solutions for social, educational, environmental, and political problems.

underlined by Nan Shil Kwon, a spokeswoman of Creative Commons Korea and member of ShareHub, “*the high penetration of IT services and social networks has naturally led to the identification of the sharing economy as an intervention strategy*”, facilitating the adoption and dissemination of sharing and collaboration practices and encouraging the development of projects and business associated with them.

So the city has embraced the sharing economy declaring itself as a Sharing City for the first time in September 2012, launching the project “**Sharing City Seoul**” and starting to apply the concept of sharing economy to its urban policies.

The main peculiarity of “Sharing City Seoul” is precisely the great commitment of the Seoul Metropolitan Government (SMG) and therefore the strong public engagement. Seoul aims to bring the sharing economy to all its citizens, expand the sharing infrastructure, promote businesses that are already dealing with sharing, incubate new companies, put underutilized public resources back into circulation and provide greater access to data and digital services. Overall, it aims to create an ecology where the sharing economy can develop in an autogenous way, a “Sharing Ecosystem” based on a “Sharing Cultures”, with a new sensitivity towards sharing, cooperation, exchange, collaboration (SMG, 2014a, 2014c). The measures on which it has worked are mainly:

1. *Preparation of laws and systems to promote sharing.*

After declared itself a “Sharing City” in September 2012, on December 31 of the same year, the “**Seoul Metropolitan City Sharing Promotion Ordinance**”¹⁹³ (SMG, 2014b) was enacted, thanks to a series of public hearings that allowed the local government to collect information and opinions from sharing economy activists and citizens. The newly enacted ordinance establishes the rules for implementing the project and dictates the support of the city in the vitalization of sharing not only in the public sector, but also in the private sector. The ordinance called also for the creation of an internal division voted to the management of the project: the **Social Innovation Division**. From the institutional side, another political act has been drawn up, the “**Seoul Metropolitan Government Act for Promoting Sharing**”¹⁹⁴. Promulgated on January 2014, it provides the legal framework to support non-profit organizations that work in the sharing economy field while deploying the necessary infrastructures for the promotion of the Sharing Economy. The act includes key provision for declaring principles of sharing public resources, designating “sharing NPOs or sharing corporations”, providing administrative or financial support and organizing a ‘sharing promotion committee’. The, here briefly called ‘sharing companies/organizations’ selected work all in order to solve specific social problems and foster sharing (SMG, 2014a, 2014c).

2. *Establishment of a policy execution body under private-public governance.* The cooperation between the private and public sector is publicly considered a key element of the project. In February 2013, the city established the **Sharing Promotion Committee**¹⁹⁵, composed of 15 members, 12 coming from the private sectors of IT, CSR and social innovation and 3 from the Public Administration (a city councilor and

¹⁹³ The “Seoul Metropolitan City Sharing Promotion Ordinance” can be seen at the address: <http://legal.seoul.go.kr/legal/english/front/page/law.html?pAct=lawView&pPromNo=1191>.

¹⁹⁴ No. 5619, Jan. 09, 2014.

¹⁹⁵ As stated the article n.11 of the Seoul Metropolitan Government Ordinance On The Promotion Of Sharing (Partial Amendment No. 5619, Jan. 09, 2014) “*The Mayor shall establish the Sharing Promotion Committee of Seoul Metropolitan Government under his/her command in order to deliberate and provide advice on policies for the promotion of sharing and support for sharing organizations or sharing enterprises*”.

officials). The committee deliberates on the selection of ‘sharing companies’, suggests diverse opinions on their business operation, and monitors and evaluates their work. As reminded by the professor Jihoon Jeon, member of the Committee, “*the local government has addressed in first instance to the services providers rather than the customers because if the city is able to provide good services and at the same time to spread awareness of the potential of these new forms of economy, citizens naturally will follow and enter in the process*”. Also, as Botsman and Rogers believe, if there is a system that facilitates sharing, reuse and participation, the society will adopt it (2010).

3. *Opening of an online sharing information portal: ShareHub. ShareHub.kr* is the gateway to the Sharing Economy in the city, the bridge that connects citizens, businesses and local government. Created thanks to the cooperation with a private organization, Creative Commons Korea¹⁹⁶ (and managed by it), the web portal gathers all the information and experiences of sharing and collaborative consumption of the city. It also introduces overseas sharing activities; connects of people, businesses, government and NGOs interested in a better sharing; and supports networking with companies and organizations related to sharing. The Seoul Metropolitan Government provides administrative and financial support, cooperating on some aspects such as management and advertising of the sharing companies. As underlined by Mr. Hak Young-Song, project manager of the Social Innovation Division, “*through the portal citizens are always informed on the organized events and can express their opinion*” generating an ongoing exchange of ideas. The byword of the portal is “*Sharing is the way of life for sustainable tomorrow*”.
4. *Seoul Metropolitan Government as promoter of the sharing economy.* The main role that local government is playing makes it an enabling platform for advertising events and sharing services, for deploying a strong sensitivity on the topic and for supporting companies based on sharing values. The city does not handle businesses directly but helps startups who work in sharing to find a place in the market, provides programs of entrepreneurial support, advice and mentoring sessions with senior entrepreneurs and experts, and also advertises events, initiatives and platforms (SMG, 2014a, 2014c).
5. *Installation of an information exchange window with the world.* The city of Seoul really cares about international relations and perspectives exchanges with foreign experts. It is always well informed on the development of the sharing economy abroad and aims to reinvigorate its project thanks to the comparison with other cities and policymakers. For this reason, among the first initiatives, a **Sharing Economy Advisory Group** has been created composed of international experts: Joe Gebbia, Airbnb co-founder, Rachel Botsman director of Collaborative Lab, April Rinne, CSO of Collaborative Lab, Herald Heinrichs, professor at the Lüneburg University, and Neal Gorenflo, co-founder of Shareable. The group meets periodically to provide information on the trends of the sharing economy abroad and give *ad hoc* advices.

Recently the SMG has created another entity to guarantee the transparency of the process: the **Sharing Facilitation Committee** to solve potential tensions among sharing business e current laws (Johnson, 2015). The Municipalities strictly believes on the importance of correcting obstructing status or systems by maintaining a cooperative relationship with the central government while supporting sharing companies/organizations. For this reason he recently started a legislative review in cooperation with the National Assembly and the

¹⁹⁶ Official web site of Creative Commons Korea: <http://creativecommons.or.kr/xe/main>.

Central Government to ensure better institutional support to the sharing economy. The activities of the Sharing Facilitation Committee are related to the **consultation** started in April 2015 **among various internal departments** to discuss the possible problems related to the sharing economy¹⁹⁷: the Department of Strategy and Finance held a meeting with experts to frame the economic situation around sharing economy. The Department of Land, Infrastructures and Transportation, the Department of Culture, Sport and Tourism, and the Food&Drug Division discussed together with the Autonomous Provinces on the problems related to the shared transport (in particular about the Uber case), on the topic of hospitality and usage of religious structures (tax suppression) and about home-sharing and social eating. The Department of Trade, Industry and Energy discussed on how to foster the car sharing service and support the use of electric vehicles. The ICTs and Future Planning Division debated on how review the entrepreneurial support in terms of sharing¹⁹⁸.

8.3.2 *Actions and initiatives*

The activities of the SMG can be divided into three types:

1. *development of infrastructures for Sharing City;*
2. *support to ‘sharing companies/organizations’;*
3. *spreading and propagation of citizen’s participation.*

The first group of activities has been already discussed explaining the process at the base of the implementation of the ‘Sharing City Seoul’ project.

The second group is related to the designation of ‘**sharing companies/organizations**’ selected among those work to catalyze more sharing in Seoul and are able to solve local social problems (intergenerational gathering, recycle, creation of communities and new social links, creation new jobs...). The city provides to these organizations:

- project’s certification,
- Sharing Seoul Brand Image license,
- administrative support,
- public relations consulting,
- financial support.

In the first phase of the project, 20 new sharing enterprises were selected through the *Youth Business Startup Incubation program*, providing offices and workspaces, advisory services and a total of 240,000 dollars to 10 startups. The total investment has been 450,000 dollars in 27 sharing organizations or businesses. Among these, there were online platforms that facilitate house sharing, like AirBnb (Kozaza, BnB Hero...), baby clothes exchange platforms (Kiple), parking lot sharing apps and others related to exchanges of goods, knowledge and skills¹⁹⁹. The city, as underlined by Prof. Jihoon Jeong, member of the Sharing Promotion Committee, is following a precise strategy. “*It is looking to the providers of services first, involving them in the project in order to create the right offer and the proper environment to favor the adoption of these services and practices by citizens*”. SMG is trying to pave the way and strengthen the ecosystem for the sharing economy to thrive (Johnson, 2014). Right now

¹⁹⁷ The designation of exceptional amendment is in course, in order to limit or remove contradictions inside some ordinances. 7 problematic areas have been identified, 6 are in strict connection with the space sharing.

¹⁹⁸ The information are taken from the official report “Sharing Economy-Mid Report” released on July 2015 available only in Korean. For this reason the translations of the original name of the departments can not be completely correct.

¹⁹⁹ For a complete list of companies and start-ups selected, please consult the guide “Sharing City, Seoul” <http://www.slideshare.net/cckslide/sharing-cityseoulenglish>.

63 social enterprises²⁰⁰ have been selected, obtaining the logo (the blue peanut, Alimteo) and the financial, marketing and communication support²⁰¹. 25 of these organizations work in the field of *space sharing services*, 15 companies work in the field of *good sharing services*, 16 in that of *skills, experience, time sharing services* and 7 organizations offer *content sharing services*²⁰². By 2018 the aim is to get to 300 companies/organizations members of the project.

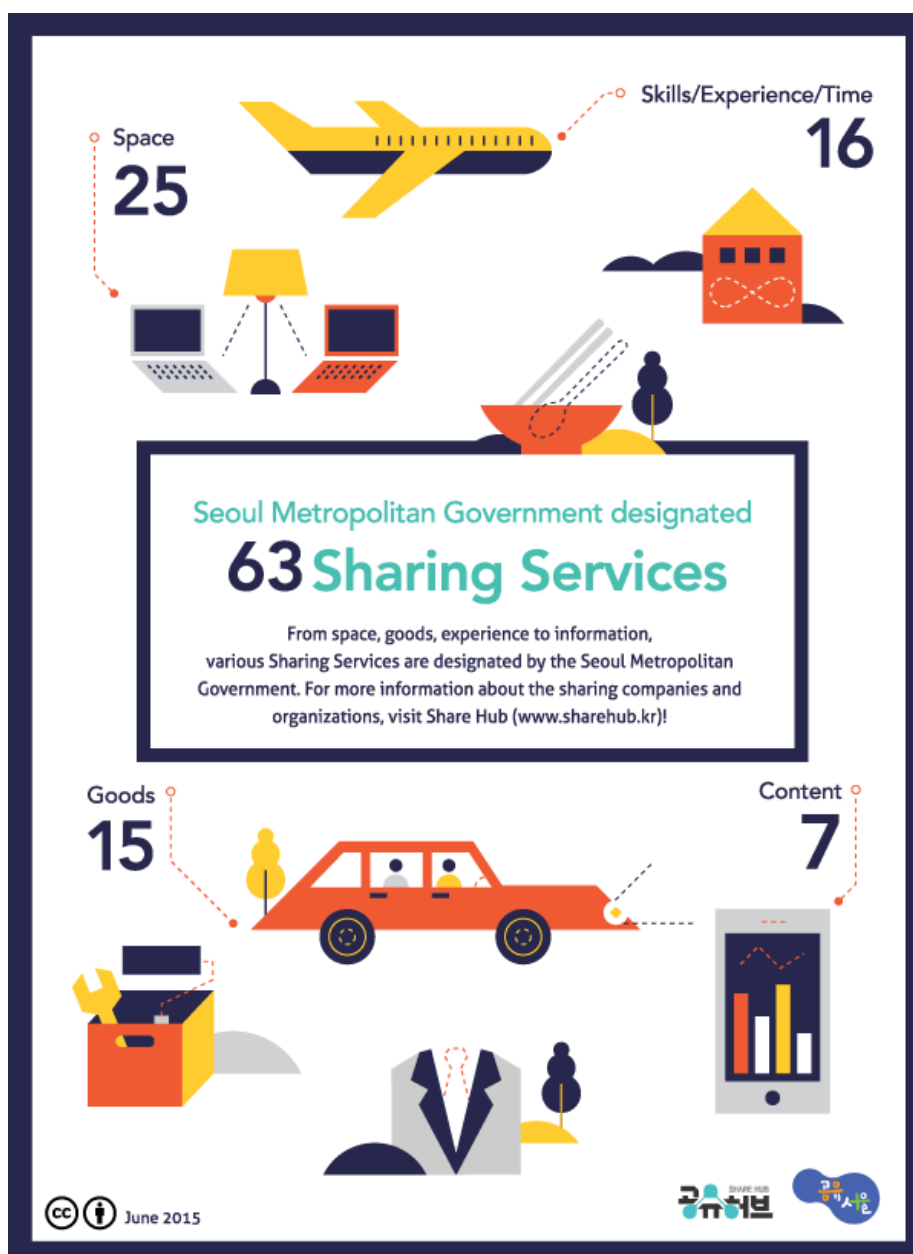


Figure 12 Infographics of ShareHub on the 63 selected 'sharing organizations'.
Source: <http://english.sharehub.kr/services-infographics/>

²⁰⁰ Data at July 2015. ShareHub offer detailed infographics about the selected startups and social business, see <http://english.sharehub.kr/services-infographics/>.

²⁰¹ 27 'sharing companies/organizations' selected in 2013, 13 in 2014 and 23 in 2015 until July.

²⁰² Only 2 'sharing companies/organizations' failed and went out from the project. They operated on the share of goods, one of the main problematic sector since some policies related to the sharing of goods was already powered up and some companies pre-exited at project "Sharing City Seoul"; from the beginning was highlight the possibility to enter in competition.

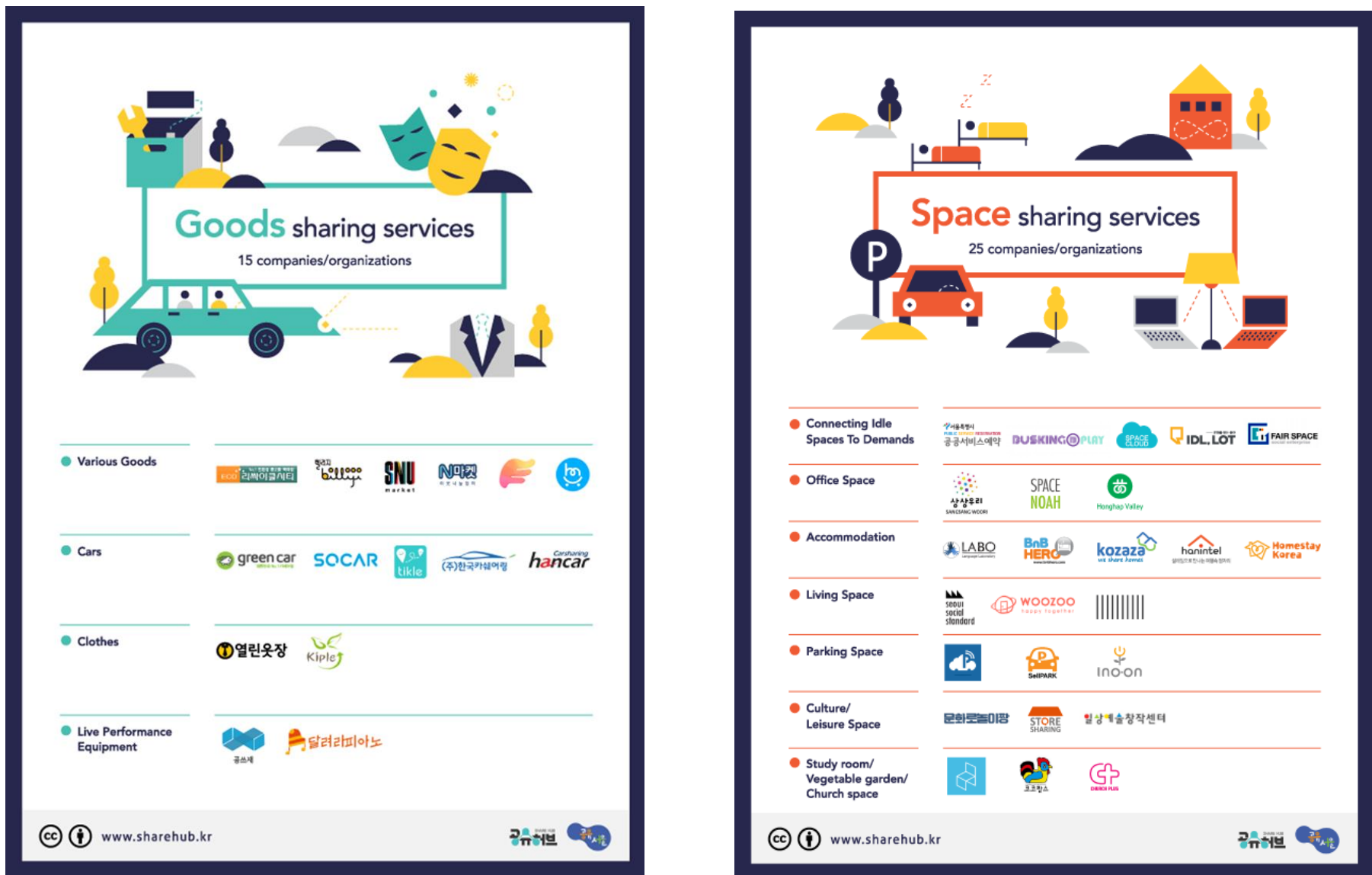


Figure 13 ShareHub infographics: the ‘sharing organizations’ selected by the SME for the categories: good and space sharing services. Source: <http://english.sharehub.kr/services-infographics/>



Figure 14 ShareHub infographics: the ‘sharing organizations’ selected by the SME for the categories: skills/experience/time and content sharing services. Source:<http://english.sharehub.kr/services-infographics/>

The adoption of the **logo** is a clear sign of the will to create a sharing economy ecosystem made on trust and confidence among people, since it reassures users on the services' safety, and favors startups in their goal to reach the critical mass and the break-even point (before to die and close). In addition, the logo, which is part of a wider **communication campaign**, makes recognizable the project and its actors; the billboards of the project are all around the city reminding to people the possibility to have alternative solutions at the current hyper consumer lifestyle²⁰³ and at the economic crises (Johnson, 2014). The Municipality is clearly trying to promote the development of local replies, that impact on the urban and homegrown field, giving new opportunities to residents in terms of economic and social development and attempting to reduce the territorial environmental effects. In some cases the idea seems to be the strengthen of these local solutions in order to replace the power of big companies locally and spread a Korean sharing economy version of services globally (as for KakaoTaxi, see next paragraph, 8.3.3).

In the list of the 63 startups one can find

- social enterprises that support young mothers and families thanks to the online peer-to-peer collaborative platform that allows users to buy and sell second-hand children's clothing online, like Kiple (that offers recycled clothes and used textiles for a low-cost exchange, helping parents conserve resources and reduce family burden);
- startups engaged in the re-use that link people who wish rent or borrow idle goods, such as Billi, Wonderland or Super Natural Used Market;
- social ventures that help young people to enter in the job market, like The OpenCloset that lends secondhand business outfits for interviews (the outfit are donated by a community of seniors who charge a minimal cost for the rental, each donors leave a messages of goodwill and each renters can reply expressing gratitude);
- other realities are engaged in the promotion of the local culture, like PlayPlanet that gives the possibility to experience the Korean life directly with locals (and offer also the opportunity to travel abroad with the native of the country of travel), giving them the chance to share their culture and knowledge and earn some money;
- other platforms operate to help disabled people to live, move, learn and experience the everyday life in a proper way, or to promote the concept of sharehouse, taking it from Japan, like Wozoo that try to help young people to afford the house expenses promoting the model of shared house with those with similar hobbies and experiences; this company supplies housing to students at low cost and helps residents share their hobbies and experiences with one another;
- given the high city density and the high rental costs, the theme of the house is gaining momentum and other realities, such as Seoul Social Standard, strives to propagate the shared house models;
- in general the topic of the space is important, and many platforms are dealing with it, offering information about study rooms, meeting rooms and other space renting issues, like SpaceShare, or information to connect people with spaces that fit their broad needs, providing list of variety shared space rentable at good price, as in the case of SpaceCloud;
- other platforms, such as SpaceNoha, give support for office space sharing or co-working network among businesses or propose sharing space for living or creative work, such as the Living and Art Creative Cente;

²⁰³ Moreover, the typical Korean lifestyle is voted to high consumption, so that the city generates 9,000 tons of waste every day and 49% of the families are in a situation of debt. (see <http://www.shareable.net/blog/sharing-city-seoul-a-model-for-the-world>).

- there are also spaces for the re-use, and startups like Norizzang propose sharing workspace or tools to allow people to make daily necessities by recycling waste wood;
- other organizations and projects try to solve the isolation problem of elderly people and the house concerns of young people matching young and old in the same house (One Roof Project);
- the isolation is a subject particularly dear to the heart of people and for this reason many startups and social ventures work to reduce it. It is the case of Zipbob, a social dining platform allowing individuals to book restaurants and dine with groups of people sharing similar interests in the house of one of them, the host of the event; the main purpose is not simply the dinner or in general the food, but the opportunity to meet new people; in addition for many Seoulites it represents a good chance to find a girl/boyfriend. In Seoul more than 25% of people live alone and has a miserable lifestyle made of work, loneliness, junk food watching tv and no relations²⁰⁴. For this reason these platforms represent a concrete way to gather people together and improve their relations, creating new networks and limiting the urban loneliness;
- also the urban farming is spreading in the city as a reply to the desire to rebuild connections among people and seek healthy and safe food, as well as an alternative method to counter problems with climate change and energy shortages. Cocofarms for example is a platform that connect people with idle land and people that want to try out farming without owning their own land. Urban farming is a rising subject and the mayor has even unveiled a comprehensive package to secure enough farming space in the highly congested capital. He has declared that “Seoul can become the world’s No. 1 farm city”. The goal of the farming project is exactly to encourage people to grow what they need autonomously and help the city to create related businesses, new jobs and new relations;
- to help all these rising startups, among the certified by the SMG there is even a platform (Honghap Valley) that helps other startups to solve their problems offering services of mentoring, marketing, meeting and networking and acting as a meeting point amongst online and offline business operators;
- in addition, around the city there are also 58 shared bookshelves and 81 tool lending libraries²⁰⁵, that represent a way to reduce consumption but first of all to rebuild communities and social ties in a city where 100 or 200 families live in the same building but they don’t know each other (ShareHub, 2014, 2015a).

The last 6 startups selected in June 2015 deal with sharing space – Parking Plex; content – Cinegg want to create an ecosystem for independent movies and a shared-culture community; Aud is a social coop that developed a share-typing app to help deaf people; XVision Technology develops smartphone applications to provide comparable information for visually impaired and non-disabled as well; knowledge and skills – Lingofly is a platform to learn a language meeting mother tongues; HeadFlow is a social enterprise that propose new learning models. The social value is the main feature of the selected startups, combined with social innovation and new technologies (ShareHub, 2015d).

Recently, in October 21, 2015, the city hosted the **Forum “Invigorating Sharing Economy”** “*a meaningful event where various parties share opinions about the role of the Seoul City Government in nurturing global sharing companies while reviewing various activities Seoul has engaged for the past 3 years in its efforts to promote Sharing City Seoul*”

²⁰⁴ These informations are taken from the Adieu 2015 Survey, available at the address: http://world.kbs.co.kr/english/program/program_trendkorea_detail.htm?No=118827.

²⁰⁵ See the recent infographic released by ShareHub at the address <http://english.sharehub.kr/infographics2/>.

(ShareHub, 2015f). The forum was an authorized personnel's event and was open by two experts of the sector: Doo-Won Cha, head of the Division of Strategy Planning of the Korea Institute of Science & Technology Evaluation and Planning, and Seung-Ho Shin, Director of Marketing at SOCAR. The Mayor also attended the Forum. At the panel participated other renowned experts, such as CEO Young-Hwa Jang of OEC, CEO Jun-Cheol Yang of Onoffmix; CEO Hyun-Ho Park of Kmong; CEO Jeong-Hyeon Lee of Curiously; CEO Yo Namgung of BuskingTV; Manager Seok-Won Yang of D.CAMP; CEO Seung-Yong Seong of Hayden Angel Club. The discussion focused a lot on the Seoul's support in terms of infrastructures and resources, evaluated still not sufficient, on the need to expand the network involving more sharing companies in the administration process and on the necessity to diversify more. Also the request of more flexibility in the legal framework and regulations emerged as relevant element to allow sharing companies to grow at global scale. To reach this goal is also requested a stronger support from the SMG (*ibidem*). The panel was a proactive moment of discussion to reason on how to help SMG to foster even more the process that it started in 2013. A greater socialization of the sharing services is another request came out, since ordinary citizens are still not familiar with sharing and only their awareness and consequent use of the services can allow the growth of the sharing companies. The Mayor replied declaring the intention to “provide more aggressive support to those companies” and the importance to reinforce the project in terms of contents in order to live up to its international reputation. “In this regard, he promised he would make more efforts to help grow and expand sharing companies so as to realize the goal of Sharing City 3.0” (*ibidem*). During the Forum the SMG declared to plan the opening of an institution called “Sharing Economy Academy” to incubate new sharing businesses and to provide much support in order to be prepared for the 2016 Sharing Seoul Expo (*ibidem*).

In general, the project “Sharing City Seoul”, with its internal structures, is not the only reality promoting the rise of new social businesses and startups. From the private side there are some foundations, such as Hyundai Foundation or SK Foundation, that bolster the development of the social economy, giving resources and funding to small rising businesses with social aims. From the public side there are cooperatives such as SESNET-Social Enterprises Support Network, Seeds, and the Korean Social Enterprises Promotion Agency (and actually many other). They offer spaces and cover costs for business establishment, mentoring services, networking facilities, incubating periods and monitoring and follow-up services. The potential thrive of the sharing economy and the creation of a sharing ecosystem is part of the biggest orientation of the Country to social entrepreneurship, based on and feed by the idea that *Everyone is a Changemaker*. The decision to push on the sharing economy project is in line with the main orientation of the country and of the city toward innovation and social business. In fact, to provide an environment where “social economy” can generally thrive, the Seoul Metropolitan Government has opened the “Social Enterprise Development Center” and changed the direction of its social enterprise support from providing labor costs to forming an ecosystem that allow self-development and continuous growth.

Among the other things, **mapping** and **connecting** the existing entities and structures is perceived by the SMG as an important way to systematize the local potential and pool energies. Especially in the field of social innovation, the knowledge of the existing agencies, supporting groups and intermediaries, and their connection in a strategic frame, can enable the sharing of knowledge and information between sectors and networking and reduce search and transaction costs in social innovation. Social innovation, as saw, is becoming a significant way for the promotion of the inclusion and the creation of a more cohesive city. The manager of the Social Innovation Division, Mr. Hak Young-Song underlines, as reported in the document “A new of mapping ecosystem of Innovation”, that the city is now attempting a

new approach more spatially concentrated and more functionally intense to strengthen the ecosystem of social innovation. An example of this new approach is the **Seoul Innovation Park** that represents also a case of space re-use. For almost 50 years was used as Korea Center for Disease Control and Prevention (KCDC) under the Central Government, and was then purchased by the Seoul Metropolitan Government that decided to make the site a forward base for social innovation. The total area is around 100,000 m² including 40,000m² of green space and 32 buildings. To find the better way to re-use this space, in 2014 a master plan was laid out and the Seoul Innovation Center was set up as operating agency. The Seoul Innovation Park was launched in June 2015. Since in the past the place was used to cure and control diseases it will not lose its nature and will be used to solve social problems. By date it hosts the Social Economy Support Center, the Community Support Center, and the Senior Support Center. It accommodates innovating agencies working on social economy, sharing economy, community rebuilding, social welfare, culture and environment and it incorporates various innovation support agencies such as financing, accounting, marketing, design, labor and legal services. For the future the SMG plans to build also business hotels, convention facilities, children cultural complex and innovative arcades to exhibit and experience the innovations. Various spaces open 24 hours (as quite usual in Seoul) will be added soon, such as meeting rooms and offices but also sleeping facilities to let innovators meet, discuss, rest and produce ideas. In the space will be included also a coworking. A point that SMG stressed a lot is the importance of create an innovative place not only for its function but also for its formation. It wants to create an open platform and in order to pursue this goal the master plan is thought not in a fixed way, but it is open to creative modifications according to contexts that resident agencies will face in the future. The innovators' participation in forming and establishing the Social Innovation Park, is welcome, fostered and expected. Also the design of the spaces will be continually rethought in order to reply to the emerging needs, so it is flexible. Looking at this place emerges the will of the SMG to create the park in a democratically way by the residents as a form of cooperative. In addition, the existing walls around the space will be removed to give this idea of open space and welcome people in a meeting with innovations. In order to inspire as much experimentations as possible and encourage social entrepreneurship, the SMG will support the project with funds and will recruit 1,000 social innovators to move in the park. They will receive office spaces and administrative assistance, they will have the possibility to implement experimental projects and create social business related to social innovation or to the resolution of social problems. The partnership between private and public entities and the exchange between inside and external agencies will be promoted as well. All these efforts aim to create a new platform for innovation (SMG, 2015b).

The third group of activities intends to spread the knowledge about the sharing and collaborative services through people, promoting local events, meet-ups and training courses.

Since before the declaration of “sharing city”, a **Public Hearing** was held (September 24, 2012) to discuss on the draft ordinance for promoting sharing and to foster the project “Sharing City Seoul”. Starting from the idea that “*the more Seoul's spaces, buildings, and experiences are shared, the more benefits and interests are created*” as the Mayor often reminded, also some **lectures** on the topic of sharing were organized right after the ordinance. From January to April 2013 every Thursday, in the Conference Hall of the SMG, Wisdom, a sharing enterprise designed by the City, helped citizens to better understand the “Sharing City Seoul” project, what an economy of sharing is, and how to participate in the sharing initiatives. Through open invitation, the citizens were also involved in the production of **brand images** (BIs) and slogans (“*Sharing bring happiness to 10 million citizens*”) for the project, included the logo of the project, the blue Alimteo, used to designate the sharing

organizations and businesses selected by the project for promotional purposes. In April 18, 2013 the City organized a “**Sharing Economy Forum**” event to present new sharing models through promotional booths of sharing businesses/organizations and right after (April 20) a “**Book-Reading Subway**” event book concerts, “sharing bookshelf making” events, and flash mobs for book reading in subway trains. In August 1, 2013, the first “**Sharing City Fair Smart Cloud Show**” was held in the city and followed thereafter by other international and national conferences. These more ‘institutional’ events were followed by many other happenings for citizens to experience sharing (organized by the city government, ShareHub and the new ‘sharing companies/organizations’) including “Sharing Imagining Workshop”, and contests and games all around the city²⁰⁶ (ShareHub, 2014).

The support to new or future entrepreneurs is a key element in the development of the project, and the SMG is providing specific training programs to help them. In August 2013 was organized the first “**Sharing Economy Start School**” to enhance understanding of the sharing economy and to support startups by developing specific sharing economy business models (the schools was addressed to member of no-profit organizations, community activists, those preparing for venture startups, etc.). In June this year, 2015, the City Government organized the third edition of the School. As usual, it was addressed to those who aspire to develop ideas to improve the quality of life using the sharing economy tools. The school was hosted by Open Entrepreneur Center, that used to offer entrepreneurial education services, and sponsored by Seoul NPO Center. This edition has involved also the students of the previous editions in a spirit of sharing knowledge and experiences. Beside experts on the sharing economy topic there were also Ceo and staff member of some of the sharing organizations selected by the SMG (like OpenCloset). The students thanks to this project have the opportunity to share their ideas of social sharing business and team up with the experts in order to understand how develop them. The School is intended to encourage people to know the phenomenon of the sharing economy and to find ways to develop sharing ideas. It is scheduled to run for 6 years (ShareHub, 2015c).

To make aware people about the sharing economy from kids to adults SMG is still running several events, meet-ups and gatherings based on the topic. After providing the offer thanks to the selection of the sharing organizations, the SMG is supporting a communication campaign to match citizens with services and let people become aware on what can be shared in the city, when and how, presenting the concept of the sharing economy itself and introducing the companies selected to the citizenship. Some examples, among the many local events, are the “Sharing Gardens” started in 2014 and implemented in each province of Seoul and the “Writing Contests” organized to let people express their opinion about sharing economy. The most famous event is the **Sharing Seoul City Fair**²⁰⁷, at its third edition. This year was held in May inside the Dongdaemun Design Plaza. It was the occasion to introduce to the citizenship the selected sharing city until now and create a big event of socialization. Two major car sharing operators (Green Car and SOCAR) were also present and displayed their rental vehicles in the outdoor area. Alongside the stalls of the sharing companies were organized Sharing Contests, concerts and artistic live performances, and games to push a participative interaction of the audience, some of them directly organized by young students. The fair included a Sharing Market for teenagers in which exchange and barter their idling staff. The outdoor area was filled with an array of workshops and experience programs. The

²⁰⁶ These first information are taken from the official english document “Current State of ‘Sharing City Seoul’ Project” available on the website of ShareHub.

²⁰⁷ The event is reported in this English article of ShareHub: <http://english.sharehub.kr/did-you-enjoy-sharing-city-seoul-fair/>.

event was more than a normal fair, becoming a moment of social aggregation for the entire city and a starting point to create a more sense of belongings. The same SMG was part of the event in order to share its vision and collect input from people (ShareHub, 2015b).

To reach also young people and kids, the SMG is organizing “**Sharing Economy Clubs**” in middle and high schools in order to create new generation already socialized to these values and practices, which one day will normally share in their everyday life. These clubs offer the opportunity to know the concept and the practices and intend to encourage students to share (Johnson, 2015). In addition, the SMG has launched a demo version of “**Sharing Schools**” with the aim of raising awareness on the concept of sharing and encourage its practice. Schools, Cultural Local Offices and Educational Establishment are all involved to support the implementation of such sharing programs. The attention to young people is nothing new in South Korea, especially in terms of education, because it represents a safe investment for the country; it guarantees growth and therefore the future. But in this case it is an investment in social terms too: the situation of deep economic crisis, the social pressure that oppress young people, the housing problems, etc. have generated an increase in stress-related diseases, to which the local government tries to answer, helped by the social enterprises on which it is investing, by making explicit the possibility to find creative and innovative alternatives to the existing and current situation, based on the concepts of sharing and collaboration

The Public Administration is encouraging youth to consider the potential of the sharing economy in creating new jobs opportunities, in reducing isolation and social exclusion, in building communities, and in living in a sustainable way. We must consider that in South Korea young people face strong social pressure in which status and image are the key elements of the success and the students suffer from the high academic expectations. As result, the young Koreans who fail their expectations and those of the society are often held up and suffer from stress-correlated pathologies such as depression; or start to abuse alcohol and think to suicide (In South Korea the suicide rate is among the highest in the world).The competition is always alive and palpable and even the outward appearance, the beauty, plays a key role in this competition. So below the surface of widespread prosperity, forms of exclusion, tendency to isolation and weakening of social ties emerge. For this reason, the SMG has favored the opening of special spaces²⁰⁸ and YouthHub²⁰⁹.

