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Customer experience from a self-service system perspective: Maria Åkesson Bo Edvardsson Bård Tronvoll

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### Customer experience from a self-service system perspective

#### Introduction

Activities and interactions with self-service technologies (SSTs) create challenges and opportunities for customers and affect how they experience the service. For example, Kandampully (2012) emphasizes the use of SSTs as a key strategic driver of changes in customer behavior. Previous studies on SSTs have focused predominantly on variables with positive or negative impacts on the adoption and continued use of SSTs (e.g. Gelderman *et al.*, 2011; Meuter *et al.*, 2000). This article takes a broader perspective by focusing on customers' experience drivers when using SSTs in a self-service system context. We define "experience drivers" as activities and interactions carried out and assessed by customers (and other actors) that result in memorable experiences, both favorable and unfavorable. Drivers unfold during value co-creation processes; thus, studying them in practice is crucial. A customer experience refers to the outcome of a service process in a specific context in the service organization, including the use of an SST (Edvardsson *et al.*, 2005; Johnston and Clark, 2008; Meyer and Schwager, 2007).

During SST use, customers undergo a continuous flow of experiences, some of which can be memorable. As Berry *et al.* (2002, p. 88) state, "customers always have an experience—good, bad or indifferent—whenever they purchase a product or service from a company." Some of them are memorable, whether favorable or unfavorable. Remembered customer experiences influence the brand perception and future customer behavior and are thus linked to company profitability (Klaus and Maklan, 2012). Many companies therefore focus on creating competitive advantages through favorable customer experiences, yet the multifaceted concept of customer experience remains poorly understood (Klaus and Maklan, 2012). This is uncalled for since customer experiences drive customer behavior, which makes them a foundation for company success (Gentile *et al.*, 2007). Therefore, companies must understand the underlying drivers of such experiences, both favorable and unfavorable.

The poor understanding of customer experience might be due to its complexity. Customer experience can be created by things that companies can control, such as the servicescape, and by things difficult (or impossible) to control, such as norms and rules. Norms and rules, or *schemas*, as referred to in this paper, are often neglected in service research. Customers are social actors and their behaviors are shaped not only by their needs and wants but also by schemas. Therefore, this article investigates four different categories of schemas: informational, relational, organizational, and technological. We use the schemas as a theoretical basis to both classify and analyze customer experience drivers. This is in contrast to previous research that has focused on the characteristics of service systems and different resources (e.g. Dabholkar and Bagozzi, 2002). Instead, this study aims to determine how customers' experiences are formed when using SSTs by identifying the underlying drivers in the context of a self-service-based system. We provide a basis for analyzing service system conditions that are likely to result in both favorable and unfavorable customer experiences. We also analyze *customers' journeys*, which occur before, during, and after their

experience with a self-service-based system with SSTs. We selected retail as our empirical context and the furniture company IKEA as a case company. IKEA met our criteria because its service system is based on SSTs and emphasizes the customer experience. Besides, Schmitt (2003, p. 43) calls for researchers to analyze "the experiential world of the customer." According to Kandampully (2012), retail business models and practices are quickly outdated by customers' changing needs, which result mainly from changing technology such as SSTs. IKEA thus offers an ideal empirical context for this study.

This article proceeds as follows: First, we review prior research related to customer experiences, service systems, and customer experience drivers. We summarize our theoretical framework by providing an empirical understanding of value co-creation as interactive and experiential in nature (Vargo and Lusch, 2004). Our theoretical framing suggests that the concepts of the service system, drivers, and customer experience are interdependent. Second, we present the study methodology, providing an overview of the empirical context and an explanation of the design, data collection, and our event-based data analysis technique. Then, we outline our findings consisting of 13 favorable and unfavorable customer experience drivers that guide value co-creation and thus help form customers' experiences, and we discuss their implications. Finally, we provide managerial implications, discuss the study limitations, and give suggestions for future research.

#### **Theoretical Framework**

Customer experiences

Customer value is experience driven, co-created, and context dependent (Vargo and Lusch, 2004). It is an outcome of customer integration and value co-creation efforts (Carbone, 2004; Meyer and Schwager, 2007; Vargo and Lusch, 2008). Meyer and Schwager (2007) maintain that customer experiences result from activities and interactions with SSTs, servicescapes, experience rooms, frontline employees, and other customers. Companies such as Disney, IKEA, Singapore Airlines, Apple, and Starbucks focus on favorable customer experiences as their core strategy. For example, IKEA emphasizes the role of design in creating favorable customer experiences, not just function or low prices (Edvardsson and Enquist, 2009). The IKEA philosophy is to create favorable customer experiences by increasing customer perceived value through reducing perceived sacrifice for the customer (IKEA.com).

The concept of service experience resonates with Holbrook's (2006) definition of value—namely, that value resides in activities and interactions and is subjectively experienced. Holbrook (2006, p. 715) defines value as an "interactive relativistic preference experience," which implies that it is a function of interactions among people or between a person and an object. It is contextual and personal. It reflects attitudes, affection, satisfaction, or behaviorally based judgments, and it resides in resource integration and value co-creation processes. However, value creation can also include the destruction of value (Echeverri and Skålén, 2011), which can occur when customers have unfavorable experiences.

Prahalad and Ramaswamy (2004) argue that value is now centered in the experiences of consumers, not just embedded in products and services. Bitner *et al.* (2008, p. 67) claim that "firms can no longer compete solely on providing superior value through their core products, but rather they must move into the realm of customer experience management, creating long-term, emotional bonds with their customers through the co-creation of memorable

experiences potentially involving a constellation of goods and services." A company should orchestrate customer experiences that render value and create loyalty whenever customers interact with resources within its service systems. To do so, however, companies need to understand how customer experiences form and affect customer behavior and, ultimately, company performance and success (Maklan and Klaus, 2011). Kleinaltenkamp *et al.* (2012) find that both social and economic factors drive resource integration and, therefore, customers' experiences. However, their approach is static. We argue instead that drivers are dynamic and embedded in value co-creation. Experience drivers thus explicitly influence the formation of customer experiences.

