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Offline Stock-Outs in an Omnichannel Context:  
Assessing Consumer Behavior in a Digitalized Retail  
Landscape - a Case Study of IKEA

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## Abstract

Controlling inventory levels has been an issue for retailers to deal with for a long time in order to provide the right supply at the right time and place and thus prevent stock-outs. Traditionally, this issue has mainly concerned the physical store. However, as retailers are adopting omnichannel strategies, out of stock (OOS) situations concern both online and offline channels. Accordingly, built on a case study on the multinational retailer IKEA, this paper presents an analysis on consumer behavior in an omnichannel context, particularly assessing consumer responses to offline stock-outs. Based on a multi-method approach, the results show that consumer responses to offline stock-outs in an omnichannel context depend on channel behavior as well as the degree of expectation on product availability. The findings illustrate the importance for retailers to view offline OOS situations in an omnichannel context and could serve as a guide for future research in studying this area.

**Keywords:** stock-outs, consumer behavior, omnichannel, digitalisation, retailing, IKEA

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## Introduction

This article explores consumer responses to offline stock-outs in an omnichannel retail context. Already decades ago, research stressed the importance of knowing how consumers respond to OOS situations in order for managers to make efficient decisions regarding for instance product assortment and inventory (Fitzsimons, 2000). Moreover, as more and more retailers operate in an omnichannel context, information on consumers responses to OOS situations can help improve managerial decisions regarding for instance channel choice, flows of goods online and offline and channel integration (Hagberg & Jonsson, 2016). Accordingly, this paper is based on a comprehensive study on how consumers respond to stock-outs in an omnichannel context.

Digitalization has emerged to become one of the most important topics of the contemporary retail industry and research has highlighted digitalization as a key to firm's performance success (Hagberg, Sundström & Egels-Zandén 2016). The retail industry is currently experiencing a tremendous transformation where retailers are moving from providing multiple channels relatively separate from each other to an omnichannel approach where all online and offline platforms need to be seamlessly connected in order to meet the demands of the modern consumer (Stone, Hobbs & Khaleeli, 2002;

Brynjolfsson, Hu & Rahman, 2013; Bell, Gallino & Moreno, 2014; Piotrowicz & Cuthbertson, 2014; Verhoef, Kannan & Inman, 2015; Hagberg et al., 2016). Retail managers have realized that the high costs of investing in an omnichannel strategy pays off (Dhaakia, 2005), as studies have shown that customers who move across channels generate higher revenues and share of wallet (Kumar & Venkatesan (n.d.), found in Rangaswamy & Van Bruggen, 2005. p, 10). In principle, an omnichannel strategy might thus be considered a great opportunity in order to thrive in a digitalized world. However, in practice, retailers are experiencing challenges on how to master multiple channels and understand digital consumer demands (Dholakia, Kahn, Reeves, Rindfleisch, Stewart & Taylor, 2010; Bell et al., 2014; Piotrowicz & Cuthbertson, 2014). A crucial aspect of an omnichannel strategy is to provide accurate information as well as product fulfillment on the right time and place in multiple channels (Bell et al., 2014). Failure in information and product fulfillment may lead to dissatisfied customers, a problem which is becoming more complex in an omnichannel environment. For instance, impediments might rise when retailers provide information in one channel, such as product information on a website or smartphone application, but does not manage to provide customers with the desired product

in another channel (such as the physical store). Consequently, a gap in information and product fulfillment might lead to an OOS situation in which consumers are unable to complete the purchase process although they have other expectations. Hence, consumer responses to OOS situations are significantly relevant for retailers to take into account in an omnichannel context (Bell et al. 2014; Peinkofer, Esper, Smith, & Williams., 2015).

Although consumer responses to OOS situations have been a subject for discussion for decades (Fitzsimons, 2000), research has so far mainly considered consumer responses to stock-outs in a single-channel retail context (Peinkofer et al., 2015). However, as consumers use multiple channels in their purchase processes, there is a need for research dealing with consumer responses to OOS in an omnichannel context (ibid). The reason for this is that digital innovations has transformed consumer behavior and purchase processes (Verhoef, Neslin & Vroomen, 2007; Grewal, Roggeveen, & Runyan, 2013; Peinkofer et al., 2015). The integration of digital and physical channels allows consumers to seek information and make purchases both online and offline, which has created various types of channel behaviors (Dholakia, et al., 2010; Piotrowicz & Cuthbertson, 2014). Previous research has, for instance, elaborated on channel behavior by separating consumers who use a single channel from those adopting a multi or omnichannel behavior (Konus, Verhoef & Neslin, 2008). Hence, the notion of different channel behavior indicates that consumers act differently throughout the purchase process. In addition, Grewal et al. (2013) suggest that the stages of the consumer purchase process in a digitalized retail landscape can be separated into prepurchase, purchase and post-purchase stage (Grewal et al., 2013). During the different stages, consumers are able to use a single channel, multiple channels separately, or combine several channels in order to move seamlessly between online and offline channels

(Piotrowicz & Cuthbertson, 2014; Gross, 2015, 2016).

From the introductory discussion, it is evident that there is a need to view consumer responses to OOS situations in the light of channel behavior. Hence, this study is positioned to fill this particular gap in the literature, exploring consumer behavior responses to offline stock-outs in an omnichannel context. The paper draws empirically upon a case study of IKEA. IKEA is an example of a retailer with a wide selection of goods, large warehouses and developed digitized logistic systems, yet suffering from OOS situations. In combination, IKEA provides online channels such as a smartphone application and a website in combination to the physical store for consumers to find information and purchase products in, enabling their customers to adopt a single, multi or omnichannel behavior. Hence, for the scenario where customers engage in an omnichannel retail environment and further experience an offline OOS situation in the physical store, the case of IKEA constitutes a relevant case to explore. By taking a stand in the field of research regarding consumer responses to offline OOS situations, we elaborate on channel behavior and the consumer purchase process in a digital context with the aim to broaden the knowledge regarding consumer behavior in a complex omnichannel environment. Accordingly, the research question of this paper is as follows: how do consumers respond to offline OOS situations in an omnichannel retail context?