Youth Zone. The project is part of Seoul’s youth policies. The plan expects to create five Youth Zones, and currently two are already active, Youth Zone G-Valley, Youth Zone Daebangdong. These two spaces were created thanks to projects and ideas on youth spaces proposed by 20 youth groups invested by the community that led at the end to policy changes. Currently Youth Zone G-Valley is operated by Project Noah and Youth Zone Daebangdong is run by NSPACE. In general, the aim of a Youth Zone is connect young people each other and let them to imagine new opportunities for the future, it offers opportunities of learning, eating and resting also, in order to be an aggregation point and an enabler in the building of communities. Everyone is welcome and become the owner of the place in some sense. To make these places as much as possible friendly and tempting everyone calls each other by nickname. A membership card allows taking advantages from the many programs offered, but also without the membership facilities are accessible. The two spaces share the same online platform and they plan to create also a joint program (ShareHub, 2015e).

²⁰⁸ The official web site of the space is <http://youthzone.kr/welcome>.

²⁰⁹ The official web site of the space is <http://www.youthhub.kr/international>.

- **Youth Zone G-Valley** is located in the Seoul Digital Industrial Complex (across Guru-dong, Gasan-dong and Garibong-dong) and provides employments to more than hundred thousand young people. The area used to be an industrial complex and the evolution in digital area has left space for poor environment and bad working conditions, in which youth have to face many challenges. For this reason the choice of this place to locate the Youth zone acquire more importance. The space seeks to create a more livable and workable environment for young people and help them to restore their life starting from job. This place wants to build networks among young people and also with institutions and organizations, creating communities. Seen the high concentration of office in this area Youth Zone G-Valley offers also spaces to rest (unlike other youth spaces). It consists of five areas: Library, Multi Purpose Zone, Work Zone, Rest Zone and Sharing Kitchen (*ibidem*).
- The **Youth Zone Daebangdong** is closed to the so-called exam village, where students prepare the state exams. To have a state job is highly desired but is not easy to achieve it, with the consequence to create many expectations among young and favor the spread of stress related pathologies. Ms. Sung-Joo Yoon, manager of the space, stresses a lot this point, since Youth Zone “*wish to play a role as an alternative to the sad reality that sees only 10% of the students pass the exam*”. Very important for the manager is to show that there are other opportunities and options, a part from the exam and state job, and the place wants to offer a help in transforming the life of young people of the area. Youth Zone tries to connect this people and involve them in activities that can be opened to all the surroundings area, building communities, a topic on which the NSPACE team is particularly committed, as declared by the manager. Many projects are run here, from meet-ups to study groups, from creative projects to recreational projects, etc. It includes a Coworking Zone, a Multi Purpose Zone (rentable for various workshops, events, meet-ups), a Sharing Kitchen, in addition at the second floor there is the Rest Zone that host exhibitions of young artists’ works and Together Zone, a zone of offices used by five partner organizations engaged in several programs for local development (*ibidem*).

YouthHub is a project of the Seoul Metropolitan Government that aims to help young people “*design a future society*” by providing a place to share ideas and try to solve their problems, in which experiment with a sharing economy, and “*discuss specific policies regarding various agendas such as work-labor, housing, life safety net, business creation, youth politics,*” and more. The Hub is also intended as a model and a networking center for similar projects throughout Asia. It is managed by SMG and Yonsey University. As underlined by Ms. Kim Young Kyung, director of infrastructures at YouthHub, this space represents an ecosystem of innovation that involve directly young people, nurturing them and giving social skills and experiences. It is a hub of connection with the society that want to empower young and increase their self-confidence. The message, as reminded by Ms. Kim, is “*job is not just making money, but become member of the society*” and a place like YouthHub wants to teach this. “*The crisis is everywhere and through these structures the government wants to support youth in finding a job, create their own business, learn how to live in the society and believe in yourself*”. In particular YouthHub is directly connected with youth organizations, also private, all around Korea and operates as a bridge between the government and the private youth organizations, helping the former to understand how organize new policies to reply to social problems and how to connect with the youth organizations. In the same area of YouthHub there are other two structures: the Social Economy Assistance Center and the Community Village Center; YouthHub is the key actor that helps these structures in the relations with government. For example the Community Village Center, helped by

YouthHub, can link its residents with the government and gain funding to develop local projects directly by the residents. YouthHub works on different fields:

1. Youth policies : divided in ‘policy’ thanks to the Seoul Youth Policy Network, connected to the SMG, to collect ideas from young to develop into policies (such as the Two Times Bank Book in which the SMG provides financial support to recipients of basic social assistance); ‘research’ with Youth participatory research and Planning research programs; and ‘domestic and international network’ developed in conferences and forums to match young people to oversea programs and with experts (the 2013 and 2014 conference “Reshaping the way we life” is an example).
2. Support, divided in ‘Arrange Meeting, such as the Youth Cham; ‘Project Support’ with the Youth Activities Catalyst; and ‘Space Support’ with the “Sliding Door Office” and the “Jongro 4-ga Young Maker’s Shop in which SMG and YouthHub provide offices and spaces to young sellers at low price.
3. Education, with the “Youth School” and the YLA (Young Leaders Academy for undergraduate students” in which people learn from retired expert groups on social science, management, community services on every Saturday.
4. Job, with “Work-based Learning” (Seoul Youth Innovative Job Project) to have the opportunity to work on social issues having field experience and “Starting Business” to give example on how solve youth issues.
5. Space. YouthHub is equipped by a Seminar Room and a Conference Hall (rentable), in addition there are areas to work and study, a rest area, offices, a café, laboratories of recycled materials, a library and other facilities to host meet-ups and make real projects (Seoul Youth Hub, 2015).

At first glimpse it seems that SMG is building an interweaved structure able to cover different social fields and to reply to the needs of many targets of people, such as housewives, children, free-lancers, retirees, social entrepreneurs, deserving young, creatives, social innovators, etc., crossing also tourists and city users. Mayor Park has a distinct inclination to the human dimension, and points to a real paradigm shift that affects the daily lives of its citizens. A further evidence of this inclination is also the birth, in the Seoul City Hall, of the **Citizens Hall**, an open shared space set up to help citizens take initiatives. It is not a space created inside the project “Sharing City Seoul”, but it reflects the people orientation of the Public Administration. It is a place where discuss, make proposals and find gathering, sharing and exchanging opportunities; a venue for a multitude of citizen-oriented events and activities such as performances, exhibitions, forums, lectures, and markets, a space for policy forums and citizenship education courses too. It is also a place where learning and communication activities are conducted every day in order to empathize with the citizens and hear their opinions. A space of the people, for the people and by the people, coming back at the *progressive* idea of city (Cho and Douglass, 2014)²¹⁰.

Also the option to select “Sharing villages” and to promote within them good business models, falls into this logic of supporting citizenship putting people at the center. Talking about villages Seoul is already famous for the **Sungmisan Village**. It is an urban community first embryonically established in 1994 with an experimental school. In the years it has evolved a lot and today there are a cooperative, a system of co-parenting, regional recycling

²¹⁰ From its opening on January 12, 2013 to November 20, 2014 over 2.89 million people visited Citizens’ Hall, something like over 4,900 people per day on average, with the exception of closed days. A total of 65 couples held their characteristic and personal weddings at Citizens’ Hall, and over 1,200 events, such as exhibitions, performances, and workshops were held by citizens by renting the hall. At the Seoul Speakers Corner, 2,364 people voiced their opinions.

ventures, 7 shared houses and a theater. The village fosters the resilience of communities and citizens and in cooperation and collaboration grows the kids, enjoys the community and helps each other. Mr. Wi Sumg Nam underlines that “*to live in a city like Seoul is difficult and chaotic. A community is more friendly and through it is possible to take care of children without use private and expansive services, to help each other and to cultivate personal relations*”. Many other small communities are spreading in the city, around 25, even if they are very small, at the early stage, and not in network, so it is difficult to intercept all of them.

The city is reasoning also in terms of support policy for the **sharing of public structures**. By July the city offered 1007 spaces (27 in Seoul and 980 in its districts) including public offices and building (*dong*), libraries, welfare centers, also regional and provincial offices. The shared use of space is possible in days and time in which they are normally closed. To October 2015, 23 thousand groups of people have used shared spaces provided by the Municipality, generating 9 thousand opportunities for shared use. The spaces must be book at the online address: <http://yeyak.seoul.go.kr>. Since the demand of spaces by citizens is growing there is a plan to broader the service (self-managed hotels for example). In the region of Gwanjin-gu and Hwayang-dong there are experimentations of cafés realized inside public buildings and managed directly by citizens. The use of these spaces in time usually closed, during the night for example, implies to guarantee greater safety implementing more control devices (The Community Service Center is in charge of this, there is one for each province)²¹¹.

In a crowded city like Seoul the issue of **parking lots** is crucial. Inside the project, SMG is reasoning also to provide a more, shared access to parking spaces. Moduparking is one of the services offered in this sense. Modu, in Korean means “for all”, and it connects residential lots free during the working time in order to make it available for those looking for a park in the city. It offers 2,000 shared parking in 7 districts, available through an app that shows where are the available parking. Another service that SMG is trying to promote is the sharing of public parking, like those of the schools. In addition also private owner of home parking can make them available, establishing an agreement with the owner, the building (if condo), the district and the citizens living in the area²¹².

The issue of the house, as already seen, is a hot topic, for this reason the SMG is favoring the rent of spare room by private. The “tourism promotion law” limits this opportunity and in December 2014 only 585 rooms were available inside authorized structures. Some perspectives of improvement are emerging in order to promote this idea in the near future, organizing conference with private and public bodies and creating a community of connected users that can push in terms of marketing and helps each other²¹³.

The initiatives of the project “Sharing City Seoul” are part of a broader framework of policies that the city is carrying out to improve the quality of life of citizens and make the city more sustainable. The strategy “Smart Seoul”, as seen, is the first frame from which the sharing city originated. In addition, and in connection, the strategy “Sustainability in Social Economy”²¹⁴ is also in line with the spirit of “Sharing City Seoul”. With this strategy the local government has designed, and is now implementing, a policy of comprehensive support to build a sustainable ecosystem, instead of the current business development policy based only

²¹¹ The information are taken from the Mid-report of July 2015, not available in English.

²¹² Also this information is taken from the Mid-report of July 2015, not available in English.

²¹³ The information is taken from the Mid-report of July 2015, not available in English.

²¹⁴ The initiatives can be seen at the online address [http:// www.gsef2013.org /session/session_2_0_4 .asp?sMenu=sse2](http://www.gsef2013.org/session/session_2_0_4.asp?sMenu=sse2).

on quantitative growth. The sharing economy initiatives fall into this strategy as the policies for the expansion of public spending or for the creation of an intermediate and systematic support system for the local development of regional ecosystem, or again as the policies for the support of social innovation businesses able to intercept and solve specific social problems. The initiatives are many, making it difficult to describe all of them in this context, but another emblematic document demonstrating the willingness of local government to push on these issues in a proactive way, is the recent Seoul Declaration (ES)²¹⁵, signed in April 2015 at the ICLEI World Congress 2015 and linked to the ICLEI new Strategic Plan 2015-2021. The declaration is a collaborative document that outlines a path of urban sustainability, recognizes the serious problems that beset the current society, and sets out how the city can change in response.

The “Sharing City Seoul” project is a recognized case of success for the whole world, but also the rest of the Country is impressed by the effort of the city. Other cities are addressing to SMG and Social Innovation Division to start a similar project, and in some city the first steps have been already implemented, in particular Busan, Daejeon and Gwangju²¹⁶.

In order to improve the relations outside the country, Seoul is planning to build some international networks, such as the “National Sharing City Association”, “The Consultative Group of World Sharing Cities” and the “Global Organization of Sharing”. Systematize the cities and countries’ results, activate connection and exchange good practice are at the base of the construction of these new networks. A SMG delegation in October has also made a tour in the main European countries to meet the Administrations engaged in sharing projects and visit cases of excellence.

8.3.3 Global versus Local: the two souls of the Seoul Sharing Economy

In general we can detect two type of sharing economy in Seoul, one more oriented to the small local scale and largely supported by SMG through the program “Sharing City Seoul”, and another based on multinational corporations, as Uber and Airbnb (Hong, 2015) (even if for many experts they cannot be considered sharing economies, but rather rental economies – see chapter 1). The first type of sharing economy expression has been broadly presented; the second one refers especially to AirBnb and Uber.

AirBnb is taking advantages from the governmental policies and initiatives related to the sharing economy, flourishing in the city. The unexpected success of AirBnb in South Korea led Seoul in the list of the cities with more listings with San Francisco, London, Paris... there aren’t official statistics on the AirBnb business on South Korea but is evident that the company has made a big work in terms of local marketing and branding. The choice to partner with local famous bloggers and create a local AirBnb team made by Korean people and autonomous was winning (Bernardi, 2015b). Using AirBnb to travel and sleep in Seoul allow to save costs, giving the possibility to extend the trip, to experience neighborhoods out of the traditional hotels districts and overall to live an authentic travel experience. Understanding the winning power of the solution offered by AirnBnb, also akin local solutions are flourishing. Among the same startups and social businesses selected by the SMG there are entities offering short terms rental vacation solutions. Their flagship is the possibility to experience the life in a typical Korean House (Hanok), savoring the local culture and

²¹⁵ Read the declaration at the online address http://www.iclei.org/fileadmin/user_upload/ICLEI_WS/Documents/Governance/Council_meeting_April_2015/Seoul-Declaration_nomarks.pdf.

²¹⁶ Also this information is taken from the Mid-report of July 2015, not available in English.

traditions, as this the case with Kozaza (also member of certified Seoul Stay) and BnBHero (that offers also long term stays). Solutions very similar to AirBnb but with a local imprinting that reveal the general will of the city not to be bulldozed by the big sharing companies (Gorenflo, 2014, Hong, 2015, Bernardi, 2015b).

Another interesting case is that of UBER X, banned from the city in July 2014 and replaced by new local solutions. In South Korea in fact local law prohibit individuals or firms without proper commercial licenses from providing or facilitating transportation services . The most famous solution, and the first in order of appearance, is KakaoTaxi, launched in December 2014. The city choose to find a local solution by relying to Daum Kakao (born from the merger of the telecommunications' company Daum and the phone company Kakao) and creating KakaoTaxi, a taxi-hailing smartphone application becoming soon popular all over in Korea. KakaoTaxi's service model focuses on providing a convenient and secure connection between drivers and passengers, it offers a service similar to those of Uber but involves only taxi drivers with a proper license. Prior to the launch, Daum Kakao signed MoUs with the Korean National Joint Conference of Taxi Association, the Seoul Taxi Association, the Federation of Korean Taxi Workers' Union and the Korean Taxi Workers' Union, working closely with major current operators to deliver an exceptional taxi experience to all parties involved. Once logged in with their KakaoTalk account, the users just need to add their drop off location to complete the request since the current location is automatically set as the pick up location. The app is based on different factors such as the distance and current traffic conditions, and directly send the request to the best-positioned drivers for ride acceptance. The interface is clear and minimal and makes the navigation easy both for the passenger and for the driver. All drivers are currently licensed taxi operators approved via KakaoTaxi's application process, this guarantees the safety of the service and makes confident the passengers that after the request receive the driver's name, photo and vehicle information (once the taxi accepts the request). The privacy of the passengers is ensured by a security number (a generated number that mask the passenger's real number) and there is the possibility to use text messaging function for short info such as "Arrival in 5 minutes", "A lot of luggage". For further privacy protection, all text message exchanges are automatically deleted once the taxi reaches the drop off location. In addition, passengers can send notifications to KakaoTalk friends (related to pick up time/location, drop off location, vehicle information, estimated ride time...). At the end of the ride, both passengers and drivers can rate the experience and who has high ratings can obtain different benefits. As in any other sharing economy service operated by platforms, the rating system wants to discourage unwanted behaviors, ensure high-quality experience and create trust among the users of KakaoTaxi . The app is a potentially strong competitor to Uber, and it is considering expanding the service in New York. Also Japan has banned Uber's pilot ride sharing service in Fukuoka, since there are regulatory problems, and in general the service is creating many doubts all over in the worlds. This frame highlights the tendency of the SMG to prefer local solutions for the city, keeping control and wealth local (Gorenflo, 2014, Bernardi, 2015b).

In South Korea, given the opportunities for growth and the increased demand for services to connect passengers and drivers, other companies began launching similar mobile call taxi applications. All the apps are quite similar, offering the same solutions and guarantees. For example LIMO TAXI allows to share the position with friends, has the same system of booking and benefits of KakaoTaxi but in addition, one can choose car and drivers. BAEK GISA is a premium taxi service launched by Three Line Technologies Inc. that uses the current passenger's position to call a taxi via the app. A text messenger can be added at the request to customize the service: with children, quite ride, many luggage... Passengers can also send their info to friends and rate the drivers. The biggest Korean phone company, SK

Planet, has launched T-MAP TAXI and the service is very similar to KakaoTaxi, allowing licensed taxi drivers to register adding their name, their car and their license number.

The country is home to electronics industry leader and mobile device producer Samsung, so it is no surprise that South Korea currently has a mobile phone internet usage rate of 74% and choose to create a own app (or more apps) also for the taxi service. Moreover, the mobile audience is highly engaged with mobile content and willing to spend money on it . Mobile social networks and chat apps are very popular in the country and the local chat app KakaoTalk has more than 152 million monthly active users that make it the most popular mobile messaging apps worldwide²¹⁷.

8.3.4 *The shared mobility*

The transportation and shared mobility issues involve governments in many reasoning, overall in terms of pollution reduction, accidents decrease, and traffic decrease. Also for the Seoul government the transportation issue is not irrelevant as strictly related to the environmental topic and the sustainability theme, which occupy a big part of the city agenda. The slogan of the Seoul Traffic Vision 2030²¹⁸ declares: “*Seoul, a city whose advanced transportation network makes private car ownership unnecessary!*”. At the core of this vision there is the creation of a joint-ownership traffic environment and the byword “All Sharing Traffic”²¹⁹. The shared transport in Seoul is called **Nanum-car** service. It embodies this vision and it is precisely the reply of the City of Seoul to pollution and traffic, an attempt to reduce pollutants and nuisances and a concrete policy to decrease the traffic volume created by private vehicles. The first policies started in the 90s, with the transportation demand management system for companies in 1995, the application of the congestion fee on Namsan Tunnels 1 and 3 in 1996 and the parking threshold program in 1997. In 2003 the city applied also the 7-day road space rationing and started to inspect policy implementation and to adopt new measures. In the recent years, at global level, the reflection about solutions to reduce pollution and slow down traffic, is taking more and more in consideration the new formula of car sharing, especially in Europe and North America. Also Seoul and in general South Korea are developing a public awareness on car ownership and thanks to the advanced wireless communications (smartphone, gps, etc.) they can offer convenient ways to book and hire cars, enriching the car sharing program of new possibilities. The City of Seoul has made plans to offer a car sharing service as part of its transportation demand management policy, offering a service for those who cannot afford the expenses for a private car and reducing the vehicle ownership (Go, Lee, Yang, 2014). But it is with the “Sharing City Seoul” project in 2012 that the City made a crossroad in the concept of shared transportation. The car sharing service was particularly touted as one of the most important programs in making Seoul a “sharing city” (*ibidem*). For the program, contestant was publicly recruited, plans and services for citizens were reviewed, a partnership agreement with two private companies was signed and, in February 2013, and through a public contest, the name “Nanum-car” was officially chosen. The following table shows the Program Entities in the Nanum-Car Program in Seoul. Data are taken from the official website “Seoul Solution”²²⁰.

²¹⁷ For more info see the official website: <http://www.kakao.com/talk>.

²¹⁸ The Seoul Traffic Vision 2030 is available on the official website of Seoul Metropolitan Government at the address: <http://english.seoul.go.kr/policy-information/traffic/seoul-traffic-vision-2030/>.

²¹⁹ In Korean the Car-sharing service is called ‘승용차 공유이용 서비스’ or the Anglicism “카셰어링”.

²²⁰ Data are taken from the official website “Seoul Solution” available in English at the address: <https://seoulsolution.kr/?language=en>. Seoul Solution introduces urban development, provides global urban

Category [↗]	Program Entity [↗]		Brand Name [↗]
Gasoline-driven Cars [↗]		Green Point Co., Ltd. (Consortium) [↗]	Green Car [↗]
		Socar Co. Ltd. [↗]	Socar [↗]
Electric Cars [↗]		LG CNS Co., Ltd. (Consortium) [↗]	Citycar [↗]
		HanCar Co., Ltd. (Consortium) [↗]	HanCar [↗]
		KT Rental Co., Ltd. (Consortium) [↗]	- [↗]
		Korail Networks Co., Ltd. (Consortium) [↗]	YouCar [↗]

Figure 15 Source: Seoul Solution

The car sharing service started with 292 outlets and 492 cars in February 2013 and it reached 850 outlets and 1,816 cars in November 2014. The outlets are located near public parking lots run by the local administrative districts of Seoul or by public institutions. The car rental is possible at any time all over the city as showed by the Figure below. In addition, the other pictures show parking lots of gasoline and electric car sharing and signs of the service. From a normal car rental system, there are significant differences. For example, the car sharing program requires to who wants to use the service to become member; the membership allows to book the car directly online, via mobile phone or ARS. With the normal rental system the rent is made by the day, with Nanum-Car by the hour, with a significant reduction of fixed costs for people who wishing to use a car for a shorter period. The operational efficiency is higher, since the same car can be used by several people and many times during the day. The table below shows the most relevant differences between the two services.

information, promotes public-private cooperation, and is managed by Global Urban Partnership Division of SMG and the Seoul Institute together.

Table 3 Source: Car Sharing Vs. Car Rental: A Comparison. Source: Car Sharing page on the Seoul Metropolitan Government website (<http://traffic.seoul.go.kr/archives/9344>)

	Car Sharing (Nanum-Car)	Car Rental
Users	Members	Anyone
Rental Time Segments	30 minutes (available 24 hours/day)	1 day (available only within business hours)
Outlets	All across the city	Designated branches
Payment	After use	Before use
Contract Type	Upon first applying for membership	New contract each time
Pick-up & Drop off Process	Automated	Personnel required
Insurance	Included	Additional

In addition, the high penetration of mobile devices and the presence of advanced information technology are changing the face of the rental service, making it easier. Any mobile devices, the Internet and ARS allow to the members to preview the cars available and the associate an outlet, and a smart key simplify the process making it simple and convenient (Go, Lee, Yang, 2014).

“Sharing City Seoul” project and Car sharing. Inside the project of “Sharing City Seoul”, five companies that provide car sharing services have been selected, among the total of 63 sharing companies/organizations chosen. Here below the logos of these companies as presented by ShareHub in the official website:



Figure 16 Logos of the carsharing operators of Seoul. Source: ShareHub

In general the penetration of the sharing economy is still at its beginning, even if the project has been launched at the end of 2012. Among the social businesses and startups selected there are not many entities already able to scale up, excluded some extraordinary cases. Such as **SOCAR**, a car-sharing service with a business model similar to that of Zipcar in the United States (and in which the Municipality believes a lot). The service was launched in 2012 after dealing with government officials and regulations, and is growing more and more meeting the people demand of convenience and favoring the use of this type of alternative mobility. Started from Jeju Island, today it allows users to rent vehicles parked at lots in 52 cities around the country, including Seoul, Busan, Daejeon and Gwangju, there are 1,400 SOCAR zones for 2,400 cars and currently 600,000 members using the service (Kwon and Park, 2015). The low price of the service and the easy-to-use system attract customers favoring the development of the service²²¹. The service has a website and a smartphone app that let users book cars for their own use, after registration with a credit card provided by the company. After downloading SOCAR’s smartphone application, a user can reserve a car for a specific amount of time via their mobile device. The door of the car can be opened by the application and the user returns the car to a parking lot designated by the company. Socar is now the largest car sharing service in South Korea. Through their business, Socar seeks to improve the society through environmental responsibility, which earned them the official recognition as a B Corporation (Benefit Corporation) – the first company among its industry peers to get it (Tay, 2014). SOCAR in 2014 received 18 million dollars in funding from Bain

²²¹ More detailed info about Socar are available on the Korea JoongAng Daily at the address: <http://koreajoongangdaily.joins.com/news/article/Article.aspx?aid=3003827>. The official website <http://www.socar.kr/> is available only in Korean language.

Capital. Another company that is doing very well is **GreenCar**. In 2014 it reached 200,000 members, operated 720 car sharing zones in 33 cities with 1,200 cars, including 70 imported ones such as BMW Mini, BMW Countryman, Fiat 500 and Ford Mustang (Park J.H, 2014).

Electric car- In order to give an eco-friendly imprint, the city started also an *electric car*²²² sharing service. It officially started in May 2013, even if the idea to introduce it was even of May 2012; some delays in making agreements and the time to build the proper infrastructures slowed down the pace.

Table 4 Nanum-Car. History (Source: Car Sharing page on the Seoul Metropolitan Government website (<http://traffic.seoul.go.kr/archives/9344>))

Nanum-Car	
September 2012	Launch of the “Seoul: A Sharing City” campaign
October 2012	Bidding for operators of the car sharing program - requirements such as dedication to the public interest - (proposal about plans for operations, services and strategy to promote the public interest)
January 3, 2013	Partnership agreement signed with Green Point Consortium and Socar. Selection and agreement: Committee created to choose partners, verify ability to perform the program, and sign the agreement
January 21, 2013 – February 3, 2013	Open contest to all citizens to choose the name of the program
February 20, 2013	Membership recruitment for Nanum-Car and start of the service

Tabella 5 Electric Car Sharing. History Source: Car Sharing page on the Seoul Metropolitan Government website (<http://traffic.seoul.go.kr/archives/9344>)

Electric Car Sharing	
May 2012	Development of the pilot plan for electric car sharing
July 2012	Sign of the agreement with program entities
August 2012	Creation of a Council with four electric car sharing program entities (184 cars)
August 2012 – March 2013	Building the infrastructures and system integration suitable for the electric car sharing. Creation of 212 charging stations, including 28 “Express” station
April 2013	Citizens tests
May 2013	Start of the electric car sharing service
July 2013	Transfer of the program from the Seoul City Climate Headquarters to the Seoul City Transportation Headquarters

The decision to boost the electric car market in Korea is a sign of its assumption of responsibility to address climate change and reduce pollutants and greenhouse gas emissions. The specific electric cars used in the service are boosting the domestic market, since the main types of electric cars are the Kia Ray and the Renault Samsung. In addition, international cars are available, but in some sense, the spread of these car models in their electric version is introducing the idea of electric car as a car for everybody, a kind of mass car, that at the same time boosts the local market. The City of Seoul signed agreements with four private companies, starting partnership able to offer a convenient, efficient and green service. The Seoul government provides benefits as the access to public parking lots and the partner companies offer the electric car sharing service. Among the companies selected, there is also CityCar, operated by LG (it is one of LG CNS’s subsidiarity companies), that is having a great acceleration in entering the market and it is introducing a new paradigm of eco-friendly

²²² Jae-Ho Sung, a University Reporter for LG CNS, describes the electric cars as “*eco-friendly vehicles that use electricity as their source of power. Because they run on re-chargeable batteries, they don’t need any fossil fuels which produce one of the biggest kinds of air pollutants, CO2. They are also known to have quieter engines and less chance of explosion after an accident*”.

transportation culture to Korea. On the LG CNS Official Blog, Jae-Ho Sung, a University Reporter for LG CNS, reports the instruction to use a City Car²²³:

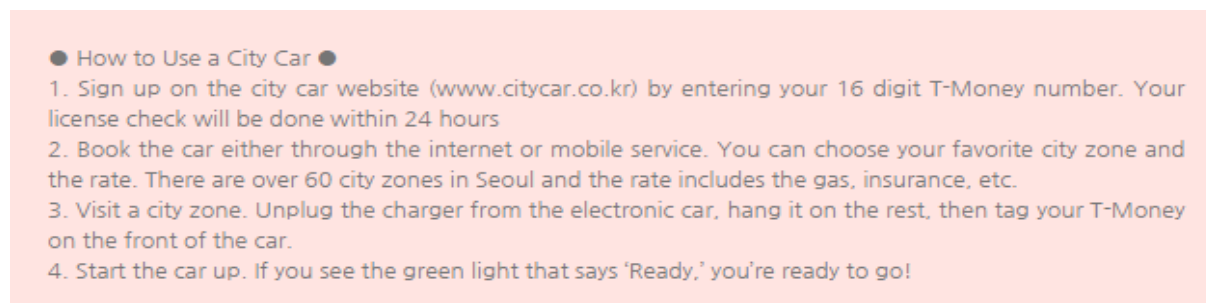


Figure 17 Instruction for the use of a City Car. Source: <http://www.lgcnsblog.com/features/city-car-an-icon-of-eco-friendly-and-convenient-transportation/>.

Boost the car sharing. Many assistance programs are available, users of carsharing can benefit of 50% discount for parking in public parking, and the providers of electric car sharing receive a subsidy on the purchase of electric car and free installation of normal-speed chargers. In addition, 32 “express charger” have been installed. The key strength is the integrated Information and Service Management System that integrates many individually-run services, before independent, allowing to have a unique “multi-card” instead of a card for each services and an integrated gasoline/electric car information service (TOPIS website). The service management system allows users to advance their complains and questions too.

Started slowly, the service has reached 350,000 members by November 2014 and also the number of users per day is increased, with an average use of 4 hours and 7 minutes (4 hours and 20 minutes (70 km) per use for gasoline-driven cars and 3 hours and 54 minutes (64 km) per use for electric cars) (Go, Lee, Yang, 2014). The continuous improvements made users more and more satisfied also about electric service. Go, Lee and Young talks about a survey conducted via the “Policy e-Poll” on the city website that ranked the service as the 5th most important program in Seoul in the first half of 2013, after the program to phase out a nuclear power generator in the first position, the late-night buses, the Clean Apartment Project and the program for Patient-Friendly Hospitals&Clinics²²⁴. However, one of the main complains remains the lack of one-way trip.

Negative elements. The service is not yet one-way or free-floating, but station-based, so the members must pick up the car from a particular place, usually a parking lot (which may or not be convenient) and return it in the same place at the end of the service. These elements abroad, in Usa and Europe, have limited the car sharing’s attractiveness and for this reason by the time European and American companies offer a one-way service giving the possibility to use the smartphone app to geolocalize the closest car and pick it up everywhere it is parked, returning it at the end where the user prefer. This evolution has made the car sharing more appreciated and attractive. Talking with the project manager of Transportation Division of the SMG, Mr. Shin Seong Hoon, he recognized this limit in the service offered in the city, but he also underlined that in Seoul the service has a specific target: young people and families. It is mainly used by young people that do not own a car for date night and by families that must carry on many baby accessories for weekend-short-trip out of Seoul.

²²³ T-Money is a transportation card as well as a device used to pay for taxi fares and, in some cases, transactions at convenience stores. The T-money function is often added onto various payment (credit/debit) and discount travel cards. T-money can be used on public buses and subways in several different metropolitan cities and locations including Seoul, Gyeonggi-do, Daejeon, Incheon, Daegu and Busan.

²²⁴ See the website <https://seoulsolution.kr/?language=en>.

The official analysis of the car sharing service are in line with this declaration and show that a majority of users (83.8%) are in their 20s and 30s. These groups usually use public transportation and in general they are less able to afford a car purchase.

Table 6 Percentage of Car Sharing Service Users by Age Group (2014). Source: Internal Data, Seoul Metropolitan Government.

Category	20s	30s	40s	50s	60s or older	Total
User Percentage	44.2%	42.2%	10.0%	3.5%	0.1%	100%

The analysis show also that the shared cars are highly likely to be used on weekends; the percentage of weekend users was 37.5%, confirming the propensity of young families to use the service for short trip out of the city. In addition, as foreigner, I could not try the service, since one can book the car only using the ID national code, and probably for this reason no one of the companies provides an English version of the website.

At this very moment is not relevant expand the service in its one-way version, since the demand for the service is still limited to some specific targets. Furthermore, the city has an excellent public transportation infrastructure, the traffic during the day discourages the use of a personal car and the taxi service is also very convenient, various and efficient.

The main complains about electric cars are related to time of use, location, and fees, such as problems with the charging facilities and the limitations on distances that could be travelled on a single charge.

Right now, the effectiveness of the car sharing service in terms of managing transportation demand is rather limited. In the long term however, the growing number of users, especially among young, may discourage people from owning a car in the future. In any case, only the time will show the effectiveness of this program and now it is not useful focusing only on the immediate negative aspects.

Specificity of Seoul Car Sharing. The main difference between the car sharing offered in Seoul and that of the other countries in the world is the provider of the service. Usually the provider is from the private sector, also in Seoul the service is provided by privates but the program itself is implemented by the City of Seoul. This is clearly another field in which the role of the government is relevant and crucial and the policy support (subsidized use of public parking lots, subsidies for the purchase of electric cars, etc.) makes a difference. Different working tables with experts, policymakers, industries leader, were realized to collect ideas and expertise and to better customize the policy direction and the minimum conditions required. In addition, also some ordinance was reviewed to allow providers to use public parking lots with discounts. Also the choose of the companies able to provide the service was made through public contests. The car sharing service in Seoul is definitely a partnership between the public sector and the private sector.

The service is not yet completely efficient and can grow more with the proper interventions. It needs to be more self-sufficient for example and requires a platform to expand. It need to reach the critical mass, or in other words more users, effective advertisement and promotion strategies. In addition, always in order to ensure service quality and expand more the service, it is important to avoid any kind of competition with other modes of transport and emphasize the public nature of the service. Moreover, the possibility to offer special discounts or low fees for specific targets of people (low-income families, disables or even who sell the car...) or areas (traditional markets, community-building project areas, regions not reach by public transport) can enhance the service and make it more attractive.

Bikesharing. To program a bike sharing service in a city with more than 10 million inhabitants is not easy, for this reason the project of bikesharing took some time, The city gave citizens the possibility to active participate at the process, thanks to a public contest through which the citizenship choose the name “따릉이” (Ddareungi) that in English is translated with ring ring. By now there are more than 700 km of cycle path, but only 125 are fast track, all the other are share by bikers with pedestrians, or worst by cars. To solve this inconvenient and improve the service an investment plan by 2020 was already presented. The system at the moment is not fully efficient, especially in regard of safety. The price, on the contrary is very convenient and the service can be access using the same card of the public transport. An experiment is underway, open to all the citizens, to test the bikes and the service and verify where are the strengthens and the weakness and at the moment the service is not largely use (a part side for the bikes that are close to the river of green areas.

9 THE CITY OF MILAN

9.1 Main Context

Milan is the chief town of the Province of Milan and of the Lombardy Region. With its 1.342.806²²⁵ inhabitants, is the second Italian Municipality for inhabitants after Rome and, with the conurbation, it is the third metropolitan area more populated in Europe after London and Paris. A vast urban zone comprising a number of Municipalities of different size, that can be considered a “mega-city-region” (Hall and Paine, 2006), with a new and complex spatial division of labor (Ranci, 2007). An urban sprawl, as defined by Martinotti²²⁶ looking at the “vast lands” of Sernini (1996), with a special social stratification that sees city users and commuters besides residents in the usage and consumption of the city.

Milan is recognized as the economic and financial capital of Italy. It represents the biggest Italian industrial city (the stock exchange is located here) and it is the heart of many financial businesses (more than 280,000 business of all sizes are based in the city area and the most important multinational corporations are located here). In addition, today the city hosts the major number of startups in all the whole country, 470 according to data from UnionCamere. It is the richest city in Italy among regional chief-towns, by personal gross income, and registers a total GDP per capita of €36,000, a figure that puts the city in first place nationwide and eleventh in the world²²⁷. The city is also an important international logistic center (home to 20% of Italy’s warehouses used by various operators) and everyday it sees a huge amount of commercial traffic, people and global expertise. Economy and finance are not the only shaping features of the city, since it is also a center of attraction for new cultural and social tendencies, for its historical, cultural, and artistic heritage, and a world recognized epicenter for fashion and design.

