

Advocacy for expanding research on technologies, experiences, services, and beyond!

Recherche et Applications en Marketing
2022, Vol. 37(3) 2–12
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DOI: 10.1177/20515707221136986
journals.sagepub.com/home/rme


Ingrid Poncin

Université Catholique de Louvain–LOURIM, Belgium

Wafa Hammedi

UNamur, Belgium

Caroline Lancelot-Miltgen

Audencia Business School, France

Why a special issue on technology, experience, and services?

Since the seminal work of Holbrook and Hirschman (1982), building experience has been a major issue in marketing. Everything that surrounds us is accompanied by an experience and is therefore part of what makes us human (Gustafsson and Kristensson, 2020). The literature has demonstrated the numerous positive impacts of a successful experience on key efficiency variables such as satisfaction, loyalty or, more recently, consumer engagement.

Identified as an important research topic since Fisk et al. (1993), it is still remarkable that the study of experiences continues to generate so much interest almost 30 years later and is even reinvigorated by recent crises and ever-increasing technological developments.

To examine customer experience, several streams of research coexist today in the literature

and this pool of knowledge continues to grow. In 2013, RAM devoted a special issue to the shopping experience (Antéblan et al., 2013; Badot and Lemoine, 2013). However, almost 10 years later, despite a growing number of studies, scientific research remains fragmented and contradictory. The proliferation of articles addressing customer experience, in different research fields, has led to theoretical fragmentation and confusion (Becker and Jaakkola, 2020). These ambiguities and the lack of a unified vision have reduced the effectiveness of research and management of the literature on experience (Law and Van Schaik, 2010), making it particularly complex to connect different literatures and perspectives. In addition, the collaboration and communication of marketing research with other research fields that address experience is now even more crucial to the scholarly community and practitioners (De Keyser et al., 2020).

Several seminal articles (Becker and Jaakkola, 2020; De Keyser et al., 2020; Lemon and Verhoef,

Corresponding author:

Ingrid Poncin, Université Catholique de Louvain–LOURIM, Chaussée de Binche, 151, Mons 7000, Belgium.
Email: ingrid.poncin@uclouvain.be

2016) have helped better define the concept of customer experience. Still, many studies agree on the difficulty to capture the complexity of this construct (Roederer, 2012), and perhaps even more difficult, to measure it in a reliable and valid way.

We define experience as a holistic and multi-dimensional reaction specific to each customer/consumer in response to an interaction with a brand, an employee, or a technology. This reaction is based on the last interaction and all other interactions that the customer/consumer has previously experienced. Due to its subjective nature, the key dimensions of this experience are therefore the affective/emotional, the social, and the behavioral. Nevertheless, the cognitive dimension remains interesting to consider, particularly in the case of a technology, where ease and perceived usefulness remain essential conditions for a positive experience. The immersive nature associated with the cognitive dimension could also be of key importance, especially when we talk about experience in a virtual environment such as a metaverse or video games.

Measuring experience remains a challenge for researchers. Research using qualitative methods (Carù and Cova, 2003, 2015; Filser and Roederer, 2016; Pantano and Priporas, 2016) has highlighted the difficulty of understanding the variable of experience in depth. None of the currently available measures holistically captures all dimensions of this complex construct.

Nevertheless, depending on the goals of the research and the dimensions that are most important to capture, the following measures are preferred: immersion or presence to capture the cognitive dimension, classic measures of affective responses such as PAD (Polarity, Arousal, Dominance) (Mehrabian and Russell, 1974), or the playful experience/playfulness (Ahn et al., 2007; Ben Mimoun et al., 2017; Ben Mimoun and Poncin, 2015; Mathwick et al., 2001) to capture the cognitive and affective dimensions; and measures such as social presence to capture the social dimension of the experience. The behavioral dimension is the easiest to capture because it is directly observable.

Recent research in the field also raises the question of evolution of the customer experience over the time (Siebert et al., 2020). Some researchers

recommend making the customer journey as “consistent and predictable” as possible, by simplifying, personalizing, and contextualizing the customer experience (Frow and Payne, 2007; Kuehnl et al., 2019). Others suggest to intentionally incorporate inconsistency, unpredictability, and uncertainty to create more excitement, or a “sense of adventure,” with the goal of fostering higher levels of engagement and loyalty (Siebert et al., 2020). The shift in the consumer’s role from simply being a passive recipient of an offer to diversifying the roles assumed (i.e. co-creator, influencer, co-producer, or partner) has also been explored in recent years (Leclercq et al., 2016; Macinnis et al., 2020). Finally, the context of consumption (e.g. community, groups, real or virtual) also plays an important role.

