

Sezione tematica #8. Digital Marketing
Developing a Data-Driven Customer Experience.
A managerial perspective

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Abstract

Nowadays data-driven marketing strategies are fundamental for firms, since data allow firms to better understand and engage with customers and, then, improve their customer experience. The paper aims to identify which customer information should be exploited to implement data-driven marketing practices that improve the customer experience.

Analyzing data collected from a sample of 135 managers, the study results reveal that firms can improve their customer experience by exploiting the potentialities of data-driven marketing practices based on customers attitude and their social media behavior. In this way, firms can make more informed decisions that help consumers follow their choices. The study tries to add to both theory and practice by highlighting that firms should collect and treat data about consumer attitude and their activities on social media to provide a superior customer experience. Furthermore, the study contributes to a better understanding of the customer experience concept since it adopts a managerial perspective rather than the traditional customer viewpoint.

Keywords: data-driven marketing, customer experience, social media behavior, consumers attitude

Introduction

Data abundance and technological advances in the digital realm have transformed marketing practices. Data-driven marketing practices have emerged and have crafted data-driven customer centric marketing (Shah & Murthi, 2020).

Nowadays, firms need to make data-driven marketing decisions in order to be successful (Kumar et al., 2013) and gain superior competitive advantages (Shah & Murthi, 2020).

According to Forrester Research, data driven marketing strategies are fundamental since firms can gain sustainable competitive advantage if they know and engage with customers (Archer, 2020; Cooperatain, 2013; Nadler & McGuigan, 2018). Data driven marketing practices are essential to win in the age of customers because they are based on a deeper knowledge of customers and prospects (Nadler & McGuigan, 2018).

Improving the customer experience is now more important than ever because new technologies have empowered customers that now interact with firms through different touchpoints throughout their customer journeys and peer customers influence experiences as well (Lemon & Verhoef, 2016; Nadler & McGuigan, 2018).

In order to create and deliver strong, positive customer experiences, firms have to integrate multiple sources of data. However, many firms still do not understand how they should collect and quantify data about customers and, thus, they fail to provide unified customer experience due to the lack of customers data and analytics (Hossain et al., 2020). This because the proliferation of different data sources, such as email marketing, online content, social networks, e-commerce and digital advertising, has made challenging to identify which information matter and which insights firms should use to improve their customer experience.

In the contemporary big data environment, the aim of the paper is to better understand which customer information should be exploited to implement data-driven marketing practices that effectively enhance the customer experience. For this reason, the study furthers the extant literature by identifying those customer information that, if rightly managed through data-driven practices, contributes to improving the customer experience.

Theoretical background and hypotheses development

“Data-driven marketing refers to the use of data to inform and optimize the way through which marketing activities and, in particular, the creation, delivery and exchange value for customers are carried out” (Kumar et al., 2013). Big data enables firms to make informed decisions since, if they are rightly collected, stored, and managed, they allowed to know and engage with customers (Mcafee & Brynjolfsson, 2012). Big data are fundamental for data-driven decision-making that could result in a better customer experience (Lemon & Verhoef, 2016; Nadler & McGuigan, 2018).

Multiple definitions of customer experience exist in the marketing literature. The major accepted definition considers the customer experience holistic in nature, incorporating the customer cognitive, emotional, sensory, social and behavioral responses to all interactions with a firm/brand. In particular, this key marketing concept has been taken into account since customers previous experiences with a firm offerings define, at least in part, their expectation, since every time customers get in contact with the firm and its products they acquire new knowledge about firm offer and this influences customers expectation (Meyer & Schwager, 2007).

Previous studies remark the importance of socio-demographic information about customers and their role in predicting customers exigences and in differentiating firms

offers in order to deliver products and services that better satisfy their customers. Although the power of socio-demographic information in explaining or predicting consumer behavior is a debated matter, it seems that they can play a crucial role in customer experience but more efforts are required (Deshwal, 2016).

In the same vein, consumption data, which refer to customers likelihood to purchase, are used by firms to understand consumption and design product, services, and shopping experiences. Hence, also consumption data are considered to be a strategic element to (re)define customer experience (Nasermoadeli et al., 2013).

Another kind of information that could contribute to enhance customer experience is data on consumer attitude since they reflect how consumers process information to make buying decision (McColl-Kennedy et al., 2019).

Furthermore, in the data-drive environment social media have been identified as a powerful tool that plays a key role in empowering customers. It has become evident that social media represent a source of opportunities for firms since looking to enhancing customer experience. In fact, social media let firms obtain access to a huge amount of information about customer preferences, opinions, and behaviors that, in turn, could be used to tailor their journey (Moreno-Munoz et al., 2016). Finally, it has emerged that firms that take into account their customers sentiment towards their brands are more likely to capture information useful to better interpret their customers and, consequently, increase and strengthen their experience (Gallagher et al., 2019).

Overall, we expect that the use of these information to implement data-driven marketing practices may positively affect the customer experience.

Therefore, we propose the following hypotheses.

H1: Data-driven marketing practices based on socio-demographic customer data are positively related to the improvement of customer experience

H2: Data-driven marketing practices based on consumption data are positively related to the improvement of customer experience

H3: Data-driven marketing practices based on customer personal attitude data are positively related to the improvement of customer experience

H4: Data-driven marketing practices based on customer social media behavior data are positively related to the improvement of customer experience

H5: Data-driven marketing practices based on customer sentiment towards brands data are positively related to the improvement of customer experience

Research methodology

An online survey was performed to collect data and test the research model. From January 2020 to February 2020, an email survey was sent to a sample of marketing managers identified through LeFac database, a pay-per-use database that collects information and insights about firms from a wide range of industries and different business sizes that actively invest in marketing, advertising, and communication.