Researchers also suggest that customers evaluate their experiences holistically (Verhoef et al., 2009) within service systems (Edvardsson et al., 2012), so systemic frameworks are necessary to portray and manage customer experiences (Grewal et al., 2009; Payne et al., 2008). This conceptualization is somewhat different from previous versions, which suggest that customer experience is the outcome of interactions with elements of the company, including the brand, technology, frontline employees, and product or service users (Johnston and Clark, 2008; Meyer and Schwager, 2007). We argue that service systems include fundamental societal norms and rules (Waddock and Bodwell, 2007) as important elements in the formation of customer experiences.

### Service systems and schemas

Customer experiences are always created in a service system context (Edvardsson *et al.*, 2011; Vargo, 2008; Vargo *et al.*, 2008). Service systems thus enable customers to co-create favorable and memorable experiences that result in business value for the company. Hence, service systems enable and facilitate the successful realization of customer experiences in line with value propositions.

Scholars and practitioners agree that value is created by customers (Heinonen et al., 2010) and that companies, by designing service systems, provide configurations of resources that enable, direct, and support customers' value-creating processes. Therefore, companies strive to design service systems and SSTs that provide value propositions. Customers' valuecreating processes are created and re-created independently or during interactions with different actors (Grönroos, 2011). Co-creation is about activities and interactions with the service process, such as finding information, scanning products at the checkout counter, or designing a new kitchen using an SST. In services, customers undertake activities (Edvardsson et al., 2011; Vargo and Lusch, 2008) with specific intentions in mind. Although resources are necessary to do this, they have no real value until they are used by customers. The value co-creation process is enabled by complex, multifaceted service systems, which are important to understand because these systems frame value co-creation and, therefore, customer experiences (Vargo, 2008; Vargo et al., 2008). Edvardsson et al. (2011) contend that the role of structures (resources and schemas in interaction) has not been fully explicated in terms of what drives customer experiences. Value co-creation may be shaped not only by resource integration but also through continuous interaction with the social system and the social reality.

This article suggests that customers' activities and interactions within a service system are partially guided by schemas grounded in foundational norms and rules in society or

practices (Waddock and Bodwell, 2007). Thus, they can be understood as knowledge about rules and norms, shared among actors, which exists in multiple settings outside any particular practice and is grounded in values embedded in the surrounding society. Tronvoll and Edvardsson (2011) argue that schemas guide actors in their behavior and value co-creation. However, schemas are not owned or possessed by any single individual; rather, they are detached from the actor and shared across society (Högström and Tronvoll, 2012). Yet shared schemas still shape actors' activities and interactions and, therefore, experiences, Foundational values serve as rationalizations and protections of the norms and rules, which constitute a logical system, creating meaning for the involved actors. This research uses Tronvoll and Edvardsson's (2011) four categories of schemas as a theoretical framework to empirically explore and define customer experience drivers. Schemas can be understood as antecedents of experience drivers in a service system. They create and re-create specific behaviors; as such, they give a resource value and define how it can be understood and acted on within a service system (Högström and Tronvoll, 2012). In other words, schemas help define how customers and other actors are expected to carry out various activities and interactions. For example, informational schemas such as signs help communicate norms and rules about how to engage in a particular service situation. At a higher level, a schema can guide customers about the proper behavior in interacting with other customers and service personnel.

# Customer experience drivers

We define a "customer experience driver" as an activity or interaction carried out by customers and other actors that results in memorable customer experiences. The customer experience then reflects the perceived value attained through the drivers in the service system. The customer experience process crosses the boundaries of purchase phases, namely, before, during, and after a store visit. Service systems are embedded in social systems, which means that customers are already influenced by certain social norms and rules (schemas) before they visit a store. We therefore focus on customers' entire process of creating value before, during, and after their visits to a store; we refer to this as the *customer journey* hereinafter.

Researchers in marketing have studied customer experience drivers in various contexts from customers' perspectives. Lapierre (2000) and Schau *et al.* (2009) identified several customer value drivers in technology settings. The Technology Acceptance Model (TAM) has been used to explain how an individual's perception of a technology is affected by its attributes, such as "perceived usefulness" and "perceived ease of use" (Davis, 1989; Davis *et al.*, 1989). The technology ready index (TRI) focuses on how people's personality explains the acceptance of new technologies (Parasuraman, 2000). Ulaga and Eggert (2006) studied industrial buyers and found six different value drivers: two dealing with the core offering (product quality and delivery performance), two with the sourcing process (service support and personal interaction), and two with customer operations (supplier know-how and time to market). However, little empirical work has explicitly focused on how customers' experiences form through activities and interactions, which constitute the core of our driver definition. We focus on customer experiences from a service-dominant logic perspective and

a service system context marked by the existence of multiple SSTs. We conceptualize experience drivers as motivators of activities and interactions carried out by customers, which result in memorable experiences. Thus, we predict that they unfold during value co-creation processes and can be studied only in practice, as customers integrate and use resources for specific purposes.

# Summarizing the theoretical framework

Value creation takes place within service systems when actors, shaped by schemas, integrate resources through activities and interactions with the intention of creating value. Value is cocreated by customers and expressed through customer experiences (Normann, 2001; Prahalad and Ramaswamy, 2004; Vargo and Lusch, 2004). Ramirez (1999) argues that value cocreation is synchronic, systemic, and interactive in nature. Some activities and interactions have greater impact because they create a phenomenological state of mind expressed through the customer experience.