All these factors impose additional constraints on customer engagement and the design and experience of the customer journey (Akaka and Schau, 2019; Bolton et al., 2018; Siebert et al., 2020).

Emerging technologies: How important and what impact?

In recent years, digital and mobile technologies have disrupted our daily lives both professionally and personally (Bleier et al., 2019; Davenport et al., 2020). They are having a significant impact on the integration of resources, relationships, and interactions between actors. This technological development is not about to stop and its impact on relationships will be fundamental.

By 2025, 85% of interactions between companies and customers will occur without a human agent. In addition, brand investments in immersive technologies are massive and will increase at an average annual rate of 43.8% between 2021 and 2028 (Industry ARC, 2022). Immersive technology refers to future technologies such as virtual reality (VR), augmented reality (AR), mixed reality (MR), and, more recently, metaverse (Johnstone et al., 2022; Norlund, 2019). This type of technology will significantly soften the boundary between the real

and virtual worlds, and open up a wide range of possibilities for marketing.

In this world of rapid technological innovation, artificial intelligence, the Internet of Things, chatbots, immersive technologies, or even robots (Wirtz et al., 2018) have important potential impacts on customer experience and value creation that seem to be diverse, but, unfortunately still unclear. The integration of smart technologies can undoubtedly offer many opportunities, but at the same time would bring a number of challenges, both for the company and for its customers (Davenport et al., 2020; Miltgen and Smith, 2019).

Implications for experience and services

In line with stakeholder theory (Freeman, 2010 [1984]), which focuses on the group of stakeholders affected by an action, we consider that technology and its diffusion within organizations affect multiple stakeholders within Society.

In the context of this special issue, the four key stakeholders are as follows:

The companies or organizations, for profit or non-profit (B);

Their employees (E);

Their customers or consumers (C);

Society in general (S).

Technologies thus spread from one actor to another, forming several pairs of entities that are directly affected by the consequences of this spread. Rather than focusing on each of these pairs, we focus our attention on three potential pathways through which technology spreads through services and experiences that directly affect the involved stakeholders and the value they ultimately generate.

The first pathway (1) concerns the way technology can affect the relationships and thus the experiences between organizations and between these organizations and the Society (B2B2S model).

The second pathway (2) is about the impact of technology on interactions between an organization and its customers, between customers, or between customers and the Society (B2C2C2S model).

Finally, the third (3) pathway studies the impact of technology on the experience between an organization and its employees, between employees, and between employees and the Society (B2E2E2S model).

These three routes are modeled within the conceptual framework presented in Figure 1.

Articles in the special issue

The three paths presented in the conceptual framework are discussed in the articles of this special issue along with the different dimensions and characteristics of the experience included in our definition.

The first article presented by Yang and Garnier proposes an inventory of the use of technologies in stores. Thanks to a systematic review of 125 articles, the authors propose a new and integrative approach to interactive technologies in stores, structured in a Person-Object-Situation perspective (Punj and Stewart, 1983), based on the reactivity of technologies and the participation of consumers, and adapted to physical distribution. Three complementary research models are proposed to address essential issues: the understanding of interactivity and the impact of ISTs on the consumer experience in physical stores (B2C), the impact of highly interactive technologies, and the issue of forced use of ISTs. The affective and social dimensions of the experience are emphasized, as well as the holistic nature of the entire journey and the importance of certain individual characteristics and thus the subjective nature of this experience in this retail context. Priority research perspectives are discussed, and a research agenda is proposed.