The paper is structured as follows. The next section presents our theoretical framework based on existing research regarding consumer responses to stock-outs and consumer omnichannel behavior as well as how these fields of research interconnect. The following section concerns the methodology, where we present the multi-method approach used for this study. Furthermore, the empirical data on consumer responses to offline OOS situations is presented together

with an analysis and discussion in relation to the theoretical framework. Lastly, we conclude and identify implications and suggestions for further research.

## **Theoretical framework**

### **Consumer responses to stock-outs**

Holding the right inventory is a cornerstone of retailing in order to prevent OOS situations. As research has elaborated on how to prevent failure in product fulfillment through supply chain management, studies have also highlighted the importance of investigating consumer responses to OOS situations (Zinn & Liu, 2001; Peinkofer et al., 2015). Accordingly, research regarding consumer responses to stock-outs is extensive, due to the fact that efficient decisions regarding for instance product assortment and logistics can be made on the basis of this information (Fitzsimons, 2000; Peinkofer et al., 2015). Especially, research dealing with the notion of consumer expectations on product delivery and theorization on consumer responses to OOS situations are of great importance for this study.

#### *Consumer expectations on product availability*

Consumer responses to stock-outs are highly influenced by expectations on product availability (Dadzie & Winston 2007; Pizzi & Scarpi 2013). In fact, the expectation-disconfirmation theory (EDT) suggest that the level of (dis)satisfaction as a result of customer expectations are crucial determinants to consumers' behavioral intentions (Oliver & Linda, 1981). EDT suggests that the level of (dis)satisfaction depends on whether customer expectations are high or low; the more consumers expect the product to be available, the greater expectations they have on product fulfillment and vice versa (Oliver 1981; Peinkofer et al., 2015). Hence, high expectations on a product being in stock will lead to greater disappointment if the product is out of stock.

#### *Consumer responses to stock-outs - Substitute, Delay or Leave (SDL)*

Zinn and Liu (2001) investigate consumer responses to OOS situations by studying people who have experienced an OOS situation before and those who have not. They relate the outcomes of consumer responses to a list of variables including for instance brand loyalty, attitudes and perception of the store, affecting consumer responses. In detail, their model illustrates three different outcomes where consumers will either purchase a substitute product (S), delay the purchase to another time (D) or leave and not proceed with the purchase at all (L). Additional studies have extended the SDL framework, presenting possible reactions to stock-outs in the light of brand loyalty, emotions and consumer dissatisfaction (Zinn & Liu, 2008; Kim & Lennon, 2011).

#### *OOS in an omnichannel retail environment*

It is evident that there is a great pool of research within this field. However, research has mainly considered consumer responses to stock-outs in a single retail channel, viewing OOS situations as an independent phenomenon occurring either online or offline (Peinkofer et al., 2015). For instance, researchers like Peinkofer et al. (2015) have elaborated on e-commerce and how consumers respond to online stock-outs. Moreover, as the modern customer moves between multiple channels in their purchase processes, there are still research areas of interest to explore, viewing OOS situations in the light of multiple channels. Hence, this study is positioned to fill this particular gap in the literature, exploring consumer responses to offline stock-outs in an omnichannel context.

#### **Consumer behavior in an omnichannel retail context**

Digital innovations have reshaped the way we shop, when we shop and what we shop and a considerable amount of research has been conducted on, for instance, e-commerce, social media and smartphones from a

consumer as well as a retail perspective in order to more deeply evaluate these transformations (Brynjolfsson, Hu & Rahman, 2013; Piotrowicz & Cuthbertson, 2014; Hagberg et al., 2016). In today's retail environment, the lines between different channels are becoming blurred and we are now facing a shift from a multichannel perspective towards an omnichannel approach (Verhoef, Kannan & Inman, 2015). Compared to the multichannel, where the physical and online store are separated, an omnichannel retail environment implies that customers can move seamlessly across digital and physical channels (Piotrowicz & Cuthbertson, 2014). Also, the increased range of channels provided for shopping encourage consumers to not solely make purchases in physical stores, but also via online desktops and mobile devices (Pantano & Viassone, 2015). Altogether, digital transformations have changed the interaction between customers and retailers, more specifically the consumer purchase processes and how the modern consumer behaves while shopping (Grewal et al., 2013; Brynjolfsson, Hu & Rahman, 2013; Cuthbertson & Piotrowicz, 2014; Hagberg & Jonsson, 2016; Hagberg et al., 2016). In fact, understanding today's consumers in an omnichannel retail environment is deemed as the greatest challenge for the retailers of this decade (Sundström, 2016).

Practically, in an omnichannel retail environment, customers can start their purchase process by searching product information online at home and later conduct the purchase offline in the physical store. Likewise, a purchase process can start offline in the physical store and finish online at a webshop (Bell, Santiago & Moreno, 2014). Despite the growing use of online channels, research shows that the physical store is still the dominant channel for the purchase to take place, making this channel an important part of the purchase process (Piotrowicz & Cuthbertson, 2014). Further, portable devices like smartphones as well as digital in-store solutions where consumers can search for

product information allows consumers to switch between online and offline channels (Hoopes, 2012). Accordingly, in order to make sense of how consumers behave in the digitalized retail environment, Grewal et al. (2013) presents a framework of the consumer purchase process in an omnichannel context. Their model identifies how mobile, digital in-store solutions and social media impact the purchase process and consists of three stages; 1) Pre-purchase 2) Purchase and 3) Post-purchase. However, despite the notion that consumers use and switch between multiple channels during the purchase process (Verhoef et al., 2015), extensive research has been done on consumer's shopping behavior mainly focusing on one single shopping environment, either online or offline. In fact, there is a scarcity of empirical studies on customers using multiple channels for search and purchase, which calls for extended research dealing with consumer behavior in an omnichannel retail environment (Rangaswamy & Van Bruggen, 2005; Verhoef et al., 2007; Dholakia et al., 2010; Gross, 2016).

As digitalization has transformed the consumer purchase processes, omnichannels has also enabled consumers to adopt different type of channel behavior. For instance, in their study, Konuş et al. (2008) divide channel behavior into three segments: 1) multichannel enthusiasts, who show positive attitudes towards all channels and high levels of innovativeness, 2) store-focused consumers, who mostly use brick-and-mortar stores and 3) uninvolved shoppers, who show little interest in any channel. Due to the complexity of understanding consumer behavior in an omnichannel retail environment, where consumers can use either single or multiple channels or move seamlessly between channels while shopping, this type of categorization of different channel behavior is highly relevant for research evaluating consumer behavior in an omnichannel retail context.