From a technological point of view is the more wired city in Europe with 7 thousand kilometers of pipelines and 375 thousand kilometers of fiber. It offers free OpenWi-Fi with more than 600 access points, 237 open data sets for citizens and businesses and 30 Digital Islands. These latter structures are hyper-technological outdoor spaces opened to citizens and tourists to favor communication, information, and mobility in a sustainable manner. Each island offers a package of interactive services that give the opportunity to have a 360° experience and explore the city easily. The advanced technological infrastructure (see the traffic management, the alternative mobility, the goods logistic and the citizens’ services such as IT help desks, social wealth programs, civic crowdfunding...) has been intensified in view of Expo 2015 to offer a “widespread Expo” integrated in the territory that hosts it. An example is the E015-Digital Ecosystem²²⁸, a digital environment of cooperation, open, competitive, and non-discriminatory, created to develop integrated software applications. The ecosystem provides to all enterprises, public institutions, associations and other public and private entities of the territory the opportunity to work in an integrated way, creating new relationships and forms of collaboration by taking advantage of the opportunities generated by

²²⁵ Data at June 30, 2015 (<https://it.wikipedia.org/wiki/Milano>).

²²⁶ Beside texts and books of the author, online interviews to Martinotti are also available. See the online address <http://www.treccani.it/enciclopedia/ricerca/martinotti/WebTv/>.

²²⁷ Data are taken from Real Estate Market, 1st semester 2013. *Lombardy – Italy*. The report is available at the online address: http://www.worldcapital.it/files/pageDocuments/Report_Focus/Milan_light-1.pdf.

²²⁸ E015 is a collaborative effort between the Company EXPO 2015 SpA and the business system represented by Confindustria, the Chamber of Commerce of Milan, Confcommercio, Assolombardia and Union of Commerce, with the scientific coordination of CEFRIEL-Politecnico di Milano.

Expo. To date it has 495 subscriptions²²⁹; among the others there are InfoBlue, the Milanese Airports, the Municipality of Milan, Expo in Città, and many others. Its innovative feature is to overcome the traditional logic of open data to assume that of the open service: a facility fully updated using a common informatics language to communicate data coming from different operators. E015 represents the output derived from a connection between public and private, that to face ‘peak load’ invent new services and grow together.

The city is characterized also by strong citizen dynamism, an active Third Sector with many networks committed to reply at the main urban problems, and many voluntary groups. The civic participation and the strong activism are striking features of the city. Citizens know their social reality and manifest a deep sense of belonging, at the base of the same identity of the city; they are keen to contribute at the social and environmental prosperity; they are proactive, with a solid civic consciousness and a concrete social participation. As emphasized by Galliano, project manager of the Milan Smart City project, *“the city of Milan is always very lively and responsive when stimulated and its actors are able to grasp the common goals in an amazing way”*. The city substrate is optimistic and open, and it seeks the dialogue with the Public Administration, recognizing in it a potential partner, a fellow, and not an enemy.

Anyway, it should be stressed that the city is also facing the main urban problems typical of big cities and fueled by the economic crisis. Milan, as many other Italian and European cities, is undergoing a gradual aging of the population for example and, in addition, birth rates tend to decrease and the housing market pushes more and more the new generations towards the metropolitan area. The families are experiencing a worsening of their living conditions, (signaled mainly by the high load index), and they are knowing a deep modification of their organizational structures (revealed by the increase of singles and by the growing rate of women in employment). The middle classes appear destabilized in professional terms, wages are often inadequate compared with the levels of consumption, and the rising immigration rates redraws the work and social map of the city. Social vulnerability, instability and social exclusion increase and the growing commuting (in a metropolitan area that centralized economic activities in the city center) determines congestion, traffic and worsening environmental conditions (Ranci, Costa, Sabatinelli, 2011).

9.2 Milano Smart City

For a few years already, the Public Administration has reasoned about its Smart nature and it has launched several initiatives to provide the necessary and functional tools to plan and implement the so-called **Smart City**. A meticulous and careful strategy has allowed implementing a number of infrastructure processes commonly defined Smart, thanks to which in 2013 the city reached the third place in the ranking of Forum PA Smart Italian cities and in 2014 it got the top spot followed by Bologna and Florence (Forum PA, 2014, 2015)

The path was launched in 2011 taking part at the European calls under the initiatives **“Smart Cities and Communities”**. The city won four calls, and supported the realization of three projects on sustainable mobility (City Mobil 2, TIDE, Fr-Evue) and of one project on the energy efficiency on public buildings (Eu-Gugle). Other two projects related to digital islands and mobility information was implemented thanks to “structural funds” (POR 2007-2013); and another one, founded by the European Community through the “Information and Communication Technologies Policy Support Program 2007-2013”, was about the Smart City in general (My Neighborhood-My City). In 2012, the city opened a web portal **“Open Data”**

²²⁹ The information are taken from the site www.milanosmartcity.org.

that make available a huge number of data even without proprietary software. In 2013, with the project **App4Mi**, the city launched a contest on the use of open data through the portal dati.comune.milano.it; the project was thought for citizens and micro enterprises and accompanied by a series of ten free workshops and conferences with experts of digital economy. The **Open WiFi** has even more highlighted the commitment of the city in the smart direction to create an environment more open to citizens and tourists. The Digital Islands, seen before, give people the possibility to move in the city with the support of advanced technologies (included smart lighting and electric vehicles, bike sharing and devices' recharges)²³⁰.

Actually, the forthcoming International Exposition (EXPO MILANO 2015) has had a function of accelerator, giving a new push and spurring the ongoing processes. It allowed to rebuild a framework for action more specific and targeted on the digitalization and implementation of smart technological solutions. Recognizing the opportunity offered by the Exposition, the first step was its inclusion in the city governance model, as a seventh parameter within the already famous dimensions elaborated by Giffinger (2007) and concerning the creation of a Smart City. The Expo Inc. was integrated in the frame of the other stakeholders already involved²³¹: corporations, social businesses, small medium enterprises, universities, research centers, associations, and so on... To explain the role



Figura 18 Source: milanosmartcity.org

of Expo in the Smart City frame and discuss about the Expo legacy after the six-month-manifestation, public events has been organized, such as “Milano+Expo=Smart City” in collaboration with Expo Inc. Within this context the public authorities is proving that can play a role of facilitation, connection and coordination, creating the right setting to favor the development of the local excellences.

Another significant step, at local level, was the establishment of an important collaboration with the Chamber of Commerce, and the approval of a **Council Deliberation**. The Deliberation is a protocol that enshrined a stable public-public partnership between the two institutions for the promotion of the project called **Milano Smart City**. With this protocol, the two entities ratified their support and commitment and both the parties undertook to build and share with all the stakeholders the strategy of Smart Milan and to encourage the



Figure 19 Source: milanosmartcity.org

²³⁰ More info can be found in the official document “Milano Smart City – Progetti e principali interventi” available at address: <http://www.milanosmartcity.org/joomla/images/sampledata/programma/SmartCity/milano%20smart%20city.pdf>.

²³¹ Online the full document: “Linee guida Milano Smart City” (Maggio 2014). <http://www.milanosmartcity.org/joomla/images/sampledata/programma/SmartCity/milano%20smart%20city%20-%20linee%20guida.pdf>.

creation of a governance model of the Smart City (also in view of the forthcoming establishment of the Metropolitan City). Between the various actors involved there are of course the Chamber of Commerce, representing the business world, but also the University, representing the world of research, as well as local Public Authorities, territorial and non-territorial, sharing similar objectives, local businesses and EXPO Inc. With the presence of so many and different actors it was immediately clear the strategic importance to establish a proper governance model (Pichierri, 2005), structuring a stable and homogeneous organizational frame, able to trigger and support synergies and interactions between actors, ensuring firm working relationships and exchange of information in the setting of the legal structures strengthened. A model that can streamline the communication, enabling a continuous and direct dialogue between the main actors, public, private and civil, to promote shared and participatory decision-making processes, and to facilitate the implementation of joint decisions.

April 19, 2013, the Chamber of Commerce and the Municipality organized a “**Public Hearing: toward Milan Smart City**”, at the Science and Technology Museum, the first citizen forum on the topic, involving the main actors of the city’s development. The main goal of the hearing was to involve stakeholders, both local and international, in building Milano Smart City strategy, in order to find innovative solutions and ideas supporting this process, to strengthen the dialogue between different realities, and to disseminate and promote Smart City contents to a large public. The City of Milan was already part of European projects linked to the “Smart Cities and Communities Initiative” and was (and still is) actively engaged in the major European and international networks working on Smart cities. At the local level, the Municipality was already engaged in building stable partnerships between different actors in the fields of research and innovation, business and finance, but also civil society and active citizenship. From this public opportunity, that gathered more than 400 people, a series of consultations and opinions for networking institutions, private sector, universities, and third sector arose. The hearing was divided in two parties: in the first part an international opening with all the main representatives at international level and a local session dedicated to the local promoters of the Milan Smart City strategy. In the second part, seven **tables of discussion**, corresponding to the traditional Smart City six pillars²³² plus Expo 2015. After the public hearing other public occasions of gathering, thematic working tables, have been organized with all the stakeholders in some way involved in this innovation process of the city and always related to the seven tables. As result was a participative process for the development of strategic policies of the city in the smart direction.

In parallel an **audit, comparison, and analysis of ‘smart topic’** already present on the Draft Plan of the City of Milan was carried out checking the activities and projects of the different City Divisions and the ‘smartest projects’ already in place. The logic was: coordinate the smart city projects, re-read the existing initiatives in smart version and involve all the Divisions of the Municipality in the reflection, in order to identify the existing smart projects and integrate the different planning (Welfare Plan, Water Plan, Garbage Plan, and so on). From this internal mapping 63 projects have been identified, a set of actions of the administration, whose strategies and connecting points has to be defined and exploited.

A further step was then the **mapping of the local stakeholders** working on this field in order to identify potential promoters interested in the implementation of the smart process (not only with ideas and researches but also with funds). In some sense, this strategy can be

²³² The six dimensions identified by Giffinger and the Vienna University are: Smart Economy, Smart Living, Smart Environment, Smart Mobility, Smart People, Smart Governanc. In Milan Expo 2015 was added at seventh dimension.

considered a way to enhance the best of the city, pulling out the existing potentialities, and testing the ability of the Municipality to play a role of connector and enabler, supporting at the same time inclusion and social cohesion. Bringing together the research world (university at the top), the economic world (in consideration of the multitude of small-medium enterprises active in the local context), the creativity world (thanks to fashion and design), and the social tissue of the city neighborhoods, the City of Milan aimed to activate the best energies and to create the right synergies for the building of a real smart city. The path that it decided to follow allowed to

- better understand the local substrate, and from this knowledge
- elaborate a specific vision.

The starting idea that moved the Public Administration is the recognition that alone, on its own, it cannot transform a city into a smart city. What it can do is to create a favorable environment to make it possible, an environment in which all the parties in presence can successfully work towards common and shared goals. The Public Hearing has confirmed this idea, allowing the identification of concrete broad lines then recognized and approved as **Guidelines for Milano Smart City**. The Guidelines derive from the administration's strong believe that only an ongoing dialogue and the exchange with the local communities of practices can be the base to build a city that is smart, green and inclusive; only the collaboration between public and private can support Milan in the national and European competition to become a benchmark for innovation and sustainability. As the Guidelines²³³ underline "*Public Administration on its own cannot transform a city into a smart city, but it does have the task of creating a favorable environment where the best and blue chip players within its area work successfully towards common and shared goals*".

Has seen before, the technological equipment is not lacking: dense fiber optic networks, WiFi hotspots, digital areas, portals and open data, among other things, are at the core of the Digital Milan. In addition, the Exposition has accelerated the process of enhancement of the city infrastructures. E015 is an example, but also the MOC (Media Operation Center), a center of coordination of interventions involving different levels of government, is a good example of inter-institutional cooperation that can also be used in other cases such as interventions for natural disasters. In addition, the experimentation of NFC payments, that involved not only the event but the whole city, is another case of legacy and added value. The presence of EXPO has also generated a new idea of Smart City, the *Digital Smart City*, based on the legacy of the innovative technology used for the Exposition itself. The site, in fact, represents a green field and a smart city *per se* with dedicated services, provided both via on-site multimedia Totems and via smartphones that have helped and guided visitors around Expo during the six month of opening, and also in the visit of the city. These equipments have transformed the site in a digital smart city and brought the experience out of the site in a logic of *widespread Expo*²³⁴.

However, for the Municipality, the technological aspect is not the only ingredient that can help in the creation of a smart city. As already underlined, technology represents an enabling tool, but never the final goal of the Smart City strategy. The real and fundamental ingredients are always people and communities, the reason why of the existence of the technological

²³³ See the english version of the Guideline at the online address: <http://www.milanosmartcity.org/joomla/images/sampled/programma/SmartCity/milano%20smart%20city%20-%20guidelines.pdf>.

²³⁴ More information about the *digital smart city* created with EXPO 2015 can be found on the official web site of the exposition, at the address: <http://www.expo2015.org/en/learn-more/why-milan/digital-smart-city>.

equipment; in addition, only a mixing environment, that puts together different worlds, can bring the right and more efficient solutions.

The Guidelines are composed by seven points here briefly presented:

1. Global city, national and European lab. The city actively takes part in major international, European and national smart cities networks which promote ongoing comparison of smart practices. It can be considered a hub of economic, social and cultural networks at global level. It also carries out smart projects in partnership with European cities, enterprises and universities to ensure an effective replication and sustainable policies.
2. Lab for sustainable urban mobility. The mobility issue is a very important field of work for the city which is committed to improve the use of public transport services and to provide a better short-term and long-term parking system. In the city's opinion livability should be promoted also through sustainable mobility that becomes smart only if leads to a better quality of life thanks to effective, accessible and intelligent tools. As written in the guidelines, the city aims to become the leading city in testing car sharing and peer-to-peer mobility, promoting competition and increasing access to enabling platforms, to soften the effect of private urban mobility. In addition, Milan has implemented pedestrianization traffic calming, and easy-access and real-time mobility information.
3. Lab for environmental and energy policies. In order to improve the quality of the environment, and therefore the quality of life of citizens, the city is trying to curb pollution, improve energy efficiency in buildings and public lighting, achieve a better waste management and implement a citywide smart grid for energy management. As it says in the guidelines Milan wants to promote energy efficiency projects and reduce the CO2 emission by integrating smart buildings, innovative public lighting and smart metering. Also the topic of urban waste is considered as a crucial issue and the city aims to have the highest rate of recycling among over-1-million-inhabitants cities.
4. Lab for social inclusion and diversity. Milan considers smart only a city that is able to use smart technologies and 'intelligent services' to favor social inclusion and create value. For this reason it works on smart policies focused on elderly and young people, children, individuals with disabilities, migrants and marginalized people. Ensure equal opportunities, overcome barriers and discriminations are at the base of the city agenda. The guidelines underline that "*Milan fosters in all its neighborhoods, up to the level of housing units, a network of relationships supported by technologies, to improve active participation and monitor the needs of even the most marginalized members of society*". The promotion of community and local welfare seems to be crucial for the city, and the use of new technologies can favor it and foster the social realignment between public and private resources, enhance existing informal networks and cooperation among stakeholders, and promote multiculturalism using new way, favoring at the same time new forms of homecare, and giving voice to the weakest targets of the population.
5. Lab of well-being in the city. The concept of smart citizens acquire great importance, since without a smart inclination the supplied infrastructures become meaningless. In order to have smart citizens, in the sense of active, aware and involved in the city's public life, it is important to foster processes of lifelong learning that allow to overcome the digital divide, to impart the culture of well-being, and the respect and improvement of public facilities and environment. Open to a participatory management of green areas and public spaces, involve stakeholders in the promotion

of well-being, spread the digital culture and new forms of interaction, are all ways to favor the smartness of citizens.

6. Lab for decluttering and simplifying Public Administration. Facilitate the dialogue between public bodies/services and citizens underlies of the necessity to streamline administrative measures and simplify bureaucracy. It means that the access to information and institutional data must be transparent, immediate, clear and of easy access. Milan is living a process of administrative opening up and wants that citizens are always fully informed and up-to-date. The use of technology and the implementation of *ad hoc* online services can broaden the access to the services and upgrade work effectiveness; for this reason the city states the importance of work in this direction.
7. Incubator for business models. One of the mission of the city in becoming a smart setting is to stimulate the productivity and the entrepreneurship, encouraging public-public partnership but also public-private relationships. In these forms of interconnections projects should be monitorable, interlinked and cooperative and based on the collective designed made by all the stakeholders involved. In the Guidelines the importance of Expo in this sense is stressed as well the necessity to involve not only the city itself but also the surroundings. In addition “*Milan underlines its role as the Italian capital of startups by reducing bureaucracy and simplifying authorization and sanctionatory procedures*”. In this last point there is also a reference to new businesses, especially those of the sharing economy.

Some figures and examples can give the idea of the commitment of the Municipality²³⁵:

- *Environment* – The energy efficiency plan expects 7000,000 m³ connected to the district heating network (29 public buildings) that allow 160,000€ annual savings of the fee by the Municipality. “Marchio Milano Blu” is a project to encourage drinking tap water. 4727 trees have been planted and 3000 new trees added in green areas. Electronic meters for gas are increasing in number. To these figures one must add many local initiatives that are taking place in Milan in the field of environment.
- *Mobility* – Creation of “AREA C”, a protected area inside the city in which cars can enter only paying a fee. It allows a reduction of traffic and pollution, favoring the use of the public transportation, the livability of the city, a reduction of car accidents and a new budget available for the alternative mobility. The measure was approved by citizens through a question inside a referendum. Data confirmed expectations, registering a development of the bike sharing service of 15%, a reduction of management cost of 35% and a strengthening of the public transport of 50%. Bike sharing and car sharing services are developing and expanding. Parking app and Infoalert on mobility are other smart solutions experimented by the city, together with specific project such as TIDE (Transport Innovation Deployment for Europe). In view of Expo the public transport was improved and a new subway line created (violet line). The strengthen of soft mobility is another concern of the Municipality.
- *Welfare* – Activation of many projects based on technology and addressed to women, elderly, children, migrants, jailed. The attention of the city to “weak” targets of people is reflected in new projects and policies that give voice to these groups using technology. Same example are: Immigration center; Agenzia Uni to welcome foreign

²³⁵ For a complete list of all the initiatives and project that go under the umbrella of Milano Smart City see the attachments of the official document “Milano Smart City – Progetti e principali interventi” available at address: <http://www.milanosmartcity.org/joomla/images/sampledata/programma/SmartCity/milano%20smart%20city.pdf>.

- university students; online network of welfare institutions (ASL, Region, Municipality, PAT...); Smart Ciber, to map the risk prevention...
- *Citizen services and culture* – Opening of specific help desks and boost of information, related to public transport, energy, geoschool – a portal to find kindergartens in the neighborhood – and services of public utilities like Icaro (automated management of births), and Caronte (automated management of deaths), geo-referenced system for green spaces and agricultural park... also from the cultural side many projects and initiatives have been launched (MiTo, Media Library OnLine (MLOL), Musei.net, QRCode – 193 informative totem in 9 languages, Tourism Portal with maps and online ticket to download...)
- *Business* – The city has launched many calls to encourage entrepreneurship. Just to name some projects: OccupaMi with the Chamber of Commerce, to stabilize precarious workers. Start II, with the Chamber of Commerce and the Lombardy Region, to distribute services to future entrepreneurs and contributions to new businesses. Digital Enterprise (Ict), with the Chamber of Commerce and the Region, to give contribution for the spread and creation of digital technologies. Microcredit for under 35 with coaching programs and support in the business's activity...

This brief review is just a way to give an idea of the city work in creating a real smart city, but is not exhaustive, and many projects, policies, and initiatives are not mentioned here²³⁶, especially because new projects are added over time. The following image offers a synthetic overview of the initiatives, as proposed by the Municipality in October 2015.

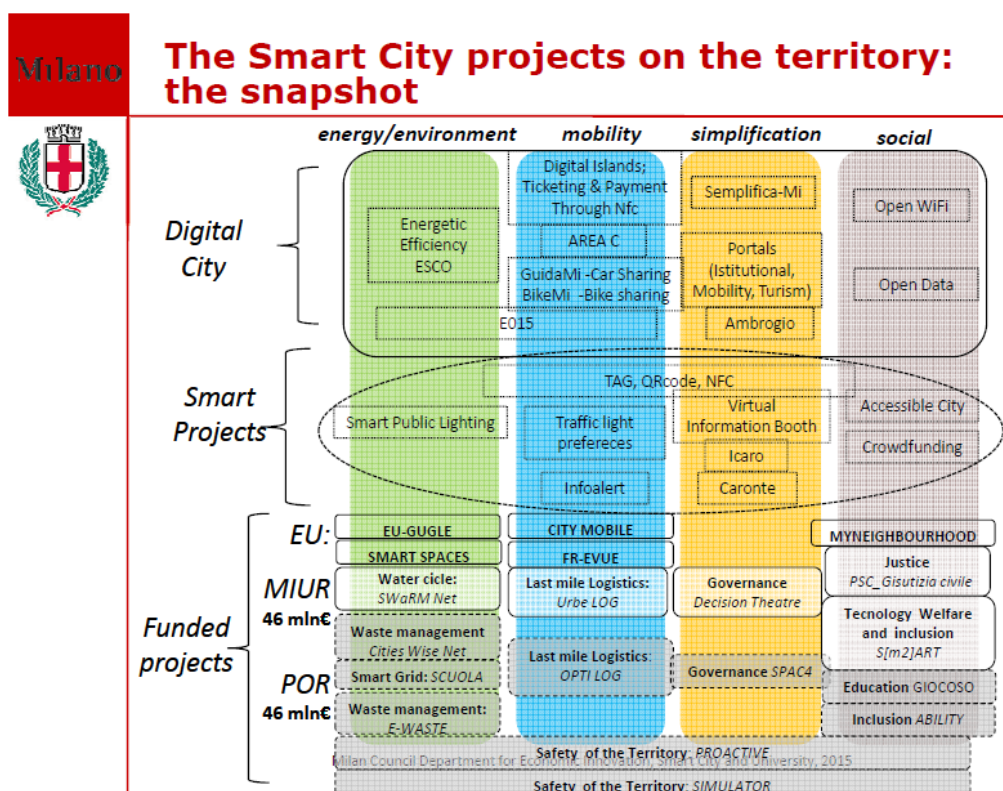


Figure 20 Source: milanosmartcity.org

²³⁶ To collect more info about all the project that the city is carrying out look at the official document available on the website of the Municipality at the address: <http://www.milanosmartcity.org/joomla/images/sampledata/programma/doc/RenatoGalliano.pdf>.

Another task of the city is the creation of a **Smart City Lab**. After a period of lengthy negotiations started in September 2012 and concluded in May 2014, the Municipality, the Ministry of Economic Development and Invitalia²³⁷, formalized a seat agreement for the creation of a physical place designed to be an incubator. The area is today quite marginalized but easy to reach by public transport and already featured by many urban relevant projects and many academic and research centers (Bocconi University, IULM University, Domus Accademy – design and fashion school, IFOM – research center for training and development on the topic of cancer, and IEO – Oncology European Institute). It will be realized in 2016, offering 4000 square meters to allow the incubation of innovative companies with high technological value. It will be equipped with a showroom to exhibit the technologies produced, a co-working space and a conference room.

The commitment of the city in transforming Milan in a Smart City can also be measured at national level. May 30, 2013 was signed a protocol between the cities of Milan, Turin and Genoa for which, while continuing to work individually on the specificities of individual municipalities involved, the new Smart City Milan, Turin and Genoa, undertake to “put in a common system” their excellence by sharing successful solutions in order to improve the quality of life of citizens, overcome the crisis and ensure maximum sustainable economy. In parallel, the city is also part of the National Observatory of the Smart Cities created by the National Association of Italian Municipalities (ANCI) and through this container the three cities can collaborate and participate at European and national calls, even supporting each other in the proposed projects on topics such as sustainable mobility and goods logistics (a similar protocol has been signed also with the city of L’Aquila). At international level the city is already included in the main networks that work and reason on the topic of the smart city.

From the description given of the *smart* inclination of the city and of the commitment that it is taking up, elements related to the concepts of sharing and collaboration already emerge. The city with the Guidelines was already opening the way for collaborative practices in its territory, without even knowing the disruptive future development of the society in the direction of the sharing economy. This evidence confirms the initial idea according to which the current sharing cities move quite always from smart setting; and it is from this framework that cities are able to activate *sharing city*’s reasoning. That’s way the presence of smart infrastructures and smart citizens can be considered a prerequisite for the activation of sharing economies’ initiatives and for a rapid spread of its underlying values. The evolution of *smart* in *human* (and even in *progressive*), naturally leads to *sharing* in the intersection of urban space and cyberspace (Agyeman and McLaren, 2014). The Guidelines for Smart City Milan, in retrospect, can thus be considered pioneering attempts to build a better, greener, more sustainable, inclusive, and livable cities.

²³⁷ Invitalia is the National Agency for inward investment and economic development, owned by the Italian Ministry of Economy. Its goal is to boost the country’s economic growth, focusing on strategic sectors for development and employment; it is committed to reviving crisis areas and operates mainly in the South of Italy. It manages all national incentives that encourage the creation of new companies and innovative startups. It finances projects both large and small, targeting entrepreneurs with concrete development plans, especially in innovative and high added value sectors. It provides services to Public Administration to speed up the spending of EU and national funds, as well as to promote cultural heritage. It is the Purchasing Body and Contracting Authority for the execution of strategic actions at local level.

9.3 “Milano Sharing City” project

9.3.1 *Birth and features of the “Milano Sharing City” project*

“Milano Sharing City” can be considered the “natural daughter” of Milano Smart City in the society 2.0. A city that is trying to reply at the urban challenges, common in all the Italian and European cities, promoting inclusion and cohesion through the innovations carried out by the new ICTs and the related services’ forms that they are developing in the frame of the sharing economy. Cities and metropolitan areas are natural incubators of those ideas, able to turn critical issues into opportunities and problems in new solutions (Rinne, 2015). The City of Milan is betting on this, taking on the responsibility to experiment new directions. Gaining strength from the environment shaped by the previous project Milano Smart City, and by the conditions created through this effort, the city is now concretely reasoning and acting in terms of creation of an ecosystem in which sharing is promoted and its tools evaluated as able to support the city vision.

The reflection about sharing economy has emerged with energy from non-state actors, outside the administration, and it has found a fertile ground in the PA itself from the beginning. The Municipality has welcomed the external incitements on the topic, evaluating it in line with its previous efforts to make Milan a better city, and recognizing the sharing economy as an additional and complementary strategy potentially winning. The city has included the issue on its agenda, thus becoming the first Italian city to adopt a policy of “sharing”.

The first step came from outside the administration, with the birth of *Sharexpo*²³⁸: *Milan shared city for Expo 2015*, launched by Collaboriamo²³⁹, Eni Enrico Mattei Foundation²⁴⁰, Modacult²⁴¹, Expolab²⁴² and Secolo Urbano²⁴³. The starting idea was to make a collective reasoning around the topic of the sharing economy in view of the International Exposition (EXPO MILANO 2015), in order to identify proposals and initiatives useful to tackle the presence of the 20 million visitors expected. Given the exponential estimated demand growth

²³⁸ The main goal of Sharexpo was to bring to the attention of Institutions, economic players and grassroots the emerging topic of sharing economy, as well as to stimulate a cultural reflection on this theme.

²³⁹ Collaboriamo.org is an online platform of experts of the sharing economy, that offers studies, information, training and consulting to start ups and public administrations that want to know the opportunities offered by the collaborative economy, to design a new service or to develop partnerships with existing platforms. The official website is www.collaboriamo.org.

²⁴⁰ Fondazione Eni Enrico Mattei (FEEM) is a nonprofit, nonpartisan research institution devoted to the study of sustainable development and global governance. Its mission is to improve through research the quality of decision-making in public and private spheres. This goal is achieved by creating an international and multidisciplinary network of researchers working on several innovative programmes, by providing and promoting training in specialized areas of research, by disseminating research results through a wide range of outreach activities, and by delivering directly to policy makers via participation in various institutional fora.

²⁴¹ ModaCult is a Centre for the study of Fashion and Cultural Production, a research institute founded in 1996 within the Faculty of Political Science at the Catholic University of Milan. It has an international reputation in the field of socio-cultural studies in fashion, together with a strong consolidated experience in research on consumer and gender studies, cultural industries, culture-led urban regeneration and creative districts.

²⁴² The Laboratory "UCSC ExpoLAB" was founded in 2011 and it will exist until the end of the World Exposition taking place in Milan in 2015, whose title is “Feeding the Planet, Energy for Life”. The aim of UCSC ExpoLAB is promoting, coordinating and implementing all the scientific activities, the concrete initiatives for the spreading of good practices and the specific initiatives that Università Cattolica will develop on the EXPO 2015 themes.

²⁴³ Secolo Urbano is a consulting group on cities and communication strategy. It is the first Italian group of Italian urban consultants who combines technical and creative skills. Goal: to bring the urban agenda in Italy.

during the six months of the exposition (and an offer almost static), Sharexpo considered the City and the Province of Milan an ideal testing ground to experiment services and tools of the sharing economy. In context of emergency, such as the Hurricane Katrina²⁴⁴, the sharing services has been successfully tested in order to manage in a quick and efficient way the flux of people injured or in need, showing the potential of this form in offering resilient solutions. Sharexpo starts from the same consideration on the utility of the sharing economy services in the management of significant fluxes of people, as expected during the months of EXPO. Sharexpo is an initiative conceived and shaped from the reflections emerged during the first edition of the manifestation “**Sharitaly**”²⁴⁵, held in Milan in November 2013. A format born with the aim to report the Italian sharing economy status, now in its third edition. It represents a concrete space of reflection for collaborative services, businesses, startups, and administrations longing to exchange idea, monitor the Italian situation and brainstorm on new perspectives. The presence itself of such a format²⁴⁶ in the city highlights the vivid environment that is featuring Milan in terms of innovation, and the desire to find alternative solutions for an improved quality of life. Sharexpo came from this same desire with the aim to provide an incentive to the normative design and the innovation frame in favor of collaborative services, to overcome bureaucratic constraints that prevent the effective implementation of these services in the city. In addition, it represents a way to connect entities working in similar fields, but unaware to be part of the same whole, a tool to create new synergies and a common umbrella of reference. In Sharexpo’s idea many subject would benefit from the presence of sharing economy services and tools during the exposition. Ordinary citizens could feel to be an active part in the exposition; visitors could have a different type of visit experience through new services; enterprises would launch and strengthen new business models; no-profit would develop new model of collaboration through new networks and solutions, valuable also in the post-Expo; Public Administrations would experiment new forms of engagement and participation of citizens in a logic of creation of shared value and commons. After the launch was organized a consultative event²⁴⁷ with *ad hoc* working tables involving startups, large corporations, associations, social enterprises, government agencies, research centers etc. The main topics on which the tables reasoned were both cross-cutting and specific; among the cross-cutting themes there were 1. Open data and technology, 2. Services, 3. Participation, 4. Communication; among the specific themes there were: 1. Mobility, 2. Hospitality, 3. Culture and free time, 4. Job. Thanks to a careful job of coordination, in April 2014 a **Steering Committee for Sharexpo** composed by fourteen experts was created. Their contributions and impulses moved the reflections around the smart city and the experimentation of the sharing economy during the exposition, allowing writing a final draft, a steering document. The **Sharexpo official document** was presented in July 2014 with its set of specific goals²⁴⁸:

²⁴⁴ Hurricane Katrina was one of the strongest storms to impact the coast of the United States during the last 100 years. When the Hurricane hit in 2005, New Orleans East flooded and many people lost everything: homes, businesses and even family members. The community reacted and thanks to the collective help of everybody replaid in a resilient way offering immediate share support and then creating a cooperative.

²⁴⁵ The first edition was held in Milan (November 29, 2013); the second one in Rome (December 1, 2014) and the third inside the “Collaborative week” held in Milan from 7 to 14 November, 2015. To follow its reports and info see the official website: <http://www.sharitaly.com/>.

²⁴⁶ The format was conceived by Collaboriamo.org with Marta Mainieri and the Cattolica University with Ivana Pais.

²⁴⁷ To see the report of the consultative event: file:///C:/Users/utente/Downloads/Report-Sharexpo_15-aprile.pdf

²⁴⁸ “SharExpo: Milano città condivisa per Expo 2015. Documento di indirizzo, 30 giugno 2014”. The document is available at the address: <http://www.sharexpo.it/il-documento/>.

- to analyze the role of a mega event such as Expo 2015 as a potential driving force for Shareable Cities;
- to identify critical issues and potentialities in the following five sectors: mobility, hospitality, food, leisure and work;
- to identify the role of the sharing economy and decline it in the five sectors;
- to evaluate areas for improvement in regulatory, cultural and organizational terms;
- to develop a strategy for action; to realize a feasibility report at employment, economic, territorial, cultural and social level.

The impulse for a deep reflection is thus arrived thanks to the international exposition, immediately finding a very fertile ground. The Public Administration has supported from the beginning these first solicitations, recognizing the will of commitment coming from the bottom, and demonstrating an already rooted sensitivity toward innovations. Considering the citizen incitements in line with its political address, having always promoted social innovation and Smart City, and recognizing the sharing economy as a catalyst in this frame, it has started an internal reflection on the topic and opened an **online public consultation**²⁴⁹ equipped with a questionnaire. The goal of the consultation and of the questionnaire was to collect, directly from the citizenship, information, requests, ideas, and demands, related to the possibility of pushing on collaborative and sharing services, and to open an online collaborative drafting for an official document on the topic. The consultation found a great consensus and collected information and opinions from startupper, university researchers, local associations, users of shared services and passionate citizens. At the same time, it pushed businesses and enterprises to enter in contact with the Public Administration offering technical advises. Beside the consultation, open to anyone who wanted to help, the Municipality organized several public events on the topic and a first offline consultation with experts and operators working in the five sectors identified by Sharexpo: mobility, hospitality, food, leisure and work. The consultation process has driven businesses, associations, movements of consumers, citizens, etc... to connect directly with the Public Administration, generating a huge patrimony of input and information, unprecedented for the city and for Italy as a whole, a real *collaborative policy making process*. The online consultation and the questionnaire made clear the important role the PA can play in this frame, as “enabling platform”, connector of experiences, facilitator for the development and the integration of the sharing economy’s practices in the urban context²⁵⁰. How?

- Mapping and systematizing the more relevant local experiences and encouraging their communication;
- Promoting public debates and training/informing events for citizens on the issues of the sharing/collaboration and on the culture of cooperation, in order to achieve a critical mass of users;
- Promoting the analysis and monitoring of the effects and impacts of new forms of innovation and experimentation of sharing, investigating at the same time the conditions in which collaboration can be implemented to favor a better understanding of the phenomenon and create suitable forms of regulation;
- Encouraging a system of recognition and validation of the quality amongst the sharing economy platforms with few clear rules;

²⁴⁹The text of the online public consultation can be seen at the address: https://docs.google.com/forms/d/1ta6q86Qk4mi7_LGOBHtb1GYxffvBbgewmVHPzKGI76U/closedform.

²⁵⁰ The information are taken from the official website of Milano Smart City: <http://www.milanosmartcity.org/joomla/images/il%20network%20della%20sharing%20economy.pdf>.

