The Role of Self-Service Mobile Technologies in the Creation of Customer Travel Experiences

Chaoren Lu, Wei Geng, and Iris Wang

> " *It is good to have an end to journey towards; but it is the* "
> *journey that matters, in the end."*

Ursula K. Le Guin
in *The Left Hand of Darkness*

Through the use of self-service mobile devices, the traditional marketplace interaction is being replaced by a marketspace transaction, in which the foundation of customer-company interaction has changed. This article discusses the main actors of experiencial value creation through the physical world and virtual world in the context of transport service. The empirical data is collected from semi-structured interviews with 19 young urban transport commuters. The results show that self-service mobile devices enhance the information accessibility for passengers to create customized travel experiences through a closer interaction with other actors, including transport service providers, transport-related service providers, and other passengers. Moreover, the scope of travel experience was expanded beyond the traditional service encounter both temporally and spatially. This article is an exploration of the influence of self-service mobile devices in the changing roles of customers and companies. A key message is that executives must pay attention to how their companies create experience value in both the physical world and the virtual world, separately or in combination.

Introduction

The customer experience is important for all kinds of services; both scholars and practitioners view its creation as an imperative component of a service firm's success (Helkkula et al., 2012; Prahalad & Ramaswamy, 2004). Previous research has shown that the creation of an extraordinary customer experience can lead to extra benefits, particularly with experience-centric services, such as the retail, hospitality and tourism industries (Pine & Gilmore, 1998; Zomerdijk & Voss, 2009). However, the customer experience is also important for other non-experience-centric service industries, such as urban public transport (Carreira et al., 2013).

Public service places greater focus on functional value based on collective interests than on personal hedonic value. However, with the development of customer capability in terms of self-service mobile technology, customers have more opportunities to create a personalized service experience using their own knowledge and skills (Meuter et al., 2000). Therefore, the tra-

ditional management-oriented perspective of experience creation has been challenged by a customer-dominant perspective (Gentile et al., 2007; Zomerdijk & Voss, 2009). The customer experience tends to emerge through the more complex service ecosystem rather than through a single company's service system (Laghari & Connelly, 2012).

The academic literature lacks a unified view, but does contain fragments of when and where the customer experience emerges (Zomerdijk & Voss, 2009). Driven largely by the widespread usage of self-service mobile devices, the traditional "marketplace interaction" in the physical world is being replaced by a "marketspace transaction" in the information world (Rayport & Sviokla, 1995). For instance, when customers find a taxi on the street to go to their destination, their service experiences are emerging in the marketplace; but, when they order and select a car ride service through their mobile device, their service experience partly emerge through the marketspace, where products and services exist as digital information and can be transacted through the

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online information channel. Therefore, the customer–company interaction has changed significantly in terms of the value-creation process (Meuter et al., 2000; Rayport & Sviokla, 1995). In the physical world, the information collected within the stages of the value chain enables the company to produce and sell products or services more efficiently; in the virtual world, it is potential value in itself (Lariviere et al., 2013; Rayport & Sviokla, 1995). Therefore, customer experience can be created within all stages of the value creation process, where it is a potential source of new revenue, as well as a potential source of risk. The temporal boundary of experience creation – the point where the customer experience starts and ends – becomes fuzzy and hard to define (Helkkula et al., 2012).

Through this article, we seek to understand who is the main creator or co-creator of the customer experience and to understand through whom the superior customer travel experience can emerge. We set the study in the context of public transport service for two reasons. First, current research in terms of customer experience lack focus on the non-experience centred service, such as public transport. Second, customer experience research on public transport mainly stands in the physical world; there is a lack of research on how the digital service information influences customer experience creation in the virtual world.

We will examine whether the use of self-service mobile devices influences the temporal boundary in the creation of the customer travel experience. Specifically, we attempt to answer two research questions:

1. What are the roles of company and customer in the creation of the customer travel experience?

2. Does the use of self-service mobile devices change the temporal boundary of the customer travel experience?

This article is structured as followed. First, we examine the literature on customer experience, with a particular emphasis on travel experiences. Then, we outline our research design. Next, we provide the empirical results from 19 interviews. Finally, we present a framework for the creation of customer travel experience to answer the two research questions listed above.

