Multichannel Co-creation in Web-based Environments

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The concept of user or customer co-production (or co-creation) has been mentioned in the managerial and in the service design literature on several occasions. It has been discussed in the marketing literature because of its perceived importance as a tool for increasing customer satisfaction and product success in the market, in other words, converting customers into co-producers is a very powerful tool to generate competitive effectiveness (Kelley, Donnelly and Skinner 1990). In design literature, a strong emphasis has been given to the tools that can ease the access to participatory design by users and customers (Bødker and Buur 2002; Battarbee 2003) and improve their overall experience (Allen 1993; Cain 1998; Forlizzi and Ford 2000).

The adoption of the co-production approach is a radical shift in the way in which firms establish relationships with customers. Customers are no longer considered as receivers of the values, products and/or services provided by companies. Rather, customers are regarded as active partners in the production process (Bettencourt 1997; Wind and Rangaswamy 2001; Prahalad and Ramaswamy 2000; Hamel 2002; Bendapudi and Leone 2003; Mooney and Rollins 2008). The production process to which customers take place as co-creators is no longer limited to the production and distribution of products and services but is related to the creation of rich branded experiences (Smith and Wheeler 2002; Shaw and Ivens 2002). In this sense, customers have shifted their role from the one of receivers of services and products to the one of part time employees or co-producers (Von Hippel 2001; Honebein and Cammarano 2006; Pini, Noci and Boaretto 2008). A good explanation of the concept of co-production could be Solomon's (2004) theatre analogy: the service performance is seen as a theatre that has a front stage (service delivery) and a back stage (service production) on which audience (customers) and actors (the firm) share the performance.

The co-creation process naturally reshapes the traditional boundaries of the firm as it takes place in a participatory environment, where the traditional hierarchical model of innovation management cannot take place. The internal, totally controlled, functional

based model of innovation management is substituted by a "community of creation" (Sawheney and Prandelli 2004), a permeable system with ever-changing boundaries.

In order to facilitate the positive interaction between customers and the company to generate co-creative processes there is a compelling need of developing adequate environments in which co-creation can take place. These environments, called participatory environments, have been fostered by radical innovations in network technologies. In particular, the mass adoption of Web 2.0 and mobile Web 2.0 technologies brought participatory environments to a scale hard to imagine only a decade ago (Boaretto, Noci, Pini 2007). In order to establish an adequate relationship with co-producers, the company needs to set an environment in which to share some information with the customers in regard to its resources and capabilities, the risks that customers may encounter while using the products, and any other information about the products' technologies and business systems. Web 2.0 environments allow customers to adopt a very wide range of different interactions, depending on their particular goals and needs, the level of involvement they want to achieve and the role they want to play in virtual communities (Pini, Noci, Boaretto 2008; Boaretto, Noci, Pini 2007; Hagel & Singer 1999; Hoffman & Novak 1996). This variety of stances and motivations allows companies to establish different and over time changing levels of interaction with their customers depending on specific goals and perceived payoffs.

The quality of the management of participatory environments and of the relationships between company and co-creators is crucial in generating positive responses and an adequate level of commitment to the co-creation practices. Managing relations in participatory environments forces companies to be more focused on the preparation of the conditions that allow co-creation, rather than on the delivery of final solutions. In this sense, the product or service offered to the market should allow a space for co-creation and adaptation from customers, becoming more a platform to work on than a closed project. In order to stimulate co-creation there is need of augmenting the occasions of interaction between customers and the company. The design of the touch-points and their integration in order to deliver a superior integrated brand experience is crucial to the success of any kind of co-creation activity. As the number of touch-points increases, and the level of unpredictability of customer behaviour grows dramatically, there is a strong need to integrate information and communication in objects, products and spaces in order to bring the access to co-creation and knowledge sharing closer to the point of inspiration. Multi-channel customers, in this sense, are very active in the search of information through different channels and media and are proactive in the way they set up relationships with companies in all the stages of the purchase process.