- Promoting research on the economic, environmental and social impacts of the sharing economy;
- Strengthening the forms of active participation of the citizens and the links between companies and the collaborative experiences of active citizenship, enhancing at the same time processes of co-design and co-operation;
- Promoting the creation of new businesses in the field of sharing / collaboration and with social vocation;
- Becoming itself an early adopter of collaborative services and favoring the dynamics of cooperation including the integration of conditional clauses in some public calls;
- Clarifying the legislative frameworks and the referring rules of major collaborative services (especially with regard to safety and forms of taxation), in order to promote a better understanding for those involved in the production and use of collaborative services;
- Offering virtual and physical spaces of encounter and comparison; open data and open services;
- Promoting calls for the provision of funds for startups dealing with the sharing economy;
- Fostering synergies with similar initiatives promoted in other territories, in order to support the creation of active alliances between local Public Administrations, civil society and the business world;
- Activate a platform for civic crowdfunding.

Those are the main points that the PA undertook to fulfill; they are inserted in the **Guidelines on “Sharing Economy”**²⁵¹ approved by the Council in December 2014. These *guidelines* make clear the administrative purpose and what can be the role of the PA. As one can read in the resolution guidelines “*In an interinstitutional and multi-governance context, the Public Administration can create the conditions so that those who are now potential opportunities for the city become effective opportunities for growth, innovation and inclusion, enhancing existing practices and inspiring new ones that are responsive to the needs of the city*”. A statement that displays the proactive approach of the Public Administration about the new economy of collaboration, and the role that it could play in the urban context.

In order to cope with the implementation of such a program, the City has involved in the reflection many **different internal divisions**: Mobility, Labor, Culture, Sport and City Planning, not only to notice the *sharing* programs already active, but overall in a logic of high engagement, internal comparison and integration of approaches, visions and activities. The interconnection among different divisions is related to a still rooted pro-people orientation and has been already tested with the implementation of the Milano Smart City project. In addition, the Municipality, recognizing the need of professional skills not already fully present inside the administration, has established a group of **external consultants**, experts on innovation, smart city and sharing economy. This group guarantees the transparency of all the processes and the high competence of the administration in the management of the project, and in the relations with external actors. At the same time, in order to have a look at the international sharing economy situation, also international and **global advisors** have been consulted, such as April Rinne²⁵². Recognize the need to train the staff and to collaborate with experts on the topic can be considered one of the basic preconditions to start a useful discourse on the

²⁵¹ The guidelines of Milan Sharing City are available at the online address: [http://www.milanosmartcity.org/joomla/images/milano %20sharing%20city_finale.pdf](http://www.milanosmartcity.org/joomla/images/milano%20sharing%20city_finale.pdf).

²⁵² April Rinne is Chief Strategy Officer at Collaborative Lab, and she is one of the biggest expert on sharing economy at international level.

concept of sharing city and avoid transforming it in an additional meaningless label of the urban development.

The City shows to be aware of the importance to support, promote and communicate the sharing economy's initiatives, but instead of create a specific platform for this purpose, thanks to a public-public partnership with the Chamber of Commerce²⁵³, started a project called "**Expo in Città**" (Expo in the City). The pervasiveness of the International Exposition in the local context and the importance to link it with the development of the city, taking advantage from its potentialities, emerges also in this context of communication of the sharing economy. Even if the project is not strictly an initiative of sharing, in concrete it allows a real sharing of spaces and the widespread communication of the events that occurs during the Exposition. It represents a real example of crowdsourcing in the city. The idea of "Expo in Città" is inspired by the already popular manifestation "Fuori Salone", an initiative that takes place during the Design Week and in which all the events, parties, expositions, gatherings related to the official manifestation converge. "Expo in Città" replicates this format, offering information on all the ongoing events scheduled during Expo, not only in the city but also in the all metropolitan area. The platform allows the match between who has spaces and locations (public and private) and who is looking for them to organize its own event. In this way, many actors, from municipalities to private association, organizations, and services, have had the opportunity to update their own spaces on the platforms (over 1000) during the six Expo months, and making them available to the organizers of events. Who is looking for a place can collect information on all the spaces available through the platforms and, without to pay any fee, can choose the place that fit better with its initiative and directly contact the owner to manage the rent. The platform offers other three services:

- Support at the authorization procedure (a novelty and a legacy after Expo) through a one-stop-shop for the request of all the required authorizations whit a single module.
- Sponsorship help-desk, a matching activity without fee, not public in order to preserve privacy (a kind of repository from which extract the best event for the features of the sponsor).
- A channel of communication, the 'core business' of the project. Anyone who wants to inform about its own event can use a single form to upload it on the platform, receiving also a series of communication services: the event is inserted in all the printed materials of the project distributed all over around Italy and Milan, and in the online version, in the social network campaign, in the "Expo in Città" app and in the blog that provides a six-languages communication.

Three private subjects (Vodafone Italia, Intesa San Paolo, Edison) won a call for sponsorship and they enter in the project offering a service of communication support. The support was requested since the project proposes an atypical sponsorship form (100% is dedicated to communication activities with the result of a more impacting communication for the subjects that upload their events). Alvise De Sanctis, PR & Communication Manager for "Expo in Città", underlines that the project is an "*incredible innovation [...] doesn't exist in the world a calendar that combines all events of any kind of a metropolitan area*". In six month 54.683 events have been uploaded, for 100 daily initiatives, making "Expo in Città" a huge project of local marketing that involves all the territory, all its subjects, public, private, no profit, associations. In De Sanctis' opinion, it is one of the largest projects of territorial marketing in the world. A project that has a sharing inclination since it was shaped to be co-

²⁵³ Chamber of Commerce and Municipality worked together for many years in the promotion of the territory, the first is oriented to enterprises, the second to citizens.

created and shared at the same time, in which the platform just covered the role of connector and the operators did all the work, in a context of complete absence of top-down discretion. It can be considered a fully crowdsourcing project, in which also the public authorities updated by themselves their events. In addition, the output operations were realized thanks to the E015 platform that allow imagining all type of possibility of applications and supplies a complete service of information at 360°. The project can be considered a concrete legacy of the Exposition for the territory and expresses for the first time the ability of different subjects (from small to big) to converge, an ability never reached before. Seen the success of the format, Chamber of Commerce of Milan and the Municipality of Milan are evaluating the opportunity to continue their activities beyond the end of the Exposition.

9.3.2 *Actions and initiatives*

Among the various actions that the City intends to implement, some steps have already been taken, including the **mapping of the actors** and the systematization of the most important experiences of the territory along with the support to the communication of such initiatives. The mapping has allowed to create an official Register of qualified operators of the sharing economy, through public call. The idea to create a register came after the offline consultation with experts and operators that “*revealed the necessity to give visibility and acknowledgement to the new reality of the sharing economy in the city*”, as underlined by Caterina Sarfatti, Project Manager for the International Affairs Department of the Municipality of Milan. The analysis of these actors revealed a social and economic fabric particularly dynamic, distinct and heterogeneous, different from what the mainstream literature on the subject suggests, since more focused on territorial localization and on social issues, and less on technological innovations. By November 2015 the Register counts 102 participants, 60 are experts of the topic and 42 are operators, but the registration is still possible since the call will be always open. For some local experts, as Davide Agazzi, Managing Director in RENA²⁵⁴ and counselor of the Municipality of Milan, this network could become in few years a “*prototype of a new ‘associative representation business’ or more easily a coalition of actors able to imagine public services of new generation*”.

The PA is working also on the field of the **research**, promoting the development of research activities on the economic, environmental and social impacts of the sharing and collaborative economy, in order to monitor the status of the phenomenon and follow its development.

Among the steps already made there is the launch of an experimental **civic crowdfunding** platform²⁵⁵. It seeks to create and let emerge projects of social innovation and shared social networks related to social groupings, a more accessible and attentive city to the needs of persons with disabilities, to the elderly and the families. The total allocation is of over 400 thousand euros. The call is open to social enterprises, innovative startups, social cooperatives, associations and onlus, while are excluded those projects not in line with the prerequisites established by the Municipality, or not of social utility and those proposing services already

²⁵⁴ RENA is an independent civic association, born in 2007 and made by citizens and organizations that believe in and want a country open at the experimentation of innovative policies, in which the solutions to problems are managed in a collaborative and transparent way, and public and private feel both responsible of their actions toward community. Its final aim is to become the ‘movement that connect and activate the communities of change in Italy’.

²⁵⁵ The announcement of the civic crowdfunding experimentation is reported on the official web site of Milano Smart City. <http://www.milanosmartcity.org/joomla/7-notizie/45-crowdfundig-civico-al-via-la-sperimentazione-con-un-stanziamiento-di-oltre-400-mila-euro>.

supplied by the PA. The idea to create a civic crowdfunding platform dates from 2012, as part of the Milano Smart City program, thanks to the collaboration of two different divisions of the Municipality: Social Affairs and Culture of Health (inside the Welfare Development Plan) and Labor Policies, Economic Development, University and Research (inside Milano Smart City Guidelines). It demonstrates how the initiatives of smartness are often overlapping to those of sharing. As remembered by Lucia Scopelliti, Smart City Coordinator Officer of the Municipality of Milan, the aim of the platform is *“to favor the development of a real ecosystem of innovation in the city and thus allow the birth of innovative practices and projects the city has acted on two complementary levers: from one side auctioning virtuous mechanisms within the local administrative machine, and from another side favoring synergies and the creation of a critical mass between the civil society, the voluntary sector, the businesses world, the research entities and the financial institutions”*²⁵⁶. By date, the Municipality has selected, through a public call, the operator for the creation of the platform (Eppela, one of the main “reward based” Italian platform) but its role doesn’t end with this first action. In fact, with this project, the Municipality undertakes to co-founding, together with citizens, the most interesting initiatives. The best projects selected will be published on the platform to allow the collection of the micro-funding. The projects that will reach the 50% of the budget through the platform will receive the remaining amount directly from the Municipality. In this way a wider audience will know the crowdfunding tool, and at the same time, an open and participative modality of allocation of public resources will be experimented. The City Council declares to guarantee and oversee the results achieved and, in a logic of ‘accountability’, to encourage the communication on the impact of the various initiatives financed. The Council Member Tajani²⁵⁷, that is fostering the efforts of the Municipality in the direction of the sharing economy and the social innovation, underlines that *“thanks to these crowdfunding actions, new innovative projects with an high social content will have a real opportunity to fund them and will favor the development of a more innovative city that looks at the future in a supportive way”*. The civic crowdfunding platform represents a way to let people choose from the bottom the projects that the Public Administration can support, in a system not based on administrative discretion, but on the involvement of people and on the identification of alternative access to credit. Since this is an experimental project (lasting 20 months), if the results will be winning the model could be replicated in other contexts²⁵⁸.

The initiative of the Civic Crowdfunding is part of a more articulated reasoning that the city is carrying out looking at the social innovation as a way, a tool, to favor the social inclusion. The project **“Milano(è)In”** of the Labor Policies Division, thanks to the support of the innovation and sharing economy protagonists of Milan, is activating skills, competences and resources in order to exploit the city potential in favor of a better social inclusion. The frame of Milano(è)In’s policy is based on two pillars: INnovation and INclusion. The former is considered a strategic lever to foster development and competitiveness of the local/regional economic system; in terms of policy making and financial resources, Milan bets on innovative startups, incubators, FabLab and sharing economy. The latter is pursued through social, employment and digital inclusion; thanks to the collaborative economy Milan aims to create a more cohesive social fabric. The connection with the topic of sharing and collaboration is

²⁵⁶ The interview to Lucia Scopelliti is available in Italian version at the address: https://www.key4biz.it/crowd4fund-cosi-milano-investe-sulla-crowd-economy-intervista-a-lucia-scopelliti-comune-di-milano/139604/#.VkB-_n9bRR8.twitter.

²⁵⁷ Council Member of the Labor Policies Division of the Municipality of Milan.

²⁵⁸ Another interesting Italian example of civic crowdfunding comes from the city of Bologna with the Portico of San Luca and the collection of money for its restoration directly from citizens.

evident and highlighted by the same administration as a way to build a city more clearly based on participation and inclusion of all its actors and citizens. To confirm the attention for innovation and inclusion of the city, the last survey of UnionCamere on Italian startups revealed that among the 3200 new startups born in Italy until December 2014, 470 are located in Milan. This data settles the city as national hub, followed by Rome-270, and Turin-174. The Mayor of the city declared that “*create a city able to reply at the needs of who wants doing business, innovation and launch new projects, is our goal of the last years*”.

In line with this declaration, the city has created five **incubators** with public participation.

1. *Air*, a business accelerator that aims to support the entrepreneurial activities (profit and no-profit) inside Milanese jails, with a total of 14 enterprises. The public actor is the management promoter of these enterprises born in prisons, with the task to connect them with the local tissue.
2. *PoliHub*, created in partnership with the Polytechnic of Milan, offers a program of entrepreneurial empowerment, a network, and spaces and innovative services for startups. The mission is to support highly innovative startups with business model able to scale up and push the process of cross-contamination among the diverse startups.
3. *SpeedMiUp*, an initiative to support employment and entrepreneurship sponsored by the Milan Chamber of Commerce and the City of Milan in consortium with the Bocconi University in charge of executing it. The incubator offers services of training and tutoring, accelerator programs and coworking spaces.
4. *Alimenta*, the certified incubator inside the Lodi Technological Park, organizer with the City Council of Milan of the call Alimenta2Talent. This international call wants to favor the development of business with high added value and is oriented to new startups that work in the field of food and life science. The project is in its third edition – the call will end in December 2015 – and the five winners will benefit of six months of incubation, thanks to which they will develop a solid business plan and acquire the ability for the realization of a commercial plan to present to investors.
5. *FabriQ*, certainly the most famous, today in its second year. A deep focus is given for this incubator since it is the first one specifically targeted for the social innovation promotion by the Municipality of Milan. The activities are managed by two partners, Giacomo Brodolini Foundation²⁵⁹ and Impact Hub²⁶⁰. Its main aim is the transformation of ideas into concrete projects, and it is intended to host young entrepreneurial startups whose activities have a social impact. The first call, in 2014, involved 7 companies and 25 employees. The second call, ended in March 2015, was on the themes of Smart City, Services for an “accessible city” and Sharing economy. It receives 85 applications, 12 of them reached the final stage, and in May 2015 were announced the five winners who gained a startup contribution of up to a maximum of 20,000 Euro grant. FabriQ operates along three axes: 1. Incubation and acceleration; 2.

²⁵⁹ Giacomo Brodolini Foundation is an independent centre for cultural development as well as a think tank that proposes and evaluates policies at all levels of governance: local, regional, national, European and international. FGB was created in 1971 in order to carry on the cultural and social initiative of former Minister of Labour Giacomo Brodolini with a particular focus on labour related issues. Some of the main topics FGB tackles are: immigration, gender issues, population ageing, job insecurity and development, social inclusion. To date, FGB has established its offices in Rome, Milan, Brussels and Bucharest.

²⁶⁰ Impact Hub is an innovation lab, a business incubator and a community centre. It is part of a global network of people, places and programs that inspire, connect and catalyse impact. The network of collaborators is focused on making a positive impact in our world offering its members a unique ecosystem of resources, inspiration, and collaboration opportunities to grow impact. From Amsterdam to Johannesburg, Singapore to San Francisco, Impact Hub is a rapidly expanding, diverse global network of over 7000+ members in 60+ locations. Impact Hub Milano is the first Impact Hub in Italy and the first social innovation incubator in Milan.

Entrepreneurship training; 3. Active local involvement. With this project a public space was given back to citizens and covered by a function of youth entrepreneurship development and production of social impact. In addition, the location of the incubator is a marginalized neighborhood (Quartoggiaro) underling the idea to push in the direction of inclusion and create new innovative environments. The incubator offers support in terms of training, tutorship, report, peer sessions, networking, promotion and inspiring events. It offers also a coworking space and rentable meeting rooms. In two years it allowed to fund twelve startups that in a short time have been able to involve more than 70 people. In Scopelliti's opinion *"the quality of the projects financed is clearly demonstrated by the ability of the same startups incubated to find also private resources"*²⁶¹ [...] *at the moment we are working on a new governance model of the incubator that will allow, in five years, to ensure the full viability of the project. We are also thinking of innovative financial models based on the logic of "social return on investment"*.

Beside these initiatives strictly related to the desire of the city to sustain social innovation in order to allow a better inclusion, there are also other actions that link the social innovation to the **space re-use** and that will be undertaken during 2016.

1. The most famous is the space ex-Ansaldo²⁶², just renamed **BASE MILANO** and labeled as a place for cultural progress. This place of 6.000m² has been assigned (through a public call) to Anci Milano, Avanzi, Esterni, h+, Make Cube3 in order to develop a cultural and productive project in the city (specifically in an area that normally sees a flux of people only during the Design Week). In the vision of the Municipality this space, now under restoration, will be able to generate business and culture, training and experimentation, respecting the ex-industrial nature of the area (Tortona) and also its current innovative vocation at the same time. It represents a laboratory that will cover all the cycle of development of cultural and creative goods and services, from incubation, to production and use/consumption. Currently it is promoted as a place in which innovation, inclusion and sociality will find expression, in which creative talents, innovators and ordinary citizens can connect, dialogue, confront, transforming it in a concrete result of the policies that the city is implementing under the umbrella of smart and sharing. It will host a coworking space and creative and cultural labs, and in this early stage the first 2000 m² will be assigned to the winners of a public call open to enterprises, informal groups and national and international professionals. In November 2015 Base Milano hosted the "Collaborative Week", an initiative that give the idea of the importance that the Municipality and the whole city are giving to the new paradigm of the sharing/collaborative economy.
2. **D'Azeglio Street**. The City Council of Milan opened a call to assign a 1000m²-public space in D'Azeglio Street in order to create a modern FabLab for the local makers. The space is located in an area in rapid evolution in the sign of creativity and design. It will collect labs, coworking and incubation spaces with the aim to become a meeting point for young producers or business projects, enlivening the neighborhood social life and involving the interested communities, in less words: favoring social relations and aggregation. The concession will last 12 years and the call is open to single or associated subjects, consortiums and temporary groups of enterprises.

²⁶¹ The incubated startups received awards for about 500,000€ and two of them have collected 2 million € of venture capital from private funds.

²⁶² Ex Stecca delle Acciaierie, an old industrial iron place.

3. **Smart City Lab**, a project born under the Milano Smart City Project, as seen in the previous chapter, that finds recognition also in terms of sharing economy. It is realized with the support of the Ministry of Economic Development and Invitalia (National Agency for the attraction of investments and for the enterprises development), and will allow, with its 4000 square meters, to incubate innovative companies with high technological value. It will be equipped with a showroom to exhibit the technologies produced, a coworking and a conference room. The main goals are: to establish a center for development of entrepreneurship and innovation in relation to the project “Milan Smart City”; to create a symbolic place, a reference center for research and “showcase” for the spread of new trends in urban development and the most advanced technological solutions; and to improve the social functioning of the city and the lives of its inhabitants / users.

The issue of re-use of public spaces is stated in the Guidelines and the City is committed to providing enabling infrastructure such as physical and virtual spaces for discussion and engagement: besides the spaces just presented the City has assigned more than 22,000 square meters of unused spaces to associations, startups and citizens. In terms of space, eight new shared gardens (34 thousand square meters) have been set up, and 24 houses for the solidarity hospitality have been realized. In addition, the project “Tira su la cler” aims to promote the business development, encouraging the neighborhood trade, and to breathe new life into 13 spaces unused in the suburbs of the city.

A new initiatives is the forthcoming opening in Calusca alley of the “Casa della Collaborazione - Collaboration House”, just renamed **CO-HUB**, a place to meet, debate and discuss for operators of the sharing economy and not only. The project has been designed thanks to the collaboration between the City Council of Milan (Labor Policies Division) and the ATS composed by the associations Collaboriamo and WelcomePack, Dorisette srl, Paolo Mauri Pisan and Fidia srl. The space has been presented inside the “Collaborative Week”, during the closing day (*Milano Sharing City*). The Municipality coming across the quick evolution that the phenomenon is taking in the city, recognized the lack of a physical place for the operators and the experts of the sharing economy selected with the Register. It decided to make available a place to pool energies, to adopt a systemic approach and to accelerate initiatives, a place to enabler the subjects of the net. This place replies to four needs:

1. Enhance and support ongoing paths
2. Systematize and pool experiences and best practices that people are experimenting quite alone
3. Activate processes of analysis to improve the best practices and the often-called “good sharing economies” (see the first chapter), and to find normative solutions to avoid risks and problems
4. Spread the benefits of the collaborative processes informing and empowering people that are not familiar with technologies

Starting from these necessities the coordinator (Marta Mainieri of Collaboriamo.org) identified four goals:

1. Accelerate the development of an advisor offer
2. Contaminate in order to put together best practices and fails
3. Research to measure the impacts
4. Spread the voice and reach people suffering of digital divide

Related to these goals, four main activities can be detected:

1. Training activities: training course on new jobs, dedicated to social innovators, social entrepreneurship, businesses, schools, Public Administrations and citizens. A physical desk will be open two hours a day to give info and legal, fiscal, informatics consultation
2. Contamination activities: to favor meetings among different interlocutors, from which trigger a system of acceleration
3. Research and planning activities: co-design workshops with Polytechnic of Milan and research of calls to find new founds
4. Dissemination activities: meetings, gatherings and encounters to favor the national and international debate and adopt a systemic approach at local, national and international level.

CO-HUB intends to be an enabling platform to connect experiences, practices, experts, operators coming from different worlds: business, university, institutions, civil society. The project will last two years.

Milan, among other things, includes the highest number of coworking in Italy, and 53 of them have been certified and included in the Official Register of the Municipality. In addition there are 9 FabLab and spaces for the makers. Under the logic of optimizing resources, it has provided vouchers for the use of the accredited spaces.

In terms of **open government**, the city launched a project of *participatory budgeting*, “I count, I participate, I decide”, which is involving the 9 municipal districts of the city (“zones”). The process foresees the organization of meetings in each municipal district in order to favor citizen’s active participation and facilitate wide discussions among citizens (coordinated by experts in participatory processes). During the meetings, citizens are called to: express the needs of their neighborhood; create feasible proposals; and in the last phase of the process, select the projects/interventions to be financed through a voting process open to everyone. The projects that will receive the majority of votes will be part of the budget of the Municipality of Milan so as to be implemented during the new budgeting period²⁶³.

In terms of *collaborative finance*, Milan has a structure of solidarity social credit and microcredit for enterprises called Welfare Ambrosiano Foundation, a no-profit entity that supports citizens at risk of social exclusion. The Municipality created a fund to guarantee the loan that some banks selected by public call can dispense. In addition the city has sign an agreement with the European Commission (inside Horizon2020) to launch the project “Open Care”, which intends to be an experimentation of new welfare model in which the citizen is co-designer of the care devices needed.

A recent event fueled by the city initiative and involvement has been “**The Collaborative Week**”²⁶⁴. A full week devoted at the new sharing economy practices.

- Opened by the 2015 edition of *Sharitaly*, for the first time in a two-day version (Bernardi, 2015c).
- Closed by an initiatives of the PA, *Milano Sharing City*, two day as well, and in important occasion to reason on the future of the cities, on the state of art of Milan, presenting the steps already made and the further initiatives.

²⁶³ To get more information on the participative budgeting is possible to consult the official report “*I count, I participate, I decide. Participatory budgeting of the Municipality of Milan*” on the website www.bilanciopartecipativo.milano.it. An english version is also available.

²⁶⁴ Promoted by Proteina with the patronage of the Municipality, together with Collaboriamo, Global Enterprise, lab121 and Housing Lab.

- In the middle *Experiment Days*: an event/fair to explore the housing forms in the city, based on the ideas of co-design, co-creation, co-housing and collaboration;
- *The European Coworking Conference*: sixth edition of Coworking Europe, a gathering on the practices of shared work in Europe;
- *Espresso Coworking*: the main national meeting of the coworking Italian community.

The co-week was hosted in the space Ex Ansaldo, as seen one of the public spaces that thanks to a project of urban regeneration will become a central point of the city innovation, promoting the social entrepreneurship and the creativity of the city. A symbolic space for this event.

9.3.3 *Not Stakeholder, but Solutionholder*

The Public Administration in its document “Milano Sharing City” doesn’t speak of *stakeholders* but use the term *solutionholders* to underline that in the current context the actors involved are not in conflict or in antithesis with the public system, but can enter in a virtuous process of reciprocity able to generate forms of co- planning, co-development, co-management of practices, spaces, goods and services. These subjects can imagine and propose new solutions at the old concerns of the city, if have the possibility to interact and work together, and if new partnership and strategic forms of collaboration among Public Administration, business, associations and single citizens are activated. The city declared its trust in this mechanism, recognizing the central social and economic role that each individual can play. A role that is not just related with the job function of each person but with the people ability, skills and inclination that are fueled and multiplied in the inter-connection with other subjects. This inter-connection can favor the formulation and identification of new solutions and new typologies of services. The same Public Administration recognizes that such results can be achieved only with a significant paradigm switch not just economic but cultural and institutional overall.

In this frame, its role can be crucial as seen in the chapter 5 and 6, since it can facilitate, connect, and coordinate the impulses fostered by the dissemination of the sharing economy. It can actualize and make real collaborative ideas, develop hidden opportunities and favor the spreading of new practices, define innovative strategies for the local development relying on community’s energies, on people’s creativity, on expert’s analysis, on business’s ideas and models, on civil society’s empowerment, in few words on the engagement of the so-called five souls of the collaborative governance.

9.3.4 *The shared mobility*

To conclude, also from the side of mobility the city offers opportunities of sharing. Since the shared mobility is an important chapter in the agenda of each Municipality, a short focus on this topic is mandatory also for the city of Milan.

First of all, among the shared mobility services of the city, there is the **car sharing**, an initiative that comes from the previous project of Smart City and in the Sharing City project is finding a greater space of expression and expansion. The service has many benefits, in terms of saving costs for people that renting a car bypass the maintenance costs, and in terms of reduced environmental impact, thanks to the reduction of traffic and the improved quality of the air. Therefore, it can be considered a modern, smart and eco-friendly approach to the four-wheels. In a city like Milan. where we register 57% of transport service use and 30% of

private car use²⁶⁵, to offer an integrated and well-functioning car sharing could be a solution to improve the quality of life of citizens.

In the city there are many different companies offering the service. The most famous are GuidaMi and Car2Go followed by Enjoy, E-vai, Twist and Share’Ngo. These operators register 340 thousand of members, an average of 8,100 daily rents and around 2,000 cars available²⁶⁶. The first one to be activated in the city was GuidaMi. It is the public operator, born in 2004 thanks to the support of the Municipality of Milan and of the Ministry of the Environment. In 2007, the Local Public Transport company (ATM) owned by the same Municipality took control of GuidaMi and in 2010 was merged with the other carsharing services operators in Milan (i.e. Carsharing Italia²⁶⁷ created by Legambiente). GuidaMi offers an interoperable service within the ICS²⁶⁸ network (i.e. GuidaMi users can access carsharing services in other ICS cities without subscribing a new membership). It is a two ways service (car should be returned to the initial location) where users reserve the car by the Internet, app or call center, choose the time and the pick-up location, and unlock the car with their smart card. In addition, the member can use the same card of the public transport to access the service, in an integrated operability way. GuidaMi has been recently bought out by Aci Global.

To give more opportunities to the citizens, and seen the benefit of the carsharing service, the Municipality in 2013, for the first time in Italy, has opened a public call in order to find new operators of carsharing. The minimum requirements were: offer a service in One-Way Free Floating modality inside the city; be operative 24/7; own a fleet of minimum 80 vehicles and pay an annual fee of 1,100€ to enter in the C Area and use parking stalls. Car2Go was the first to be selected and became operative in 2013; it represents the first private operator to compete in the Italian market. In 2014, it registered 70 thousands of users, 25 thousands weekly rents, and 700 Smart ForTwo (the car model available). To use the service an electronic card is required (not free). After Car2Go another operator entered in the market: Enjoy, a private company of Eni. It doesn’t require a card to rent the car and in 5 minutes you are registered and the service starts. Both the private companies offer a one-way service, so through the app the users can find the nearest car, and after the service, leave it where they prefer inside the city. The third private operator to tap into the Milanese market is Twist, in May 2014, thanks to the public call of the Municipality. It registered 26 thousand members and 500 cars available. Unfortunately, in November 17, 2015 the operator announced the stop of the service for economic reason.

In the meantime, in December 2010, a pilot project of electric carsharing has been launched in Milan: Evai, run by FNM Group (Trenord, the main transport and mobility group in Lombardy, owned by the Regional Government), which is not part of the ICS circuit. The service offers also traditional car, it is extended in other 39 cities of the region and owns a total of 100 cars.

The “last guy” of the city carsharing is another electric carsharing operator: Share’Ngo, managed by CS Group. The service started in June 2015 with 144 electric cars and offers personalized fares. Thanks to the ‘Equomobili’, yellow tracks that provide the charge for the

²⁶⁵ Data are taken from the last presentation of the City Counselor for Mobility, Maran, during the manifestation “Sharitaly” of November 2015 and are available on the website of Collaboriamo.org at the address: <http://www.collaboriamo.org/media/2015/11/3.-Maran.pdf>.

²⁶⁶ The data are available on the official website of the City of Milan.

²⁶⁷ The first experimentation of carsharing in the city Mila, Carsharing Italia, was launched in 2001 by the environmental association “Legambiente” and in 2006 it joined the ICS network.

²⁶⁸ ICS means Carsharing Initiative and the network is active at national level.

vehicles, for the first time the city can experience a one-way service also in its electric version. Students, women, and over 50, which can access to the service with a reduced fee, compose the expected target for this operator. Its main slogan is “electric, shared and democratic”.

In general, we can detect an expansion of the car sharing service along the time and Milan register the 40% of the national offer.¹² members in 100 decide to leave their second car; the users are mainly among 20 and 30 years (64% has less than 40 years), but a good quote of under 21 is registered, and in addition, the number of newly citizens that decide to use the car sharing instead of take their car from the city of origin is increasing; the 33% are women while 66% are men. The carsharing system of the city has recently won the award Eurocities Innovation 2015.

A *critic point* recently emerged is related to the possibility to leave the car also in the suburban areas of the city. A primary carsharing operator has just announced its intention to limit in some way the area of movement of the fleet. With a system of discounts and extra-charges the idea is to encourage people to leave the car in the center of the city, where the require is higher, and discourage who wants to park in the suburbs, where the request is lower and cars risk to remain unused for several days²⁶⁹.

The sharing mobility is only an example of technology applied to mobility services in the city: there are also apps for parking (Pyng, MyCicero, EasyPark), a general website about city mobility (muoversi.milano.it), the C Area (areac.atm-mi.it) and the online TPL ticket (app Atm Milano). The Municipality is open to reimagine the system together with its citizens. A possible evolution is related to the launch of peer-to-peer services that will make necessary to rethink the assurance paradigm; the current normative in fact doesn't allow the private rent to a third person. In this case, the role of the Public Administration will assume a new aspect, in order to overcome its role of supplier to become also a regulator of the public market systems. In addition, during the “Collaborative Week” of November 2015, the City Councilor for the Mobility declared that new additional solutions to link other services to the car sharing (i.e. restaurant reservations) will be supposed.

Another shared mobility service offered by the city is that of **bikesharing** (BikeMi), the first to be started, in 2008. Today registers 40 thousands member per year, 10 thousands daily rents and a total of 4,500 bikes, 1,000 of them with pedal assistance, confirming the service system as the first in the world to offer this double possibility. The slogan is: “easy, convenient and green”. It can be used like a public transport for a maximum of two hours (the first 30 minutes are free).

The shared mobility service is a border sector still in experimentation, but citizens show a high level of appreciation giving an average vote of 7,4 for the bike sharing and of 7,8 for the car sharing²⁷⁰. After car and bike sharing, the city has recently launched a service of **scooter sharing**, always operated by Eni-Enjoy, another choice in the direction of a sustainable living (less pollutant emission and less own and use of private vehicles). The penetration of the mobility sharing services has grown thanks to the spread of ICTs and mobile devices, allowing a process of reformulation of mobility services, demonstrating how part of the city mobility is strictly related to the possibility to access to Internet.

²⁶⁹ This last information is taken from the “Mobility Manager” website <http://www.mobilitymanagement.it/2015/09/09/criticita-carsharing-freeflow/>.

²⁷⁰ Data taken from the last presentation of the City Councilor and published on the website collaboriamo.org.

10 COMPARING THE TWO CASES

10.1 Different scenarios, same goals

Both cities have embraced the sharing economy and are trying to incorporate it into their urban ecosystem as a means of resolutely replying to some of the biggest urban challenges and with active tools. However, as shown, although they have a common goal, the approaches demonstrate how to implement strategies both potentially successful while pursuing different paths.

Two scenarios have been outlined:

1. In the first scenario, in the sharing economy, the Public Administration sees a complementary and additional way to answer the main urban problems and decides to promote it, organizing an agenda of interventions that favors citizens, social businesses and local companies. First it develops the necessary infrastructures to favor the spreading of the sharing economy in the city: creating a specific internal division to manage the relations with external actors and follow the project, enacting an ordinance, and promulgating an official act of promotion. It equips the project with specific Committees, official structures of support, and an NGO for communication. In the meantime, it organizes Public Hearings and Forums to collect the initial replies of the citizens. It launches a series of meet-ups, events, gatherings, training schools, and even games to inform people about this new opportunity of development, to give future entrepreneurs support in imagining and designing new social business models and to let citizens experience what the sharing economy is. That is, to socialize people on the benefits of the sharing economy. Meanwhile, it analyzes the urban context, evaluates the social, economic and environmental needs and intercepts the local excellences in different fields (mobility, job, food, housing, sociality and knowledge) mapping the sources of innovation and the sharing potentialities. It supports the birth of new startups and the development of the existing realities already committed to answer the main social problems, as well as the birth of citizen committees and new aggregation entities. The Municipality becomes an enabling platform that solicits the spread of a sharing culture and bolsters the sharing economy services, promoting its use and knowledge. This graph illustrates the reasoning.

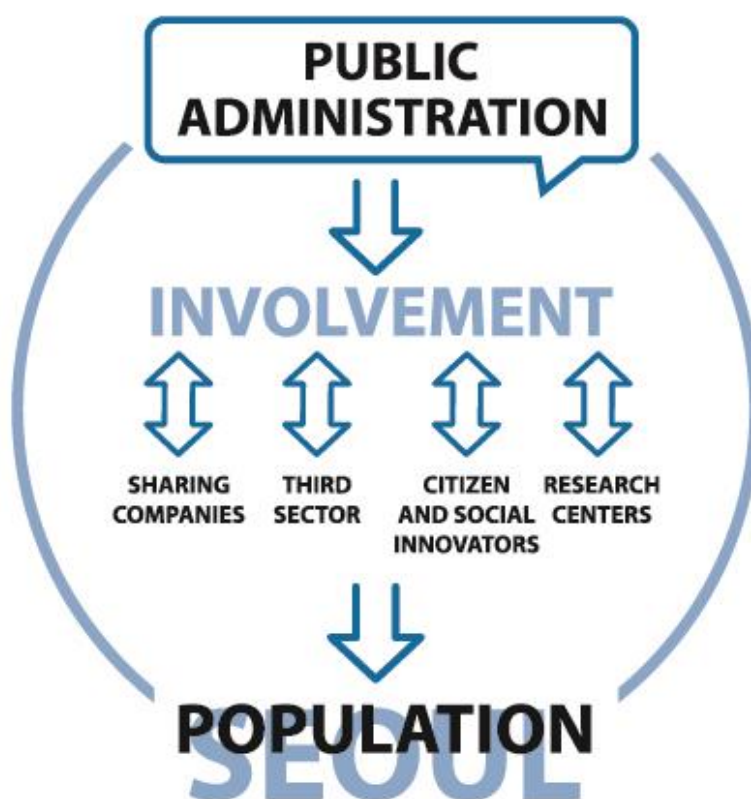


Figure 21 Seoul Scenario. Source: the author

In this case, the **PA** is the **driving force** of the entire process and the main party in presence that addresses, conducts, organizes, manages, and promotes experiences and activities. There is a strong desire to make these practices common practice, realizing a real ecosystem of sharing with all the actors of the city, from civil society to business companies, from third sector to research and the world of innovation. In this case, the push and the incentive come from the top and, in an attempt to implement the administrative idea, some *ad hoc* structures, smaller organizations and NGOs, with the necessary skills to penetrate into the local fabric, have been created. The administration has shaped the required structures to launch the project in a regulated and coordinated way, looking at the providers' services even before the customers, in order to create the right setting in which it can then instill the propensity of usage. The government is preparing the field to let all this realities, organizations, cooperatives and startups thrive. While in the people-heightened attention and care for their city is growing, as well as the desire to take part in something useful for themselves and for others. Citizens are becoming more and more aware of the possibilities opening up through the sharing economy and new technologies, since the governmental structures are committed to show them alternative ways to solve urban diseases. The process can be considered top-down, because without the driving force and the economic support of the local government, the current public-private partnerships and the role of citizens would remain secondary. The context is divergent from the Italian one and also from the European setting. In Korea, hierarchies are usually extremely vertical and the strict rules of conduct between the different levels of the social stratification make horizontal relations and peer-comparisons more difficult, on the contrary they are simpler in the scenario of Milan.