Customer Experience

The concept of customer experience was first conceived in the mid-1980s, along with the customer behaviour literature, which articulates that customers are not rational decision makers, but are "feelers", "thinkers" and "doers" and that the underlying emotional elements affect customer behaviour (Gentile et al., 2007). Pine and Gilmore (1998), view experiences as a new type of economic offering to customers, which emerges as the next step after commodities, goods, and services in what they call the "progression of economic value". Furthermore, a comprehensive contribution has been offered by Carù and Cova (2007), who identify a "continuum of consuming experiences" ranging from the experience mainly constructed by companies to the experience created mainly by customers, passing through experiences that are co-created by both customers and companies.

Building on the work of Meyer and Schwager (2007), the customer travel experience can be defined as "the holistic individual response arising from the passenger [to any direct or indirect] interactions with all aspects (e.g., tangible factors, multichannel services, or other passengers) and across all moments of transportation provision" (Carreira et al., 2013). Such "moments" encompass the total experience, including the pre-service, in-service, and after-service stages of the experience, and involve different experience factors (e.g., social environment, service interface, retail atmosphere, assortment, and price) (Verhoef et al., 2009). Such experience factors can be defined as customer perceptions of all aspects of service that contribute to the customer experience.

Actors in customer-experience creation
Research into who facilitates customer-experience creation shows divergent arguments. The traditional approach to customer-experience creation mainly emerged from management practice and the service design literature, which refers to a management-oriented perspective (Berry et al., 2006; Edvardsson et al., 2005; Meyer & Schwager, 2007; Zomerdijk & Voss, 2009). According to this perspective, customers are only invited to engage in the pre-designed service encounter conducted by the service company. The customer experience emerges through the customer's subjective reaction to such predesigned physical facilities and standard processes.

The collaborative perspective argues that the customer experience is co-created by both the customer and service provider (Prahalad & Ramaswamy, 2004), much in accordance with service-dominant logic (Vargo & Lusch, 2004). In this perspective, customers co-create unique experiences through their interactions with a service provider across different touch points, respond-

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ing to the different designed elements, along with other elements that are not under an organization's control, such as the social environment (Vargo & Lusch, 2004).

The customer-oriented perspective posits that customers create their own experience with a service (Helkkula et al., 2012; Verhoef et al., 2009). This perspective, which is coherent with customer-dominant logic, views customers as actively creating their own service process and experience landscape by selecting service elements to achieve their desired experience (Heinonen et al., 2010).

Temporal scope of customer-experience creation
The temporal dimension is one of the core characteristics of customer experience, which originated from the all moments of contact between the customer and the company, or the company's offerings (Meyer & Schwager, 2007). The traditional approach views customer experience as emerging from within customer–company encounters, where customer experience is created at the interaction and purchasing stages (Berry et al., 2006). The temporal scope of such experience creation is based on all encounters with the service providers, both present and past (Zomerdijk & Voss, 2009). According to the collaborative perspective, the temporal scope of customer-experience creation has been viewed over the lifecycle of the customer relationship, aggregating all previous and present experiences, rather than only service activities (Teixeira et al., 2012). The customer-oriented perspective further broadens the scope of customer-experience creation that takes into account not only core-service-related experience, but also non-related phenomena, which means that the customer experience is viewed based all the past, current, and future imaginary value in the context of the service customer's lifeworld contexts (cf. Helkkula et al., 2012; Verhoef et al., 2009).