The project named MenoMaps II described by Salu Ylirisku, that will be presented and discussed during the Pinc 2011 Conference, concerning the construction of novel map-based platform for multichannel publishing through which multiple parties, some of which are commercial, some public, and some third party, may provide services for each other   and for the map users, who are engaged in 'outdoor leisure activities', could be a good test ground for developing a multi-channel co-creative approach to building value through customer experience.   MenoMaps II is a collaborative project, where novel business opportunities for new kinds of map services are explored. The companies that are involved in the project are facing a challenge: how to survive in the change of fundamental structures that underlie their business? In this sense, the co-creative approach to customer experience could address some of the issues related to: a) the definition of new business opportunities provided by the interaction techniques of the map services, b) the creation of the right business model to exploit them and the design of the multichannel platform and its interfaces.

Before taking into consideration the role of co-creation in delivering superior customer experiences and fostering innovation in services, there is the need of reconstructing MenoMaps II business model. The tool chosen is the business model canvas (Osterwalder e Pigneur 2009) as depicted in exhibit 1, as it allows a very visual and immediate perception of the links between the different parts of the business model and highlights the missing ones. Once the MenoMaps II business model was reconstructed through this model it has been possible to better address the elements underlying the weaknesses in the different parts of the business model. These elements could be summarised as follows:

a) <u>Room for development of a clear value definition</u>. The service depicted should be of some value for "people engaged in outdoor leisure activities" though it is not clear or evident which kind of customer experience should this service provide to these people and which are the conditions under which these experiences are taking place. The lack of a central value proposition could also be related to the need of a deeper understanding of the experiences that potential customers might consider valuable in using this new service.

b) <u>Challenge to rethink customer role in the service usage</u>. In this sense, under the generic definition of people engaged in outdoor activities, there might be a wide range of activities that customers or users might like to undertake. All these activities could be achieved through the use of very different tools, from physical maps to local social network such as Foursquares or Gowalla, from Google Maps to car navigators. How does this new service integrate with this existing array of activities, experiences and devices? On the other hand, outdoor activities might start with very "indoor activities" such as checking weather forecasts, viewing comments, pictures, videos or other kind

of contents from people that have already visited the places on a pc or even an internet television set. Are these activities part of the service and if not, how does the service integrate these activities?

c) <u>Room for design of innovative revenue models</u>. Despite the description of the different roles of project partners it is not defined which are going to be the revenue models and the price structures underneath them.

d) <u>Development of multichannel approach to the design of touch point roles and functions</u>. The multichannel approach could provide a strong support to the customer experience and this is somehow clear both in practice and literature, but it requires a clear definition of the content and functionalities of each touch point and the channel chain that links touch-points together to generate a coherent and valuable customer experience.