The second article by Franck and Dampérat takes a B2B perspective and focuses on the impact of sales support technologies on salesperson performance (B2E). Although experience is not directly examined in this research, the study of the performance of 196 B2B salespeople shows a

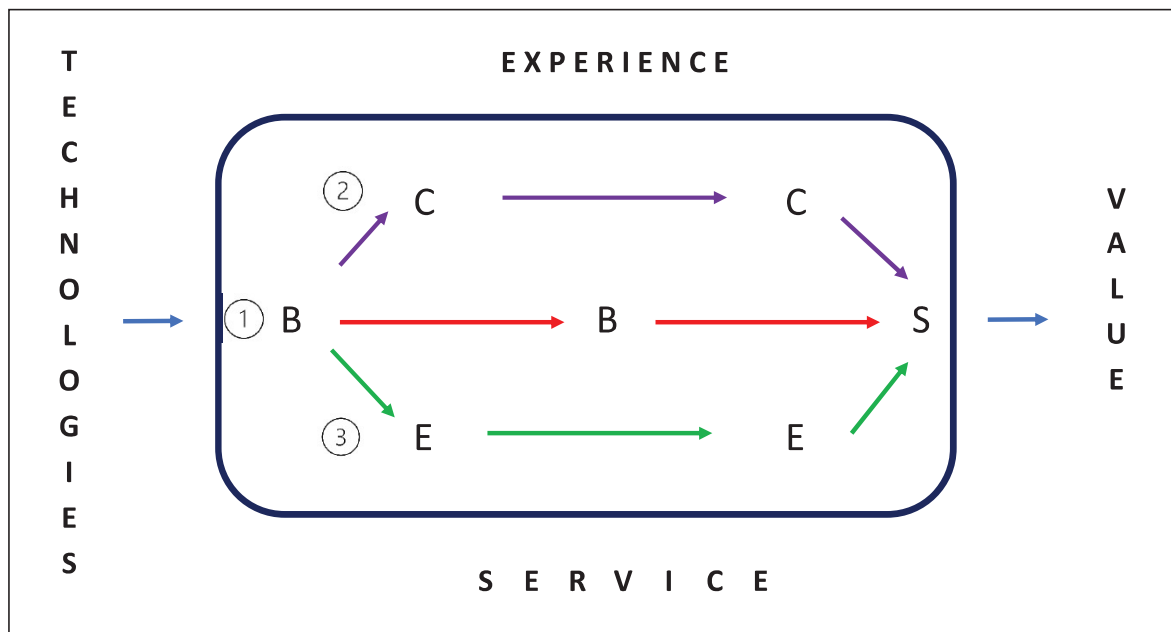


Figure 1. Technologies, experiences, services, and stakeholders.

direct influence of the use of sales support technologies on the performance of salespeople. The study is particularly interesting because it provides a deep understanding of the underlying process and demonstrates both interpersonal and intrapersonal mediation effects. For example, at the social level, the quality of the relationship appears to be key, while role overload and the risk of burnout are central in terms of intrapersonal mediators. From a B2B perspective, this work shows how the contribution of technologies led to better salespeople performance and highlights the potential complementarity between technological tools and human employees (B2E) to optimize sales performance. Agnihotri (2021) pointed out that a large number of B2B salespeople perceive themselves as inefficient and uncomfortable using the digital tools and the digital interface. However, this research shows the interest and potential of an approach that integrates the sales support technologies for salespeople, as well as the importance of proper training and support for the sales teams in their use of technological tools. Thus, the growing importance of technologies, particularly those related to artificial intelligence, in the workplace (B2E, B2B, or B2C contexts)

offers opportunities for future research and raises important ethical and societal issues (B2E and E2S contexts).

The third paper proposed by Jongmans, Dampérat, Jeannot, and Giuffrida offers a consumer inclusion perspective (B2S). This study examines the online consumer experience, specifically the role of e-personalization on e-commerce websites tailored to the needs of consumers with disabilities (perceptual, cognitive, or physical). It explores the role of ease of use and playfulness as explanatory mechanisms for the effects of e-personalization design on e-commerce site reuse and positive word-of-mouth (B2C) intentions. A model of online consumption experience based on e-personalization is proposed and empirically tested on a sample of 117 participants from a panel of French Internet users over 55 years old with disabilities. The results highlight a double serial mediation of the e-personalization of the design on the intentions of reuse and word-of-mouth, via the ease of use and playfulness. Thus, these results again demonstrate the importance of the cognitive and affective dimensions of the experience.