Characteristics of self-service mobile devices
Recently, academic researchers have recognized the critical importance of technology in the delivery of services the traditional marketplace interaction is being replaced by a marketspace transaction (Meuter et al., 2000) . The marketspace is defined as "a virtual realm where products and services exist as digital information and can be delivered through information-based channels" (Rayport & Sviokla, 1995). The foundation of customer-company interaction has significantly changed in such marketspace environments. Self-service technologies are typical examples of marketspace transactions, where no interaction is required between customer and company. Based on the attribute model,

self-service technologies can influence various attributes of the customer experience, such as expected speed of delivery, ease of use, reliability, enjoyment, and control, which affect the customers' attitude toward using technologies and the need for interaction with employees (Meuter et al., 2000). In the digital age, the application of self-service technologies in mobile devices largely facilitates the value co-creation between customer and company through direct or indirect interaction. The combination of portable, personal, networked, textual/visual, and converged characteristics of mobile devices enable customers to have closer interaction with service providers and other customers in real-time, and they enable customers to create customized travel experiences (Lariviere et al., 2013).

Research Design

This study aimed at an in-depth understanding of customer perceptions and responses to address travel-experience creation in the context of mobile technologies, and as such, a qualitative approach was adopted. Interviews and focus group discussion were adopted as the appropriate method to identify value perceptions that customers were able to verbalize. The customer interviews were done mainly at the metro stations in Chengdu, China, and at the campus of Southwest Jiaotong University. The respondents were selected within such areas with a preference for young and highly-educated people, because such groups of people tend to favour self-service technologies using mobile devices (Meuter et al., 2000).

We interviewed 19 people between the ages of 20 and 40 who were frequent users of both public transportation and public transport related mobile applications.

We designed semi-structured interview questions through APPolls Survey (http://appolls.com), a mobile device application that facilitates offline surveying, including audio recordings.We asked the respondents questions relating to their use of self-service mobile applications in the context of their daily travel. Each interview was recorded and lasted approximately one hour. Additional open-ended questions helped respondents to describe their personal stories relating to self-service technologies that influenced their past travel experiences. Those questions included, for instance, "what do self-service technologies mean to you in terms of your daily travel journey?" and "how you view the time spent using self-service technologies?". During the interviews, we observed other relevant aspects and non-verbal behaviour.

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We also collected data about customer complaints and feedback from the urban transport operation company. This additional data broadened our view of customer value expectation and value perception within the process of travel-experience creation, including its negative aspects.

The data analysis followed the approach of Miles and Huberman (1984), which involves three concurrent activities: reducing data, visualizing data, and drawing/verifying conclusions. The goal of such inductive and deductive process was to systematic creating appropriate codes and categories. During this process,

the theory was allowed to emerge from the empirical data to enable a better understanding about the customer travel experience.

Results

We categorized the travel experience values created in the marketspace through the use of self-service devices. Below, we describe the results of three cases: ChangZhou Pocket Bus, Didi Taxi, and Sina Weibo. The different types of value discussed in the three cases are summarized in Table 1.

Table 1. Summary of the types of value discussed in the three cases

Experiential Value	Illustrative Quotations	Actor(s)	Temporal Boundary
Function value			
Convenience	"I can book a taxi to pick me up at a convenient place by using Didi [Taxi], even in rush hour".	Firm and passenger	Before or during the service
Information value	"I normally check out the bus times [by using Changzhou Pocket Bus] before I go to the bus station. So, I don't need to spend more time on [waiting at] the station."	Firm and passenger	Before or during the service
Monetary value	"I can use the 10-yuan 'red pocket' (ticket) each time I use Didi [Taxi]".	Firm and passenger	After the service
Hedonic value			
Communication	"I can contact friends or share moments on Sina [Weibo] while I take the bus to work."	Passenger	During or after the service
Social value	"I am a bus travel expert on Sina [Weibo], and I have 2000 fans that follow me. I share many travel-related news stories on Sina [Weibo], when I have time, especially on the bus".	Passenger	During or after the service
Identity value	"The taxi driver can trust me and let me pay the fare [online] even a half day later. Because she [the taxi driver] can see that I have 35 payment records on Didi [taxi] and she has to pick up another passenger during a busy period.	Passenger	Before or after the service