In any case, the efforts of the PA to enter into contact with the citizens shape a new approach that seeks a better dialogue among the parties involved, soliciting the spread of the sharing economy and its related values. For this reason, Nan Shil Kwon of CCKorea,

underlines that “*the project is an operation not completely top-down*”, since “*the local government has immediately sought cooperation with the citizens, activists and businesses by organizing public hearings and meetings*”.

Furthermore, citizens have many opportunities to interact with the administration, presenting projects and ideas through the official website and through the platform of ShareHub. As has been seen, the people-centered approach is the driver for all the initiatives, and young people themselves are called upon to give opinions on and suggestions to the PA (Week of Youth, Youth Council are just few examples of the possibility for young people to talk directly with the administration, advance ideas and propose solutions).

The direction remains strongly public and, in this specific local context, it represents the strength of the model, a model that probably could not develop in another way. As reports Alberto Giacchini, professor at the Graduate School of Business, Sejong-Syracuse MBA, “*Korean culture is probably making the difference in this project to build a sharing functioning ecosystem, since commitment, respect, discipline and caution are inner values deeply rooted in the Korean people*”. The distinct impression is that Seoulites, and in general Koreans, are taking up the challenge seriously. From the institutional structures and the Public Administration, to the committed private companies, from more and more empowered and active citizens to hopeful and resolute creative and innovators, all are playing their role to pave the path for the bloom of society, to give the country the essential economic, environmental, cultural and social relief that it needs. All together, they are making the bases for a concrete paradigm shift. It will take time, as does every disruptive change, and we are experiencing a transition period, but Seoul seems to be creating a suitable framework to make the shift real.

For some, this approach is too top-down but, looking at the picture from inside, it is more of a well-functioning, public-private partnership that doesn’t forget to engage people and their values. The system has not yet turned into a scheme of public-private-citizen partnership (as envisaged in the model of collaborative governance explained in chapter 5), there are no explicit and official acts among these actors or a resolution that engages all parties as a whole in an institutionalized way. It cannot be considered a bottom up line of action even if the engagement, the empowerment and the participation of citizens, third sector, and civil society is promoted and present.

In addition, as professor Kyung-Min Kim, of the Seoul National University reminds us, even before the establishment of the Mayor and the launch of the program, “*in Seoul there were movements of young people concerned with concrete actions to promote the improvement of the quality of life, even if not necessarily based on sharing solutions*”. However, these experiences were fragmented and discontinuous and, today, intercepting the project “Sharing City Seoul”, and in general thanks to people-centered policies, they are finding improved conditions of expressions and more opportunities to transform their ideas and dreams into reality. Now, they have a chance to expand in a more well-framed way, to create a more cohesive setting, to reconnect people, rebuild communities and reduce social exclusion, and to exploit the ground that the administration is preparing. As Seyfang and Smith (2007) underline, networks of activists and organizations promoting novel bottom-up solutions for sustainable development are emerging. They have the skills and the determination to propose solutions responding to the local situation, interests and values of the communities involved, and they are the real force, able to integrate the sharing economy in the system. Talking with the common people, start uppers, researchers, experts, institutional spokespersons, also this side of the sharing economy – very close to people – emerges. Apart from the superstructure that the project is creating (made by public-private

presence), there is what can be considered the content, i.e. the growing participation and attention of the people in the processes of life enhancement, the innovative boost coming from creative and innovative citizens.

The “Sharing City Seoul” project is not the only initiative available for those who want to transform an idea into a business. Besides the selected 63 sharing companies, many others are rising, even if local government does not support them. They testify to the vibrant environment of social businesses that is marking the country. They do not have the certification of the sharing city project, but (as seen in chapter 8) they can count on the help of other entities, such as big, private companies (SK Foundation, Samsung, Hyundai Foundation...) and also public governmental structures that foster social business (i.e. SESNET-Social Enterprises Support Network, Seeds and the Korean Social Enterprises Promotion Agency). Doo Won Cha, project manager at the Korea Institute of S&T Evaluation and Planning (Kistep), and main Korean expert on the topic, underlines that all these entities “*are transforming Seoul into the innovation hub of Asia*”. They are fueling an unprecedented wave of innovation and the idea that *Everyone is a Change-maker*; and from the interviews, this feeling clearly emerged, along with a lively, energetic and confident atmosphere. The impression is that all the new start-uppers, creative talents, innovators, social entrepreneurs (and also students of the topic) sincerely believed in the new opportunities that sharing economy (and in general social innovation and social economy), brings and in its underlying values, in the superstructure that has emerged from the active role of public and private bodies, and in the power of an active, alert and dedicated citizenship.

Interviewing social businesses’ Ceo not involved in the ‘sharing city project’, the large amount of funds available to foster social and sharing economy is considered a double-edged sword. If, on one hand, this gives young, creative, innovative people the opportunity to run a business with financial and coaching help, on the other hand, some enterprises not really devoted to making a change are receiving money all the same, but their businesses are tenuous and inconsistent. Luckily, the system of monitoring and verification of the Sharing Promotion Committee is active also in detecting this kind of situation, and after the first period of launch, the lack of expertise of these companies inevitably emerges, and the funds are stopped. As underlined by the Ceo of a non-certified social company, among the selected startups only 5% is generating a profit and many NGOs are turning into social ventures for gaining access to funds. Other enterprises admit that they prefer not to be part of the project in order to not to be obliged to follow the rules prescribed, since they can get money, help, funds and support from the big, private companies or from other institutional programs, as seen previously. In any case, certified or not by the project, and excluding the “false good companies”, these enterprises are the expression of a generation and a country that really wants to make a difference, that has been invested with the commitment to create a better society and is taking up the challenge.

In Seoul, some key actors interviewed (actually few) consider the project a propaganda initiative, but they do not deny that the effects of the organizational machine undoubtedly fall on citizens and, over time, the weaker targets of society (young people, women, elderly and emarginated subjects) will benefit from the initiatives in a systematic way.

At this first level, citizens have started to understand the meaning of sharing, thanks to the ground that the Municipality is creating. However, it should be stressed that the Koreans have a long tradition of cooperation and collaboration, today made easier by new technologies and the structured work of the PA. Some examples, as reported by Mr. Sung Nam Wi of the Sungmisan Village, are the proto-sharing economies of *gye* (계), community lending circles,

the *poomasi* (품앗이), non-monetary labor exchanges (that are living a revival in some gu, neighborhoods such as Eunpyeong-gu) and *du-rae*, (두레) group labor collectives. Therefore, the true challenge is to give a chance to the common people in the use of the new sharing economy services, in order to make real the potential paradigm shift.

2. In the second scenario, some public, private and non-profit actors, external to the Public Administration, realize the benefits that the new forms of sharing and collaboration convey (especially for their city, waiting to host a mega-event), and create an entity to stimulate a debate on this topic, opening a local reflection for the first time. They create opportunities for listening and working groups, chances for collective reflections, involving the Public Administration too. The latter participates in the first meetings, agrees with the requests and the motivations brought up by these “activator actors”, and embraces the instances related to the topic, considering them in line with its agenda and internal directions. To be more prepared in facing this new topic, it engages external experts and consultants. Therefore, it opens a dialogue-with the citizens and the economic and social actors of the territory (through an online questionnaire and an online open public consultation) to know what they think and what they know about the sharing economy, and to understand-to which extent the PA and sharing economy can have a common path in the city. It collects their demands and needs, launches a series of meet-ups on the topic, maps the realities and the actors already existing, creates a network of actors interested in the dynamics of sharing. Doing so, it comes in contact with the leading enterprises, organizations, companies, representatives of the sector, with the various associations, the civil society, the third sectors and the movements on consumers protection, namely with the city itself. The first result is a huge wealth of input and information coming from outside the administration. The process is collaborative and based upon dialogue, with the aim of co-designing and co-managing future practices and spaces, goods and services. It culminates in a resolution by which the Public Administration undertakes to support innovation and the development and dissemination of sharing economy practices, of which citizens will be the future beneficiaries. The graph illustrates the reasoning.

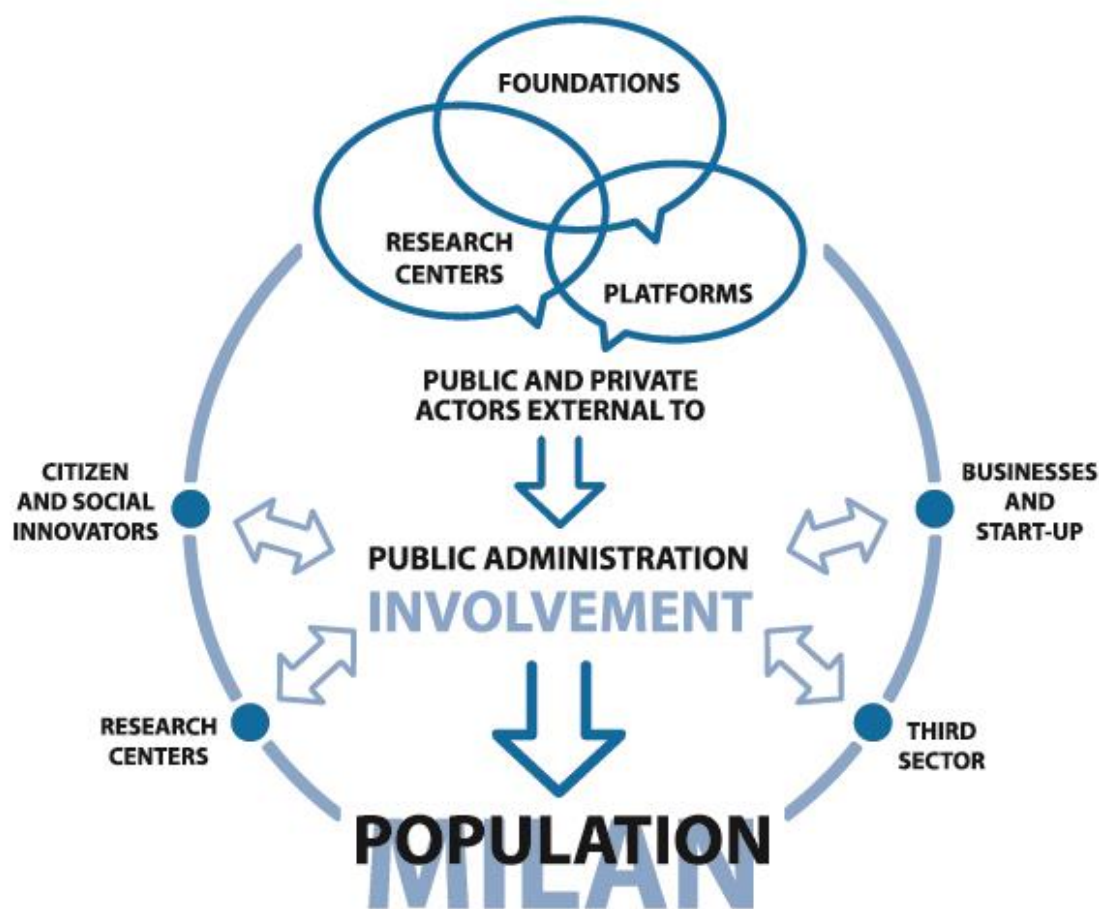


Figure 22 Milan Scenario. Source: the author

Within this framework, the PA acts as a **connector, an enabling platform**, following the genuine developments of the territory. It provides spaces and resources to increase the dialogue and to bolster the new practices, opening up to outside expertise, those best trained and able to understand the processes of the sharing economy and to support the development of collaborative services.

The Municipality is just one of the many parties present. It is not the most important or the driving force. As underlined by Biraghi of *Secolo Urbano*: “*Milan is not its Municipality [...], it doesn't have any distinct strategic planning and outside it is represented in its broader networks with other global cities not by institutional subjects but by economic sectors and particular interests, such as those of fashion, of finance, of communication and of design, by single actors that have power, in terms of international relations, stronger than that of the Mayor. I'm thinking about Armani, or Prada or less known personalities such as Gilda Boiardi (Interni, for the design) or Borioli (SuperStudioPiù) or Pikler (Zona Ventura)*”. The City of Milan has its own historical peculiarity, and that is to work without a centralized mode of decision. Also in the field of the sharing economy, the Municipality reflects this model. It does not conduct, but goes along with. It is reactive and accommodating, and it collects instances that come from the bottom, from the city itself. The city has always demonstrated, even in times more or less difficult, to be extremely resilient and to have the great ability of self-organization. Nowadays the involvement of the citizens goes beyond the mere participation, “*people want to be co-creators, co-agents of the services offered, and of the policies*”, underlines Caterina Sarfatti, Project Manager for the International Affairs

Department. “*Since forever, the civil society self-organizes and privately produces public goods, and the administration follows (if it wants, if it is able...)*” recalls Caterina Pacchi, urbanist of the Milan Poly-technical Institute. “*This mechanism is effective on areas in which the mobilized actors have some kind of visibility,*” she suggested. The network of Sharexpo represents specific fields and areas of interests. Some actors, coming from the research area, the innovation sphere, and the world of urban experimentation, have tried to get involved with proposals that could find an echo, and were undeniably echoed by the Public Administration and by other actors, those typically of the sharing economy, that could be activated and better networked²⁷¹. Expo was just an expedient to connect these actors, to offer a detailed reflection to the PA, and to solicit it to take up this and other innovations, in order to let the process continue, even after Expo. The approach was useful, since - as Renato Galliano, project manager of the Milan Smart City project reminds us - it allowed to connect different resources and energies, already existing in the city but fragmented and isolated, “*resources and energies that can find, and actually found, in the coordination work of the administration, a fellow, a partner to level up the experiences*”.

The Administration, as seen in chapter 8, had already a sensitivity in this regard: it has always been active on urban innovation issues, start-ups and new forms of economy; it has taken a series of actions around the theme of social innovation and then got the subject of the Sharing Economy. It has always bet on innovation as a tool to strengthen the community spirit and social inclusion. An example is the series of meetings under the project *Milano (è)IN*, promoted by the Labor Division. With this project, it is fueling the debate on the importance of using social innovation as a tool to improve the level of social inclusion and create a more supportive social tissue. And it is promoting actions and concrete initiatives in this direction by betting on financial resources, startups, incubators, FabLabs and a sharing economy. The support for projects of incubation and acceleration, and spaces of collective production and consumption for example, is a sign of the active public participation and of its’ commitment in matching innovations and inclusion. It is promoting several experimentations, such as the platform of civic crowdfunding that seeks to make citizens protagonists of the urban choices through a direct participation in the conception and funding of the public interest’s initiatives. Another example is the project “*Expo in Città*”, a concrete case of crowdsourcing that allows everybody to find a place of expression in the city organizing events; it allows to connect different actors, showing that they can act autonomously if there are the right conditions. Namely, if the PA acts as a platform for connection. Also, several initiatives coming from the different departments of the administration (Labor, Urban Planning, Culture, Sport...) highlight the general leaning and confirm an internal conformity in the direction of sustainability, inclusion, equity and innovation (Green City, 100 in 1 Day Project, BookCity, Fuori Salone...)

The background is that of the Smart City: the smart infrastructures supplied and the governance model implemented, based on Giffinger’s six dimensions plus Expo, made Milan the first Italian Smart City, according to the ICity Rate of Forum PA (2015), with a frame oriented to support not only technologies and innovations but also the human capital of the city. An orientation that made Milan more than a Smart City, a “*Human City*”, quoting Galliano. Now, with the Council Resolution, the PA is undertaking to relate with three typologies of subjects under the big umbrella of the sharing economy. The big corporations

²⁷¹ The social innovation actors, as well as those of the sharing economy sector, used to work alone. Sharexpo is a way to connect them and imagine cross-action areas, systemitize energies and create synergies. Also because sometimes, these subjects do not have the capability to give their innovation permanence, continuity and rootedness. A combined context can help in this sense.

such as AirBnB and Uber, in order to understand how to manage and regulate their presence in the city and how to exploit their networks for a recirculation of information; the small startups rising up in the city and based on collaborative models, in order to comprehend how promote them and allow them to thrive, socializing the benefits of the sharing economy services to people; the community's initiatives so as to figure out how to read, interpret and relate to them.

The PA is acting as an enabler to connect these realities between them and within them. The creation of a *Register* of experts and operators is another sign of its connecting role. With the register, the PA first of all wants to map the presence of experts and operators of the sharing economy in the territory and create a connection among them. But above all, it seeks to find a direct channel of communication with these subjects in order to reason with each of them on a joint promotion of sharing economy services and benefits, imagine a level of individual and collective partnership, and operate their promotion, highlighting their specific peculiarities. Many forms of experimentation are rising, inspired by the city and embraced and promoted by the Municipality. As Biraghi underlines, "*Milan is famous for its physical resilience, it has a morphology and a structure not particularly characterized that allows it to be the scene of prototypes and experiments*".

Talking with the main actors involved in the project - public, private and civic - a vibrant atmosphere and a feeling of trust in the new opportunities carried by the sharing economy and supported by the Municipality, emerge. The sentence of Pierfrancesco Maran, City Councilor for the Mobility, during Sharitaly 2015, expresses the feelings and the vibes that are crossing the city, "*Milan is the city where things happen*". The civil society is proactive and engaged in several projects; the economic sector, with special regard to the new emerging startups, is an active part of the project, as advisor, as beneficiary, as a driving force; the innovation and research centers follow and the PA, as can be seen broadly, is acting perfectly as a connector of experiences, people, ideas, as a multiplier, letting things happen and creating new opportunities with the engagement of all the *shareholders*.

In terms of the Sharing Economy, a model of *widespread governance* without an actor widely prevalent is going to replicate; as has been seen, the public actor is compliant and cooperative, and the experimentation method can be considered a pilot leading model. The approach of Milan respects the diversity of initiatives that are emerging from different perspectives, without a specific coordination by the administration, and with a more circular imprinting. As show in the graph of the scenario, the impulses come from the bottom, involve the PA in the reflection that they generated and then, the same PA collects these stimulus and integrates them into its general orientation, in some sense going with them and multiplying the possibilities. The PA acts as a connector of experiences, people, and initiatives and supports the new frame thus generated. The impulses are re-circulated where their effects can multiply and reach and involve more citizens, inspiring new forms of experimentation. What elsewhere could be seen as a shortcoming, in Milan becomes a strength, typical of the "Ambrosian approach" and in Biraghi's opinion, is what makes Milan a true capital of the Sharing Economy, as it is in the fashion, design and finance fields. The recent (November 2015) "Collaborative Week" is just one expression of the ability of the city to make its voice heard and connect with the PA in a new path of development.

10.2 Two different approaches to Collaborative Governance

The two cases are therefore similar but different at the same time. What pools them is the ultimate goal, the focus on social innovation and sharing, and the ability of the PA to realize its responsibility in creating the ecosystem. As noted by Manzini during a public gathering of the “Milano(è)In” series of meetings, ecosystems are powered by standards, rules and norms that prevent unnecessary detours and that can only be developed with specific cultural tools. *“But you cannot live by rules alone; these must be inserted into the big picture, to extract effectiveness from the solutions”*.

The **vision** is therefore, a central point and as seen from the data collected, in both case studies it is not lacking.

The city of Seoul is maybe doing it in a more structured and well-shaped way from the institutional perspective, and more top-down. As seen in the section on Seoul Policy Strategy, the city has introduced the issue on the agenda and made clear statements of its intents. It has enacted the Seoul Metropolitan Act for Promoting Sharing before and the Seoul Metropolitan City Sharing Promotion Ordinance right after, in order to make clear what role it wants to have, in what direction it wants to go and with which rules. It has created a specific division, the Social Innovation Division, and it has introduced specific advisory groups such as the Sharing Promotion Committee, the Sharing Facilitation Committee and the Advisory Board. It has launched an interface portal with its citizenship and created a brand issuing a certification to the startups and social enterprises selected by its advisers in order to ensure quality and to increase the people’s confidence. It powered up public-private partnerships and opened itself up to listening to citizens. The PA is driving the process with force and certitude, avoiding paternalism but engaging people to put in common and re-circulate resources, to activate ideas and create alternatives. This framework derives directly from the commitment of the City (and of the Country) toward social innovation and social economy, and it is completely embedded in it. It is also a result of a programmatic and strategic planning of a Smart City that is allowing the current state of the Sharing City, since without the smart background and the high penetration and use of smart devices, there wouldn’t be any conditions to create a shared-city. The “Sharing City Seoul” project is just an additional tool to provide its citizens opportunities for development and to offer a better local conditions of life to the citizenship, at the same time improving the high-level position of the city and of the country in the global scenario.

Milan as well starts with a clear vision: by the approval of the Guidelines, the Municipality has defined its role and declared what it can do to facilitate the process long term. However, a peculiarity of the Milan case is also the cooperation in the institutional definition thanks to the online consultation that allowed the collection of the local opinions and created the condition for a collective policymaking action, as well as the push of the process from the very bottom, from the local substrate. The city is traditionally very responsive and has always demonstrated a great ability for self-organization and self-engagement. The Municipality can rely on the actors that launched the reflection in the city, which embodies this attention and the general sense of care for the city, as well as on the external group of experts that provides a clear helm in the orientation of the projects. The initiatives promoted run parallel to other goals related to Smart City, innovation and social inclusion. The city has prepared the field for a natural development of new local practices in the direction of sharing and collaboration, even if unconsciously. The creation of a Register of sharing actors and the recent establishment of the “House of Collaboration” (Co-Hub) are an expression of the rapid steps that the city is taking, since this place will give a physical space to those who are involved or interested in the economy of sharing. The resolution on the civic crowdfunding is a further administrative

attempt to enter into the logic of sharing, offering people opportunities to make real what could just be collaborative ideas (choosing them from the bottom), entering into the process, and becoming an early adopter too. As well as the many incubator programs launched with public participation, which are fostering social innovation in the city; they are teaming up and brainstorming innovators and creative talents. Overall, Milan is promoting very innovative practices whereas there are no similar experimentations elsewhere, and even the pioneering case of Bologna followed different modalities.

Can we talk of **collaborative governance**? According to Iaione: *“The definition and implementation of the political address is shared through patterns of governance (international treaty or institutionalized) that bind the actors belonging to the 5 souls of the collaborative governance into a stable circuit of urban and territorial development government: 1) citizens and social innovators; 2) business (profit, low profit, non-profit); 3) cognitive institutions (schools, universities, research centers, academies, cultural institutions); 4) civil society organizations (social parties and third sector); 5) public institutions.”* It is more and more a shared reflection to consider these actors as potential builders of effective and efficient practices of cooperation, both from the point of view of common perspectives and design and from the point of view of experimental attempts. To allow them a formal relationship and a joint and shared management, Iaione affirms the need to create real physical and institutional spaces where the five groups can gather and share strategic guidelines and policymaking. Places where they can implement these lines and trigger collaborative dynamics, mutual exchange, co-design services for the community, and processes of urban and territorial transformation, industrial and productive innovation. To do this, however, clear and shared rules are necessary, since the functions, the tasks and the modalities of collaboration must be regulated, and a sustainability and institutional fundraising plan must be drawn up. Paraphrasing the definition of collaborative governance given through the project of Co-Mantua, we can see the emergence of a pattern or a person that appears as an agency of local collaborative development and as a centre for research and community development at the service of all those involved in collaborative governance²⁷². This can also trigger an innovation of the democratic process in which the political direction is shared and based on the dynamic collaboration of all the members of the local community.

In the two case studies, there are some of the fundamental ingredients of collaborative governance, but not necessarily all.

If Seoul seems to proclaim a statutory definition more detailed than Milan, followed by an act with the legal framework of the project, Milan had greater involvement of external actors, those who are considered the five pillars of the collaborative governance, also and especially in the definition of the process. If in Seoul the public-private partnerships are multiplying and it is not yet clear whether it is possible to involve civic parties to evolve into public-private-civic partnership, in Milan the creation of partnerships seems less evident. But citizens, administration and economic parties are moving in an open context of comparison in which they are strongly into dialogue, and also into the planning to go in this direction. If in Milan this current dynamism is also generating an innovation in the democratic process, in Seoul the administration remains the dominant actor and is not easily influenced from the outside, even if its attention to the people is strong and it is showing a remarkable openness and a great capacity to listen. If in Milan a specific physical place for the actor of the sharing economy has just been born, in Seoul many different, bigger or smaller, spaces for specific targets of

²⁷² The definition of collaborative governance given by Iaione and LabGov within the project Co-Mantua can be read at the online address <http://co-mantova.it/codizionario/>

people (young, future entrepreneurs, innovators) are rising up, even if a general co-house/sharing-house has not yet been created. What probably is missing in both cases is the enactment of specific *pacts* as in LabGov's experimentations, by which the involvement of the civic part is clearly stated. Another missing element is the focus on the topic of commons as driver of all the reflection, as it is in Bologna where the prototype of the governance model has been experimented for the first time.

The local, cultural, and historical features of the two cases are different, generating distinct development paths and frameworks of the Sharing City, based on their peculiarities and local identities.

- The absence of a centralized mode of decision in Milan can be perceived as a limit, while it is reflecting the traditional form of development of the city. A kind of **widespread collaborative governance**, with a **bottom-up approach**, is detected here, a model in which the Municipality is not the main actors, but flows with the city impulses.
- At the same time, the presence of a strong public direction in Seoul leads us to imagine that real participative and collective approaches are impossible, while, in such a context, the process would not have happened at all without the driving force and the economic support of the local government. We are witnessing a more **centralized collaborative governance**, with a **top-down approach**.

The governance models that the cities are implementing are not as institutionalized as in the case of Bologna, which relies on pacts and truly public-private-civic partnerships. However, some key ingredients of collaborative governance have been detected, like the first seeds for an improvement of the current state over time. Seeds showing that the right path has been taken and that a kind of *primordial collaborative governance* is possible even if the processes are more molecular, as for in the City of Milan, or more top-down oriented, as in the case of the City of Seoul.

- The former is more decentered and based on spread horizontal relations; here, probably, strictly institutionalized tools would stiffen a very fluid and - till now-effective system. The current narrative talks of a “Milan Model”, that is not primarily based on the concept of collaborative governance in the strict sense and only on sharing economy, but on the ability to create a citizen-centered system, innovations for inclusion (and not speculation), labor and collaboration.
- The latter is more centered, with its strong public direction, but not less attentive to the citizens' needs, and it is creating the environment to let them express.

In both cases, there is not an institutionalized accounting of commons by the citizens, but more fluid forms of collaboration. This implies that there is not a model that can be imported as a whole or a “one-size-fits-all” solution. As many experts underline, such as Iaione, Cicero, Mainieri, Rinne, Gorenflo, a customized work is required to shape the most effective and efficient model for the territory. We are not yet in the modeling phase, not even in more established and structured experiences as in the case of Bologna with its Regulation for the Care and Regeneration of Urban Commons, a concrete attempt of prototyping in which ordinary people are allowed to act as commoners and to enter in processes of co-design with the PA.

In conclusion, Milan and Seoul can be considered pioneering experiences that are paving the way for co-management, co-production, co-reflection, collaboration, sharing and pooling, with a particular focus on innovation, sustainability, equity, inclusion and access. They are trying to go in the direction of the co-city. Nevertheless, each city has its own forms and

aspects and can implement the process respecting its nature and local features. Although one cannot speak of collaborative governance in an all-round manner, the projects implemented are certainly disruptive and innovative and there are the prerequisites to improve the existing and create a real city of sharing. The transition will take time and for both case studies the question about the direction that future administrations can and will give is rising. However, both in Milan and in Seoul, it is clear that things are coming along and although the election of 2016 will lead to a change of city councils, some experiences are so well-established and already rooted that is impossible to delete the impulse of cooperation and the wish of co-creation coming from citizens and social enterprises. The political framework should not overlooked: in both cities, we are observing a progressive aptitude, an openness that is making possible what in other political contexts would be more difficult.

11 THE QUESTIONNAIRE

A specific questionnaire was realized to detect the people's propensity to the use of sharing and collaborative services, and to observe their effective use and their knowledge of the services in their area of residence.

It consisted of 14 questions aiming at detecting:

- people's propensity to share by giving (1) and asking (2),
- the effective use of the sharing economy services (3) and attendance of sharing places of consumption and production (5) with a personal evaluation (4),
- the source of knowledge about sharing services (6)
- some opinions related to
 - the management and organization of these services (7,8,9),
 - the issues that could be improved (10),
 - the role that could be played in the food system (11),
 - the general idea of the sharing economy services (14)
 - the real knowledge of the city services (12,13).
- The survey also included a set of questions to capture basic demographic data (17,18,19,20) and the level of confidence in the use of online tools (15,16).

As already explained in methodological chapter (7), the questionnaire was elaborated in Italian for the case of Milan and in English for the case of Seoul, proposing the same questions with only a difference in the question related to the specific events/initiatives of the city of reference (12 and 13), necessary different. Unfortunately the administration in Seoul didn't reach the expected results (see chapter 7), and it was not possible obtain a significant number of replies. For this reason the analysis concerns only the Italian case showing how participants replies in terms of propensity, use and knowledge of the sharing services on their urban context. The analysis, at the end of the chapter, is then briefly compared with a similar survey recently run in Seoul and in South Korea on the same topic.

Analysis of the Milanese sample.

The sample that replied to the questionnaire is composed by 1097 respondents quite equally distributed between males (486 equal to 44,3% of the sample) and females (611 equal to 55,7% of the sample).

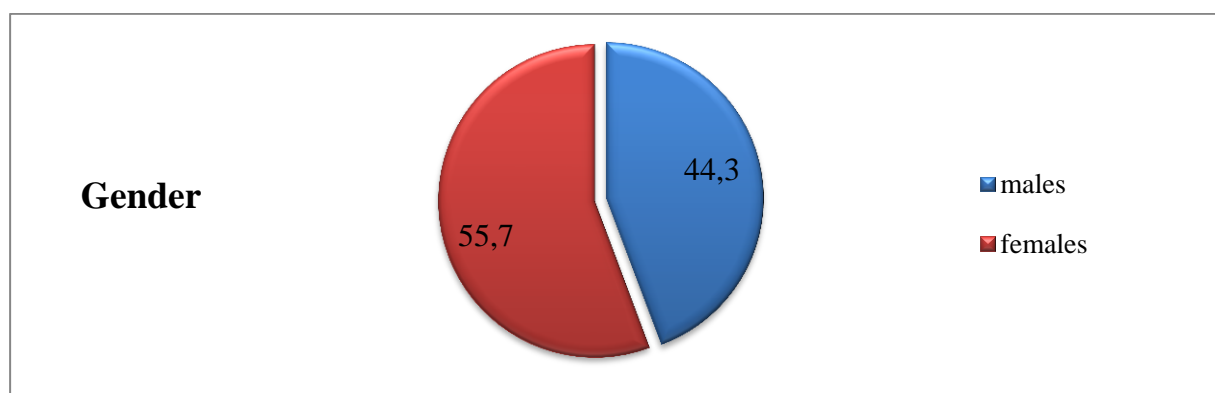
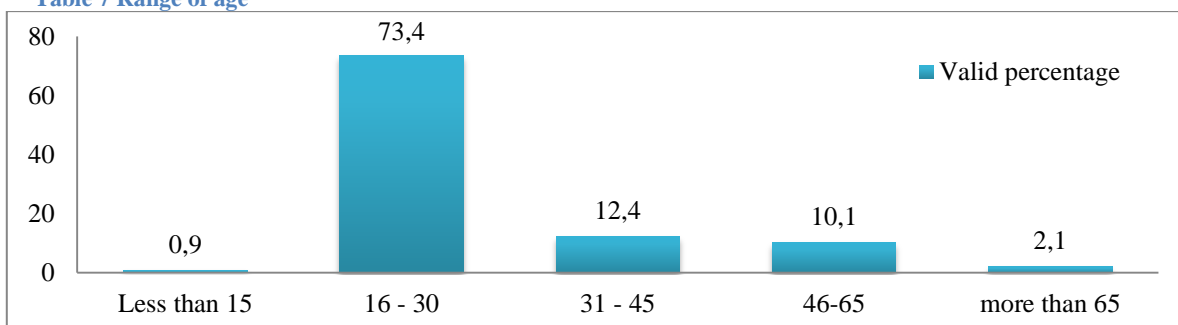


Figure 23 Gender in the sample

As for the age, the sample is quite young, with 73,4% of the respondents having between 16 and 30 years. As anticipated, this data seems to be motivated by a greater propensity of young to reply at questions related to social and technological innovations. The submission of

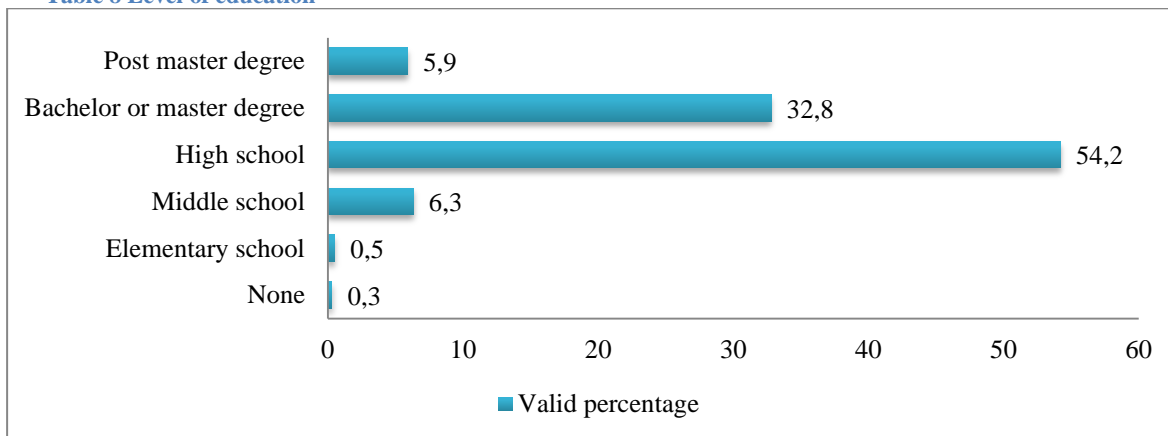
the questionnaire on the road has revealed, on the contrary, a lower trust and propensity to deal with this topic by the other older targets of people.