The fourth paper by Bachouche and Sabri explores the importance of consumers' motivation

and their profile in understanding the participation experience offered to them by the businesses (B2C). It clearly refers to the subjective nature of the experience. Although the advantages that companies have in implementing such a participation process are well known in the literature, the benefits of such initiatives for consumers have not been sufficiently studied. Based on a qualitative study ($N=23$), this research shows that, in the creation/co-creation or selection phases, participants valued the relative success of these strategies according to their profile and the benefits gained. The attribution theory (Weiner, 1985) suggests that consumers motivated by experiential and social benefits would value both, the participation experience and the brand, even if they would lose the campaign (and the reward), which is not the case for consumers motivated by more utilitarian motivations. For companies, this experience can be a means to drive customer engagement. Interestingly, and consistent with recent literature (Cambier and Poncin, 2020), non-participants perceive brands that are more collaborative with their customers as more human and familiar than brands that rely on a traditional innovation process (B2S).

Finally, the paper by Trabelsi-Zoghalmi, Touzani, Abbes, and Charfi investigates how gaming affects real life and vice versa. Although they opt for an integrative perspective, emphasizing the holistic nature of such an experience, this research proposes to focus on the gameplay and its main components. It uses a qualitative methodology using individual interviews, netnography, and a 3-year ethnographic immersion to understand in depth the components of the gaming experience. Massively Multiplayer Online Role-Playing Games (MMORPGs) attract consumers seeking fun, experiences, and challenges. MMORPGs appear as complex experiences where virtual and real life are in constant interaction. The game as a virtual experience influences the players' real lives (virtual realization) which influence the way they experience the game (virtualization of the real world). One of the most important contributions of this research is the finding that video gaming is not a process with clear and separate chronological phases. Games are an experience where the boundaries between the virtual and the real are not sharply

drawn and where virtual and real lives are far from being separate experiences.

The five papers in this special issue take different methodological approaches that offer complementary insights into the processes related to experience, experience itself in relation to technology, and its impact on services. While the studies do not cover all the possible perspectives on these topics, but they provide interesting findings that could stimulate future research. For example, Yang and Garnier's paper provides a comprehensive framework and research agenda for the in-store technology domain, while Franck and Dampérat's paper offers perspectives for the B2B domain. In the B2C domain, the contributions by Jongmans, Dampérat, Jeannot and Giuffrida and Bachouche and Sabri discuss in depth the processes at the heart of the customer experience and propose ways to integrate the societal issue of sustainability. Finally, the paper by Trabelsi-Zoghalmi, Touzani, Abbes, and Charfi shows how the boundaries between the real and virtual experience are blurred. The proposed framework can therefore stimulate research in this area, particularly from the perspective of the development of metaverse.

Future research avenues

Future research avenues are numerous, and it is not our objective to provide an exhaustive list. We will start with the methodological considerations of defining experience and the difficulties associated with its measurement.

Exploring technology and experience in marketing requires moving from a technology-based perspective to an experience and consumer-based perspective. In addition, a holistic perspective also requires an integrated approach that goes beyond examining a single technology and considers the portfolio of technologies available to consumers, and how they contribute to a compelling experience. This also has implications for technology selection and customer journey design. Therefore, research that combines objective and/or behavioral measures with subjective and consumer-reported measures will provide the most comprehensive understanding of this complex phenomenon. We urge researchers to be creative in terms of data

collection and analysis methods, and especially to draw inspiration from what is being done in other disciplines (e.g. eye tracking). The immersive ethnography proposed by Kozinets (2022) is a good example of a novel method for studying service experiences in these new contexts.

We now focus on some directions that seem particularly promising in light of the conceptual framework proposed in Figure 1.

The first path concerns the impact of technology on business dimensions and society (corresponding to the B2B2B2S model)

Despite the explosion of work on technology and experience, researchers still focus on the technical or consumer perspective, with little attention to the service provider/business and employee perspectives. The works of van Doorn et al. (2017) and Grewal et al. (2020a, 2020b) offer interesting research agendas in the area of services or distribution.