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ChangZhou Pocket Bus

The ChangZhou Pocket Bus is a mobile app that was co-developed by the Changzhou Transit Group and China Unicom. It is designed to let passengers access real-time bus and Bus Rapid Transit (BRT) schedule information, allowing them to find a suitable route from their current location to their destination. Our results show that many passengers feel a sense of security from ready access to travel information through their mobile devices; they can better manage their time and anticipate their itinerary and experience before beginning their trip. One office worker highlighted the value of a feature that alerts users that the bus is approaching their stop, which helps them avoid missing their stop and makes their journey less stressful. This feature is particularly helpful because bus riders can be distracted or tired, or may even fall asleep, during their bus journey. Other features allow users to save their favourite travel lines and customize their routes for greater time efficiency.

Didi Taxi

Didi Taxi is a taxi-ordering mobile app developed by Xiaoju Technology Co. Ltd., a privately-owned company. The Didi Taxi platform allows customers to directly communicate with taxi drivers without requiring intermediary organizations. The service saves time for passengers wishing to order a taxi, especially during rush hour and in remote locations. The mobile app changes the method of interaction between passengers and the travel company. Our results show that the service allows passengers to better anticipate the time and location of a taxi service based on the location-based system. Compared to alternatives, passengers state that the service allows them more control over their travel plan; they can call the taxi service to arrive "just in time" or even let the taxi wait for them. Moreover, an online payment method challenges the traditional taxi fare payment method. With the mobile app, passengers can pay inside or outside the taxi; this personal credit system enhances trust between taxi driver and passenger and saves time. There are financial benefits to passengers in the form of digital "red pocket" tickets, which reduce the cost of travel and can be shared with other passengers, meaning they have both financial and social value to passengers. This approach has helped Didi Taxi become the market leader among taxi-ordering services.

Sina Weibo

Sina Weibo is a mobile app for crowdsourcing and microblogging, and it was developed by a privately-owned company. Sina Weibo provides a large variety of text,

audio, and visual information relevant to its customers' daily lives. The news and other information provided from Sina Weibo is chosen by each individual customer, which is more valuable than traditional media found onboard buses. Customers both consume and generate information that they share with others, especially during their journeys. The platform not only provides a channel for customer feedback and complaints to the travel company, but it provides access to information about travel-related news and events. Both passive and negative participation into social interaction allows customers to enjoy their travel experiences, receive information, and grow their social identity, among other benefits..

Discussion

Our results show that self-service mobile devices enhance the information accessibility for passenger to create customized travel experiences though a closer interaction with other actors, including transport service providers, transport-related service providers, and other passengers, as shown by the framework illustrated in Figure 1. The direct service provides value through reliable travel information and a convenient service. However, the company can only play the role of platform provider if it enables other service operators to facilitate interactions with and between customers.

Didi Taxi, for example, is a transport-related service provider; it provides a platform but does not own any physical service assets, such as taxis. Nonetheless, the users that we interviewed indicated that Didi Taxi was responsible for the convenient service experience rather than the taxi provider. The wide use of this platform is due to its economic benefits and convenient user experience; it provides value to both taxi driver (service provider) and passenger (customer). Didi Taxi do not own any of the information it provides about taxi services; however, the economic promotion provided by Didi Taxi attracts individual service providers and customers to provide their location information. Therefore, customers perceive experiential value more from the value propositions embedded in the service platform and less from the sensorial feeling associated with the service itself.

In terms of the experience platform, a customer achieves the experience value not only from the core service and related service, but also from the non-related service. For instance, in terms of a public transport service, taxi and bus services can be substituted for one another. Therefore, if we view the bus service as the