Table 7 Range of age



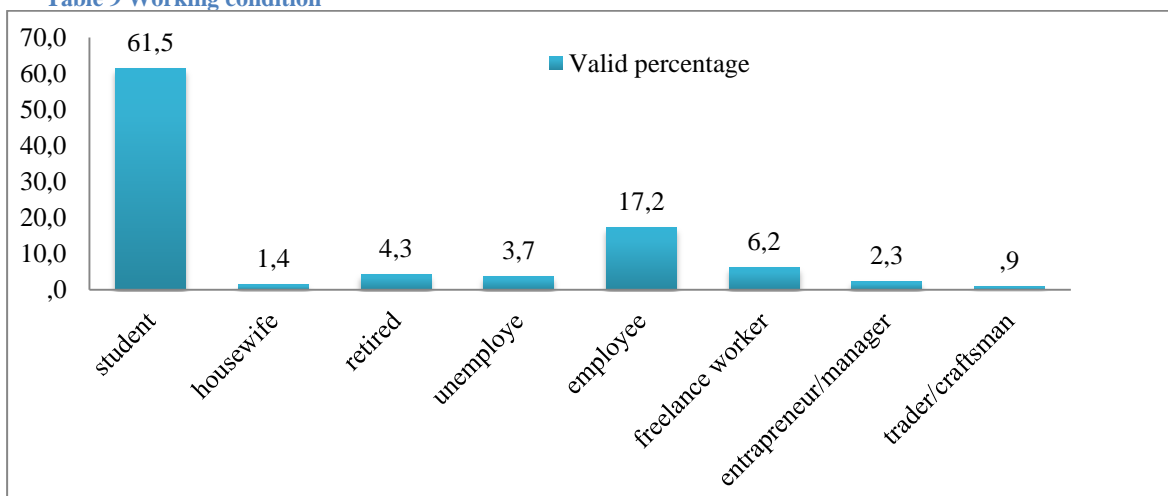
The reached level of education of the respondents is mainly the high school, (54,2%), followed by a university degree (32,8%). These results are consistent with the average age of the sample.

Table 8 Level of education



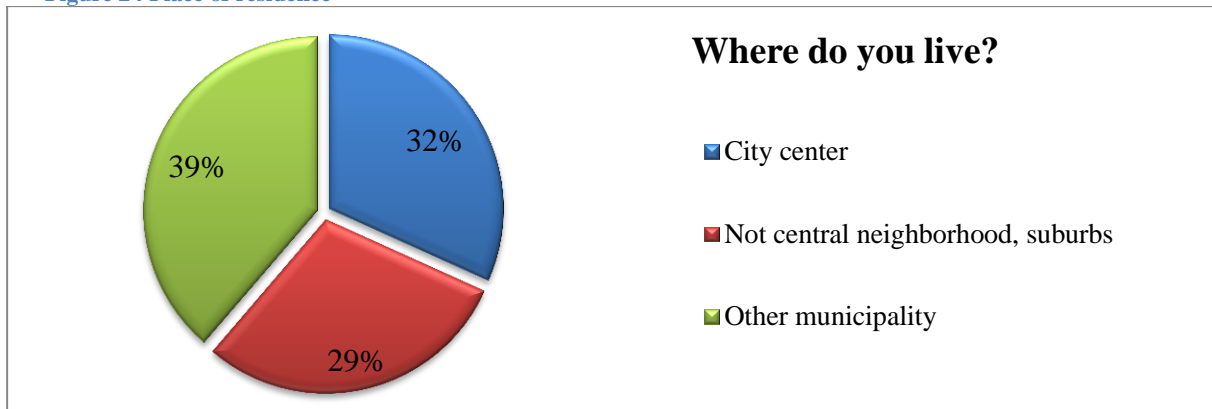
Also the working condition is congruent with the data on age, showing a 61,5% of students among the respondents, followed by general employees (17,2%) and freelancers (6,2%).

Table 9 Working condition



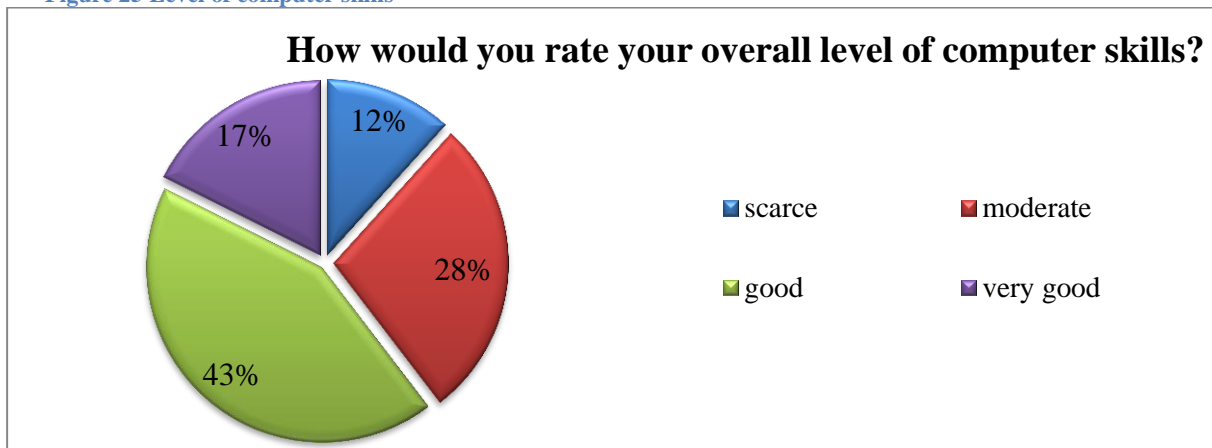
The place of residence is equally distributed between City Center (32%), Suburbs (29%) and other Municipalities (39%).

Figure 24 Place of residence



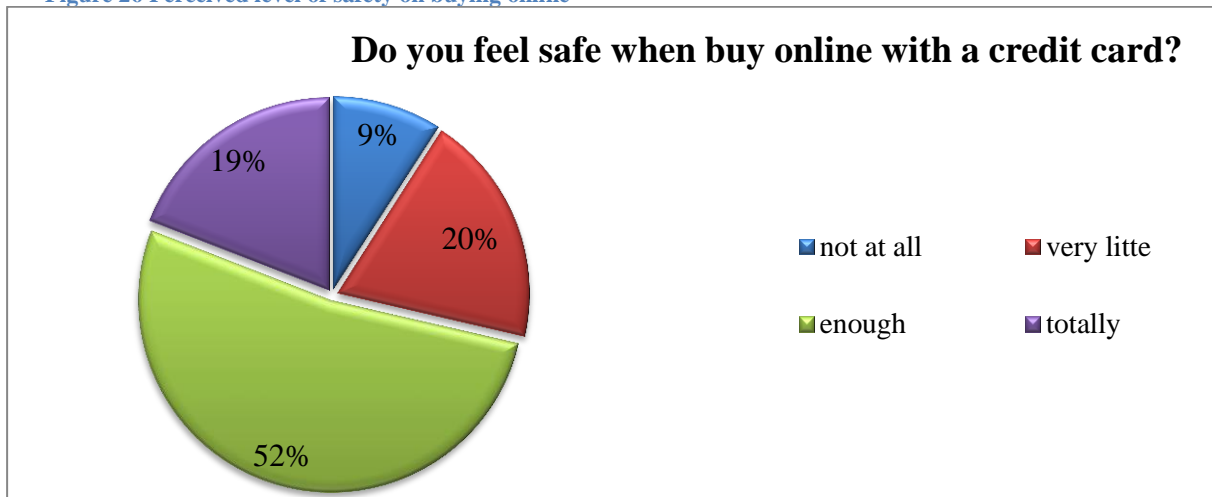
The general level of computer skills is on average good (43%) with only a 12% that self-declare a scarce level.

Figure 25 Level of computer skills



The confidence in terms of online payments with credit cards reflects the composition of the sample, with a 52% that declare to feel enough safe and only a 9% that affirms to not to be safe paying in the web.

Figure 26 Perceived level of safety on buying online



In order to identify relevant features of the data, the first step is the analysis and comment of the answers given by the sample to each item. The answers are organized in a way that may help highlighting specific trends or interesting characteristics.

1. What would you be willing to share with or lend to an acquaintance or a person living near your home? from 1 (absolutely no) to 10 (surely yes)

	Mean	SD
Household appliances & tools	5,4	2,8
Bicycle	5,6	2,8
A lift by car or motorcycle	7,3	2,6
Clothes	3,1	2,6
Sport & camping equipment	5,6	2,8
Furniture & furnishings	3,9	2,7
Hospitality	5,9	3,0
Knowledge & skills	8,3	2,2
Time	7,1	2,4
Money	3,6	2,6
Food	6,8	2,8

The average score to the various items of this question can be used to divide them and create three groups, characterized by good (mean value above 6), average (mean value between 6 and 4) and scarce (mean value under 4) propensity to share.

Figure 27 Groups of share propensity (give)

Group 1: Good propensity	Goup 2: Average propensity	Group 3: Scarce propensity
Knowledge & skills A lift by car or motorcycle Time Food	Hospitality Bicycle Sport & camping equipment Household appliances & tools	Clothes Money Furniture & furnishings

Has showed in some Italian researches (Sharitaly 2014, 2015) people usually show a good propensity towards shared mobility and hospitality. A finding that reflects the greater pervasiveness of platforms that operate in these sectors, such as Uber and AirBnb that are gaining more and more popularity (along with many critics, as explained in the first chapter). The data collected with the research questionnaire show instead that the willingness to borrow or lend is not so high for these two sectors. Participants agree to share a lift by car or motorcycle but not the bike for example, and not so much the house or a spare room. This evidence seems to suggest that the sample possibly feels a difference between the use of a service for renting bike and room on an online platform and the idea to directly lend or borrow the own bike/room to a stranger.

The variables of the question can be summarized in a *scale evaluating the propensity to share*. Cronbach's Alpha (Cronbach, 1951), was adopted in order to verify the consistency (reliability) of the scale created. The value of the Cronbach's Alpha of the scale, as the table below shows, corresponds to ,874, a value high enough to consider the scale reliable.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,874	,875	11

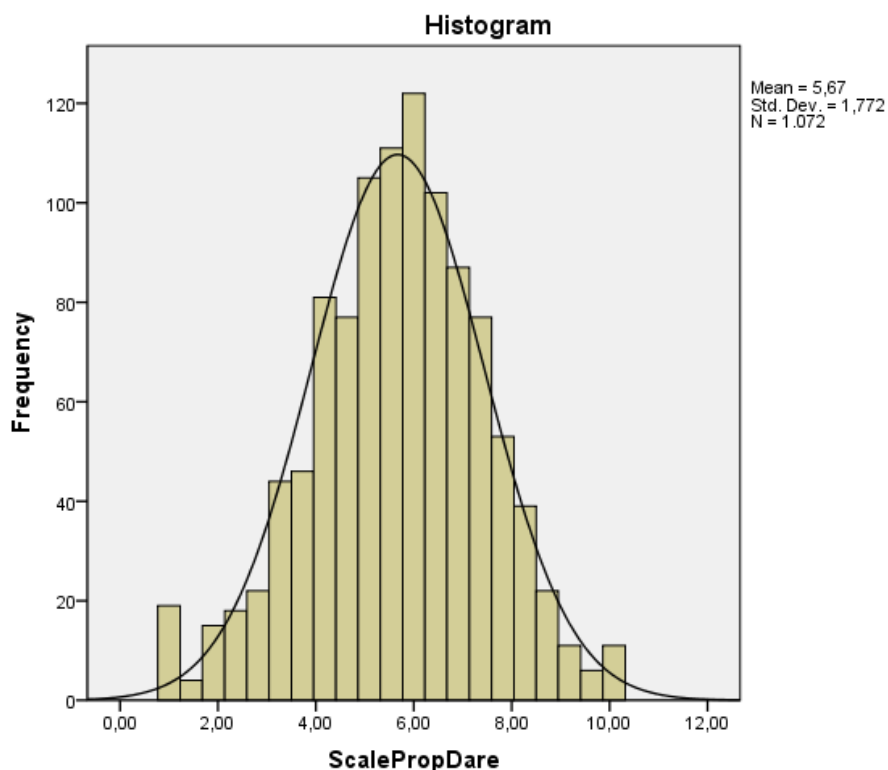


Figure 28 Scale of propensity to give

2. What would you ask or would you borrow, from an acquaintance or person living near your home? from 1 (absolutely no) to 10 (surely yes)

	Mean	SD
Household appliances & tools	5,0	3,0
Bicycle	5,2	3,0
A lift by car or motorcycle	6,7	2,9
Clothes	2,7	2,4
Sport & camping equipment	5,1	2,9
Furniture & furnishings	3,3	2,6
Hospitality	5,2	3,0
Knowledge & skills	7,5	2,6
Time	6,4	2,8
Money	3,1	2,7
Food	5,3	3,1

Generally people seems more keen on giving than asking, as in this set of items all values are lower than in the previous one. The composition of the three groups of propensity however is quite similar, with only ‘food’ changing category; also the relative preference order is maintained:

Figure 29 Groups of propensity to ask

Moderately positive attitude towards the asking of	Scarce propensity towards the asking of	Negative attitude towards the asking of
Knowledge & skills A lift by car or motorcycle Time	Food Hospitality Bicycle Sport & camping equipment Household appliances & tools	Clothes Money Furniture & furnishings

The attitudes to lend or borrow are quite similar, only the ‘food’ switches from a positive attitude to a medium/scarce propensity. Possibly because the idea to ask for food to strangers could be unwittingly related to the notion of poverty, while the idea to give it, especially if to people in need, is socially considered a positive act, not only in terms of reducing waste but mostly in relation to solidarity actions. In addition, despite the rising campaigns against waste and the promotion of food sharing, in Italy this practice is not yet rooted. The little success of the Italian platform Ifoodsharing.org, in comparison of the great success of its German predecessor Ifoodsharing.de, is a confirmation of the low interest of people in practices of sharing food through online services.

The variables of this second question can be summarized in a *scale evaluating the propensity to ask things*. The Cronbach’s Alpha of the scale, as shown in the table below, is, 883, therefore the scale can be considered reliable.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,883	,883	11

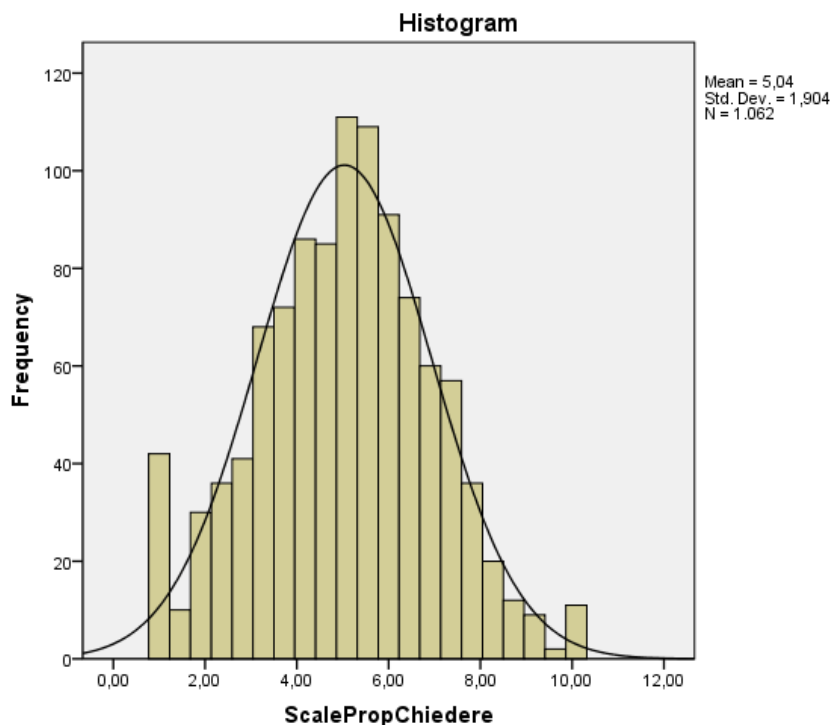


Figure 30 Scale of propensity to ask

The analysis clearly shows that some services of sharing are definitely more appealing than other, whether it be receiving or offering services and goods. Knowledge & skills, A lift by car or motorcycle, Time, Food, are the most preferred.

The next question detects the actual use of the sharing platforms and services among the sample, and allows understanding which one is the preferred and how often they are used.

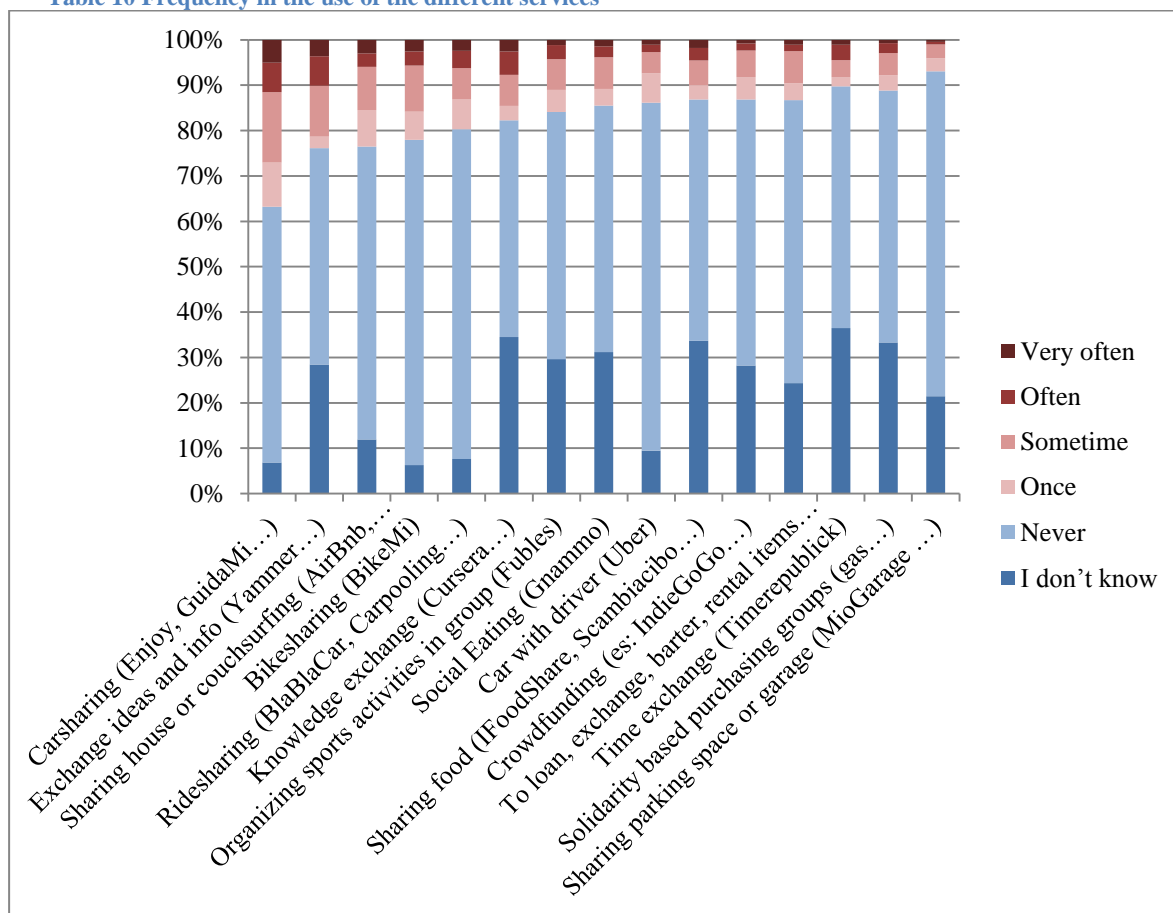
3. During the last 12 months, did you use some of these services?

Frequencies

	I don't know	Never	Once	Some time	Often	Very often
Carsharing (Enjoy, GuidaMi...)	76	625	108	172	72	56
Bikesharing (BikeMi)	69	788	68	112	34	28
Ridesharing (BlaBlaCar, Carpooling...)	84	803	73	76	42	27
Car with driver (Uber)	104	842	71	51	18	12
Sharing house or couchsurfing (AirBnb, Couchsurfing...)	132	712	88	105	33	33
Sharing parking space or garage (MioGarage ...)	237	791	32	34	6	5
To loan, exchange, barter, rental items (Barattopoli, Reoose, CoseInutili, LocLoc...)	270	692	41	78	16	12
Exchange ideas and info (Yammer...)	314	527	28	124	72	40
Crowdfunding (es: IndieGoGo...)	312	648	54	65	17	9
Organizing sports activities in group (Fubles)	327	601	53	75	34	13
Knowledge exchange (Cursera...)	381	528	35	76	57	28
Time exchange (Timerepublick)	400	584	22	41	37	12
Social Eating (Gnammo)	372	587	35	60	30	20
Solidarity based purchasing groups (gas...)	344	598	41	77	26	16
Sharing food (IFoodShare, Scambiacibo...)	368	613	37	54	24	8
Other	54	108	5	6	1	3

“Never” seems to be the most frequent answer for each item, highlighting a big group of *laggards* inside the sample. In the diffusion of innovation theory, the *laggards* are the last group to try to adopt a new product. Usually this group is composed mainly by older people or those with a low socio-economic status, but in this sample they seems to be younger than expected, since the sample itself is primarily composed by people under 30. In addition, this target is normally matched with the Generation Y, the Millenials, characterized by a larger use and greater familiarity with the communication, media and digital technologies. Despite this they seem to be not so confident with the new sharing economy platforms and services, showing that the process of integration of the sharing economy in the society is still at its beginning.

Table 10 Frequency in the use of the different services



The goods and services that respondents are more prone to land and borrow (Knowledge & skills, A lift by car or motorcycle, Time, Food) are more or less the services more used by the respondents, so there is a kind of correspondence between propensity and use, although we are talking about a minority of the sample. The above table highlights that the more used services are: **Carsharing, Exchange of ideas and info, Sharing house or couchsurfing, Bikesharing and Ridesharing**. About 70% of the respondents used at least once one of these services. By adding up the answers to all this set of items, a variable called “*Overall frequency of sharing services use*” was created.

caleUse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	,00	160	14,3	30,9	30,9
	1,00	31	2,8	6,0	36,9
	2,00	36	3,2	7,0	43,9
	3,00	35	3,1	6,8	50,7
	4,00	52	4,6	10,1	60,7
	5,00	30	2,7	5,8	66,5
	6,00	30	2,7	5,8	72,3
	7,00	19	1,7	3,7	76,0
	8,00	17	1,5	3,3	79,3
	9,00	20	1,8	3,9	83,2
	10,00	9	,8	1,7	84,9
	11,00	7	,6	1,4	86,3
	12,00	10	,9	1,9	88,2
	13,00	8	,7	1,5	89,7
	14,00	4	,4	,8	90,5
	15,00	8	,7	1,5	92,1
	16,00	5	,4	1,0	93,0
	17,00	4	,4	,8	93,8
	18,00	2	,2	,4	94,2
	19,00	4	,4	,8	95,0
	20,00	2	,2	,4	95,4
	21,00	3	,3	,6	95,9
	22,00	4	,4	,8	96,7
	23,00	3	,3	,6	97,3
	26,00	2	,2	,4	97,7
	27,00	2	,2	,4	98,1
	28,00	2	,2	,4	98,5
	31,00	2	,2	,4	98,8
	33,00	1	,1	,2	99,0
	34,00	1	,1	,2	99,2
	36,00	1	,1	,2	99,4
	42,00	1	,1	,2	99,6
	44,00	1	,1	,2	99,8
	57,00	1	,1	,2	100,0
	Total	517	46,2	100,0	
Missing	System	602	53,8		
Total		1119	100,0		

The value zero corresponds to a complete absence of use of the services, while the value 57 suggests that most of the services proposed have been used very often. The distribution of these values shows us that the users are not polarized on the same few services but widespread among the options given.

In addition, we can infer from this data that the people that do not use any services are 31% of the sample. This group of respondents, that never used any of the listed services, does not appear to be characterized in any relevant way by vital data, as shown by the following tables.

Self-evaluation of the overall level of computer skills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Scarse	18	11,3	11,5	11,5
	Moderate	46	28,8	29,3	40,8
	Good	61	38,1	38,9	79,6
	Very good	32	20,0	20,4	100,0
	Total	157	98,1	100,0	
Missing	99	3	1,9		
Total		160	100,0		

Security in buying online

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all, I never do it	17	10,6	11,0	11,0
	Very little, I try not to do it	27	16,9	17,4	28,4
	Enough secure, I do it if necessary	81	50,6	52,3	80,6
	Totally, I do most of my shopping online	30	18,8	19,4	100,0
	Total	155	96,9	100,0	
Missing	99	5	3,1		
Total		160	100,0		

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Man	65	40,6	40,9	40,9
	Woman	94	58,8	59,1	100,0
	Total	159	99,4	100,0	
Missing	99	1	,6		
Total		160	100,0		

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	16-30	119	74,4	75,3	75,3
	31-45	19	11,9	12,0	87,3
	46-65	17	10,6	10,8	98,1
	> 65	3	1,9	1,9	100,0
	Total	158	98,8	100,0	
Missing	99	2	1,3		
Total		160	100,0		

Education Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Middle school	7	4,4	4,4	4,4
	High school	98	61,3	61,6	66,0
	Bachelor or Master Degree	42	26,3	26,4	92,5
	Post Master Degree	12	7,5	7,5	100,0
	Total	159	99,4	100,0	
	Missing	99	1	,6	
Total		160	100,0		

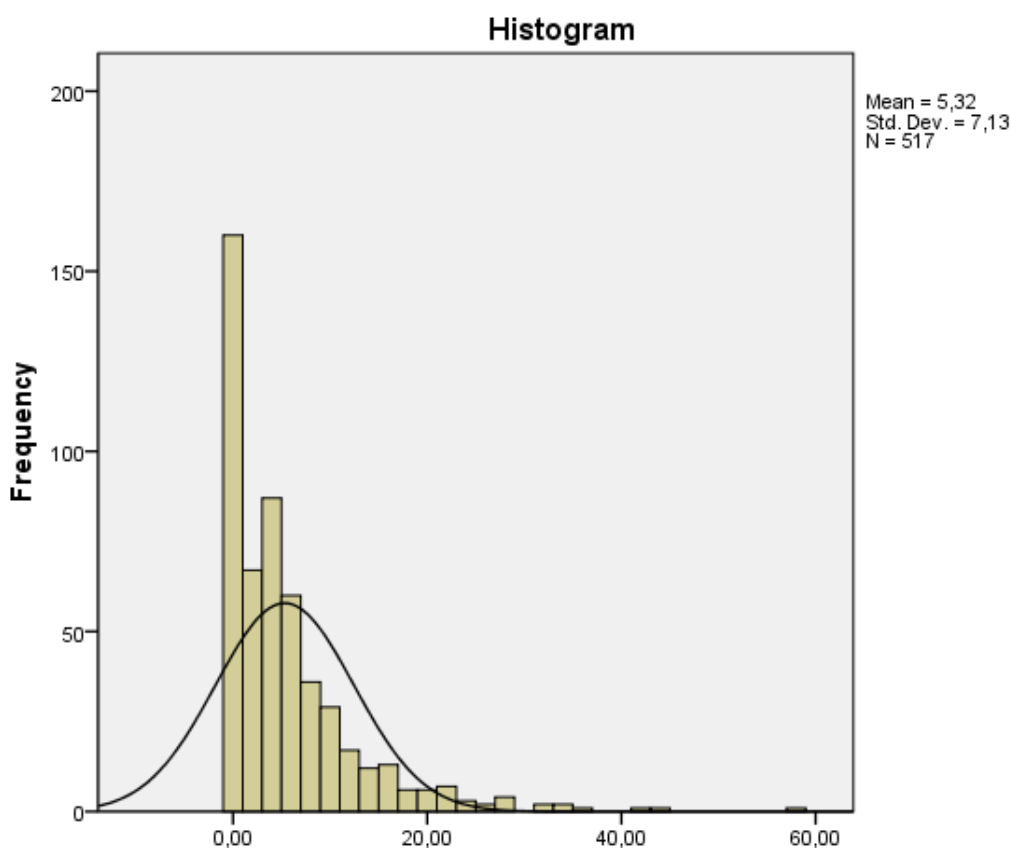


Figure 31 Frequency of sharing services' use

A distribution of data is considered symmetric if it looks the same to the left and right of the center point. The level of skewness is a measure of the lack of symmetry of the data. The skewness for a normal distribution is zero, and any symmetric data should have skewness near zero. Negative values for the skewness indicate data that are skewed left, and positive values for the skewness indicate data that are skewed right. As a rule of thumb if the skewness statistic is twice as large as the standard error of skewness, the distribution is skewed (De Vaus, 2007). Kurtosis is a measure of whether the data are peaked or flat relative to a normal distribution. That is, data sets with high kurtosis tend to have a distinct peak near the mean, decline rather rapidly, and have heavy tails. Data sets with low Kurtosis tend to have a flat top near the mean rather than a sharp peak. A uniform distribution would be the extreme case. The Kurtosis value for a normal distribution is 3, but many software calculate the excess

Kurtosis where the value for normal distribution is set to 0. Positive Kurtosis indicates a “peaked” distribution and negative Kurtosis indicates a “flat” distribution.

In the present analysis, confronting the distribution of the first two variables (*Scale of propensity to give and Scale of propensity to ask*) with the variable “*Overall frequency of sharing services use*”, emerge that the skewness of the last one is much more accentuated. While for the propensity to ask the distribution is basically normal, the propensity to give is lightly skewed towards a positive value and the actual use of services is quite strongly skewed towards negative values. Therefore, we infer that the **propensity to share is higher than the actual use of the services**.

Statistics

	ScalePropGive	ScalePropAsk	Frequency of SharingServices use
N Valid	1072	1062	517
Missing	47	57	602
Skewness	-,224	-,034	2,606
Std. Error of Skewness	,075	,075	,107
Kurtosis	,050	-,222	9,914
Std. Error of Kurtosis	,149	,150	,214

Looking at possible correlations, a Pearson’s correlation is a good way to a measure the strength and direction of association that exists between two variables measured on at least an interval scale. Here will be used the Pearson’s correlation and the Spearman’s correlation. The latter is a nonparametric measure of the strength and direction of association that exists between two variables measured on at least an ordinal scale (De Vaus, 2007). In the present analysis, the propensity of sharing or asking correlates only lightly to the actual frequency of use of the services (Pearson=,182; <,000; Spearman’s Rho=,121 sig<,01). The correlation between the two variables evaluating the propensity instead is extremely strong (Pearson=,706; Spearman’s Rho=,702 both sig <,000).

Correlations

	Frequency of SharingServices use	ScalePropGive	ScalePropAsk
Frequency of SharingServices use Pearson Correlation Sig. (2-tailed) N	1 517	,178** ,000 504	,182** ,000 499
ScalePropGive Pearson Correlation Sig. (2-tailed) N	,178** ,000 504	1 1072	,706** ,000 1037
ScalePropAsk Pearson Correlation Sig. (2-tailed) N	,182** ,000 499	,706** ,000 1037	1 1062

** . Correlation is significant at the 0.01 level (2-tailed).

Correlations

			Frequency of SharingServices use	ScalePropGive	ScalePropAsk
Spearman's Rho	Frequency of SharingServices use	Correlation coefficient Sig. (2-tailed) N	1,000 . 517	,121** ,007 504	,121** ,007 499
	ScalePropGive	Correlation coefficient Sig. (2-tailed) N	,121** ,007 504	1,000 . 1072	,702** ,000 1037
	ScalePropAsk	Correlation coefficient Sig. (2-tailed) N	,121** ,007 499	,702** ,000 1037	1,000 . 1062

** . Correlation is significant at the 0.01 level (2-tailed).

The population of the sample is generally unaware of the services offered by the sharing economy or it has never used them.

- The only one that was used at least once by the 36% of the respondents is the service of **carsharing**,
- while the **exchange of idea** was used at least once by the 23,6% of the respondents,
- the **sharing of a house** by the 23,1%,
- **bikesharing** by the 21,6%,
- **ridesharing** by the 19,5%,
- **knowledge exchange** by the 17,5%,
- **organizing sports activities in group** by the 15,6%,
- **solidarity based purchase groups** by the 14,3%
- **car with driver** by the 13,6%,
- **sharing food** by the 12,9%,
- **crowdfunding** by the 12,9%,
- loan and **exchange of objects** by the 13,1%,
- **social eating** by the 11%,
- **time exchange** by the 10%,
- and **sharing parking space** by the 6,9%.

4. If you have used any of these services, overall, how would you rate your experience from 1 (very bad) to 10 (very good)?

The fourth question is about the general evaluation of the experience of those people that tried some services. The analysis only includes the answers of those respondents that used the services at least once, for a total of 313 people.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEGATIVE	1	,3	,3	,3
	1	7	2,0	2,2	2,6
	2	6	1,7	1,9	4,5
	3	8	2,2	2,6	7,0
	4	12	3,4	3,8	10,9
	5	38	10,6	12,1	23,0
	6	48	13,4	15,3	38,3
	7	70	19,6	22,4	60,7
	8	63	17,6	20,1	80,8
	9	26	7,3	8,3	89,1
	POSITIVE	34	9,5	10,9	100,0
	Total	313	87,7	100,0	
Missing	99	44	12,3		
Total		357	100,0		

The mean evaluation is 6,8, with a Standard Deviation of 2. Among those who have used one the sharing tools,

- the **7% has an overall negative evaluation** (between 1 and 3),
- while **16% has a moderately negative** evaluation (values 4 and 5),
- **37,7% gives a moderately good evaluation** (6 and 7 points)
- and the remaining **39,3% has a very good opinion of the services provided** (8 to 10 points).

The respondents that give a very good evaluation are almost 40% of the part of the sample that have tried at least once some of the services. It could be interesting to compare this group with all the other respondents that, despite having experienced some services, have a not so good evaluation. For this reason, I created a dummy to compare the two groups and specifically their average level of use of each service. The respondents giving a good evaluation (>8) correspond to 1 and those giving a less than good evaluation (1-7) correspond to 0 and they are almost the 60% of the sample.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	,00	190	53,2	60,7	60,7
	1,00	123	34,5	39,3	100,0
	Total	313	87,7	100,0	
Missing	System	44	12,3		
Total		357	100,0		

Basically, it is the sharing of car services (carsharing and ridesharing) to define the good opinion of the service in the respondents. They are the most used and the most appreciated services, in line with their general pervasiveness.

The frequency of use goes from 0 to 4 and the following table shows the average level of use for each type of service in the two groups of population: those who have a not so good evaluation (0) and those who have a very good evaluation (1). The table confirmed that differences among means are significant only for Carsharing and Ridesharing, followed by the sharing of Knowledge and Ideas, even if the difference in this case is less significant and those who used less the service gave a better evaluation. For Carsharing and Ridesharing, indeed, those who used more the service gave a better evaluation.