Exhibit 1: the MenoMaps II business model canvas
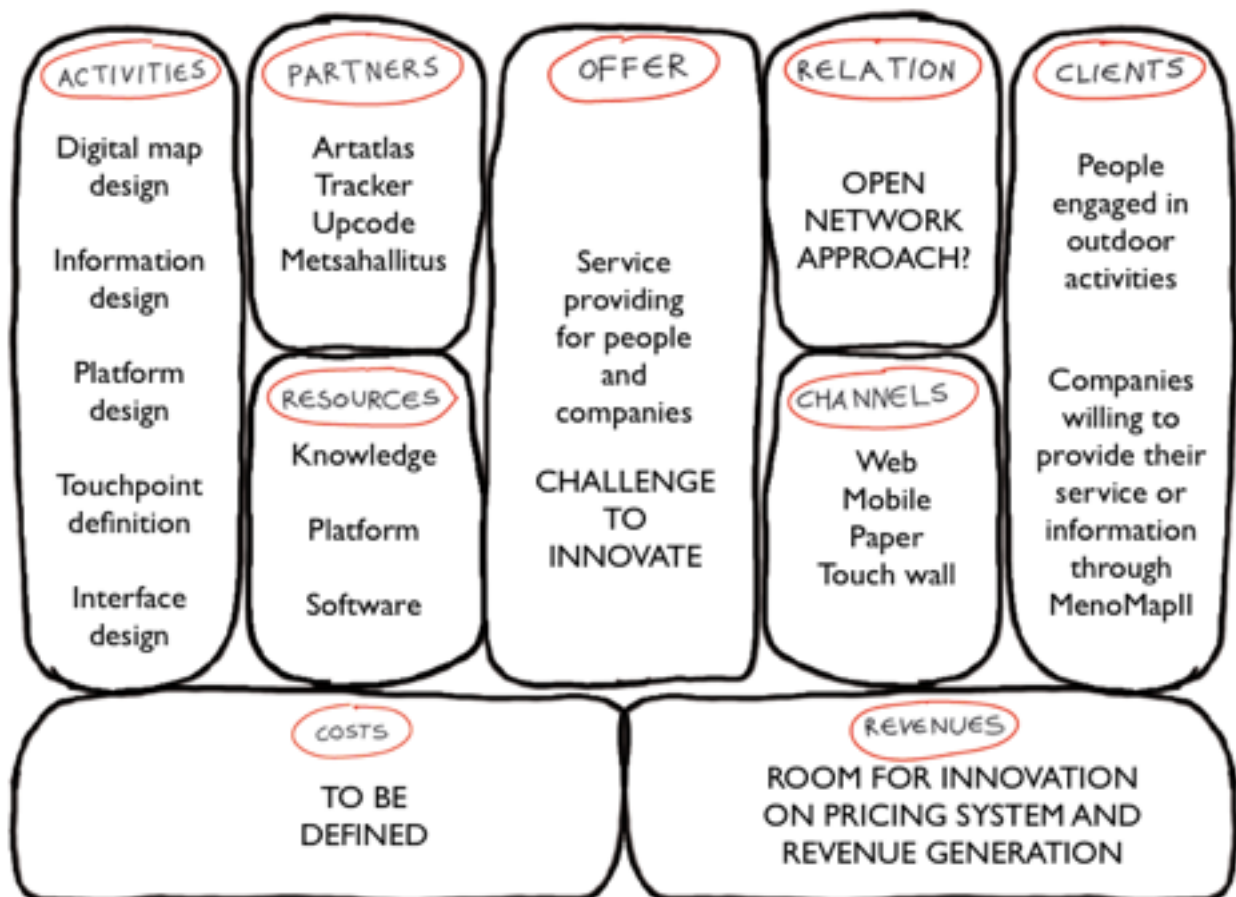
In order to address the above mentioned issues and define some future lines for the business model development, it could be used a frame of analysis that is based on the concept of multichannel co-creation as it is presented in the first part of this work. The use of this framework is twofold: a) it could be used to better define the concept of customer experience in multichannel environments and b) to investigate the actual experience

managed by people when engaged in leisure outdoor activities and exploit their knowledge and competencies to build better services and foster innovation.

Defining customer experience for MenoMap II

One of the most critical aspects of MenoMap II project could be identified in the definition of customer experience and the role that a multichannel approach plays in generating such an experience. The value issue and the revenue models one, as depicted above, could be somehow easily dealt with once the customer value issue has been clarified. Customer experience has been described in the managerial literature in many different ways[1]. Despite the wide range of definitions and contributions to the topic, it is possible to derive some common traits that could represent the customer experience construct: a) experience differs from need satisfaction as it is related to providing customers with "superpowers" (Normann, 2001), i.e. allowing them to achieve their goals and run the activities they wish to perform with the minimum cognitive frustration and physical burden; b) experience is achieved through the direct involvement of senses; c) it is built through the integration of a different set of touch-points; d) it is achieved through relationships not only with the company but also with other subjects and groups. In this sense, the MenoMap II project needs to make these superpowers more evident and to define the big picture within which these superpowers are performed by customers. On the other hand, a better understanding of the different roles of social networks and influence groups in shaping the experience is fundamental in order to define the proper set of services, interfaces and content availability. The value perception of the services and interfaces provided is very much linked to the level of superpower customers could achieve and the quality of the social context in which they can perform their experience and share. Revenue models also depend strongly on these elements and the related pricing structure is very much dependant on the level of customer involvement, social group participation and the quality of the touch-points in reinforcing the customer experience (superpower). In order to define which kind of experience customers want to achieve while performing outdoor leisure activities, the content they need, under which context of use and through what kind of interfaces MenoMap II project could try to exploit customer competencies and knowledge through the different stages of the innovation process as described below.