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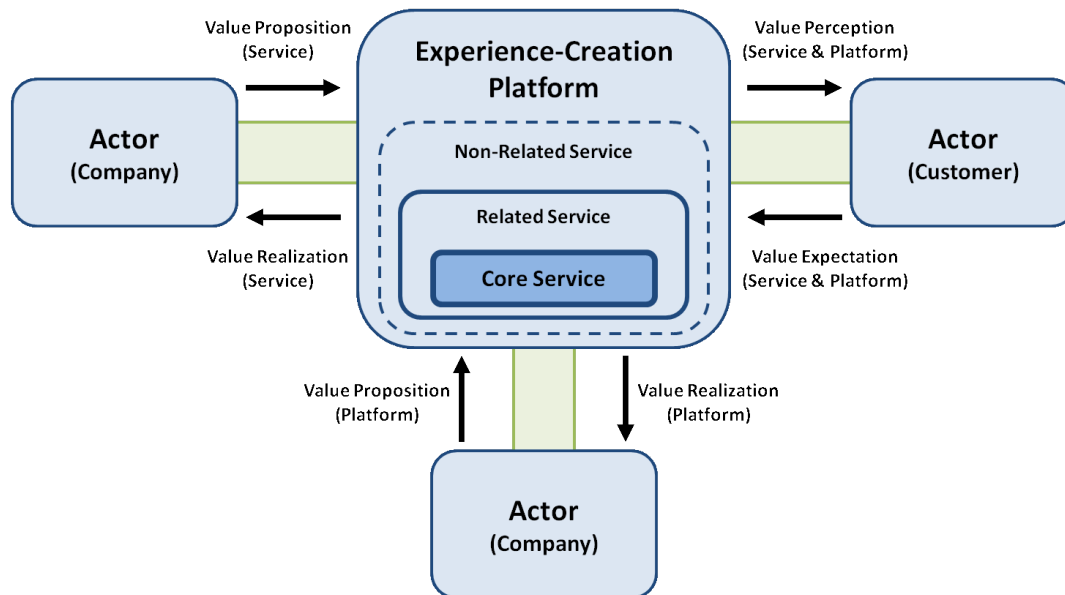*Chaoren Lu, Wei Geng, and Iris Wang*

Figure 1. Framework for the creation of customer travel experience

core service, then the taxi service can be the related service, and vice versa. The social network plays the role of non-related service in this case. Passengers can perceive experiential value from the bus service, or the combination of bus service initially, then taxi service later on, with a social communication service along the way. Passengers can co-create value directly with the transport service provider or indirectly through interaction with the transport service provider by using the transport service platform. Also, passengers can co-create value with other passengers by sharing information, experiences, or even vouchers.

Moreover, both passenger and company in the experience creation process can be viewed as an actor within a value network. It is hard to define which actor provides a direct value proposition to the passenger in the self-service encounter, due to the many traditional, direct forms of communication around the interaction, which have been replaced by an indirect method of interaction and communication. Furthermore, the traditional service provider could mainly provide a convenient and reliable transport service, which represents the functional value from the passenger's point of view. In this sense, such functional value is co-created by both service provider and passenger. However, the role of passenger cannot be ignored; they could also create value for other passengers by sharing personal experiences and comments related to certain issues

that will also influence other people's travel journey. In some situations, passengers could also provide value to the service company in the form of market insights and customer knowledge. In this case, passengers play as an active role in creating value rather than simply being passive receivers of value.

An individual passenger can create their own travel experience through close interaction during all moments of contact within the transport service process (Carreira et al., 2013; Verhoef et al., 2009), where some elements are outside the service provider's control but within the passenger's control, and some elements are outside both actors' control. Especially based on the enhanced communication channel, the transport service experience becomes less controllable. The transport operator could mainly focus on the controllable elements and also the important travel experience factors. The customer, however, can always actively find and share with the transport-related service provider to achieve their personal expected value. The transit-related service provider may not need to create the platform; rather, it can focus on one element of the transport service, such as taxi ordering and booking. However, only the value proposition provided by one actor can facilitate other actors to create further value propositions favoured by passengers. Passengers tend to prefer indirect contact with social actors rather than service providers, which depends on the convenience and speed of interaction.

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Among the large volume of information resource available online, customers choose the service elements as they wish. Therefore, a service provider's responsibility to support the formulation of their passengers' travel experience is to provide structured service information and attract customers' cognitive, affective, emotional, socials and physical responses to such travel service elements.