Figure 1 portrays the interdependency of the service system, drivers, and customer experience concept. The actor operates within the service system on the available configuration of resources, guided by schemas. Drivers are sorted into certain schema categories and framed by the scope of the actor's operant resources in the context of value co-creation, including SSTs. In turn, these drivers influence and shape the customer experience.

## Please insert Figure 1 here

#### Method

#### Empirical context

"The IKEA business idea is to offer a wide range of home furnishings with good design and function at prices so low that as many people as possible will be able to afford them." (IKEA, 2014). This includes functional furniture with good design at a low price. To offer a low price, the IKEA concept is built on a self-service system with many SSTs enabling customers to do many things on their own, such as assemble furniture, scan items and find products in the store, and design a kitchen on their own using the kitchen planner device. IKEA Group has 307 stores in 26 countries and has introduced a wide range of SSTs in its interactions with customers. Customers can use its SSTs before (e.g. website), during (e.g. information kiosks), and after (e.g. app) their visits to a store—in other words, throughout their journey in the IKEA world. By focusing on the customer's journey, we can identify the various drivers and obtain a holistic view of customer experiences. At IKEA, this may involve multiple SSTs. The five most widely used SSTs in this study are as follows: (1) the kitchen planner, a web-based planner and online guide for creating a new kitchen at home before visiting the store; (2) the app/website for making shopping lists; (3) information kiosks that allow customers to plan, calculate, and look up information in the store; (4) express checkout for customers to scan their own items; and (5) stock availability checkers, which can be used before the visit to the store. To take part in the study, respondents had to have used at least two of the SSTs in the previous six months.

Design, data collection, and data analysis

We conducted an exploratory case study of customers' experiences of using SSTs at IKEA. The interviews took place at one IKEA store in Sweden. An experience-based event technique, with a structure similar to critical incident techniques, defines the data collection procedure for identifying and analyzing customers' experiences with SSTs. In a qualitative interview procedure, we asked the participants to recall events associated with using SSTs at IKEA and the outcomes of these events. This method allowed us to obtain data from the informants' perspective and stories told in their own words (Edvardsson, 1992). As such, we have access to the most relevant information from the respondents' viewpoints (Gremler, 2004).

We asked informants to describe in detail up to three positive and three negative experiences with using SSTs at IKEA. Through follow-up questions and probing, we also obtained a detailed description of their experiences and why they perceived them as positive or negative, why they occurred, and what the result was. Our intention was to capture the customers' journey—that is, the experience they had before, during, and after their visit to a store. We randomly selected customers at IKEA, ensuring that the informants represented the diversity of IKEA's customer base. Typically, respondents were asked to join the study just before leaving the store.

We conducted 60 interviews in which customers described in detail 200 experiences with using at least one of the abovementioned SSTs provided by IKEA. In these data, we focused on how favorable and unfavorable customer experiences are formed. Specifically, we noted important activities and interactions during value co-creation processes in which we could identify customer experience drivers. Each interview lasted approximately 10-30 minutes (see the Appendix). The interviews were recorded and transcribed. All 60 respondents were Swedish; 38 were women and 22 were men. The age range was 22-68 years, and the respondents consisted of three groups: students (30%), families with children (45%), and senior citizens (25%). This gave us a spread that covers relevant customer variations. For the data analysis, we used the constant comparison technique and open coding (Strauss and Corbin, 1990), focusing on identifying drivers, activities, and interactions linked to favorable and unfavorable customer experiences. All the authors participated in the initial coding process, so we could compare and discuss the outcomes to agree on a reference point. The rest of the material was coded by the first authors and a research assistant. The events were first sorted into the informational, relational, organizational, or technological schema categories (Tronvoll and Edvardsson, 2011). We then used these four categories as a way to structure our data. Within this framework, the drivers were inductively sorted. Within each category, we identified empirically derived experience drivers through constant comparative analysis and open coding (Strauss and Corbin, 1990). To group the drivers within the four categories or schemas (informational, relational, organizational, and technological), we focused on customers' activities and interactions with SSTs. When customers interact, they are social actors, and schemas reflect the existence of norms and rules that govern their acting. Schemas shape customers' experience drivers, and the experience drivers unfold in activities and interactions as value is co-created. Comments that seemed especially relevant to the drivers were noted. The open coding resulted in several subcategories that summarized key drivers of different customer experiences related to SST. During the data analysis, we

also noted whether the drivers were associated with favorable or unfavorable customer experiences. It is important to note that some of our data or some customer quotes fit into more than one schema category. Occasionally, the authors discussed and eventually agreed on the category in which the data should be placed.

Finally, we used axial coding (Glaser, 1978) to emphasize how drivers within each schema interacted throughout the customer experience (before, during, and after the store visit). We aimed to relate the codes, for which we used pathway analysis. Experiences were not always narrated in chronological order; asking questions such as when, where, and how (Glaser, 1978) enabled us to sort out segments of the customer experience and arrange them chronologically. It is during the customer journey that the drivers unfold. Our pathway analysis aimed to explain why certain experiences were created; axial coding also helped us identify where each driver emerged in the process, namely, before, during, or after the store visit.

# **Empirical findings**

Customer journey toward forming customer experiences

The following narration describes a customer's activities and interactions when using SSTs. This particular informant is a 28-year-old female who belonged to the respondent group "families with children."