		Group Statistics					
		Service evaluation >=8	N	Mean		Mean difference	Sig (2 tailed)
used CARSHARING	dimension1	,00	190	,73	Equal variances assumed	-,761	,000
		1,00	123	1,49	Equal variances not assumed	-,761	,000
used BIKESHARING	dimension1	,00	190	,52	Equal variances assumed	-,208	,099
		1,00	123	,72	Equal variances not assumed	-,208	,124
used RIDESHARING	dimension1	,00	190	,21	Equal variances assumed	-,730	,000
		1,00	123	,93	Equal variances not assumed	-,730	,000
used CAR WITH DRIVER	dimension1	,00	190	,28	Equal variances assumed	-,128	,157
		1,00	123	,41	Equal variances not assumed	-,128	,167
used SHARING HOUSE OR COUCHSURFING	dimension1	,00	190	,50	Equal variances assumed	-,305	,018
		1,00	123	,80	Equal variances not assumed	-,305	,027
used SHARING PARKING SPACE OR GARAGE	dimension1	,00	190	,13	Equal variances assumed	,004	,936
		1,00	123	,12	Equal variances not assumed	,004	,937
used TO LOAN, EXCHANGE, BARTER, RENTAL ITEMS	dimension1	,00	190	,38	Equal variances assumed	-,052	,606
		1,00	123	,43	Equal variances not assumed	-,052	,618
used EXCHANGE IDEAS AND INFO	dimension1	,00	190	1,04	Equal variances assumed	,411	,005
		1,00	123	,63	Equal variances not assumed	,411	,004
used CROWDFUNDING	dimension1	,00	190	,34	Equal variances assumed	-,154	,120
		1,00	123	,50	Equal variances not assumed	-,154	,143
used ORGANIZING SPORTS ACTIVITIES IN GROUP	dimension1	,00	190	,63	Equal variances assumed	,228	,052
		1,00	123	,40	Equal variances not assumed	,228	,047
used KNOWLEDGE EXCHANGE	dimension1	,00	190	,79	Equal variances assumed	,209	,119
		1,00	123	,59	Equal variances not assumed	,209	,120
used TIME EXCHANGE	dimension1	,00	190	,45	Equal variances assumed	,041	,722
		1,00	123	,41	Equal variances not assumed	,041	,726

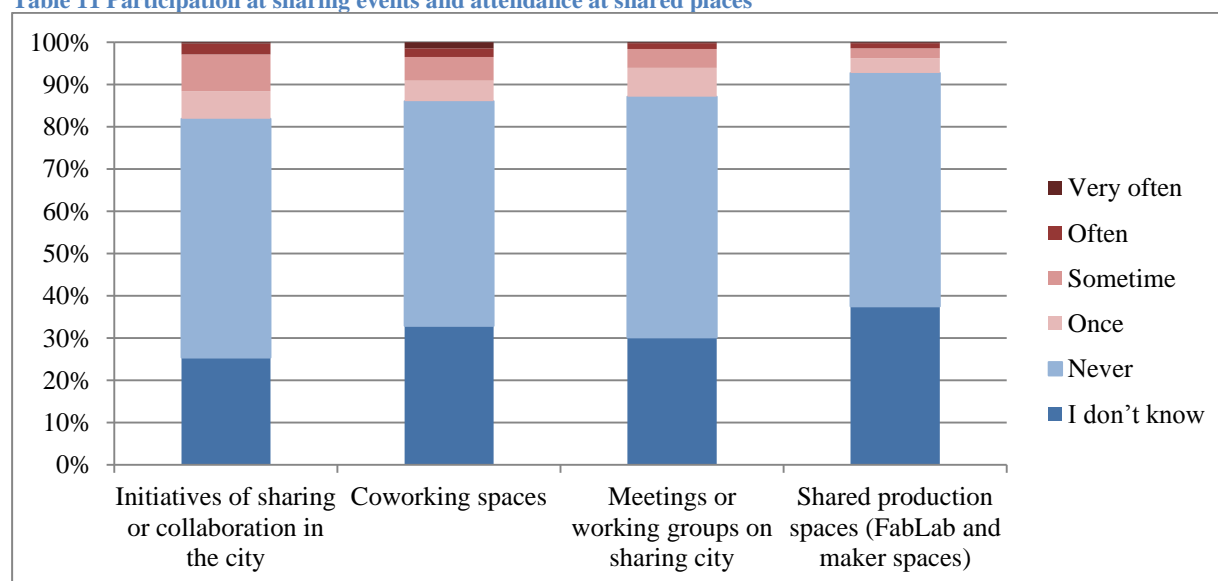
used SOCIAL EATING	dimension1	,00	190	,58	Equal variances assumed	,181	,141
		1,00	123	,40	Equal variances not assumed	,181	,135
used GAS	dimension1	,00	190	,45	Equal variances assumed	-,092	,433
		1,00	123	,54	Equal variances not assumed	-,092	,457
used SHARING FOOD	dimension1	,00	190	,43	Equal variances assumed	,109	,278
		1,00	123	,32	Equal variances not assumed	,109	,283
used ALTRO	dimension1	,00	25	,32	Equal variances assumed	,144	,473
		1,00	17	,18	Equal variances not assumed	,144	,451

5. In the last 12 months have you ever been in one of these places or participated in their initiatives?

The awareness about the services is also built by the participation in local initiatives related to sharing themes and by the attendance at spaces designated for sharing production, consumption and work. The following question allows detecting if people spend time in these places and participate at meetings and local initiatives.

	Frequencies					
	I don't know	Never	Once	Sometime	Often	Very often
Coworking spaces	364	589	54	62	23	16
Shared production spaces (FabLab and maker spaces)	415	611	39	26	13	3
Meetings or working groups on sharing city	334	630	76	49	15	3
Initiatives of sharing or collaboration in the city	282	626	72	97	28	4

Table 11 Participation at sharing events and attendance at shared places



The level of participation in events informing about the sharing economy phenomenon in general, and of its specific services available in the city is low: only the 17,9% of the sample participated in initiatives of sharing or collaboration in the city and 12, 8% attended meetings or working groups on the topic of the sharing city. Also the shared working spaces and the places of community production registered a low frequentation: 13,8% used Coworking spaces and 7,2% attend shared production spaces (FabLab and maker spaces).

The answers to the four items are added in order to create a scale called *Scale of participation at sharing events and shared places*. This scale summarizes the global level of participation to events related to the sharing city and to spaces for shared production, consumption and work, where 0 means that the respondents never participated to any of them, and 16 that they participated very often to all of them.

Scale of participation at sharing events and shared places

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	,00	399	35,7	63,8	63,8
	1,00	47	4,2	7,5	71,4
	2,00	51	4,6	8,2	79,5
	3,00	32	2,9	5,1	84,6
	4,00	36	3,2	5,8	90,4
	5,00	12	1,1	1,9	92,3
	6,00	19	1,7	3,0	95,4
	7,00	9	,8	1,4	96,8
	8,00	5	,4	,8	97,6
	9,00	5	,4	,8	98,4
	10,00	2	,2	,3	98,7
	11,00	4	,4	,6	99,4
	12,00	1	,1	,2	99,5
	16,00	3	,3	,5	100,0
	Total	625	55,9	100,0	
Missing	System	494	44,1		
Total		1119	100,0		

In terms of correlation, this variable is positively correlate to the level of use of sharing services: to a higher level of use corresponds a higher level of participation. The Pearson's Chi Square allows discovering if there is a relationship between the two variables and the Kendall's Tau-b measure the strength and direction of association that exists between two variables measured on at least an ordinal scale (De Vaus, 2007). In the Kendall's tau b, the sign of the coefficient indicates the direction of the correlation, and in this case, the correlation is positive, while the absolute value indicates its strength. As usual, larger absolute values indicate stronger relationships, from -1 to +1. The correlation signaled by the significance of the Chi-Square Test can be considered moderately strong, as testified by the high Kendall's value of .380

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1076,938 ^a	34	,000
Likelihood Ratio	319,730	34	,790
Linear-by-Linear Association	103,936	1	,000
N of Valid Cases	376		

a. 370 cells (96,4%) have expected count less than 5. The minimum expected count is ,00.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Ordinal by Ordinal Kendall's tau-b	,380	,036	9,565	,000
N of Valid Cases	376			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

6. Where did you hear about these new services and locations?

This question allows to understand in which way respondents get in contact or get information about the sharing economy services, local events and places of shared production, consumption and work.

Word of mouth	57,6%
Social network	44,9%
Online Platforms	22,5%
Meetings organized by association	5,8%
Presentations organized by the Municipality	3,9%
Working tables on the sharing topic	1,9%

The word of mouth appears to be the main channel of knowledge diffusion about sharing economy, being indicated as source of information by the 57,6% of the respondents, followed by the Social Network, signaled by the 44,9% of the respondents. These data, confirm their role as main way of communication in the 2.0 society. As already seen in the previous chapters, the Municipality of Milan is doing a strong public promotion of this new form of economy, organizing or favoring special gatherings on the topic to spread the voice of the sharing economy and let people know what services can be used. However, despite the efforts, not all of these occasions of meeting and discussion seem to have had a significant impact. Clearly, the preferred ways of dissemination are not the conferences/meetings/public presentations, at least for the ordinary people. The data suggest that the local events still attract a specific target of people, those that in some way are already bonded to the topic of the sharing economy, since they are social entrepreneurs, startups members, cooperatives staff, researchers, creative, social innovators and counselors.

7. In your opinion, which of the following subjects is more qualified to manage and promote the initiatives of sharing and collaboration in your city? Rate on a scale from 1 (very bad promoter) to 10 (Great promoter)

	Mean	SD
Municipality and public institutions	7,1	2,4
Non profit associations	6,7	2,3
Private business online and offline	6,3	2,4
School, university, research centers	7,9	2
Groups of citizens	6,7	2,3
Religious institutions	4,3	2,8
Mix of different actors among those proposed	6,9	2,4

This question gathers the opinion that respondents have on the topic of management and promotion of the sharing and collaborative initiatives in the city.

The **academic/research world** seems to be considered as the more qualified subject to promote initiative of sharing economy, closely followed (but not quite as unanimously) by Municipality and public institutions, nonprofit associations and groups of citizens. Altogether, it seems like the issues of sharing economy, for the sample, are seen as extraneous to traditional business, and better represented by not-in-the-business subjects.

8. In disseminating and promoting sharing and collaborative services PUBLIC INSTITUTIONS should:

	Valid percents				
	Strongly disagree	Disagree	No opinion or uncertain	Agree	Strongly agree
Distance itself	59,3	24,1	7,8	6,5	2,3
Lead	5,3	9,2	25,7	45,5	14,4
Collaborate by giving rules	2,9	6,4	18,9	55,3	16,5
Collaborate by tracking processes	3	4,9	20,4	55,4	16,3
Collaborate by financing	2,5	5,5	15,2	42,9	34

Going in depth and asking which can be the role of the Public Institutions, the respondents are quite compact and determined in their answer to these items. Public institution should NOT distance themselves from the promotion of sharing services, but should instead collaborate mainly by financing, but also by tracking processes and giving rules, while more incertitude is shown about the opportunity of them leading the process.

9. On the other hand, CITIZENS AND LOCAL ASSOCIATIONS in your opinion should:

	Valid percent				
	Strongly disagree	Disagree	No opinion or uncertain	Agree	Strongly agree
Distance themselves	56,5	25,2	9,4	7,1	1,8
Lead	3,5	9,1	36,1	43	8,3
Collaborate by setting the guidelines	1,9	4,5	16,6	62,4	14,6
Collaborate by tracking processes	2,3	6,3	25,9	56,4	9,2
Collaborate by financing	7,8	14,9	34,3	34	9,1

Just like with the public institutions, also citizens and local associations needs to get involved, in the opinion of the participants. More specifically the respondents think that they should collaborate by setting the guidelines and tracking processes, while more varied opinions are given on the opportunity of them to collaborate by leading or financing.

In the analysis more correlations have been sought on regards of public and citizens involvement in the spreading of the sharing economy. Nevertheless, no conclusive assumption can be derived by the correlation between the variables regarding the propensity and the actual use of sharing platforms and the vision on the role of public institutions and citizens and local associations.

	Kendall's tau b		
	Prop give	Prop ask	Scale of use
PUBLIC INSTITUTIONS			
Distance itself	irrelevant	irrelevant	not sig
Lead	,104 sig ,000	irrelevant	not sig
Collaborate by giving rules	irrelevant	irrelevant	not sig
Collaborate by tracking processes	irrelevant	not sig	-,103, sig ,005
Collaborate by financing	irrelevant	irrelevant	not sig
CITIZENS AND LOCAL ASSOCIATIONS			
Distance themselves	-,100 sig ,000	irrelevant	not sig
Lead	irrelevant	,101 sig ,000	not sig
Collaborate by setting the guidelines	,143 sig ,000	,121 sig ,000	not sig
Collaborate by tracking processes	irrelevant	irrelevant	not sig
Collaborate by financing	irrelevant	,105 sig ,000	not sig

The following question was introduced to understand which areas, in the opinion of the sample, can benefit more by the introduction of sharing economy practices, or it is in stronger need of a shift to sharing protocols.

10. In your opinion, in which areas should the sharing in the city be strengthened? For each area give a score from 1(not important) to 10 (very important)

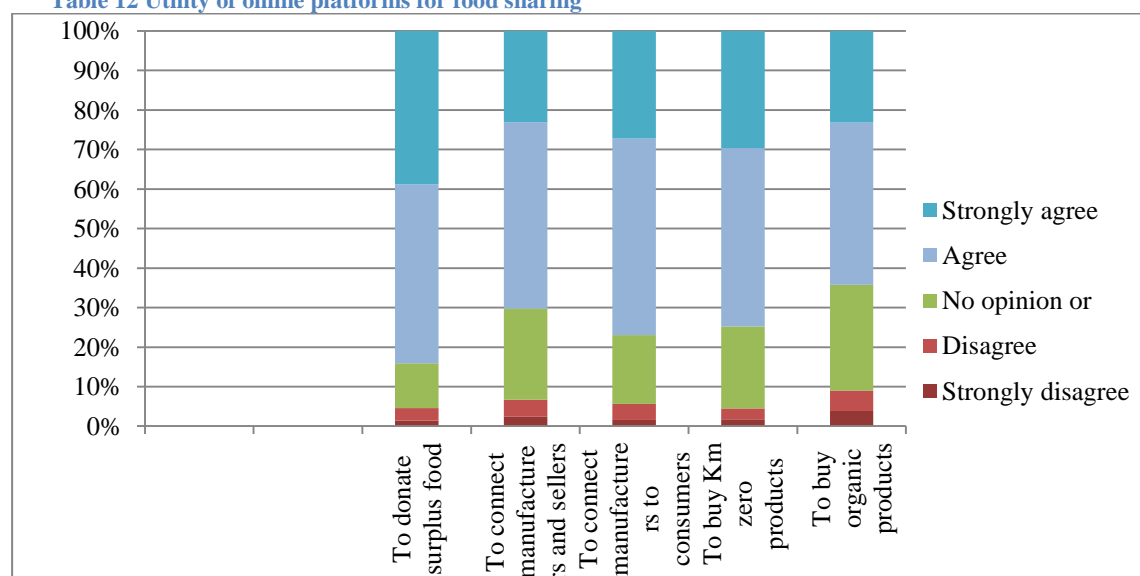
	Mean	Sd
Info and statistical data (open data)	6,2	2,3
New ideas, products and services	7,9	1,8
Culture	8,4	1,7
Economic activities for the city	8,1	1,7
Environment and pollution reduction	8,4	1,8
Tradition and local knowledge	7,8	2
Social relations	8	1,9
Public spaces	8,4	1,7
Food	7,6	2,2

The areas that are more strongly seen as fitting to benefit by an intervention of sharing economy are culture, environment and pollution reduction, and public spaces. The low value related to open data can be considered a sign of a low knowledge of the topic by ordinary citizens.

11. Why is an online platform useful for food sharing?

	Valid percents				
	Strongly disagree	Disagree	No opinion or uncertain	Agree	Strongly agree
To sell surplus food	9,5	10,6	21,6	39,7	18,6
To donate surplus food	1,4	3,2	11,3	45,2	38,8
To connect manufacturers and sellers	2,5	4,2	23,1	47,1	23,1
To connect manufacturers to consumers (retail)	1,6	4	17,4	49,6	27,2
To buy Km zero products	1,7	2,8	20,7	45	29,6
To buy organic products	3,8	5,2	26,7	41	23,1

Table 12 Utility of online platforms for food sharing



Focusing on the topic of sharing food, which is gaining more and more momentum in the global debate (fostered also by the Expo’s theme: Feed the Planet. Energy for Life), allows to reflect on the possibility of using this new form of economy to really reduce waste and recirculating goods. Platforms of sharing food are seen as useful mainly for the donation of surplus food, the connection of manufacturers and consumers, and to buy zero food miles. The dimensions more stressed are those of free giving, direct link with producers (farm-to-table), food of good quality and low environmental impact, while the mere sale is not an option. Once again, we can report a sort of contraposition between traditional businesses and the role that is given to the sharing economy options. The data show also that, even if the topic of healthy food and food for everyone is spreading, a 30% of the sample is not interested in it.

The following question enters more in the local context, trying to expose the actual knowledge and awareness of citizens about the local initiatives related to the city of Milan and to its effort to let people know what is the sharing economy and what can be exchanged, how and where.

12. Are you aware of the initiatives that support collaborative services in your city?

	Frequency	%
Public Hearing with online questionnaire on the topic of city collaboration, to define the Guidelines of “Milano Sharing City”	308	27,5
Creation of a network of experts and operators of the sharing economy in Milan	208	18,6
Presentations and public events on the topic of collaboration and sharing in the city	393	35,1
Municipal Voucher to use coworking spaces	217	19,4
Sharexpo, shared path to promote sharing economy services during Expo	410	36,6
Regeneration of public spaces, such as “Ex Ansaldo”, as a creativity, innovation and entrepreneurship space	348	31,1
Incubator FabriQ	96	8,6
Incentives for FabLab and makerspace	116	10,4
First Civic Crowdfunding	109	9,7

The data collected show a population mostly unaware of the initiatives promoted in the city of Milan. The most widely known are Sharexpo (36,6%) and the presentations on the themes of sharing and collaboration (35,1%), followed by the re-opening of the Ex Ansaldo space - converted in a space for citizens, to promote creativity, social innovation and business ideas and based on social values (31,1%). These data confirm that the topic of the sharing economy is followed and is known mainly by people involved in some way in the wave of innovation that is featuring the city. The phenomenon appears to be still a niche phenomenon, and ordinary people are still unaware of its potentialities and of the city commitment to support its expansion. As already said, the process to integrate the sharing economy in the society and extract its potentiality for the benefit of all the citizens is just started and required time to grow and settle down.

From this question it has been possible to build a scale adding up all the items of the question (*Scale of events awareness – ScaleAwarEvent*). The resulting value tells of how

many events the person was aware of. The respondents are distributed on the scale, with only a 31,1% of them not knowing any of the events listed. There are no correlations with the variables ‘propensity to give’ and ‘propensity to ask’ but a positive, moderate one with the level of ‘use of services’ (Kendall’s tau b ,199)

ScaleAwarEvent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	,00	336	30,0	31,1	31,1
	1,00	196	17,5	18,1	49,3
	2,00	171	15,3	15,8	65,1
	3,00	155	13,9	14,4	79,4
	4,00	100	8,9	9,3	88,7
	5,00	59	5,3	5,5	94,2
	6,00	32	2,9	3,0	97,1
	7,00	9	,8	,8	98,0
	8,00	7	,6	,6	98,6
	9,00	15	1,3	1,4	100,0
	Total	1080	96,5	100,0	
Missing System	39	3,5			
Total	1119	100,0			

These data show that those who generally use the sharing services and platforms are more oriented to take part in local sharing events and attend shared spaces of consumption, production and work. In addition, they know more about the specific gatherings organized in the city such as Sharexpo, Public Hearings, public space regeneration and the other opportunities that the Municipality, helped by the organized civil society, is opening.

ScaleAwarEvent * frequency of sharing service’s use
Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	,199	,034	5,812	,000
N of Valid Cases		502			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Kendall’s tau b, that ranges from -1 to +1, in this case has a value not so closed to 1 (,199), indicating that, even if the correlation exists, is quite moderate.

The following two tables show the lack of correlation between the awareness of the sharing imprint in the city and the propensity to give and ask.

ScaleAwarEvent * ScalePropAsk

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Ordinal by Ordinal Kendall's tau-b	,012	,023	,499	,618
N of Valid Cases	1036			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

ScaleAwarEvent * ScalePropGive

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Ordinal by Ordinal Kendall's tau-b	,006	,023	,255	,798
N of Valid Cases	1044			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

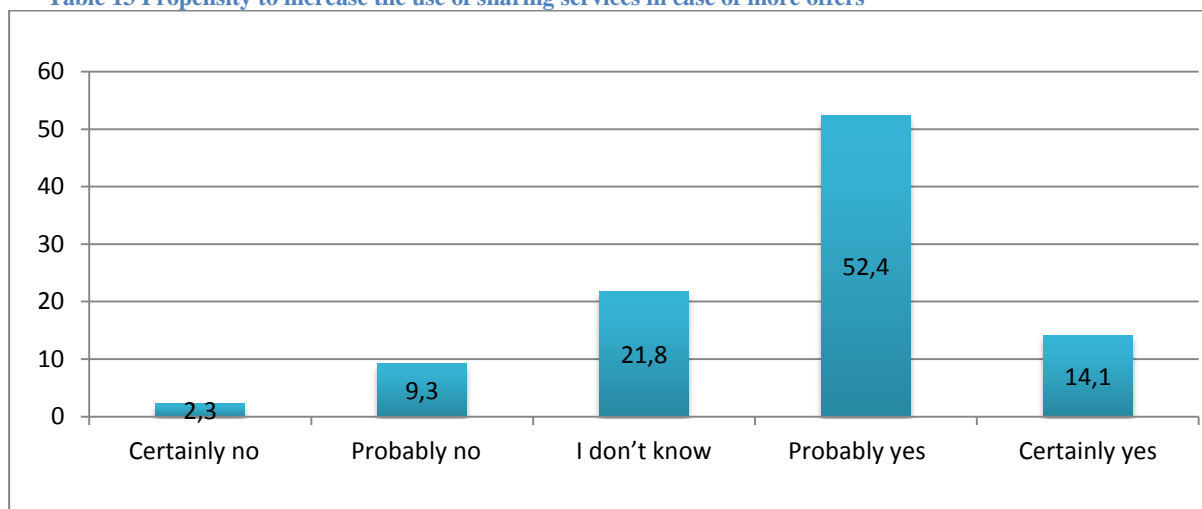
The next question intends to reveal the propensity of a major use of sharing services, platforms and spaces, in case of a strong and more rich presence of these services on the territory.

13. If there were more opportunities and more services promoting exchange and sharing in your city, would you join or use them?

	Frequency	Valid percentage
Certainly no	25	2,3
Probably no	101	9,3
I don't know	236	21,8
Probably yes	567	52,4
Certainly yes	153	14,1

Most of the respondents exhibit a moderate openness (52,4%) to a heavier use of sharing service, but there is a big chunk of respondents, 21,8%, that doesn't express an opinion on the matter, while 14,1% of enthusiastic would certainly adopt them and a remaining 11,6% is skeptic or uninterested.

Table 13 Propensity to increase the use of sharing services in case of more offers



This variable significantly correlates with all of the variables detecting the propensity and the actual participation at sharing economy initiatives. Those who express a propensity to increase the use of sharing items the more the supply increases have a broader proclivity to sharing values in general, tends to use more the tools that sharing economy offers, giving positive evaluation, and are aware of the city transformation in this direction.

Kendall's Tau B		Frequency of services' use	ScalePropGive	ScalePropAsk	Scale of participation to events of sharing	ScaleAwareEvent	Evaluation of the experience
		If there were more opportunities and more services promoting exchange and sharing in your city, would you join or use them?	Correlation Coefficient	,226	,231	,257	,235
	Sig. (2 tailed)	,000	,000	,000	,000	,002	,000

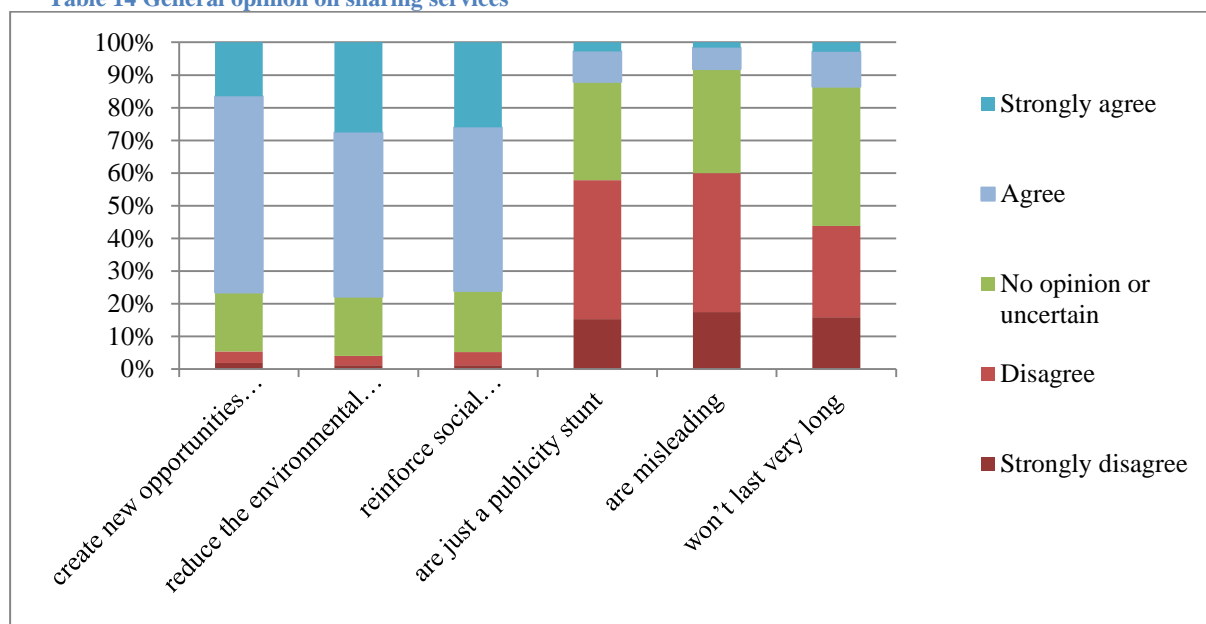
The only weak correlation is the one with the scale of awareness of the events promoted and organized in the city and connected with the sharing economy/city, while for all of the other variables at the growth of one also the other increase.

The last question sets the respondents vision and the opinion about the nature and the implications of the sharing economy.

14. How much do you agree with the following statements? The new sharing and collaborative services ...

	Valid percentages				
	Strongly disagree	Disagree	No opinion or uncertain	Agree	Strongly agree
...create new opportunities for income, employment and savings	1,9	3,5	18,1	60	16,5
...reduce the environmental impact and wastefulness	1,2	2,9	18,1	50,3	27,6
...reinforce social relationships and the sense of community	1,2	4	18,7	50,1	26
... are just a publicity stunt	15,3	42,5	30,1	9,3	2,8
...are misleading	17,5	42,4	31,8	6,6	1,6
Won't last very long	15,9	27,9	42,6	10,7	2,9

Table 14 General opinion on sharing services



The respondents mostly agree with the more positive aspects characterizing the sharing economy, and are quite unfavorable to the three negative options, although in these items the proportion of uncertain is much higher than in the first three positive items. The sample in general does not agree with the last three negative items, even though the percentage of uncertain is quite high.

Cluster Analysis

In an attempt to identify the profiles of the respondents in terms of propensity to share, use of sharing economy tools, participation and awareness, the analysis proceeds using the variables included in the database to group the respondents on the basis of a “particular sets of composite attributes” (Lazarsfeld and Barton, 1951). Using a procedure of Cluster Analysis, experimental units are gathered together on the basis of similarity criteria. The classification techniques seek groups of objects such that within the same group (cluster) the objects are “similar” to each other, and objects from different groups are “different” from each other. The main goal is to minimize the distance within the clusters and maximize the distance between the clusters. In this case, a repeated partition technique is used, in particular the *k-means*

technique, in order to obtain an x -group classification. In the k -means cluster, the objects are divided into disjoint subsets, such that each object belongs to one and only one cluster. Each cluster is associated with a centroid and each object is assigned to the cluster whose centroid is nearest. The number of clusters must be specified at the beginning of the analysis and in this case the observations suggested the creation of 4 groups.

In this analysis 8 variables have been included to identify 4 “**groups of knowledge and use of sharing services**” into which the 1097 respondents to the questionnaire are distributed. Choosing the right variables for the analysis is a fundamental step, since it ensures the usability of the results. As a general rule, the variables included should have a good selective capacity, i.e. be able to produce groups as distinct and clear as possible.

The variables chosen in this case were:

2 items of the questionnaire:

- 4. *If you have used any of these services, overall, how would you rate your experience from 1 (very bad) to 10 (very good)?*
- 13. *If there were more opportunities and more services promoting exchange and sharing in your city, would you join or would you use them? (1 “Certainly no”, 2 “Probably no”, 3 “I don’t know”, 4 “Probably yes”, 5 “Certainly yes”).*

and 6 scales, based on the elaboration of the answers to 6 different sets of questions:

- Set 1. *What would you be willing to share with or lend to an acquaintance or a person living near your home? from 1 (absolutely no) to 10 (surely yes).* By adding up the answers to all this set of items, a scale of propensity to give has been created: *ScaleProGive* (from 1 to 12)
- Set 2. *What would you ask or would you borrow, to an acquaintance or person living near your home? from 1 (absolutely no) to 10 (surely yes).* By adding up the answer to all this items, a scale of propensity to ask has been created: *ScaleProAsk* (from 1 to 12).
- Set 3. *During the last 12 months, did you use some of these services?* By adding up the answers to all this set of items, a new variable called “*Overall frequency of sharing services use*” has been created. Its values goes from 0 “no use of any services” to 60 “used each service very often”
- Set 5. *In the last 12 months have you ever been in one of these places or participated in their initiatives?* This question detect the participation to initiatives of sharing or collaboration in the city at a general level and the use of coworking spaces, FabLab and makerspaces. By adding up the answers to all this set of items a *scale of participation at sharing events* has been created, from 0 “no participation at all” to 16 “participation to all of the initiatives very often”.
- Question number 12. *Are you aware of the initiatives that support collaborative services in your city?* This question detects the knowledge and awareness of the respondents in relation to specific events, initiatives and activities connected with the theme of sharing economy, that are being promoted in Milan. By adding up the answers to all the items of this question, a scale about awareness has been created: *ScaleAwareEvent*. The resulting values tell us of how many events the person was

aware of (from 0 “completely unaware”, to 9 “knowledge of all of the proposed initiatives”)

- Set 14. *How much do you agree with the following statements? The new sharing and collaborative services ...* (1 “Strongly disagree”, 2 “Disagree”, 3 “No opinion or uncertain”, 4 “Agree”, 5 “Strongly Agree”). The answers to the three last options have been reversed and the scores to all of the items added, creating a scale of “*General positive attitude*”. The scale goes from 0 (very negative attitude towards all of the items) to 30 (very positive attitude towards all of the items).

Once selected the number of clusters and the variables to be included, the analysis are run using the SPSS software.

Final Cluster Centers

	Cluster			
	1 STRONG USERS	2 NON USERS- SKEPTICS	3 NON USERS – POSITIVE ATTITUDE	4 MODERATE WELL INFORMED USERS
Experience Evaluation	7	5	8	7
If there were more opportunities and more services...in your city, would you join or would you use them?	3	2	3	3
Overall frequency of sharing services use	28,71	1,66	2,95	12,01
ScalePropGive	6,17	4,52	6,26	6,13
ScalePropAsk	6,05	3,85	5,49	5,53
Scale of participation at sharing events	6,58	,26	,63	1,99
ScaleAwarEvent	1,92	1,54	1,74	3,15
General positive attitude	23,77	19,63	25,45	21,21

The four groups are identified and the average scores for the selected grouping variables are available in the table above.

→ The first group is composed by 122 respondents. They manifest a medium-high propensity to give (6,17) and ask (6,05) of sharing items and stuff, a medium-high level of participation at general events and initiatives related to sharing economy and specific places such as FabLab, makerspaces and coworking, a not so high knowledge of specific events in Milan, and a general positive attitude towards sharing economy services. But they have the higher frequency of use of sharing services (28,71) and a quite high evaluation of the sharing services experienced (7 on 10). For these features, they can be considered STRONG USERS.

→ 357 respondents compose the second group. They have a very low use of sharing services (1,66), and show scarce inclination to use them even if improved in the city. The propensity to give and ask is the lower of the sample; they do not know what is happening in the city in terms of sharing economy and they don’t hang out at coworking or other sharing space of production and consumption. Their general positive attitude is the lower among the 4 groups. They can be considered SKEPTICTS NON USERS.

→ The third group is composed of 410 respondents with a low use of sharing services (but still higher than the one of the previous group, 2,95) and a very high evaluation of the services experienced (8 on 10). This group has a quite positive propensity to give and ask things or services (even if the inclination to give is higher than the propensity of asking) but does not take part in initiatives and does not frequent coworking and maker spaces. The

respondents belonging to this group generally show a scarce knowledge of what happens in the city in terms of sharing economy, but manifest good propensity to the use of sharing services if improved and expanded in the city. In addition, this group show the higher general positive attitude of the sample (25,45) at the point that it can be considered the group of NON USERS WITH POSITIVE ATTITUDE.

→ In the last group there are 226 respondents with a medium use of sharing services, very well evaluated (7 on 10), not particularly engaged in local initiatives and in the use of coworking and makers spaces but very well informed in terms of specific events and projects that the city proposes and implements. This group shows a positive inclination to the use of sharing services, and a high general positive attitude towards the sharing economy. It would use more the sharing services if expanded in the city, but now it shows mainly a deep knowledge of what the city is doing in supporting this type of services and this new economic declination. This is the group of MODERATE WELL INFORMED USERS.

ANOVA

	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
Experience Evaluation	322,783	3	3,786	772	85,255	,000
If there were more opportunities and more services... in your city, would you join or would you use them?	42,777	3	,708	1077	60,400	,000
Overall frequency of sharing services use	6983,040	3	10,292	513	678,474	,000
ScalePropGive	222,433	3	2,524	1068	88,140	,000
ScalePropAsk	242,974	3	2,945	1058	82,498	,000
Scale of participation at sharing events	605,285	3	3,107	621	194,799	,000
ScaleAwarEvent	131,269	3	3,677	1076	35,704	,000
General positive attitude	2210,330	3	6,369	1043	347,069	,000

The F tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this, and thus they cannot be interpreted as tests of the hypothesis that the cluster means are equal. After having identified the four groups, the analysis proceeded checking for interesting differences. Unfortunately, the vital data do not differ significantly between the groups.

Some weak but interesting correlations are instead found with some items of question number 8. *In disseminating and promoting sharing and collaborative services the PUBLIC INSTITUTIONS should:*

- *Distance itself.* The correlation seems to be explained by an opposite trend in the answer of the two groups of non-users. The “skeptics non users” are more prone to think that public institutions should not be involved in the promotion and management of the sharing economy initiatives. On the contrary, the “non users with positive attitude” show greater trust in public institutions and manifest a propensity to think that local authorities should be involved in the promotion and management of the sharing economy services. Looking at the other two groups there aren’t significant information to report as cell counts and expected counts are pretty close.

Cluster Number of Case * Public institutions: Distance itself.