One important way to attract and motivate customers to engage in the travel experience is to provide a service platform with more value propositions and facilitate customers to achieve value by close interaction with other actors within such service platform. For most passengers, the travel experience is based on the utilitarian trip (Carreira et al., 2013). Therefore, the service platform should enhance the utilitarian value achievement through enhancing the visibility and mirroring capability of the transport information. Moreover, the relationship building through such service platform can be substantial.

Temporal scope changes in the marketspace transactions
With the help of self-service mobile technologies, the scope of travel experience was expanded beyond the traditional service encounter. Using self-service mobile technologies, passengers experience their current and anticipated future travel simultaneously through multi-channels, both online and offline. For instance, a customer can monitor the taxi's real-time route to check whether the taxi driver has chosen detours. Moreover, mobile technologies extend the customers' scope for social interaction. Such social interaction can include active information searching and passive information receiving. The social sharing real-time experiences with other passengers can enhance the travel experience of both parties.

The temporal boundary of the holistic travel experience is expanded into the customers' lifeworld contexts (Helkkula et al., 2012). However, this does not mean that one passenger will experience every transit service by watching news and videos, playing games, etc. With the help of their mobile device, the passenger can experience transit service more flexibly. Customers can perceive service experience value even before or after the transport service by monitoring the transport information through engaging into the online platform or marketspace. By using mobile technologies, the travel experience becomes more personal and complex, as well as extends the temporal boundary compare to alternatives.

Conclusion

Self-service mobile devices enable customers to experience direct and indirect interactions with service companies and other passengers during travel. All actors, such as service providers, service platform providers, and customers, could contribute experiential value to customers. The former two actors contribute more functional value and the latter contributes value mainly in terms of hedonic dimensions. Passengers can achieve experiential value from either actively participating in the service process or passively receiving the information or other value provided by the service company or other customers. Therefore, the temporal boundary of the travel experience is not strictly defined within each service encounter. With the help of self-service mobile devices, passengers can access certain parts of the transport service anytime and anywhere, such as checking information, paying taxi fares, etc. Customer can personalize their experiential value by freely switching their sensory channel among the core, related, and non-related services during each travel journey.

The contribution of this article is an exploration of the influence of self-service mobile devices in the changing roles of customers and companies, where the traditional marketplace interaction has been replace by a marketspace transaction. Further research should look into the customer reaction and motivation in engaging into the self-service encounter in more specific situations to understand the influence of self-service technology in the creation of the customer travel experience.

What all these means to managers is that they must pay attention to how their companies create experience value in both the physical world and the virtual world, separately or in combination. To create a superior service experience in the new realm of activity, executives must understand the differences between value creation in the offline marketplace and the online marketspace. Service companies can not only create value through the online service platform, but also extract value from such platforms by organizing and synthesizing the information generated by customer usage of self-service technologies.

Moreover, opening the marketspace to bring additional actors into the service platform – and thereby providing multiple new value propositions – is beneficial to customers. However, managers need to evaluate the potential benefits and risks of opening resources when

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multiple actors become involved in activities to create experiential value. The marketspace could provide opportunities to more actors, and they should mainly focus on certain points of activity during the transport service process, because the information in the marketspace can be a potential source of new revenue.

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References

Berg, B. L., & Lune, H. 2004. *Qualitative Research Methods for the Social Sciences.* Harlow, UK: Pearson.

Berry, L. L., Wall, E. A., & Carbone, L. P. 2006. Service Clues and Customer Assessment of the Service Experience: Lessons from Marketing. *Academy of Management Perspectives,* 20(2): 43–57.
http://dx.doi.org/10.5465/AMP.2006.20591004

Carreira, R., Patricio, L., Jorge, R. N., Magee, C., & Hommes, Q. V. 2013. Towards a Holistic Approach to the Travel Experience: A Qualitative Study of Bus Transportation. *Transport Policy,* 25: 233–243.
http://dx.doi.org/10.1016/j.tranpol.2012.11.009

Carù, A., & Cova, B. 2007. *Consuming Experience.* Abingdon, UK: Routledge.