I was going to buy the *Hemnes* dresser and desk; at that time, I used the search function on the Internet and found where it was. On the website, I checked the model that might be interesting. So I had an idea when I came here; where I should go and what I should look at and so on, so you have a little idea of what you are looking for when you get here. It is a well-developed website. I think that it is easy to use and easy to navigate. Then when you come here, you see the furniture in real life too, so one can feel and touch it. I usually come here to the store and take one last look, and maybe I buy it or I go home and think more, peering at the website and checking the dimensions and measures at home and so on. If I'm buying something big, I always make sure it is in stock before I go. I do not want to go to the store unnecessarily. And then I go back and buy the stuff. With the self-service, I do not feel that "Oh, now we're going to IKEA, it will be tough. I will have to stand in line for ages and there will be a lot of crowding in there." I do not think there is such a thing at all. There are usually people here too to help if you need them. Not needing to stand in the queue for a long time afterward makes me look forward a little bit more to going to IKEA.

As this narration illustrates, the customer takes advantage of the resources IKEA provides in the service system. In the first step, before visiting the store, the customer, whose goal was to achieve a nice-looking, comfortable bedroom, used the Internet-based search function to gain inspiration, obtain information, and evaluate alternatives. In line with extant norms and rules and inspired by the website, the customer wanted contemporary design and comfort. Interaction with the website thus enabled her to evaluate alternatives, which aligns with many customer norms and rules. In other words, this particular customer was knowledgeable and skillful in finding what she needed on the website. Then, at the store, she

touched and felt the furniture. In the narration, the customer explains that sometimes the purchase occurs on the first visit to the store, and sometimes more time is needed. For her, the journey continued at home through the website, where she checked dimensions and used the stock availability checkers to ensure that the furniture was in stock when she arrived back at the store. The customer explains her perception of the benefits of obtaining information before visiting the store. Through interactions with the website, the customer was able to check stock availability and save time. Therefore, the customer avoided a visit to the store before the sought-after item came into stock.

During the second store visit, the customer bought the furniture and reported that the employees were easy to find and helpful. As the narration reveals, after the visit, this particular customer had a positive view of IKEA. Therefore, the customer's activities and interactions are likely to lead to repeated visits. Finally, the narration reveals that the SSTs were easy to use, facilitated the customer's value co-creation, and helped the customer understand the service system in action.

In summary, this customer's journey framing enables us to identify and define the contents and dynamics of customer experience drivers linked to specific activities and interactions in SST-related value co-creation processes. Customers have habits and expectations and are guided by socially grounded norms and rules, such as how they should be treated by employees and their ability to find information online or by themselves in the store. To further describe other influences on customer experiences, we next present the experience drivers that unfold during activities and interactions while value is being co-created.

Experience drivers in a self-service-based system

As Figure 1 illustrates, we anticipate interdependencies among the service system, the drivers, and the customer's experience. We identify drivers through customers' value co-creation processes. By asserting that customers are social actors shaped by schemas, we distinguish four categories of schemas (Tronvoll and Edvardsson, 2011). The drivers within each schema will be presented next.

Informational drivers. Involved actors must integrate and operate on information to realize a specified value proposition (Tronvoll and Edvardsson, 2011). We found three informational drivers in our empirical data: (1) being inspired, (2) obtaining information, and (3) evaluating alternatives (Table I).

# Insert Table I about here please

Of these positive drivers, obtaining information has the highest frequency. The informants use SSTs before visiting the store to be inspired by the value propositions, as shown by the following quote:

If I know that I'm going to IKEA, I ask myself, "So, what do I want?" You can go to the website and look at different categories. I always find something fun; something you might not really need but you still want to have. (Female, 25)

This informant admits that even without a need for a particular item, the website attracts attention and inspires the respondent before the visit. It is reasonable to predict that the informant is guided by a norm that emphasizes positive feelings and makes it fun to search the website. Informants thus achieve a favorable experience when interacting with the website.

Furthermore, SSTs provide a way to obtain information, which drives the customers' experience, as illustrated by the following quote:

You can check online beforehand what is available and how it looks and so on. [Furniture's] measures and everything. It's good information, I think. (Female, 25)

The perceived ease of obtaining information about various items drives the informant's motivation to continue the value co-creation process. The third driver, evaluating alternatives, allows the customer to experience a feeling of being better prepared before a store visit, as exemplified in this quote:

If I'm going to buy something at IKEA, I always go online and check how to use it and see if a desk has four drawers or five drawers. But I do not make my purchase there [online]. Nowadays I'm more prepared on what I should buy before I go here. I check prices and I check options before I buy. (Female, 63)

This third driver may reflect a social norm for avoiding wasting precious time. It is also likely that when dealing with technology, customers are less interested in waiting. Customers want the process to go fast to experience a time-saving service; through the interaction with the website, the customer can limit the time spent in the store. Thus, we find that technology affects the norms used.

Informational drivers are most prominent before the store visit and are necessary for the customer to gain an understanding of how to co-create value in a specific context and in practice. At IKEA, informational drivers are all favorable experiences that help customers understand how to integrate IKEA's resources into their own value co-creation process.

Relational drivers. Exchanges provide basic guidelines for interactions among involved actors. Through the customers' perception of the resources offered, including how the customer is treated, a customer relationship forms. We therefore identify three relational drivers in Table II: (1) reliable use, (2) convenient, and (3) self-controlling.