## **Offline OOS situations and channel behavior**

Traditionally, retailers have struggled with providing the right goods and hold the right inventory in a single channel context, the physical store, as this has been the primary place for customers to maintain products (Emmelhaiz, Emmelhaiz & Stock, 1991; Bell et al., 2014; Hagberg & Jonsson, 2016). Consequently, the primary option for consumers experiencing an offline OOS situation has been to return to the physical store when the product was back in stock. However, digital innovations have enabled consumers to respond to offline OOS situations in new ways, as it is now possible to for instance buy the product online or view competing offers directly in a smartphone (Lammgård, 2016). As there is a need for studies regarding consumer responses to offline OOS in an omnichannel context (Peinkofer et al., 2015), we take into account the fact that channel behaviour differ between consumers (Konus et al., 2008), affecting how consumers respond to offline OOS situations. Hence, from the framework provided by Grewal et al. (2013), it is of interest to explore different channel behaviors in the various stages of the consumer purchase process and to what extent the level of channel behavior affect customer responses to offline OOS situations in physical stores.

### *Prepurchase stage*

The first step of the purchase process takes place before the actual purchase where consumers prepare, search for information and research alternatives. This stage is suggested as being highly transformed due to digitalization, as information traditionally was found in channels such as in television commercials and in the physical store (Grewal et al., 2013). However, omnichannels have opened up for new channels like smartphone applications, corporate websites and social media to provide information anytime and anywhere (ibid; Hagberg & Jonsson, 2016). Hence, the digital consumer expect retailers to provide

accurate information in multiple channels, in order for them to plan their purchase beforehand, for instance regarding price, stock-status, reviews on social media or product information in order to evaluate options and compare offers between firms (Verhoef et al., 2007; Bell et al., 2014; Gross., 2015; 2016; Lammgård, 2016).

Central to the prepurchase stage is the term research shopping, referring to the phenomenon of consumers researching a product in one channel beforehand and then buying in another channel, as suggested by Verhoef et al. (2007). The most frequent form of research shopping incorporates research online and purchase offline (as opposed to offline information leading to online purchase) (Verhoef et al., 2007). Further, Wang, Malthouse and Krishnamurthi (2015) argue that mobile shopping (m-shopping) is the most frequent form of research shopping. This is also supported by other researchers, emphasizing the importance of mobile use in the purchase process (Gross, 2015; 2016; Hagberg et al., 2016). In fact, Gross (2016) states that the use of smartphones have revolutionized consumer's daily shopping routines, making m-shopping a ubiquitous service among consumers. In short terms, m-shopping could be described as the activities of consumers who use Internet service when searching, comparing, buying and evaluating products and services, via a smartphone (Ko, Kim & Lee, 2009). Moreover, studies have taken various approaches to this area of interest, elaborating on the search phase, purchase or both, as well as on the use of single or multiple channels (Verhoef et al., 2007). However, there is a gap in research dealing with search leading to purchases conducted in an omnichannel environment (Balasubramanian, Raghunathan, & Mahajan, 2005), especially dealing with interdependencies regarding search and purchase decisions (Verhoef et al., 2007).

As many companies provide consumers with product information and inventory levels online, lacking in product fulfillment offline have tremendous consequences (Bell et al.

2014). Accordingly, this implies that researching products beforehand raises expectations on product availability, hence influencing the level of (dis)satisfaction and the way consumers respond to OOS situations in an offline channel (Oliver, 1980; Bell et al., 2014; Peinkofer et al., 2015). Hence, for this study, the concept of research shopping is important in order to understand how consumers use one or multiple channels in the prepurchase stage, for instance searching for stock-status, creating expectations on product delivery.

### *Purchase*

The second step of the purchase process contains the actual purchase and the interaction between retailer and customer, completed online, or as in this article, offline in the physical store (Grewal et al., 2013). Despite the rise of e-commerce, research has shown that the physical store still fills an important function, as customers want to feel, see and try products before the purchase (Piotrowicz & Cuthbertson, 2014). Hence, as the physical store is still the dominant channel for most retailers, omnichannel retailing has put new light on the purchase stage, in terms of the exchange of information and product delivery between retailers and consumers (Bell et al., 2014). This is emphasized in Hagberg et al.'s (2016) framework; illustrating a symbiotic relationship between four consumption elements; settings, actors, exchange and offerings. Exchange refers to "the various activities taking place at the retailer-consumer interface" (Hagberg et al, 2016, p. 697). In detail, it could be described as communication in the sense of access to and exchanges of information, and distribution in the sense of comprising the physical and tangible exchanges of products (Peterson, Balasubramanian & Bronnenberg, 1997; Hagberg et al., 2016). Traditionally, retailers have paid attention to monitoring in-store characteristics, for instance product distribution, the customer path through the store and educating staff (Hagberg et al., 2016). However, as retailers become active

online and offline, lines starts to blur and digital solutions are becoming more integrated into the physical store, for instance through the use of digital signs, providing QR codes or store navigation services through applications (Piotrowicz & Cuthbertson, 2014). Accordingly, exchanges in the purchase stage has been transformed as consumers now are able to use online channels while in the physical store, such as smartphone applications to compare prices or find extended product information, as well as using in-store digital solutions (ibid; Egels-Zandén & Hansson., 2015; Hagberg & Jonsson, 2016).