Crosstab

			PUBLIC INSTITUTION: DISTANCE ITSELF					Total
			Strongly disagree	Disagree	No opinion or uncertain	Agree	Strongly agree	
Cluster Number of Case	Strong users	Count	65	29	8	10	5	117
		Expected Count	69,3	28,3	9,1	7,6	2,7	117,0
	non users - skeptics	Count	179	98	38	30	2	347
		Expected Count	205,5	83,8	27,1	22,6	8,0	347,0
	non users - positive attitude	Count	287	68	19	14	12	400
		Expected Count	236,9	96,6	31,2	26,1	9,2	400,0
	moderate well informed users	Count	114	68	20	17	6	225
		Expected Count	133,3	54,3	17,6	14,7	5,2	225,0
Total		Count	645	263	85	71	25	1089
		Expected Count	645,0	263,0	85,0	71,0	25,0	1089,0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	57,621 ^a	12	,000
Likelihood Ratio	60,420	12	,000
Linear-by-Linear Association	1,285	1	,257
N of Valid Cases	1089		

a. 1 cells (5,0%) have expected count less than 5. The minimum expected count is 2,69.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,230	,000
	Cramer's V	,133	,000
N of Valid Cases		1089	

- *Collaborate by financing.* Once again, the weak correlation can be seen as a result of the differences in the attitude of the non-users groups. The “skeptics non users” are negative towards the idea of financial support to sharing economy services by public institutions. On the contrary the “non users with positive attitude” are more open to public funding of sharing economy initiatives and clearly support this idea.

Cluster Number of Case * Public Institutions: Collaborate by financing

Crosstab

			PUBLIC INSTITUTION: COLLABORATE BY FINANCING					Total
			Strongly disagree	Disagree	No opinion or uncertain	Agree	Strongly agree	
Cluster Number of Case	Strong users	Count	6	9	15	32	56	118
		Expected Count	2,9	6,5	17,7	50,7	40,2	118,0
	non users - skeptics	Count	13	22	71	154	87	347
		Expected Count	8,6	19,0	52,0	149,1	118,3	347,0
	non users - positive attitude	Count	5	12	38	191	160	406
		Expected Count	10,0	22,3	60,9	174,4	138,4	406,0
	moderate well informed users	Count	3	17	40	93	70	223
		Expected Count	5,5	12,2	33,4	95,8	76,0	223,0
Total		Count	27	60	164	470	373	1094
		Expected Count	27,0	60,0	164,0	470,0	373,0	1094,0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	61,506 ^a	12	,000
Likelihood Ratio	63,431	12	,000
Linear-by-Linear Association	2,523	1	,112
N of Valid Cases	1094		

a. 1 cells (5,0%) have expected count less than 5. The minimum expected count is 2,91.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,237	,000
	Cramer's V	,137	,000
N of Valid Cases		1094	

No significant correlation was found with the other items of the question, (*Lead, Collaborate by giving rules, Collaborate by tracking processes*).

The same analysis was run with the items of question number 9. *On the other hand, CITIZENS AND LOCAL ASSOCIATIONS in your opinion should...* The analysis underlines, also in this case, the presence of some correlations, even if weak, showing the same trends seen before between “skeptics non users” and “non users with positive attitude”.

- *Distance themselves*. The group of non users with positive attitude is not supportive of this affirmation, while the group of skeptics seems to be more keen on the idea that citizens and local associations should distance themselves from these initiatives.

**Cluster Number of Case * Citizens and Local Associations: Distance itself
Crosstab**

			CITIZENS AND LOCAL ASSOCIATIONS: DISTANCE ITSELF					Total
			Strongly disagree	Disagree	No opinion or uncertain	Agree	Strongly agree	
Cluster Number of Case	Strong users	Count	73	26	8	5	7	119
		Expected Count	67,3	29,9	11,1	8,4	2,2	119,0
	non users - skeptics	Count	154	105	48	36	4	347
		Expected Count	196,3	87,3	32,5	24,5	6,4	347,0
	non users - positive attitude	Count	277	74	23	19	6	399
		Expected Count	225,7	100,4	37,4	28,2	7,3	399,0
	moderate well informed users	Count	112	69	23	17	3	224
		Expected Count	126,7	56,4	21,0	15,8	4,1	224,0
Total		Count	616	274	102	77	20	1089
		Expected Count	616,0	274,0	102,0	77,0	20,0	1089,0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	72,702a	12	,000
Likelihood Ratio	69,234	12	,000
Linear-by-Linear Association	3,211	1	,073
N of Valid Cases	1089		

a. 2 cells (10,0%) have expected count less than 5. The minimum expected count is 2,19

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,258	,000
	Cramer's V	,149	,000
N of Valid Cases		1089	

- *Collaborate by giving rules*: once again the correlation founded between these two variables seems to be mainly due by the answers of the two non-users groups. While the group with a positive attitude quite clearly supports the idea that citizens and local associations should collaborate in the definition of rules in this field, the skeptics show the opposite attitude.

Cluster Number of Case * Citizens and Local Associations: Collaborate by giving rules

Crosstab

			CITIZENS: COLLABORATE BY GIVING RULES					Total
			Strongly disagree	Disagree	No opinion or uncertain	Agree	Strongly agree	
Cluster Number of Case	Strong users	Count	1	5	17	69	28	120
		Expected Count	2,3	5,5	19,8	74,9	17,6	120,0
	non users - skeptics	Count	13	24	77	214	21	349
		Expected Count	6,7	15,9	57,5	217,7	51,2	349,0
	non users - positive attitude	Count	2	11	55	250	87	405
		Expected Count	7,7	18,4	66,8	252,7	59,4	405,0
	moderate well informed users	Count	5	10	32	152	25	224
		Expected Count	4,3	10,2	36,9	139,7	32,8	224,0
Total		Count	21	50	181	685	161	1098
		Expected Count	21,0	50,0	181,0	685,0	161,0	1098,0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	68,283 ^a	12	,000
Likelihood Ratio	71,198	12	,000
Linear-by-Linear Association	3,279	1	,070
N of Valid Cases	1098		

a. 2 cells (10,0%) have expected count less than 5. The minimum expected count is 2,30.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,249	,000
	Cramer's V	,144	,000
N of Valid Cases		1098	

- *Collaborate by tracking processes:* Once again, the group of non-users with positive attitude supports the idea of an involvement of citizen and local associations in the projects of sharing economy, while the skeptics show the opposite trend of opinion.

Cluster Number of Case * Citizens and Local Associations: Collaborate by tracking processes

Crosstab

			CITIZENS: COLLABORATE BY TRAKING PROCESSES					
			strongly disagree	disagree	no opinion or uncertain	agree	strongly agree	total
cluster number of case	strong users	count	2	4	27	66	19	118
		expected count	2,7	7,3	30,5	66,6	10,9	118,0
	non users - skeptics	count	11	34	107	179	19	350
		expected count	8,0	21,7	90,6	197,5	32,2	350,0
	non users - positive attitude	count	5	15	95	243	46	404
	expected count	9,2	25,0	104,6	228,0	37,2	404,0	
	moderate well informed users	count	7	15	55	131	17	225
		expected count	5,1	13,9	58,2	127,0	20,7	225,0
total		count	25	68	284	619	101	1097
		expected count	25,0	68,0	284,0	619,0	101,0	1097,0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	38,081 ^a	12	,000
Likelihood Ratio	37,871	12	,000
Linear-by-Linear Association	,328	1	,567
N of Valid Cases	1097		

a. 1 cells (5,0%) have expected count less than 5. The minimum expected count is 2,69.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,186	,000
	Cramer's V	,108	,000
N of Valid Cases		1097	

Summarizing

The analysis of the questionnaires highlighted interesting and specific key points concerning the propensity to adopt sharing economy services, the knowledge and awareness of the existing services and practices, and the actual use in the context of the City of Milan.

First of all, **some services of the sharing economy appear to be more appealing than other**, both in terms of asking/receiving and giving/offering: *Knowledge and skills, A lift by car or motorcycle, Time, Food* are the services that register a greater propensity of adoption by the survey's participants. Some of these services are also the mainly used by the respondents, so a kind of correspondence between propensity and use is revealed. Nevertheless, we are talking about a minority of the sample, since the percentage that declares to normally use or have used sharing services is quite low. In particular, the most used services are: Carsharing, Exchange Ideas & Info, Sharing House or Couchsurfing, Bikesharing, Ridesharing; while the sharing of Time and Food is not yet widespread.

What is evident by the answers is that **the propensity to use the services of sharing is higher than the actual use**. A big part of the sample has never tried to use the emerging platforms of sharing that offer any type of services from house sharing to goods exchange, sharing tools, or time, or money, or spaces...Also the coworking spaces and those of community production are poorly attended. This is a first important indicator of the fact that more can be done when it comes to promotion and communication of sharing economy initiatives.

This observation is confirmed by another evidence: **the low awareness of the respondents in relation to the sharing economy services available and the sharing economy initiatives promoted in the city**. People actually are still not well informed about the possibilities offered by the sharing economy in the city, both in terms of consumption (emerging platforms) and production (equipped spaces for community production, FabLab and maker spaces). Also the knowledge of coworking spaces is limited and the use even more. In addition, the sharing initiatives promoted at local level, and the meetings organized to inform about sharing economy in general or in relation to the city, are little known (and register a limited participation).

At the same time the respondents highlight a **good propensity to use more services**, if made available, revealing a possibility to have good value in case of strengthening of the services at local level. The analysis reveals that people inclined to a greater use have a broader proclivity to sharing values in general, tends to use more the tools that sharing economy offers, giving also a positive evaluation to their sharing experiences.

When it comes to the services that are known and used, those of **carsharing** (in its various forms) are the winner: these services are the most known and used, and also the better evaluated by the respondents who use them. A finding that reflects the commitment of the Municipality of Milan in creating and supporting alternative forms of mobility, greener and with a lower environmental impact, and in line with the great pervasiveness that shared mobility platforms like Uber are gaining (creating turmoil at global level).

As the data show, the sharing economy in the city can count on a **core of active users** (even if limited) ordinary citizens, social entrepreneurs, startups members, cooperatives staff, researchers, creative, social innovators and counselors, and all those that in some way are connected to this theme. They not only adopt the services but are the main target of participants in the initiatives promoted in the city and by the city itself. This information can be taken into account when projecting the promotion of sharing economy initiatives to a wider

share of population. Such “ambassadors” are very closed to the already seen “nudging class” Iaione talks about, and their relevance is strengthened by the observation that traditional, institutional forms of communications are not very effective for the promotion of sharing economy contents. Conferences, meetings, public presentations can of course draw attention, and over time reach more and more citizens, but to really widen the audience the online communication seems to be crucial. The Public Administration and the sharing economy organizations (or groups that promote some forms of shared activity) should consider to enforce their online communication through **social networks**. In any case, and in the meanwhile, along the effort to involve a growing number of people, gatherings and meetings dealing with the topic of the sharing economy still represent a great opportunity to make collective reasoning and imagine together new solutions for the city, so their value is unquestionable.

Among the population there is also a consistent group of **non-users** who are also little interested in receiving information and therefore likely to be left out of future initiatives: this group of citizen will need special attention in order to break what would become a vicious circle of exclusion. The analysis shows two different groups of non-users, one with a positive attitude toward the topic and one more skeptical.

Both **public institutions** and **citizens associations** are considered relevant actors in the promotion of the sharing economy. The sample doesn't give the same importance and responsibility at the two categories: the role of Public Administrations and citizens associations differ, and while the first one should provide more substantial support, the second is intended more as a resource of ideas and control. This evidence reflects the general orientation that the City of Milano is taking and the wider debate on the topic in terms of *Partner State* (Bauwens, 2014) and *Collaborative Governance* (Iaione, 2015), as broadly explained in the chapter 4. The presence of the Public Administration is considered essential for financing but also for tracking processes and giving rules, as our sample has the perception that in the context of the sharing economy this actor can play a role of connector and enabler. The issue of regulation is crucial too, and the general debate clearly detects the necessity to rethink the legislative frame to allow sharing experimentations and developments. The positions, especially on the normative topic as shows in the previous chapters 6, are in line with the larger debate that sees the necessity to support the integration and the spread of the sharing economy re-thinking the current law systems and the legislative frames. About citizens and organized civil society, their involvement is suggested by the sample in relation to their ability to put in commons ideas and resources, finding space to reimagining participation and create collective actions. More specifically the respondents think that they should collaborate by setting the guidelines and tracking processes. The importance of an involvement of citizens and local associations is discussed also in the previous chapters as key element of the sharing city, in which the human dimension covers a crucial role.

These ideas are supported even by the non-users, but only by those that manifest a positive attitude towards the phenomenon. On the contrary, the non-users with a more skeptic approach regret the idea of any type of involvement both of Public Administration and civil society.

In terms of management, lead, organization and support, private business and religious institutions are not evaluated as relevant actors for all the respondents of the sample. This evidence can perhaps highlight the lack of a systemic vision for the development of an integrated frame of sharing in the city in which all the stakeholders, or as Milan prefer to call them solutionholder, can play a role putting in common expertise, skills, resources and ideas.

From the data collection we can detect a still low awareness of the phenomenon, and a restrained usage of the services, in spite of the efforts of the Municipality to inform, meet, share, compare, support, connect, open spaces of discussion and physical spaces of shared production and empowerment. As underlines by the promoters of the “Milano Sharing City” project, the spread of the sharing economy and its adoption from a wide range of people as common practice available for everyone is an ongoing process that will take time to develop and to be internalized by citizenship.

The same results emerged for Seoul. Even if the effort of the city to socialize the benefit of the sharing economy, inform people of the existing services and strengthen the local offer to cover the wide range of citizen’s needs, the results are lower than expected. Adoption and awareness of the services of the sharing economy in the city remains low. Cate Johnson, in a recent article of Shareable (October 29, 2015), reported that an unpublished survey of city residents by the Seoul Institute, highlights that only 12% were aware of the sharing economy. In addition, looking at the whole country (even if the services of the questions are mainly those operated in the city of Seoul), the Maeil Business Newspaper²⁷³ (Maegyeong Economy and Embrain) conducted a study on 500 people on a range of 20-50 years. Only 16% (2 out of every 10) knew the concept of sharing economy. 55,6% is not very familiar with the topic. Among the people that was not aware 59,4% had affirmed to consider in any case the sharing economy something important. 63% evaluate the Country a good place to apply the sharing economy but 59% is not available to pay for good not more used by other people. More in detail:

Table 15 Main results of the Maeil Business Newspaper Survey. Source: <http://news.mk.co.kr/newsRead.php?year=2015&no=668169>

Do you know the sharing economy?		Do you agree that the sharing economy is a necessity?	
2,4%	Very well	9,6%	Absolutely yes
13,6%	Yes	49,8%	Yes
28,4%	I don’t know/normal	33,6%	I don’t know/normal
43,4%	Not very well	6,2%	No
12,2%	Absolutely no	0,8%	Absolutely no

Another question was about the propensity to exchange specific resources:

Table 16 Propensity Maeil Business Newspaper Survey <http://news.mk.co.kr/newsRead.php?year=2015&no=668169>

What would you be willing to exchange?	
Idling goods	35%
Abilities/skills	24%
Workforce	23,2%
Spare room	6%

The most used service (at least one) in Seoul is Uber, followed by Modu Parking, Socar, Study Rooms, Carpool, AirBnb.

As for Milan, also in Seoul people show an average low propensity in using sharing services, a low awareness and a low actual use. The efforts of the municipalities would require time before to enter in the common life of citizens, and the main services known at the moment remain those of the big corporations that assumed the same model of development of

²⁷³ The article is available only in Korean at the online address: <http://news.mk.co.kr/newsRead.php?year=2015&no=668169>

the traditional market. These results are also reported in a recent article of Cat Johnson, expert of Shareable. She underlines that *“results on the ground have been mixed, and the initiative remains a work in progress. Sharing City Seoul hasn't taken off as hoped, and awareness of the sharing economy in the city remains low”* (2015).

12 CONCLUSION

12.1 Lessons learned from the two cases

Moving from the assumption that the sharing and collaborative economy is transforming our way to consume, to produce, to work and to live in the city, impacting on the economic system, the job market, the community building processes, and the environment too, the research looks at those cities that are taking up the gauntlet of the sharing economy to answer the main urban changes and challenges.

As shown, the debate around the topic is gaining momentum and many cities are starting to figure out how to use the sharing economy services and practices to improve the quality of life of their citizens. More and more cities are developing practices of sharing economy in their territory, strictly related to their specific identity, nature, peculiarities, and previous context of development.

The Human and Smart connotation of a city appears to be a key element for developing a reasoning around the sharing economy, since it involves two main aspects that favor the creation of a sharing city:

- technology – that supports the population in adapting to its environment
- and community – a structure of relationships through which the population ensures its daily needs at a local level.

The Smart City, in its more human or progressive version, seems to be the better field from which a sharing city can arise. Some cities are focusing on the logistic and transport level, since they already have well-developed sectors equipped with the necessary infrastructures. Others are pushing on sharing to improve the environmental conditions and offer a greener context in which to live, having already worked on the topic and disseminating good sensitivity among the people. Other cities again are fostering the issue of social inclusion and the importance of human capital through the promotion of cooperative and collaborative forms, since their agenda is already oriented in this direction. Each city is promoting the sharing economy starting from its background. The majority are just promoting first experimentations and proposing early steps of institutional changes, still wondering on how to expand the process; a few of them on the contrary have launched more well-defined projects based on sharing and collaboration and activated institutional frameworks for the development of the sharing processes. Looking at their models of implementation and at the frame of their ongoing initiatives, allows us to better understand the phenomenon of the sharing economy and the spreading of collaborative practices in the city, favoring a more comprehensive understanding on how a *sharing city* model can be developed.

Following this reasoning, the research identified two cases of cities exemplificative of the processes, and emblematic in their form of experimentations: Seoul in South Korea and Milan in Italy. Clearly, they have different features in terms of dimension, culture, social framework, historical path, and political and economic background. However, both the cities decided to bet on the sharing economy, declaring to be *Sharing Cities* and launching specific projects and programs. Similar rhetoric, labels, epistemic communities, and strategies can be detected. The analysis reconstructed the governance model at the base of the creation of the programs “Sharing City Seoul” and “Milano Sharing City” focusing on the type of approach adopted, on the processes activated and on the projects launched. The current debate around the sharing economy recognizes the key role that the Public Administration can play in favoring or slowing down the phenomenon in a city, and it is more and more focused on a new form of governance, that is, *collaborative governance*. Therefore, the research has looked at the role

played by the two administrations in investigating the main elements of their governance models and understanding to what extent we can talk of *collaborative governance*; and it has retraced the main initiatives launched and the actors involved to better comprehend the features of a so-called *sharing city*.

In terms of governance, albeit the two cities are representative of models born and strengthened in different contexts with diverse dynamics, both can be considered, pioneering and successful experimentations of a *sharing city*. Their analysis highlighted some peculiarities that seem to constitute the background and the basis for driving the spread of collaborative practices in urban contexts allowing citizens to imagine, create, and explore new alternatives for the local progress in a collaborative way.

The first element that emerges is the necessity to have a **clear starting vision** from which to elaborate an operative and strategic framework for the policies' design, to evaluate their direction and functioning and if needed, work for changes. With such a framework, the PA can really intercept the needs of the parties present and reach a broader audience. But the vision needs some basic elements to be formulated in the direction of sharing and collaboration.

- First of all the PA should be **aware, open-minded, caring for people, and interested in promoting innovations**. Recognizing the importance of human capital is the first step in designing and implementing a **people-centered agenda**, that puts people at the center and captures values directly from humans. The idea of a Partner State is in line with this type of PA, which should allow the creation of value by its citizens, foster their activism and embrace the principle of horizontal subsidiarity, giving its citizens the opportunity to take care of their city firsthand. In this sense, a human city's background makes the reflections around the sharing economy topic easier since it already considers the potential contribution that people can give in the improvement of the city life, and recognize in the people an active role. At the same time, it identifies social innovation as a tool to reach a greater level of inclusion, while remaining within the perspective of support to people.
- On the other hand, people should be disposed to take part in the city's life. A context rich with participation, focused on forms of civil society and activism of businesses, and featuring the wish of creating value, can positively activate reasoning and initiatives that support the values of sharing and collaboration. In both the cities seen, the **civil society** was **sensitive, active and caring**, and the propensity to put attention on the people was high as well, albeit with different nuances. Listening and giving voice to citizens, in an ongoing process of exchange and always thinking in the perspective of improvement of people's daily lives, is the substrate that can generate an efficient and effective collaborative model of governance. Interfacing with people, the PA should be transparent, open to dialogue and listening, avoid discretionary choices, and give spaces to citizens' ideas.
- An open-minded PA is also not self-referential but able to question and rethink itself both in terms of training the internal staff and managing external relations. The cooperation in **its internal divisions** is fundamental in order to capitalize paths and pool experiences, and the involvement of more trained **external actors** eases the processes.
- The PA should have an active role in creating spaces of discussion and experimentations, favoring in this way the connection among the actors, between business world, third sector, cognitive institutions, citizens and innovators (that with the PA made the 5 pillars of the collaborative governance) and fostering their

involvement, in a direct, proactive, formal and mutual way. The knowledge of these actors and the familiarity with the territory, with its services, are crucial to spur specific reasoning and reshape interventions. Understanding the forces already at work in the local context and the dynamics stimulated can engender scale effects. Such an understanding is a fundamental step in formulating appropriate, efficient and befitting policies with all the stakeholders. And it represents the necessary base to reason on the possible development of collaborative ideas in the local context. Thus, **mapping the existing services** (both online and offline), **and also agencies, operators and experimentations**, is essential to have a clear vision and develop the ability to integrate them in a programmatic way to raise their visibility, efficiency, effectiveness and scalability; it favors the design of new experimentations, the updating of the existing and the involvement in policy design.

The connection of the different actors seems to be a preliminary step and the PA can easily play the role of connector, since it is used to communicating with each of them. More than a **connector**, it can be an **enabler platform** that makes synergies possible that otherwise, would be more difficult. A facilitator that identifies the optimal conditions for the organization of all the actors together (civil society ahead), creates the conditions to allow things to happen, and allows citizens to take care of their city, in a Partner State perspective. It can really be a platform for the promotion of collaborative opportunities, for the creation of awareness among citizens and for the encouragement of the processes of the new economic model, even regulating in order to avoid the slowdown of the phenomenon. In this role of enabler and connector, the PA should understand the needs of every one of the actors involved and remain open to dialogue, if it wants to ameliorate their relations. This form of *peer co-existence and co-operation* can facilitate the development and dissemination of social and collaborative services:

- From the point of view of business, the PA can act as a facilitator and provide incubation paths and training programs.
- To ease the involvement of traditional companies, it can organize forum directly or provide space for discussion and awareness on the sharing topic, favoring a clear understanding of the nature of the collaborative economy, encouraging the birth of partnerships between traditional and new services and activating new products that develop the offer and provide greater trust to these services.
- In order to promote synergies between collaborative services and the third sector, the PA can foster meetings that strengthen the relationship between the digital world and the territory, bringing the critical mass to collaborative services that they need to grow and to the third sector new opportunities for advance and change.
- To enter even more into the process, it can become an **early adopter**: try the sharing services, testing opportunities and difficulties firsthand, and support consumers and services providers, creating more trust and confidence in the people, and favoring the development of the services themselves.
- From a normative point of view, since many services and practices are still moving in a sort of legal vacuum dictated by their novelty and particular features, the PA can find ways of minimal regulation to support the development of these services and practices and mitigate the impacts of existing regulations, in order not to stifle the rising innovation, but favor it, while encouraging its use by citizens.

The development of a sharing city is so favored by these first contextual elements that allow the cultivation of strategies to follow and drive the implementation of a **specific regulation on the sharing economy**. Enact specific acts, resolutions, guidelines (as both

Milan and Seoul did) clarify the main goals of the city and how to reach them, the roles of every stakeholder involved, especially that of the Public Administration, and which approach and vision to have on the topic. In a few words institutionalize, giving rules. Adopting a statutory regulation, as outlined in the definition of collaborative governance, is a key step in proceeding with clear, transparent, formal and shared formulations.

Also, the presence of a kind of local activating group is essential, in order to reason systematically on potential initiatives and practices and drive the discussion on the topic. The presence of a group of activation, of an expert group nudging, can favor the acceleration of the process and seems to be instrumental in disseminating and improving the local practices of sharing and collaboration. A **nudging class**, as it has been called in Iaione's proposition, able to replace the current ruling class and essential to "*convince and nudge society and institutions towards a sharing and collaborative paradigm*" (Iaione in Bauwens' interview, 2015). This class is composed of active citizens, social innovators, makers, creative talents, sharing and collaborative economy practitioners, service designers, co-working and co-production experts, and urban designers. Since the change cannot be forced, the presence of such a class can be the breakthrough to nudge people to share and collaborate, to push society, business, and institutions towards new frontiers.

In promoting the use of these services and debates on the topic, it is equally useful to drive a proper **communication campaign** that is able to transfer the values of cooperation, show the administrative effort encouraging them and clarify the potential benefits for each. This aspect assumes a relevant value considering that, as shown in the quantitative analysis, ordinary citizens do not know the services very well, and even with good use propensity, their level of adoption and usage of the services and platforms is still low. A specific campaign can socialize the benefits of the sharing economy and encourage their use. In this campaign, it could also be convenient to adopt a web platform as an access door to all the services, thereby facilitating the pooling and sharing, and the correlation among services (as done in Seoul).

As emerges, both the cases of Milan and Seoul embody the main indications, and the general suggestions given by the major guidelines and resolutions presented in chapter 6. The comparison shows that they are following the same road proposed and recommended by many entities all around the world, confirming that the proposals can be implemented at a local level for real. Of course they are tailoring their experimentations starting from their identities and backgrounds. They are involving citizens and creating connecting partnerships, able to match energies instead of separating. They are trying to enter into new forms of partnership not based on the old dichotomies but more open and inclusive. In this way, they are creating the right alliances to allow the processes to be internalized and to re-circulate energies. The civil society is proactive and catalyzes the process. The private sector is crossing the local instances and responding as a local agent, multiplying possibilities. The spaces are enhanced and allow forces to re-circulate, favoring processes of *co-* with the five pillars of the collaborative governance, and capitalizing value.

The importance of fostering social innovation, soliciting the civil society's involvement in a collaborative sense, and allowing space for the creativity of citizens and innovators clearly emerges. The aptitude of the two municipalities (to promote the realization of ideas of cooperation, facilitate the development of new service models, acting as a collector of experiences) has the advantage of enabling the development and dissemination of practices that simplify or improve the lives of citizens.

- Being open to innovation means allowing space for new frontiers of experimentation the results of which directly affect citizens' lives.

- Integrating innovation with care and attention to citizens, and therefore with the issue of social inclusion as a means of facilitating the free expression of every individual and their active involvement in the practices, can have a substantial impact on people.
- Also, supporting the emergence and spread of new service models promotes the economic development of the territory and the adoption of more sustainable consumption patterns.

Some cities, by setting up projects of car and bike sharing, estimate a reduction of their ecological footprint; others point out that, thanks to the creation of new startups and social enterprises, local jobs have increased; others again underline the potential of sharing economy in terms of creating social ties and communities of practices reinforcing existing communities or creating new networks of collaboration. Systemizing and framing the integration and the support of the sharing services at a local level, as Milan and Seoul are trying to do, seems to be mandatory in letting the benefits of the sharing economy affect the local territories, avoiding perverse effects. Another mandatory point is to start with the sincere involvement of the five pillars of the collaborative governance: this can change the face of the city and have incredible results. This approach can generate a bigger sense of belonging and increase the desire to meet and share, facilitate the local economic development by giving strength to high entrepreneurial aspirations and innovative business ideas, and promote an improvement in terms of environmental sustainability.

The elements underlined have been observed both in the cities of Milan and Seoul and have shaped their line of development of a sharing city. They derive from models of management and governance that, albeit not completely adherent to the *collaborative governance* of LabGov, present some of its key ingredients. In Milan and Seoul, we can retrace alternative models that derive from the identity and the specific features of the city, one more bottom up, which can be defined as *widespread collaborative governance* and one more, top down that can be labeled as *centralized collaborative governance*. With the awareness that this can be a stretch of the original term since some basic aspects are missing, first of all, the *pacts* that institutionalized the role of the citizens in the care of the commons; a broad reasoning among the topic of the commons in the Ostrom's perspective; the presence of public-private-civic partnership. This awareness shows an early stage of maturation of the projects and confirms that there is not a "one-size-fit-all" model of governance. Some attempts are taking place with different modalities even pursuing the main goals, but more experimentations and prototyping is needed, in order to reach a modeling. What can be done right now is **studying, mapping and connecting** the local context of reference and its actors, proceed—with **experimentations and prototyping**, try to **amplify the processes** through active and **nudging groups, socializing the benefits** of the collaborative practices to people, and **evaluate** the processes and the models, preferably identifying specific indicators.

The sharing and collaborative economy, although it is far from being a solution to all the ills of the city, can encourage the emergence of powerful synergies potentially able to impact the social, economic and environmental context in a positive way. As underlined by prominent supporters, like Janelle Orsi or Juliet Schor, this phenomenon seems to give both opportunities and serious concerns (Parsons, 2014). What those cities are doing is trying to integrate it into society, experimenting with forms of co-design, co-planning, co-creation and co-operation, renegotiating governance schemes, and finding the best and more suitable practices for the specific local context. With the aim of starting a transition from the current consumeristic model, to another one in which relations have more value than things, where policies can be re-imagined in collective ways, and a more participative democracy can be built. In this frame, the intelligence of the institutions is the ability to recognize and cultivate

the intelligence of the society, to incubate the social capital and to create the conditions and the right ecosystem to allow commoning to thrive. Moving towards the last frontier of the sharing city: the co-city.

12.2 Open questions about the future

The research work demonstrates that cities can be real open resources for citizens (Foster and Iaione, 2015), empowering them in the direction of the commons and enabling them to take care of their living environment. The new practices that the sharing economy is fueling, marked by collaboration and cooperation, can be promoted by its administration, privately supported, and powered by the activism of citizens, in a new form of partnership public-private-citizen. In this perspective, as seen, the public authority can assume, should assume, the role of a Partner State (Bauwens and Kostakis, 2014) and implementing new models of governance that put together all the components that can make sharing a city, from civil society, to cognitive actors, from private to non-profit associations.

The two case studies show us how much can be done to go in this direction despite the difficulties. They disclose the importance of trying to imagine, with a common and clear vision, the path for the city on the basis of its features, of its potentialities, of its already existing strengths. Enhancing, and not necessarily creating something new, endorsing the aptitudes, and the capacities of the city to create, at most, new synergies. That can be the path to follow for offering the citizens a better, greener, and more sustainable and inclusive living environment, to create a sharing city in which people are truly at the center. The secret seems to be the ability to become **an enabler platform that creates the conditions and the right ecosystem, which incubate the social capital, which activate citizenship and empower people**. Both the cities of Seoul and Milan very clearly seem to have this precondition, and appear quite visionary regarding the path to follow. The former with its huge effort in the creation of a city ecosystem of sharing with a top down approach, the latter with its idea to create an exportable Milan Model fitting for other contexts. None of them has yet modeled its strategy and the experimentations must continue before reaching a real efficient and effective collaborative governance model. But they can be considered pioneering experiences, examples of the essential awareness and of the necessary will to reach the goal of creating a sharing city with a functioning polycentric governance model. The ingredients are not all on the table, and a great deal could and must still be done. But the two cases can inspire new questions for the future working for cities in general, since analyzing their models and crossing them with the concepts of sharing and collaboration, some doubts still remain.

- Will the city be truly able to take up this gauntlet?
- Or, on the contrary, *sharing* will become another meaningless label, another narrative of territorial marketing, as it seems to have been for its famous predecessors?
- Will it reproduce the same rhetoric again that – in a not too distant past and still present – has already seen other cities as protagonists?
- Will it be cannibalized by the transactional form of sharing economy and by the big corporations that are reproducing the old neoliberal spirit with a new dress?
- or will it be able to really favor the expansion of the collaborative waves that are pushing from the ground?

And will these values – of sharing, of collaboration, of cooperation, intended in their most authentic sense – find space for real?

- Despite the commercial interests and the market mechanisms crossing these labels (human, progressive, sharing, collaborative) and stripping them of their meaning;

- Despite the race for profit that has not disappeared and is veiled under the cry of “*sharing!*”;
- Despite the presence of forces able to reproduce the profitable mechanisms of the capitalistic market;
- Despite the administrative stiffness and the difficulties to overcome persistent limitations of bureaucratic, administrative and normative structures;
- Despite the strength that the Civil Society and the people are acquiring – still too little – and the spaces for discussion and expression that are gaining – still too rare.

Tiziano Bonini, during the opening of the manifestation “Milano Sharing City” on November 14, 2015, reminded us how the media, over time, has been cannibalized by commercial interests, transforming and changing their capacity, meaning, effect and even purpose. The sharing economy, a disruptive innovation as much as the media that preceded it and itself a powerful channel of communication, seems to follow the same unavoidable destiny. We are back to the transformative and transactional sharing economy, to the blue and red pill of Gorenflo (2015). Many conferences and forums all around the world are wondering about this double path that the phenomenon is taking on, and about how much more strength that one seems to feature over the other. The last “Collaborative Week” in Milan is just an example; the “IASC Urban Conference of Commons – The City as a Commons” in Bologna is another case, followed by the “Digital Labor” in New York, the “CC Global Summit” in Seoul, the “Civitas Forum” in Ljubljana, and many others. During these meetings and congresses experts, researchers, scholars, innovators, creative minds, simple citizens, policy makers, public administrators, members of consumer associations, are dealing with the issues of sharing, collaboration, co-creation, co-management, co-design, co-planning... analyzing them from different points of view, looking at the process that the sharing economy embodies, at its ongoing evolutions and perversions. All the people that are gathering all around the world, are disclosing and comparing new practices and emerging models, local experimentations, deep reflections and potential prototypes. They are reasoning on how the city can really become a shared place, a commons, and on how people can be empowered and enter into the new models that overcome the old public-private dichotomies, State-market, profit-nonprofit (without mentioning the new dichotomies, like public-citizens, private-citizens). They are recognizing the importance of systematizing the experimentations and creating synergies, since no one alone can change the system, can improve the quality of life of a community, can trigger and fuel a paradigm switch. Not the Public Administration alone, not the business sector alone, and not the citizens alone. All the parties present must be enrolled in a process able to create “social circuits”. The “Co” is exemplificative of this need to put energies together in a circular way, to activate public-private-civic partnership and foster the implementation of a collaborative, or polycentric, governance model. All the meetings around the world are acknowledging this, like dots of a global net that is slowing recognizing the importance of enabling a new form of aggregation and social cohesion putting together the so-called five souls of the collaborative governance (public, private, civic, cognitive and social). All this questioning, comparing, showing up is creating a kind of meta-discourse on the sharing and collaborative economy and on new forms of co-creation of a city. All this speechmaking is fueling a growing global network, active and proactive, that aims to connect, compare, exchange, improve, and empower.

Will this network be, taken at a local level, the lever that will allow the sharing economy to not become an empty slogan that “put old wine in old wineskin” to quote Iaione?

Are we truly witnessing the emergence of what the same author calls “the nudging class”? A class that has the potentiality and the willpower to drive the society in the direction of a switch of paradigm really based on collaboration and sharing?

All these creative, innovators, practitioners, makers, active citizens, service designers, co-working and co-production experts..., that come together in many gatherings all around the world and are active at local level, could they really overturn the old schemes and replace the ruling class?

Would they be able to push society towards real internalization and the metabolism of the values of sharing and collaboration? Towards a real paradigm change...

- In which people have a voice for real, and spaces of expression, and alternative possibilities of affirmation and are part of processes of creation of the city?
- In which the administration really has the will, and the freedom, and the determination, and the trust to allow this to happen, and even to support it?
- In which the market, as we know it, even without disappearing, will allow a more genuine version of the sharing economy to exist and to find a space, restraining its more perverted forms?

The risk that comes from collaboration and cooperation sold as solutions to many urban problems without creating a concrete and substantial substrate of awareness and real spaces of expression, is high. The risk that sharing and collaboration could function as tools of territorial marketing just to promote an image and not content, is high too. The risk that private interests could devour the genuineness of the sharing and collaborative practices in the name of profit, is even higher.

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