# Insert Table II about here please

If the company changes the value propositions, then respondents expect the SSTs to adjust to these modifications immediately. They do not want to be misled or to end up paying the wrong price, which requires SSTs to be reliable. This relational driver provides a means of maintaining customer relationships, as illustrated by the following quote:

I was impressed the day I bought my first kitchen and used the self-service tool "the kitchen planner." When I got to see the result, it was of high quality. It enhanced IKEA's reputation because it was of really good quality. Then I got confirmation from several sources that IKEA has good quality [products] when it comes to the kitchen area. (Male, 49)

Therefore, the first driver shapes customer experiences of building a new kitchen and grasping the value of having a new, high-quality, functioning kitchen. Before building the kitchen, the customer appears to have accepted a norm that indicated that IKEA offered mediocre quality. Through the customer's activities and interactions with IKEA, this norm proved false, and the informant's view of IKEA improved. Hence, the informant gained high value from the kitchen, meaning the SST planning tool was experienced as reliable. Reliable use is also closely related to the convenient relational driver, although convenience is connected more with choosing when and where to use the service. It therefore entails the perceived speed of using the SST. Informants want the service to go quickly, so they can experience time savings. However, not everyone perceives SSTs as convenient:

I think it is an economic idea [from IKEA's side], rather than "Now let's facilitate for the customer." I do not think it makes it easier for the largest number of customers, especially not for older people or others who may not see so well, or those who can't read. (Female, 52)

This narrative illustrates how a relational driver can result in unfavorable customer experiences. By claiming that SSTs make the experience worse, the informant reflects norms that emphasize the importance of helping the elderly or those in need. Finally, self-controlling has the highest frequency among the relational drivers and is illustrated by the following quote:

It helps quite a lot actually. You can do more yourself, if you want, and you can feel that you actually manage to find stuff yourself. For there is a lot of stuff everywhere, and they are named differently, and there are different numbers. But you can actually use the information kiosks and fix it yourself. It makes it easier somehow. (Male, 53)

Despite the sense of experienced complexity illustrated in this quote, the informant's experience is shaped by the self-controlling driver. The informant acknowledges that there are many things to keep track of, but he enjoys being in control of the value co-creation within the service system. A similar idea is expressed in the following quote:

I do not have to use the traditional checkout counter, but I am the cashier myself. All goods can be left where they are, in the cart. This eliminates the need for the staff to go out and to scan all my goods. I can do it directly myself. It is quicker, I think! (Male, 29)

Thus, through interactions and activities, the driver's self-control becomes important to how he or she experiences the service. We therefore perceive that both these informants are guided by a norm that captures the importance of independence, such that they express feelings of satisfaction when they perform activities by themselves.

Unlike informational drivers, which are clear drivers of favorable customer experiences, relational drivers can lead to both favorable and unfavorable customer experiences. Although relational drivers can guide any part of the value co-creation process, they seem most prominent after a visit to an IKEA store. This is probably most true for existing IKEA customers rather than new ones, since existing customers are more familiar with the service process and with IKEA's SSTs.

Organizational drivers. By guiding and giving meaning to the organizational culture, organizational drivers influence different actors' resource integration and value co-creation processes, their daily operations, and their behavior.

#### **Insert Table III about here please**

We identified four organizational drivers, as listed in Table III: (1) service orientation, (2) problem-solving activity, (3) accessibility and availability, and (4) lack of trust. The first three pertain mainly to personal interactions (e.g. with employees). Lack of trust also relates to the organizational level; actors do not trust that the support and help they need will be available and will enable their value co-creation. Customers' interaction with an organization or brand depends on whether the customer trusts the organization.

The organizational drivers seem to drive either favorable or unfavorable customer experiences, although accessibility, availability, and trust are clear drivers of more unfavorable than favorable customer experiences. The following quote illustrates how service orientation can shape an unfavorable customer experience:

Sometimes it feels difficult; you don't get a service that will make it easier for you. On the contrary, now I should do the work I previously got help with. (Female, 24)

It is likely that this informant dislikes change and is driven by the norm that "it was better in the old days." Other unfavorable experiences emerge from the accessibility and availability driver:

Maybe there should have been more staff available when we were here and planned [our kitchen]. One time, we tried to get help here but there were no staff available, so we had to go home instead. (Male, 28)

This customer was interacting with the kitchen planner tool and went to the store to get personal help. Unfortunately, all the employees were busy helping other customers at that time.

Two quotes effectively illustrate the problem-solving activity driver. In the first, the customer fails to obtain sufficient help to solve a problem. In the latter, the customer's experience is driven by the sense that employees offer problem-solving abilities.

It's impossible to find anything here. I ordered a bed, and I said, "Can you help me with sheets and pillows?" And the employee said, "No, I cannot help you with that, you have to go to the next department." But when I went there, it was still wrong, and no one seemed to be able to help me. (Male, 54)

It's more and more self-service everywhere today, so you get used to it. You can always ask someone here, too. There is always someone who can help solve any problems. (Female, 59)

Finally, the high frequency of lack of trust as a driver of unfavorable customer experiences is notable. Examples of poor trust appeared repeatedly in the empirical data, such as in the following quote:

I feel that I'm the one scanning. What if I forget something and someone thinks that I'm trying to steal something? When you use the express checkout, there are always several people staring at you; this makes me feel supervised. (Female, 25)

This informant experiences a feeling of not being trusted by the organization during the express checkout, creating a fear of being accused of theft. The fear of breaking this norm affects the customer's behavior and gives her a sense of being watched. According to our respondents, the feeling of being trusted by the service organization has an important impact on the formation of customer experiences in an SST context. Customers must trust the organization, including its routines and formal structures, its employees, and its brand, before they become willing to try its SSTs. This driver is thus associated with trusting the organization, not the organization's SSTs specifically. The latter form of trust pertains more to technological drivers.

Organizational drivers seem most prominent during the store visit because they focus on the personal interactions between customers and employees. Organizational drivers are the only drivers linked to more unfavorable than favorable customer experiences.

Technological drivers. Technological drivers describe how to handle value co-creating activities and interactions to fulfill the service exchange. The empirical data reveal (1) perceived capacity, (2) ease of use, and (3) flexibility as key technological drivers. As Table IV shows, the latter two have higher frequency and are more positive drivers than perceived capacity, which drives both favorable and unfavorable customer experiences.