Exploiting customer competencies and knowledge to design a better service

Web 2.0 environments allow companies to establish rich relationships with a much larger number of customers at a very high speed and in a very persistent manner. In these

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[1] For a detailed description of the different approaches to customer experience in marketing and management see Boaretto, Noci, Pini, op. cit.

environments interactions take take place at a very low level of cognitive and physical effort from both sides. Virtual environments might also enhance the firm's capacity to tap into the social dimension of customer knowledge, by enabling or supporting the creation of virtual communities of consumption and practices (Kozinets, 1999). The relationship of the firm with different kind of virtual communities (consumption communities, brand communities, etc.) allows the firm to immerse itself into the experiential contexts of customer consumption and product perception on an ongoing basis, rather than on an episodic basis that characterises traditional ethnographic customer research (Cova, 1997). By accessing these new "cultural and knowledge intermediaries" companies can reach non customers or perspective ones. On the other hand, this mediate relationship allows firms to take part to conversations with subjects that might not be interested in dealing directly with them through company managed channels and touch-points.   Web 2.0 environments allow customers to adopt a very wide range of different interactions, depending on their particular goals and needs,   the level of involvement they want to achieve and the role they want to assume in virtual communities (Pini, Noci, Boaretto, 2008; Boaretto, Noci, Pini, 2007; Hagel & Singer, 1999; Hoffman & Novak, 1996). This variety of stances and motivations allows companies to establish different and over time changing levels of interaction with their customers depending on specific goals and perceived payoffs. Participatory environments based on Web 2.0 platforms can contribute differently to the process of innovation and value creation of companies. In this sense, following the works of   authors such as Rizzo (2009), Sawhney, Verona and Prandelli (2005), it is possible to classify them depending on two variables: a) richness of the interaction; b) Role in the innovation process.

Firms can use these environments to acquire insights and generate ideas or simply exploit them to validate pre-existing hypothesis with a large sample of their customer base. In this sense, participatory environments can be used to generate ideas and define concepts (idea generation stage) or to test or customise already created solutions (deployment stage). Due to the flexibility of Web 2.0 environments in terms of use and purpose, it is again a strategic company decision the way to exploit their potential (Exhibit 2).

In this sense, the usage of co-creation, from experience definition to the whole innovation funnel, could be supportive in the definition of the MenoMap II business model and its implementation. In particular, at this stage of the project, MenoMap II project team could reconstruct the role of information in outdoor activities and the experiences that informations and landmarks support through the tracking of conversations taking place in blogs and social networks through tool such as Nielsen WebBuzz or ViralHeat software and eventually through direct participation into these conversations. In order to run this kind activity the team should first turn the business idea into a set of keywords or semantic tree that could be used to scan the blogosphere and the social networks. This activity

would allow the team to gain a better and deeper understanding of the different aspects of landmarks and orientation in planning and executing outdoor activities and also of the present set of tools used to run such activities. Once these pieces of information are acquired there could be a better testing of the general value proposition through direct involvement in conversations and the development of social network surveys. Depending on the findings from the survey stage, it could be designed the level of openness of the system to third party and users' contributions as part of the value proposition. The level of integration required could also be a good starting point to asses the relevance of customisation as part of the revenue model and the cost structure. Maps could be used as a visible evidence of different customers experiences and therefore as a support for different contents (photos, comments, etc.) that users might like to add as their outdoor experience takes place.

Exhibit 2: the different roles of customer co-creation in product and service innovation

Innovation stage

	Idea generation stage	Deployment stage
Insights and ideas	Web buzz analysis of blog discussions Online communities Concept and idea market	Beta testing on a limited number of selected customers with feedback and comment activities
Validation	Social network based surveys On line surveys	On line configurators for product customisation Customer comments and suggestions

Role of customer

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