Despite multiple channels provided for consumers to find information, plan their purchase beforehand and use their smartphones while in the physical store, offline OOS situations are still a major problem. Consequently, both information and product delivery need to be fulfilled, which put great pressure on retailers to provide customers with the right information and hold the right products in the physical store at the right time (Ramaswamy & van Bruggen, 2005; Verhoef et al., 2007; Lammgård, 2016). In order to untangle these issues, Bell et al. (2014) present a framework, emphasising the information and fulfillment gap which occurs in the purchase stage when consumers are provided information about offers which retailers then are unable to deliver, for instance caused by an offline OOS situation. The framework illustrates different channel behaviors in an omnichannel retail environment, where customers can either obtain information offline in physical stores or seek it online through a website or smartphone application. The same goes for product fulfillment, as customers can either visit the store to pick up products or get them delivered to their homes. Particularly relevant for this study is the channel behavior where consumers "research online and purchase offline" (ROPO) (ibid). In this scenario, consumers are provided with information online, for instance accurate price and inventory, and

thereafter visit the physical store to purchase the product. However, due to a gap in information and product delivery, consumers experience a situation where retailers are unable to provide the desired products, causing an offline OOS situation. Hence, the greatest challenge and what truly makes a retailer thrive in the omnichannel world, is to link customer information to real-time operations, i.e. providing consumers with accurate information that enable them to get their products in a convenient and cost-effective way (Rangaswamy & van Bruggen, 2005; Bell et al., 2014).

#### *Post-purchase stage*

The post-purchase stage refers to activities occurring after the actual purchase (Grewal et al., 2013). In the best-case scenario, customers leave the store satisfied with a completed purchase, but that is not always the case. For various reasons, customers might feel disappointed with the purchase, hence turning to customer service or the recovery department (ibid). However, the worst case appears when customers are unable to complete the purchase process due to stock-outs. Traditionally, in a single channel retail context, the primary option for consumers experiencing an offline OOS situation was to return to the physical store when the product was back in stock. However, digital innovations have created new ways for consumers to respond to offline OOS situations, for instance buying the product online, viewing competitive offers directly in a smartphone or check when the product is in store again at a computer (Lammgård, 2016; Hagberg & Jonsson, 2016).

From a retailer's perspective, stock-outs are costly due to lost sales but also due to spread of negative word-of-mouth (Campo, Gijbreccht & Nisol, 2000; Zinn and Liu, 2001). Hence, identifying consumer responses to offline stock-outs could help make effective managerial decisions, for instance regarding inventory levels (Fitzimmons, 2000). In fact, the degree of lost sales from offline stock-outs has been

stated to depend on how consumers react, further affected by product, customer characteristics and situational factors (Campo et al., 2000). Additionally, a second or third stock-out situation has been stated to have a larger negative impact on consumers than a one time situation (Zinn and Liu, 2001). Accordingly, it is evident that there are benefits to gain from understanding consumer responses to offline OOS situations. This issue has been highlighted in the SDL framework presented by Zinn and Liu (2001), suggesting three consumer responses to stock-outs, previously explained. Using the SDL framework as a theoretical lens, our research thus explores this phenomenon in the light of an omnichannel context.

## **Methodology**

### **Research design**

The research question of this study concerns consumer responses to offline OOS situations in an omnichannel context. As there is lack in knowledge and understanding of this issue in an omnichannel environment (Peinkofer et al., 2015), this study takes an exploratory standpoint with the primary goal to explore the research topic and shed new light on this phenomenon. This approach is particularly valuable in gaining insights and understanding of a specific problem on which little or no previous research has been done (Saunders, Lewis & Thornhill, 2009). Furthermore, it enables the researchers to be flexible and altering the direction of the research during the process (ibid), which was an essential criterion for this study. Accordingly, the study follows an abductive research logic, which, as compared to inductive and deductive studies, allows the framework to be modified based on the result of empirical findings and theoretical insights (Dubois & Gadde, 2002). The complexity of the research topic further requires an in-depth description of the phenomenon. Thus, a phenomenological standpoint, with a focus on finding and reflecting upon meanings, enabled the researchers to concentrate on experiences and understand underlying

patterns of the phenomenon (Eriksson & Kovalainen, 2008).

### **Single-case study**

With a focus on consumer behavior in an omnichannel environment, a single-case study was considered useful to gain insight on this particular phenomenon. The wide use of case studies could be explained by its ability to study complex social phenomena within a real-life context (Eisenhardt, 1989; Eriksson & Kovalainen, 2008) with the possibility to serve the explorative purpose of clarifying the relations within a specific setting (Saunders et al., 2009). It has been argued that multiple case studies are to some extent preferable to a single case study as they can be generalized (Eisenhardt, 1989; Miles and Huberman, 1994). However, Dubois and Gadde (2002) as well as Dyer and Wilkins (1991) oppose to this notion, arguing that a single case study might provide more depth to the research in terms of understanding of the specific context compared to multiple case studies. In addition, it is proposed that single case studies provide an opportunity to investigate and analyze a phenomenon that has not yet been explored (Saunders et al., 2009), which also fulfills the requisite of an abductive research approach (Dubois & Gadde, 2002).

### **Case Selection**

Based on the aim of this research, a pre-requisite was to choose a case company who, in addition to the physical store, provides consumers with different online channels that enables different channel behavior. As many firms put greater attention to the interaction with their customers, they have realized the importance of operating simultaneously in different retail settings. The Swedish interior and home-furnishing company IKEA is particularly subject to this business model. Thus, with the belief to provide a valid view of this study, IKEA was chosen as a case. By integrating their physical and digital channels (their store, website and mobile applications) and therefore providing a seamless customer experience (Hagberg, 2016), the IKEA customers are able to start their shopping

journey using one channel and finish it using another. In practice, this implies an easier and more convenient way to shop whenever and wherever (ibid). However, in discussion with the marketing department at IKEA Bäckebo in Gothenburg, the company expressed a specific issue regarding information and product delivery in their online and offline channels, affecting sales and customer relationships negatively. Using IKEA as a case for this study could thus help address the research question and practically contribute to a more in-depth understanding of consumer behavior in today's digitalized retail environment.

### **Data collection - A multi-method approach**

Due to the scarce research dealing with consumer responses to offline OOS situations (Peinkofer et al., 2015) and consumer behavior in an omnichannel environment (Rangaswamy & Van Bruggen, 2005; Verhoef et al., 2007; Dholakia et al., 2010; Gross, 2016), a combination of carefully selected methods, including quantitative and qualitative, was used in order to identify and provide a broader picture of the phenomena. A combination of qualitative and quantitative methods has been referred to as triangulation, where empirical data from various methods are cross-checked. Also, triangulation of methodologies is suitable when applying a case study. The reason for that is that each method can identify and shed light on particular aspects, which, put together, provides a holistic view of the chosen topic (Silverman, 2001; Cochoy, 2008; Eriksson & Kovalainen, 2008; Dubois & Gadde, 2014). It is, for instance, suggested to combine qualitative data collected from semi-structured group interviews/focus groups with quantitative data gathered from surveys (Saunders et al., 2009). Hammersley (1996) refers to this as facilitation, where a quantitative method facilitates a qualitative method and the other way around. In much the same way, a combination of a quantitative survey and qualitative focus groups was used with the purpose of identifying the problem

and exploring underlying meanings and processes of the chosen phenomenon.