# Insert Table IV about here please

All these drivers pertain to SST quality and thus the self-service system as a total resource configuration. The first, or the number of customers who can actually use the SST simultaneously, appears in comments in which informants complain about being "thrown out of the system" or about the system taking too much time. This outcome might be due to the number of people using the SST at the same time, although one informant noted the limited physical space for an SST:

They could make the express checkouts a little wider, so that it is easier for those who come with large beds. It can be very crowded, and I think that some people may become stressed by this. (Male, 34)

In this case, the informant felt a limitation of being unable to use the express checkout due to the limited physical space. This customer's norms appear to involve personal space demands; for example, this customer might not feel comfortable being close to others. The informants also mentioned the importance of ease of use, mostly in a positive sense, for its impact on the IKEA experience. This technological driver encourages customers to want to use the SST, knowing that they have the resources to handle it and knowing what to expect from the website with the support of this technological driver.

In contrast, in the following quote, the flexibility driver ensures a positive experience despite a service failure:

Sometimes I order from the website, and the item is always delivered quickly. I just click on the website, and the item arrives in a truck just outside the door. One time, there was a defect with the furniture, but it was no trouble getting a new one. (Female, 41)

Technological drivers differ from the other three schemas in terms of guiding customers' activities and interactions at a specific moment in the value co-creation process. They appear equally important throughout the entire value co-creation process and thus for the customer experience before, during, and after the visit. This finding might reflect our study context, which not only is self-service-based but also introduces multiple SSTs that span all stages in the customer experience process.

In summary, our findings show that ease of use, self-control, and flexibility are critical drivers of customers' IKEA experience when using SSTs. Of the 200 collected critical

events, 121 are positive and 79 are negative. Organizational drivers are the only drivers linked to more unfavorable experiences than favorable ones; informational drivers almost always tend to be linked to favorable experiences. Yet these drivers are also determined by the context and are closely intertwined.

Constellations of drivers forming unfavorable or favorable customer experiences

A customer experience consists of a constellation of drivers; however, in certain situations, one driver may be more important than the others. Customers perceive situations in different ways during their customer journey; thus, different drivers are often active, shaping the customer experience flow and outcome. Nevertheless, one or several drivers often dominate, according to our empirical material.

As an illustration, one customer was planning on updating her kitchen before visiting an IKEA store. The customer was informed about the kitchen planning tool via the IKEA website and through discussion with a friend. During the visit to the store, the customer began using the kitchen planning tool, found it useful and easy to understand, and decided to go home and devise a detailed plan of the new kitchen. After long discussions with family members about alternative designs, a detailed drawing of the new kitchen emerged. However, the customer wanted to consult with an "expert" and contacted IKEA's kitchen support service to discuss details and get professional advice. The customer called IKEA to talk with an expert who understood the questions. Afterward, the customer felt comfortable with the kitchen solution and went back to the store to buy the new kitchen. This process was easy because all the details, including the right measures, sizes, colors, and so forth were already provided by the kitchen planner. IKEA then delivered the products, and with the help of a carpenter, the customer installed the kitchen. After delivery, however, the customer discovered that two pieces were missing and needed to be bought to complete the kitchen. The customer visited the website again, searched for the items, and found the store where the items were available. Because the store was far away, the customer decided to use the home delivery service and purchased the items online. During the process, some questions needed to be answered, so the customer called IKEA three times to get help. Once, the customer waited a long time before receiving any response. In this example, the reliable use, accessibility, convenient use of technology, and service orientation (e.g. home delivery) drivers directly affected how the customer formed her experience. Thus, a constellation of drivers is evident.

#### **Discussion**

This article contributes to the understanding of how customers' experiences are formed by identifying the underlying activities and interaction—here referred to as drivers—during resource integration and value co-creation linked to the use of SSTs. Previous studies on SSTs have focused predominantly on variables with positive or negative impacts on the adoption and continued use of SSTs related to the SSTs' attributes or factors (e.g. Gelderman et al., 2011; Meuter et al., 2000). Our approach focuses on social forces in terms of norms and rules (schemas) shaping customers' experiences when using SSTs in a self-service-based system. This article thus contributes to a more customer-centered and systemic perspective by focusing on customers' experience drivers when using SSTs in a self-service system in the

context of retailing. We not only acknowledge but also have as a basic assumption the fact that customers' schemas must be explicitly identified and analyzed in context, since they have a major influence on value co-creation and the resulting customer experiences. A narrative approach to data collection was selected, and an inductive, exploratory analysis of data was carried out, framed by four main theory-grounded schema categories. By asking informants to describe events during their use of SSTs, linked to either favorable or unfavorable experiences, we ensured that the narratives contained context and used related activities and interactions. We offer research contributions through four propositions.

Proposition #1: In self-service systems, experience drivers linked to the use of SSTs shape the flow and outcomes of the customer experience during the value co-creation processes.

Value is co-created when customers integrate and use resources in a service system. Service-dominant logic regards value as actor-centered, experiential, co-created within a social context, and systemic in nature (Baron and Harris, 2008; Edvardsson et al., 2011; Payne et al., 2008; Vargo and Lusch, 2008). We agree with this, but we focus on customers as social actors, centering on their norms and rules as drivers of favorable or unfavorable experiences. The theoretical framework suggests that the service system, drivers, and customer experiences are interdependent (Figure 1). Thus, the suggested model is in response to Maklan and Klaus' (2011) call for increased understanding of how customers' experiences are formed. The conceptualization of the flow of customer experiences during a customer journey shows that some activities and interactions have greater importance in driving the customer's experience. Some of the findings confirm previous research findings (e.g. Nambisan and Watt, 2011), namely, that the cognitive dimension emphasizes an informationprocessing perspective, including the experience that underlies information acquisition and processing. Furthermore, the affective dimension reflects the feelings and emotions derived as a result of interactions during the customer journey triggered by stimuli in the external environment. Few descriptions of emotions appear in our empirical material, perhaps because the respondents mostly noted positive experiences with IKEA, and emotions are more visible when customers are disappointed.