Before mailing managers, the questionnaire was pretested in order to check the questions in terms of order and comprehension and to improve platform usability and stability. The surveyed managers were asked to self-report their answers on a 5-point Likert scale about their firms' data-driven marketing practices to improve their customer experience and to express their Net Promoter Score (NPS).

The research team sent out a total of 5,143 email and at the end of the collecting process, 209 valid responses were collected, reflecting a 4.06% response rate. This percentage appears to be in line with the response range commonly reached in online surveys (Cycyota & Harrison, 2006). After excluding 74 responses due to the fact that managers have declared that their firms do not use data-driven marketing strategies, the final sample consists of 135 respondents. The sample is made of managers that operate within Italian firms. The majority of respondents operate in trade and manufacturing field of activity (33.0% and 31.1% respectively) and are large-size firms (65.6%).

To test the proposed hypotheses, a multiple regression analysis was performed with the aim of understanding and identifying which information matter and which insights firms can use to improve their customer experience.

The dependent variable expresses the Net Promoter Score (NPS), namely a customer experience metric that firms have adopted to assess their customer strategy implemented to improve customer experience (Klaus & Maklan, 2013; Lemon & Verhoef, 2016). In particular, NPS evaluates customer advocacy in terms of how likely customers are to recommend the product or service of a specific firm (Spiess et al., 2014). To test the hypotheses, five explanatory variables were considered: data-driven marketing practices based on (a) socio-demographic customer data; (b) personal consumption data; (c) personal attitude data; (d) social media behavior data; and (e) sentiment towards brands data. Finally, to partial out other potential effects on the dependent variables, some control variables were included into the model: firm turnover composition (turnover 2019) and four explanatory variables about firms' data-driven marketing and communication channels, such as website, landing page campaigns, APP, social media, and e-commerce.

Results

The regression results are reported in Table 1. The model exhibits an adequate goodness of fit ($R^2 = 0.165$). This result is sufficiently adequate, especially considering the perceptive nature of data collected (Hair et al., 2011). Drawing from a closer analysis of beta coefficients, results reveal that the NPS is positively and significantly related to the implementation of data-driven marketing practices based on customer personal attitude data ($\beta_3 = 0.757$, $p < 0.10$) and on customer social media behavior data ($\beta_4 = 1.153$, $p < 0.05$), supporting H3 and H4. The coefficients regarding data-driven marketing practices based on socio-demographic customer data, on personal consumption data and on customer sentiment towards brands data are not significant and thus H1, H2 and H5 are not supported. Findings also highlight that NPS is positively and significantly related to the use of e-commerce as a channel for collecting data and spreading marketing and communication activities.

Table 1 – Regression analysis (Y = improve customer experience)

	Beta coefficients
Constant	-.048
Socio-demographic personal information	-.105
Consumption diagnostics	-.234
Attitude profile	.757*
Social behaviors	1.153**
Sentiment towards the brand	-.070
Turnover composition	-.238
Website	1.020
Landing page campaigns	-.356
APP	.089
Social media	-.830
E-commerce	.471*
R ²	0.165

N = 135; *p < 0.10. **p < 0.05.

Discussion and conclusions

Customer experience is a key marketing concept for both research and practice. This study aims at investigating which information matter and which insights firms can use to improve their customer experience. The study findings suggest that the improvement of customer experience, evaluated through the NPS metric, is influenced by the implementation of data-driven marketing practices based on customer data derived from social media behavior and attitudinal profiles. In other words, the results reveal that firms can obtain greater benefits in terms of improvement of customer experience if they exploit the potentialities of data-driven marketing by using them to collect information on customer attitude and on their social media behavior in order to make more informed decisions useful to follow the consumers throughout their journey.

This study has implications for researchers as well as for managers. For researchers, the study tries to answer the call to extend studies on customer experience and, in particular, on such elements that could improve the customer experience in today's competitive environment (Becker & Jaakkola, 2020). In fact, previous studies have mainly investigated how to create and deliver strong, positive customer experiences from a conceptual point of view, rather than identify which information matter and which insights firms can use to improve their customer experience, despite firms fail to provide unified customer experience due to the lack of customers data and analytics. Additionally, customer experience has been traditionally investigated by adopting a customer perspective (Witell et al., 2020). This study tries to contribute to the understanding of this strategic concept by assuming a managerial viewpoint. This because a deeper investigation of managers allows to disentangle a different customer experience perspective and, consequently, to provide suggestion about which data could better support firms in enhancing their customer experience. For managers, it is of importance to take into account that different data and data-driven marketing practices have different impact on customer experience. In fact, in order to enhance customer experience, firms should think about

how to collect and treat data about consumer attitude and social media behavior. Moreover, adopting data-driven marketing decisions requires a data culture aimed at generating insights by collecting, sharing, and integrating data, possibly real-time. Finally, with regard to data control, managers should be aware of who is controlling information that occurs alongside the customer journey and to understand which data their firm can directly control and manage and, conversely, which are controlled by the customer and do not significantly contribute to generating a better customer experience.

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