In detail, a three-step approach was undertaken with the purpose to strengthen the results in the best way possible. Firstly, customers who had experienced an offline OOS situation were identified at IKEA Bäckebo through the question: "Have you managed to shop everything you wanted today?". Those answering "No" were selected to proceed to the next step. Secondly, these customers were thus asked to answer the questions of the survey as well as to enroll interest in participating in a focus group at a later occasion. For the third step, focus groups were conducted with those customers who had previously answered the survey and who had shown interest in participating.

#### *First question and selection of participants*

In the first step, identification of consumers who had experienced an offline OOS situation was carried out face-to-face with randomly approached IKEA customers by the check-out at IKEA Bäckebo, in order to gain access to the relevant sample. This was conducted at five different occasions in March 2017. By asking the question "Have you managed to shop everything you wanted today?", those answering "No" were selected to move forward to step two and respond to the questions of the survey. In total, 200 of 1 589 approached customers (12,6 %) had experienced the problem of offline stock-outs and not finding the product they wanted to purchase. This was considered a valid number of respondents large enough to provide relevant data for the analysis (Saunders et al., 2009).

#### *Survey*

In line with the approach of triangulation (Silverman, 2001; Cochoy, 2008; Eriksson & Kovalainen, 2008; Dubois & Gadde, 2014) a survey was conducted as a second step of the research process, aiming to identify and quantify the research problem. Hence, directly after being approached by the check-out at IKEA Bäckebo, the 200 identified

customers answering "No" to the first question, were selected to proceed to step two and answer the questions of the survey. The survey was administered through structured interviews where the questions were asked face to face. Prior to administration, the survey was pilot tested in order to refine and ensure that the questions were understood as intended and the respondents will be able to answer the questions without problem (Saunders et al., 2009). As this was carried out by the check-out at IKEA Bäckebo, the researchers were enabled to approach customers in a moment when they were left with no other option but to wait in line and suitably had time to answer a few questions. With the attempt to maximise the response rate, as suggested by Saunders et al. (2009), the survey was administered during the evening at workdays and a weekend the day after payment of salary when IKEA normally experiences an increase in visitors. Additionally, the survey served as a recruitment tool for the focus groups as the 200 respondents were asked to register their interest in participating in focus groups a few weeks ahead in the research process. The survey contained a set of 10 multiple-choice questions regarding channel behavior throughout the purchase process and responses to the OOS situation. The survey ended with questions regarding gender, age, postcode and a request to participate in the focus groups.

#### *Focus Groups*

Focus groups were carried out in order to fully be able to interpret the findings of the survey (Warr, 2005; Eriksson and Kovalainen, 2008). Focus groups are highly applicable in order to capture meanings and experiences of the respondents, encouraging group discussions and interaction among the participants. Another advantage of using focus group is that participants can interact and reflect on other people's views, creating an open dialogue where new viewpoints can arise and be discussed (Eriksson and Kovalainen, 2008). With the aim to explore consumer responses to offline OOS situations

in an omnichannel environment, the purpose was to review *what* consumers has to say about the topic as well as *how* they address it (ibid).

Participants consisted of 18 IKEA customers who previously responded to the survey and who had registered interest to participate in focus groups. Participants all shared the same experience; not being able to purchase what they intended to buy when visiting IKEA. As suggested by Eriksson & Kovalainen (2008), focus groups should consist of 2-10 people. Accordingly, the 18 participants were divided into three focus groups, consisting of 5-7 participants each. Moreover, the age range was between 23-65 years, consisting of 12 females and 6 men. Except from the initial criteria, no further emphasis was put on forming groups based on any other parameters. Further, the day before the scheduled focus groups, participants were sent with a reminder through text messages. When starting the focus groups discussions, the researchers made sure to inform the participants about the purpose of the study as well as to ensure the participant’s anonymity in the report, as suggested by Eriksson and Kovalainen (2008). Discussions lasted for about 1-1,5 hours at the dining area of IKEA Bäckebo, a relaxed and friendly atmosphere encouraging the respondents to feel comfortable to express their opinions and thoughts (ibid). As proposed by Saunders et al. (2009), all focus groups were recorded, in this case on a smartphone, and transcribed in full within a short time after each session. Also, in order to ensure that no data was lost, notes were taken throughout all sessions.

The result of the survey served as a baseline when formulating the questions for the focus groups. Hence, participants were asked to discuss the quantitative data derived from the survey in order for the researchers to gain a deeper understanding and underlying meanings of the results. Focus groups were moderated by a facilitator, providing semi-structured questions, which operated as support to guide the discussions (Eriksson and Kovalainen, 2008). As suggested by

Eriksson and Kovalainen (2008), questions mainly began with “How” and “What”, in order to capture underlying patterns and meanings from the answers. Accordingly, questions such as “What was your reaction to...” was asked. These questions provided descriptive answers where previous experiences, values, opinions and beliefs became evident. Furthermore, the course of the interview was mainly dependent on the flow of the respondent as the purpose was to encourage a conversation rather than the interviewer just asking questions (ibid).

	Duration	Date	Gender	Age
<b>Focus Group 1</b>	1 h	Mon, 14th of March	4 women, 1 man	28, 40, 60, 65, 65
<b>Focus Group 2</b>	1 h	Tue, 15th of March	4 women, 3 men	37, 40, 42, 42, 43, 49, 49
<b>Focus Group 3</b>	1,5 h	Wed, 16th of March	4 women, 2 men	23, 30, 31, 32, 39, 39,

Chart 1. Overview of focus groups participants.