The second proposition pertains to the classification and analysis of 13 experience drivers in four categories. By contextualizing and describing important drivers, we help explain how and why the flow of value co-creation is experiential and thus add to understanding of the foundational premises of the service-dominant logic (Vargo and Lusch, 2008, 2011).

Proposition #2: Experience drivers are grounded in norms and rules within the specific context in which actors create meaning through activities linked to the use of SSTs.

Previous research (e.g. Lapierre, 2000; Ulaga and Eggert, 2006) has focused on drivers but from a goods-dominant logic perspective, noting the factors rather than focusing on actors' activities and interactions in use contexts. Wang *et al.* (2012) and Schau *et al.* (2009)

adopt a similar retail context but still focus on factors rather than actors. Thus, previous research has a hedonic rather than a utility focus and lacks the link to schemas, that is, norms and rules that shape actors' activities and interactions. Lapierre (2000), Ulaga and Eggert (2006), Wang *et al.* (2012), and Schau *et al.* (2009) do not explicitly use or refer to schemas despite their importance in embedding contexts of drivers that guide actors.

The third proposition is linked to the conceptualization that recognizes the three stages of the customer experience process: before, during, and after the store visit. We focused on the entire customer journey because of the importance of managing the total customer experience (Berry *et al.*, 2002). We centered on the formation of customer experiences rather than the outcome experience, highlighting that it is not whether customers are satisfied with their purchase that is important, but rather how they journey through activities and interactions when using SSTs before, during, and after their visit to the store.

Proposition #3: The influence of separate albeit intertwined experience drivers becomes significant in certain stages of the customer journey.

During the journey, the customer is influenced by different sets of drivers. These sets of drivers were found to form different constellations before, during, and after customers' visits to an IKEA store. For analytical reasons, we divided the journey into these three stages: before, during, and after the visit to an IKEA store. Likewise, we sorted the empirically identified experience drivers into four theory-grounded categories: informational, relational, organizational, and technological. The experience drivers were found to influence the customers both negatively and positively at different stages of the journey, although they are intertwined. The findings revealed that the experience drivers appear with varying degrees of strength in the different stages, resulting in an intertwined variability of influencing drivers. The experience drivers and how they are intertwined are shown in Figure 2. The drivers are expanded where they typically appear and are located in the customer journey.

## Insert Figure 2 about here please.

Proposition #4: Experience drivers stimulate the search for information, create the foundation for interpersonal relationships, and generate the need for organizational assistance and technological support.

Informational drivers typically shape the customer experience before the store visit. Drivers classified as informational indicate that customers enjoy being able to obtain information before the visit, so they are prepared when they reach the store. They also might want to obtain information during their visit to the store as well as after, such as when they are putting their furniture together at home. Relational drivers typically shape customers' experiences after a store visit. The findings suggest that customers enjoy being in control of their own experience. Organizational drivers are more prominent during the visit, when customers focus on employees and their experiences with them in the store. The findings

suggest that customers do not accept long waits; they prefer to use express checkouts or perform an action that seems meaningful rather than waiting and wasting time. Finally, customers are guided by technological drivers before, during, and after their store visits. Some drivers support others; for example, a customer might arrive at the checkout counter and find long queues. The organizational driver of accessibility and availability affects the customer's realization that there are no checkout counters available. The customer obtains information (informational driver) about the express checkout and decides to test it, which provides a feeling of being in control (relational driver). While using the express checkout, the customer realizes it is easy to use (technological driver) and leaves the store with a feeling of self-control and trust from the organization. Ease of use is a key driver of favorable customer experiences; when people find SSTs easy to use, they believe that the SSTs are working in accordance with their norms and rules. Lack of trust is a key driver of unfavorable customer experiences. Unless customers have trust in the organization, they will not risk being controlled or overlooked while interacting with an SST.

## **Managerial implications**

Many companies are moving from measuring customer satisfaction in the traditional way to focusing on customer experiences related to a customer journey framework. Thus, there is a need to identify the drivers of favorable and unfavorable customer experiences linked to the customer journey, since these drivers have a major impact on customers' future behavior, word of mouth, and brand perception. As Figure 1 shows, these drivers also guide customers' ability and motivation to integrate resources. Since resource integration and value co-creation take place within a service system, the service system has a major impact on the drivers and customer experiences. For example, having self-control helps motivate customers and affects the resource integration taking place within the service system. Thus, experience drivers can be viewed as reasons for customers to take on tasks they used to get help with. Therefore, the results of this research explain what is important when designing an SST-based service system. In their role as co-creators of value, customers need and expect many things from a self-service system (e.g. the system provides information, a feeling of being in control, support from systems and employees, easy-to-use technologies, and trustworthiness). Moreover, we uncovered the drivers in this research from actual customers; thus, managers can promote these drivers as advantages that customers can gain by using self-service.

Two of the 13 experience drivers caused unfavorable customer experiences: lack of trust and accessibility and availability. Lack of trust was mostly connected with the customers' experience with the express checkout. To improve this aspect of the customers' experience, employees should be asked to greet the customer before he or she uses the express checkout, instead of standing as a controller overlooking the procedure. To reduce customers' insecurity, informational drivers that provide explicit information are important. Information alone, however, is not enough; rather, management needs to ensure that the technological drivers support the customer when using SSTs by being easy to use, since these drivers strongly influence the customer's overall experience. Since the use of SSTs is growing in our society, we found it relevant to analyze and try to understand the relative importance of the technological drivers. These SSTs need to be understood to create favorable customer experiences and company profitability. This may, for instance, be useful

when introducing a high-tech supporting service system in traditional low-tech contexts, especially when this is done in the context of customers with low interest in or few experiences with using SSTs.