- At the strategic level, it is critical to develop a comprehensive understanding of the context in which organizations are investing into various technologies, and whether these technologies are being used as tools for a specific purpose or rather as a goal in itself (e.g. Metaverse). In either case, there is a need for more research in this area.
- Some industries such as retail, creative industry, video games, and culture are more directly affected by the development of technologies. For these industries, the question is often one choosing between proactive or reactive strategies. Investment can be important, but risk taking or risks avoidance is equally important. This is the case with technologies related to the metaverse in the field of fashion or culture. In retail sector, technologies related to the visualization of products in stores or online (smart mirrors, virtual fitting technologies, augmented reality, etc.), to the information available in stores (smart labels, interactive terminals, virtual shopping assistants, etc.), or to the services offered (virtual assistants in stores or online, contactless payment, etc.) have an undeniable impact on the consumer experience. They deserve to be studied both individually and in an integrated way throughout the consumer journey. The chosen or imposed way of using technology is another dimension to be examined. The single use of a technology could have limited impact, but the impact in terms of value creation or destruction could be quite different depending on whether a more holistic approach is taken to understanding the consumer experience. For example, the increasing use of technology in the store could lead to a sense of dehumanization, which could destroy value, while the use of a few technologies would be an obvious source of positive experiences and value creation for the consumer. Similarly, the personalization of the offering and the experience with the technological advancements can lead to multiple paradoxes for consumers, resulting in both the creation and the destruction of value (Lambillotte and Poncin, 2022).
- The influence of technologies, such as NFTs, video games, and the metaverse, also raises questions about virtual properties and the future of some marketing techniques related to persuasion or loyalty. For example, during the recent Spiderman campaign, Sony offered more than 86,000 NFTs to encourage members to leave their loyalty program. So, what will be the future of loyalty programs and how effective will be these tokenized loyalty programs?
- Another direction of research concerns the societal impact associated with the development of these technologies. The first impact is certainly environmental: the development of web platforms, virtual worlds, and connected objects increases energy consumption. The storage and analysis of data required for the development of artificial intelligence or blockchain (Wang and Su, 2020; Wu et al., 2022) are other examples. Significant impacts have also been observed on humans too. Increased digital exposure can lead to massive neuropsychological

damage (e.g. weakening of working memory, attention and concentration problems, reduced ability to process cognitive operations). With immersive technologies, we go beyond a simple exposure and become fully immersed. Despite the positive contribution of these technologies to well-being – some can even be considered as therapeutic tools (e.g. users can enter a relaxing environment to relieve stress, set AR reminders and instructions to alleviate anxiety in daily life, VR exposure therapy to fight agoraphobia) – we must also study their negative effects on users. This issue is critical as technological advances in this area aim toward a future of ubiquitous experience (Ubiquitous XR), where the boundaries between virtual and real will fade out (Johnstone et al., 2022). Beyond known risks such as addiction or social isolation, other risks such as identity disorders may emerge when the difference between real and virtual diminishes. In this context, users will face a tension between their virtual and their real identity which can affect their mental health. We therefore invite researchers to better understand these risks and the effects of blended reality on the mental health and well-being of users.

Another area of research concerns the second pathway, that is, the impact of technology on consumer-to-consumer relationships, consumers to companies and consumers to society relationships (corresponding to the B2C2C2S path)

- In relation to C2C, it is important to highlight the role that technologies – particularly technological platforms such as Uber and Blablacar in the transportation sector, or Airbnb in the accommodation sector – have played (Belleflamme, 2017; Benavent, 2016). The development of these technologies has revolutionized the consumer experience in many sectors such as tourism, transportation, hospitality industry, or even secondhand products. However, the emergence of C2C

intermediation platforms, which transforms C2C practices into B2C practices, has important consequences, especially in terms of management practices, regulatory modalities, and societal responsibility (Moquet and Beierlein, 2017).

- It will be interesting to better understand the role of technologies in the transformation of C2C practices into B2C2C practices in terms of experiences and services for consumers. It is also valuable to study business models and the consequences of this transformation in terms of value creation and destruction.
- As Belleflamme (2017) points out, the impact of C2C platforms for public authorities is also under studied. While overlooked in the literature, the emergence of these platforms requires a deep reform of the legal and regulatory frameworks that have become irrelevant (Belleflamme, 2017).
- While most previous marketing research has focused on C2C platforms, Tan et al. (2022) show the impact of technology on the sharing economy. In a more societal perspective such as the circular economy (C2S or B2S), technologies also play a crucial role. For example, the development of technology platforms facilitates the easy availability of remanufactured products and byproducts. Therefore, further research is needed to better understand the impact of these technologies on individual experiences and underlying processes.
- The responsibilities associated with using of data that these technologies collect, disseminate, store, and transmit also raise ethical issues. Much of the data currently available is derived from the “traces” that consumers leave behind in their daily digital activities (Puntoni et al., 2021). The combination of technologies related to Big Data and artificial intelligence means that companies know their customers much better than ever before (Wilson et al., 2018). Companies should therefore ensure that they appropriately balance their business interests with the interests of their customers. In addition, it is still unclear how ethical and legal concerns,

especially those related to accountability and analysis of decisions made by systems, can be resolved and integrated into a marketing strategy. Marketing researchers are in the best position to contribute to the debate in these areas, and we hope that this issue will help encourage the French and international marketing communities to do so.