### Analysis of results

A descriptive analysis of the result from the survey was conducted in order to identify the problem and further establish structure as well as formulate questions for the focus groups. For the analysis of the focus groups, the researchers made sure to familiarize with the empirical data derived from each session shortly after it had been collected to recognize distinctive or common viewpoints and statements. This is recommended as the researchers soon after the discussions still have a general feeling about the reflections and easily remember important details (Eriksson & Kovalainen, 2008; Saunders et al., 2009). After all focus groups had been conducted, a content analysis was utilized, focusing on themes and patterns (Eriksson & Kovalainen, 2008). In addition to the transcription, parts of the discussions were listened to several times in order to make

certain interpretations of the data and identify and comparing information, themes and meanings across all groups. Also, quotations that clearly represented the different themes were selected (Bryman & Bell, 2013). As a next step, the answers to each question were condensed into a summary of the key points and principal themes emerged from the discussions (Saunders et al., 2009). The analysis enabled the researchers to derive the focus groups participants to different channel behaviors based on their statements. This revealed a pattern of channel behaviors, in which individual as well as collective channel behavior was identified. The focus group discussions revealed that participants could be related to one channel behavior in all the stages of the purchase process. Hence, working abductively, three different channel behaviors were identified, which, in correspondence to the division of channel behavior made by Konus et al. (2008), are divided into the following three analytical categories: 1) single-channel behavior, referring to consumers using mainly one channel while shopping, 2) multi-channel behavior, which is characterized by the use of multiple channels, mostly used one by one and 3) omnichannel behavior, referring to consumers adopting a frequent and integrated use of multiple channels throughout the purchase process. Moreover, we present our findings based on this insight, viewing different channel behavior and their impact on consumer responses to offline OOS situations in an omnichannel context.

### **Quality discussion**

Evaluating the quality of the chosen methodology is important to give rise to strengths and limitations of the study. Accordingly, Lincoln & Guba, (1985, in Eriksson & Kovalainen, 2008) suggest considering the “trustworthiness” of the study, in detail to evaluate dependability, confirmability, credibility and transferability. *Credibility* was guaranteed through extensive research on the chosen phenomenon, making the researchers highly familiar with the topic, helping to ensure that the data is sufficient

enough to merit (Eriksson & Kovalainen, 2008). Additionally, focus groups were conducted with 18 unique respondents, all sharing their own experiences and thoughts. Hence, providing the reader with citations and real life examples helps to enhance the reader's understanding of the credibility of this paper. Further, the study attains the requirements of *transferability* by explicitly declaring how the study was conducted, by informing how the interviews were designed, conducted, interpreted and analyzed. A thorough description of how this study contributes and can be linked to existing studies on this particular field of research was also evaluated in order to increase the *transferability* (Lincoln & Guba, 1985, found in Eriksson & Kovalainen, 2008). Moreover, the confirmation of *dependability* was ensured by the previous mentioned documentation on how the study was carried out, showing the reader that the process has been “logical, traceable and documented” as suggested by Eriksson and Kovalainen (2008, p. 333). This study also aimed to assure trustworthiness by guaranteeing the *confirmability*, in other words interpreting and presenting the material in such ways which is easily understood by the reader (ibid).

### **Findings and Discussion**

In order to present our findings regarding consumer responses to offline OOS in an omnichannel context, a discussion of the empirical data on IKEA customers who have experienced an offline OOS situation is further presented in this chapter. We take into account the fact that channel behavior differ between consumers, affecting how consumers respond to offline OOS situations. Hence, the recognition of omnichannel, multichannel and single-channel behavior becomes significant for this study. From the framework provided by Grewal et al. (2013), it is of interest to explore different channel behaviors in the various stages of the consumer purchase process and to what extent channel behavior affect consumer responses to offline OOS situations in

physical stores. Hence, an examination of the prepurchase, purchase and post-purchase stage is central in order to describe and analyse how consumers move towards completing the actual purchase in one or multiple channels and how they respond to an offline OOS situation.

### **Channel behavior in the prepurchase stage**

Digitalization has made it possible for companies to provide consumers with information in multiple channels before visiting the physical store, putting the pressure on providing accurate and consistent information (Ramaswamy & van Bruggen, 2005; Verhoef et al., 2007; Lamngård, 2016; Bell et al., 2014). An example is IKEA, providing online information such as stock-status, in order to ease the prepurchase stage. However, our results show that the adoption of online sources in the prepurchase stage was rather uncommon. It appeared that only 14,6 % of the survey respondents had checked stock-status before visiting the IKEA store. Of those who did check stock-status beforehand, 75 % were given faulty information regarding stock status, as they experienced an OOS situation when visiting IKEA. Evidently, in 75 % of the cases where consumers checked stock status online, the actual inventory level in store was faulty. Accordingly, slightly more than 85 % of the respondents did not check stock-status online before visiting the IKEA store. From focus groups discussions, it became evident that the participants who did not check stock-status online were not aware of this function, did not care or expected IKEA to hold the right inventory, as one participant puts it: "IKEA is such a large organization, you just expect products to be available at all times" (Lenny, 65).

Except from some participants looking up stock-status, research shopping in online channels as described by Verhoef et al. (2007) did not appear to be a common activity. As the most frequent form of research shopping contains online activities leading to purchase offline, one could have assumed that researching the website or

application was a frequent activity in the prepurchase stage. On the contrary, our survey showed that most of the respondents did not research products online beforehand, hence did not use the website or application before visiting the IKEA store. However, those who did use online channels mainly used the website. Moreover, focus group discussions showed what was shown in the survey, namely that very few of the participants used online channels before visiting the store. The webpage was mainly considered to function as a tool for inspiration, special offers, store information or find product information. Moreover, as research has suggested that mobile shopping is the most frequent form of research shopping (Egels-Zandén & Hansson, 2015; Gross, 2015; 2016; Malthouse and Krishnamurthi, 2015), our research showed that the participants were more keen on using the IKEA website on their computers than on their smartphones or tablets. In line with Verhoef et al. (2007), some participants expressed that they researched products online, however, using the smartphone application and mobile functionalities to construct shopping lists. Nevertheless, others, visiting the physical store more often and more spontaneously, tended not to plan their purchase beforehand or more loosely used traditional paper and a pencil to keep track of the shopping list.