Edvardsson, B., Enquist, B., & Johnston, R. 2005. Cocreating Customer Value through Hyperreality in the Prepurchase Service Experience. *Journal of Service Research,* 8(2): 149–161.
http://dx.doi.org/10.1177/1094670505279729

Gentile, C., Spiller, N., & Noci, G. 2007. How to Sustain the Customer Experience: An Overview of Experience Components that Co-Create Value with the Customer. *European Management Journal,* 25(5): 395–410.
http://dx.doi.org/10.1016/j.emj.2007.08.005

Heinonen, K., Strandvik, T., Mickelsson, K.-J., Edvardsson, B., Sundström, E., & Andersson, P. 2010. A Customer-Dominant Logic of Service. *Journal of Service Management,* 21(4): 531–548.
http://dx.doi.org/10.1108/09564231011066088

Helkkula, A., Kelleher, C., & Pihlstrom, M. 2012. Characterizing Value as an Experience: Implications for Service Researchers and Managers. *Journal of Service Research,* 15(1): 59–75.
http://dx.doi.org/10.1177/1094670511426897

Laghari, K. U. R., & Connelly, K. 2012. Toward Total Quality of Experience: A QoE Model in a Communication Ecosystem. *IEEE Communications Magazine,* 50(4): 58–65.
http://dx.doi.org/10.1109/MCOM.2012.6178834

Lariviere, B., Joosten, H., Malthouse, E. C., Van Birgelen, M., Aksoy, P., Kunz, W. H., & Huang, M.-H. 2013. Value Fusion: The Blending of Consumer and Firm Value in the Distinct Context of Mobile Technologies and Social Media. *Journal of Service Management,* 24(3): 268–293.
http://dx.doi.org/10.1108/09564231311326996

Meuter, M. L., Ostrom, A. L., Roundtree, R. I., & Bitner, M. J. 2000. Self-Service Technologies: Understanding Customer Satisfaction with Technology-Based Service Encounters. *Journal of Marketing,* 64(3): 50–64.
http://dx.doi.org/10.1509/jmkg.64.3.50.18024

Meyer, C., & Schwager, A. 2007. Understanding Customer Experience. *Harvard Business Review,* 85(2): 116.

Miles, M. B., & Huberman, A. M. 1984. *Qualitative Data Analysis: A Sourcebook of New Methods.* Thousand Oaks, CA: Sage Publications.

Pine, B. J., & Gilmore, J. H. 1998. Welcome to the Experience Economy. *Harvard Business Review,* 76(4): 97–105.

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Prahalad, C. K., & Ramaswamy, V. 2004. Co-Creating Unique Value with Customers. *Strategy & Leadership,* 32(3): 4–9.
http://dx.doi.org/10.1108/10878570410699249

Rayport, J. F., & Sviokla, J. J. 1995. Exploiting the Virtual Value Chain. *Harvard Business Review,* 73(6): 75–85.

Teixeira, J., Patrício, L., Nunes, N. J., Nóbrega, L., Fisk, R. P., & Constantine, L. 2012. Customer Experience Modeling: From Customer Experience to Service Design. *Journal of Service Management,* 23(3): 362–376.
http://dx.doi.org/10.1108/09564231211248453

Vargo, S. L., & Lusch, R. F. 2004. Evolving to a New Dominant Logic for Marketing. *Journal of Marketing,* 68(1): 1-17.
http://dx.doi.org/10.1509/jmkg.68.1.1.24036

Verhoef, P. C., Lemon, K. N., Parasuraman, A., Roggeveen, A., Tsiros, M., & Schlesinger, L. A. 2009. Customer Experience Creation: Determinants, Dynamics and Management Strategies. *Journal of Retailing,* 85(1): 31–41.
http://dx.doi.org/10.1016/j.jretai.2008.11.001

Zomerdijk, L. G., & Voss, C. A. 2009. Service Design for Experience-Centric Services. *Journal of Service Research,* 13(1): 67–82.
http://dx.doi.org/10.1177/1094670509351960