Some customers still choose not to use SSTs, probably because they are unaware of the benefits or do not know how to use them. Many companies provide customers with alternatives to SSTs, such as maintaining traditional checkout counters. Such reluctance to adopt SSTs may add costs for companies (Walker *et al.*, 2002), but removing the traditional checkout counters can lead to great risk; therefore, managers need to calculate whether doing so is feasible. Traditional checkout counters have gained widespread acceptance and in this sense are institutionalized. However, companies should make it easy for customers to access a physical person. This is especially important when something goes wrong, to minimize the risk of customers forming an unfavorable experience.

#### Limitations and further research

All research studies have limitations, and ours is no exception. We chose a company that already focuses on the customer experience; other types of organizations may have different experience drivers. Because the results are limited to one self-service system context (i.e. one IKEA store in one country), statistical generalizability is limited. Furthermore, two clear limitations of the data collection emerge. First, utilization of the experience-based event technique is restricted because it relies on individual people recalling all the events of the experience. We tried to limit this flaw by having respondents recall events that had occurred in the recent past, or a maximum of six months before the study. Second, we wanted to obtain detailed descriptions of the respondents' experiences, so we used follow-up questions and probing. We discussed this in advance and decided not to push the respondents into answers but rather to use follow-up questions and probing as support for the customers' stories.

Regarding the data analysis, the use of our pre-existing schema framework can be viewed as a limitation because it could have biased the classification. Perhaps the framework would have been different if we had let it emerge from the data, which is the most common method in case study research.

Further studies with a similar methodological approach to the one in this paper should expand to other empirical contexts such as health care, public transportation, or higher education—all of which are currently introducing new SSTs and emphasizing favorable customer experiences. More extensive qualitative research studies in other cultural contexts, such as IKEA in China and the United States, might also reveal that different cultural contexts shape the flow and outcomes of customer experiences. Such research could also involve interviews with employees and could reveal that drivers vary across cultural contexts.

Additional research is also needed to further test the drivers' prominence. For instance, survey research could lead to more information on the drivers' positions throughout the customer journey. More research into how actors view and create meaning in different service contexts, such as the application of role theory, could be meaningful. Using an ethnographic approach (e.g. observations) could focus research on customers' role perceptions and role clarity, which might influence actual value co-creation behavior, especially in self-service-based systems with SSTs (Åkesson, 2011). Therefore, research

could focus on the differences in customer roles as potential drivers of customer experience outcomes.

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# **Appendix: Interview guide**

#### **Narrative**

- 1. IKEA has several self-service options available to you as a customer before, during, and after your visit to the store. For example ... In general, how do you experience IKEA's self-service techniques? Why?
- 2. How do you use these services? Why?
- 3. How do you perceive the development of more and more self-services in society? Why?
- 4. Why do you use self-service?
- 5. Do you consider yourself an experienced user of self-service?
- 6. Has your use of self-service led to any changes in your attitude toward IKEA and/or your relationship with IKEA?
- 7. Do you think that IKEA's self-service options give you a better overall experience of IKEA?

### Critical incident

- 1. Can you describe three positive and three negative experiences/situations where you have used IKEA's self-service?
- 2. Describe in detail how you experienced IKEA's self-service. Can you be more specific?
- 3. Why do you think you experienced it in that way?
- 4. What was the reason?
- 5. What did it lead to?
- 6. Did someone (an IKEA employee or another customer) help you?
- 7. Have you experienced this more than once? If so, how often?

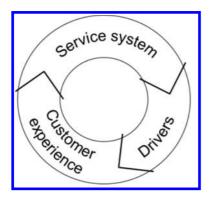


Figure 1: Interdependency of service system, drivers, and customer experience

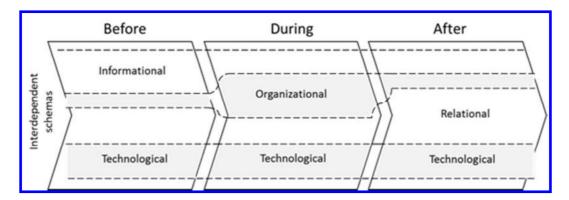


Figure 2: Customer co-creation of experiences in service systems with SSTs

### **Table I: Informational drivers**

Drivers	Definition of drivers	Positive	Negative
Being inspired	How the value proposition impresses the customer, whether	7	_
	inspirational, negative, or no attention.		
Obtaining	Search and consider various alternatives.	13	2
information			
Accessing or	After the customer has decided on the value proposition.	7	1
evaluating			
alternatives			

### Table II: Relational drivers

Drivers	Definition of drivers	Positive	Negative
Reliable in use	Perception of reliability when using SST.	9	6
Convenient	How convenient the customer experiences the service.	5	4
Self-controlling	The independence of the customers, including their opportunity to	20	8
	fend for themselves.		

# Table III: Organizational drivers

Drivers	Definition of drivers	Positive	Negative
Service orientation	How customers perceive employees' service orientation.	4	3
Problem solving activity	How customers perceive the problem solving ability of employees.	3	2
Accessibility and availability	How easy/hard it is to find an employee when needed.	4	8
Trust	How customers feel that they are trusted by the organization and its employees.	3	10

# Table IV: Technological drivers

Drivers	Definition of drivers	Positive	Negative
Perceived capacity	The limitation in the number of customers who can use the	8	8
	SSTs simultaneously.		
Ease of use	How easy/difficult it is to use the SSTs.	24	15
Flexibility	How flexible various parts of the value propositions linked	15	11
-	to SSTs are.		