### *Omnichannel behavior*

It appeared that few of the participants truly engaged and moved between multiple channels in order to ease their prepurchase stage. However, those participants adopting an omnichannel behavior appeared to use the application and website in combination to the physical store in order to research products, find store information or make shopping lists. One of the respondents expressed that:

It's so easy to use the website and app. I can create a shopping list on my computer and synchronize it to the app on my mobile. I think it's great, planning my purchase prevents me from shopping things spontaneously. (Andy, 43)

Other participants with omnichannel behavior agreed upon to use online channels in the planning stage in order to check stock-status, prevent impulse shopping, planning the purchase in the sense of their budget or research product information. A younger student expressed that:

I always check stock-status online, it has become a routine as I have been moving a lot lately. I visit the website and look up options. For me it's about trying to take advantage of all square meters in my small apartment as good as possible.

When I have found 3-5 things that might suit what I want, I go to the store to view them and I usually make a shopping list on my computer, but I also use paper as a backup anyway. It is nice to know information before, like product placement before visiting the store. (Sara, 28)

Just like Sara, it seemed like omnichannel behavior implies overcoming the barriers of learning how to use multiple digital channels and how to move between them in order to incorporate online sources into their prepurchase stage. In fact, these participants even seemed to expect companies to offer online channels, in order to ease their shopping process. Larry expressed that he “(...) finds it hard to deal with companies that do not have a website (...)” due to the fact that he consider it always “(...) easier to check prices and supply online in order to get the picture of what is available.” (Larry, 30)

#### *Multichannel behavior*

What divided multichannel behavior from the omnichannel behavior was mainly the attitude towards and use of multiple channels, as participants adopting a multichannel behavior expressed to use both online and offline channels, but one channel at the time. One of the respondents, Joanna (32), stated that she finds product information such as measures important, although she never look for stock-status. Moreover, she expressed that she does not have the application due to the fact that she thinks the “(...) website works well” and that “(...) applications just feels a little too much of a hassle”. Another respondent agreed, saying that “sometimes it feels like companies make applications just to

have one?” (Adrian, 31). This seemed to be a shared view among participants with this specific channel behavior, as another respondent said that:

Major companies like IKEA, H&M and ICA are at the forefront with digital solutions, they are a few steps ahead of consumers. There are some early adopters who hangs on the edge of development, but often it takes time for us consumers to embrace new innovations. I believe it's only a matter of time. (Louise, 37)

As customers with multichannel behavior seemed to have embraced online channels, for instance by “(...) viewing the website to get inspiration” (Nadine, 40), an holistic omnichannel-thinking did not seem to apply. Further, as these participants did not express to care about researching stock status online, they still had high expectations on product availability.

#### *Single-channel behavior*

Despite the range of channels provided by retailers, it appeared that many of the participants stick to traditional ways of shopping - using the physical store as their main source of information and product fulfillment. One of the respondents said that:

I usually visit IKEA spontaneously and I usually keep track on my shopping list in my head, or use a piece of paper. (Ursula, 40)

Customers like her did not seem to value online channels as she further explained that “I have not even thought about checking stock status online, I thought the website was to shop products online, and I did not know IKEA had an app? Is it even good?”. Other consumers confirmed this point of view, for instance Emma who expressed that she sees the shopping trip as a “fun experience” and that “I never look up products beforehand, I just expect products to be in stock” (Emma, 39).

#### **Channel behavior in the purchase stage**

The second step of the purchase process involves the actual purchase and takes place in the explicit interaction between retailers

and consumers (Grewal et al., 2013). As the purchase can be conducted online or offline, this paper elaborated on the purchase stage in an offline environment, in detail in the physical store. Hagberg et al. (2016) refers to the activities within this stage as exchanges, highlighting the physical distribution of goods and communication. Accordingly, one important step towards offering an omnichannel customer experience is to successfully uphold product availability (Ramaswamy & van Bruggen, 2005; Verhoef, 2007; Lamngård, 2016). Furthermore, the result discloses that this is not always the case, as a rate of 12,6 % (200 respondents) of the 1589 approached customers left IKEA without at least one desired product. In 81,4 % of the cases, the customers were not able to purchase the desired product due to stock-outs and in 18,6 % of the cases, the customers could not find the desired product in the warehouse. Hence, the interaction (Grewal et al., 2013) and particularly the exchange in terms of distribution of goods, described by Hagberg et al. (2016), between IKEA and these 200 customers was not completed, leading to several negative consequences.

During the focus groups discussions it became evident that an OOS situation leads to customer dissatisfaction and annoyance; not being able to buy a desired product principally leads to disappointment. As Zinn and Liu (2001) suggest, the level of disappointment seemed to increase with the amount of products being out of stock; one product is somewhat tolerable, whereas two or three goes beyond the consumer's level of acceptance. Additionally, the degree of annoyance appeared to partly depend on how often consumers visit IKEA; those who visit IKEA often are not as negatively affected as those who visit IKEA less frequently. Partly, it also has to do with the extent to which the customer has planned the purchase of the product; a well planned purchase or visit where a stock-out of the desired product is experienced leads to greater level of annoyance. In line with the EDT-framework

(Oliver, 1981), it appeared that high consumers expectations on product availability, for instance when looking up stock status online, leads to greater expectations on product fulfillment, hence greater disappointment in an OOS situation (Oliver, 1981, Peinkofer et al., 2015). Hence, due to high expectations on product availability, an OOS situation will in this case lead to great dissatisfaction.

Despite the fact that omnichannel retailing has provided consumers with endless possibilities to get information and purchase products (Grewal et al., 2013; Pantano & Viassone, 2015; Hagberg & Jonsson, 2016), our survey revealed that 41 % of the respondents did not do anything in response to the experienced stock-out at the physical store. Half of the respondents chose to ask personnel for help while still at IKEA. In most of the cases, the personnel confirmed the stock-out and informed the customers when the desired product would be in stock again. Only in 2,9 % of the cases, personnel presented a substitute product and only 1 out of 10 directed the customers to order the products online at the IKEA website. A few respondents also chose to look up information regarding the product through mobile devices and computers provided by IKEA. Moreover, during the focus groups it became evident that the majority of the participants were concerned about getting access to the right information during the purchase stage, which further confirms the importance of providing customers with the right information at the right time (Ramaswamy & van Bruggen, 2005; Verhoef, 2007; Lamngård, 2016; Bell et al., 2014). Some preferred to get help directly from personnel when these were at hand, but some also expected information to be available through digital solutions during the purchase stage, as some normally check product information on stationary computers at IKEA. Further, while the majority of the participants were more keen on using the IKEA website in the prepurchase stage, the research also showed that they used their

smartphones to a larger extent during the actual purchase in order to find stock information. Although it seemed that mobile devices were more linked to the activities during the purchase, the results also showed that participant only used the IKEA application to some extent in this stage, which seemed to differ depending on channel behavior.