- Finally, and directly associated with the data growth (collection, analysis, storage) resulting from all these technological developments, cybersecurity and the associated threats are becoming a societal phenomenon. For example, more than 56% of customers (B2B and B2C) now express an interest in the cybersecurity stance of the organizations they deal with. By 2025, 60% of the organizations will consider cybersecurity risk as a significant determinant in defining third-party transactions and business engagements (Gartner Report, 2022). To improve their IT security, companies are implementing innovative measures like biometric authentication, facial recognition, and so on. Marketing researchers should study them more closely to deeper understanding of their effectiveness and how they are perceived by users. Security design goes beyond the technical aspects to include users' education on data management. Users' lack of awareness and data management literacy could pose a major risk. Therefore, more research is needed into these cybersecurity measures, the evaluation of their perception, and the impact on consumers' decisions.

Finally, the third pathway (B2E2E2S) encourages to consider how these new technologies will transform the world of work

- According to Pofeldt (2016), in the next 20 years, 47% of jobs in the United States are likely to be automated. In addition, technologies (e.g. IBM's Watson computer) are now capable of swiftly analyzing large amounts of data that no data scientist would be able to match. In some situations, employees will be

replaced by virtual agents who will be able to interact and serve consumers on immersive platforms. These virtual employees will have the advantage of being deployed in multiple locations at once, taking on repetitive, boring, or dangerous tasks, and above all without the risk of fatigue, burnout, or absence. However, in societal terms (E2S), increased automation and a rapid replacement of human work by machines will have an impact, especially on the less skilled workers who generally have fewer opportunities of shifting into other roles. Yet, some human characteristics are unlikely or difficult to be replaced with technology (van Doorn et al., 2017). For example, jobs characterized by a strong need for empathy or social intelligence are less at risk of automation by technologies.

- Considering the impact in terms of relationships between employers and employees (B2E) or between employees (E2E), technologies not only offer vast opportunities for workers and organizations but also bring risks that need to be managed appropriately. For example, while immersive technologies promise to boost social connection, mobility, and collaboration at workplace in unprecedented ways, they can also have major implications for employees, their work experiences, and well-being. Giving employees the chance to develop their abilities or avatars and interact with customers on these immersive platforms can indeed create value for employees, consumers, and firms. However, this possibility raises questions about the organization of work, and the skills required to successfully interact in two different and yet connected worlds. The workplace experiences and especially the social links (E2E) between colleagues will also be impacted. It will then be necessary to study the relationships between colleagues within these virtual worlds (e.g. between their avatars) and the impact on their relationships in the real world.
- In many work contexts, the complementarity between employees and technology, and how much of it should be done through technology is becoming an important issue.

The coexistence of real-world employees and virtual employees may be an attractive idea to boost productivity. More research on these virtual employees is required to better understand their attitudes and the skills needed for improved customer interaction. Human workers will increasingly have the ability to design and create their own digital/virtual colleagues/agents, personalized and tailored to work alongside them. This will involve careful consideration of the relationship between human and virtual colleagues.

- In terms of evaluation and quantification of work, technological developments such as IOT, tracking devices, or even mobile applications used at work to achieve different goals (such as improving motivation, engagement, empowerment, and productivity) will make the future of work more and more quantified. While these technologies can create value, they also give access to an unlimited amount of data about workers. This opens many research perspectives, particularly in ethical and societal (E2S) terms, to understand how this trend toward quantified work can create value for employees. In addition, effects on job stability and well-being, impact on the future of marketing and service jobs in terms of attractiveness and perception, especially in an era of talent shortages and wars, should be further explored.

To conclude this editorial, we believe that technologies and their impact in terms of experiences and services constitute an extremely promising research field for marketing researchers. In this special issue and through this call to action, which emphasizes that we have just discovered the tip of the iceberg, we wanted to show that it affects all the stakeholders in our ecosystem and that there are many avenues to further develop research on technologies, experiences, services, and beyond!

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