#### *Omnichannel behavior*

As in the prepurchase stage, participants with omnichannel behavior tended to use both online and offline channels such as smartphone applications, website and ask personnel in order to ease the purchase at the physical store. One of the participants said that:

Sometimes, it's easier to look online, because sometimes the products are not located in the store according to what you expect. If you check online, you'll get a better picture of everything.  
(Larry, 30)

Particularly, they all agree that the IKEA mobile application is a "convenient tool" to use in this stage and that it works well in most of the cases. The participants adopting an omnichannel behavior is, in comparison to those with single- or multichannel behavior, relatively conscious about how digital solutions can help rationalize their purchase. It was discussed how the smartphone application could be improved, revealing suggestions to add functions such as navigation in the IKEA store, faster swipe function in the smartphone application and the possibility to easier erase products in the shopping list.

The disappointment when experiencing an offline OOS situation among participants with omnichannel behavior was brought about by two reasons: their expectations on product availability as well as faulty information regarding stock status. In accordance with EDT (Oliver 1981, Peinkofer et al., 2015), those who had been given information that the product was in stock tended to raise higher expectations on

product availability as well as experiencing a higher level of disappointment when the product was OOS and they realised that the information they had been provided was faulty. In this case, the gap between information delivery and product fulfilment (Bell et al. 2014) is apparent, which evidently lead to a high level of customer dissatisfaction. It seems that it is not always possible for customers to avert an offline OOS situation by applying to what Bell et al. (2014) describe as ROPO, i.e. research online and purchase offline. This somewhat highlights the difficulty of providing information to real-time operations (Rangaswamy & van Bruggen, 2005; Bell et al., 2014).

#### *Multichannel behavior*

Similar to the behavior in the prepurchase stage, participants with multichannel behavior tended to use different channels in the purchase stage after having experienced an offline OOS situation, and thus appeared to take advantage of the in-store solutions that nowadays are provided by retailers. If not asking personnel for help, the IKEA website also seemed to be well at hand:

I looked up stock status on the website, not in the app. When I saw the product was out of stock I thought it might be available somewhere else, at for instance Kållerød, so I looked it up.  
(Joanna, 32)

However, the focus group discussions underscored that participants with this behavior did not tend to use the channels as integrally as the participants with an omnichannel behavior. It also became evident that the IKEA smartphone application, which only few of them have, was not as widely used during the purchase as the website and displays at the store, mainly not even considered; "I haven't thought about it, I use the website" (Ursula, 40).

Despite low usage of integrated channels, customers with multichannel behavior expressed an interest concerning the IKEA smartphone application and a positive attitude

towards learning more about how to use online channels when experiencing an offline OOS situation in the future. However, focus groups discussions indicated that the reason why participants adopting a multichannel behavior are not using multiple channels in their purchase stage today is due to the fact that they do not seem to understand the meaning of it and what functions it offers. Some participants expressed resistance to use the IKEA smartphone application. For example, one of the participants said “I’m not interested in apps, but today you’re forced to use it due to technical development” (Lynda, 60) and another that:

I don’t have the app, the website works just fine because it’s mobile adjusted. Apps feels a bit tricky, you don’t use it that often. (Joanna, 32)

Also, these participants are not aware that the different channels exist, as one expressed: “What’s in it for me? I don’t think we know the app exists” (Lynda, 60).

As rarely any of the participants answering to this behavior checked stock status before the IKEA visit, no information was given prior to the offline OOS situation. Still, participants adopting multichannel behavior also had rather high expectations on product availability and the result indicated that this also lead to greater dissatisfaction, as suggested by EDT (Oliver 1981, Peinkofer et al., 2015).

#### *Single-channel behavior*

It is evident that for participants with single-channel behavior, the physical store appeared to be the primary channel in their purchase process. Hence, in an omnichannel context, the physical store is still an important channel, for some the most central, as suggested by Piotrowicz and Cuthbertson (2015). Additionally, another respondent explained that “I’m one of those who want to look at and feel the product beforehand” (Carol, 65). The result underscores that this participant sees a value in visiting the physical IKEA store, which also allows her to

turn the visit into a “cheerful thing” and a fun day with friends and family.

Opposed to participants with omnichannel and multichannel behavior, participants with single-channel behavior seemed to have been less affected by the offline OOS situation. In most of the cases, these participants spent less time on research shopping, e.g. planning and finding information before the purchase, as one puts it:

We went to IKEA rather spontaneously just to buy these things so then it was just a pity that the products were out of stock. (David, 42)

Accordingly, due to low expectations on product availability, an offline OOS situation appeared to cause dissatisfaction, however less compared to participants with multichannel and omnichannel behavior.

Participants with single-channel behavior did not show any particular tendencies of using multiple channels during the purchase stage when an offline OOS situation occurs. They did not use the website, and did not express any interest in using their mobile neither the IKEA smartphone application while at the store to proceed with the purchase in some way. In fact, these participants showed less interest in changing their habits in comparison to the others:

I’ve never looked up info about stock status at the warehouse. Why should I? (...) I’m not that mobile as a person, I do not bother to check my mobile and so on. I’ll just go back when I want to eat at IKEA again, haha. We live so close.”(...) I don’t wanna walk around in public and use my mobile phone. (Evelynn, 39)

I haven’t even thought about it. I don’t have the app, what is even the difference between an app and website? (Carol, 65)

#### **Channel behavior in the post-purchase stage**

The post-purchase stage refers to activities taking place after the actual purchase, in this case after visiting the physical store (Grewal et al., 2013). In this case, the purchase stage

has not been fulfilled, hence leading to a post-purchase situation where consumers are not able to complete the purchase in the physical stores. However, the omnichannel retail environment has extended the purchase process and created opportunities for customers to proceed with the purchase in other channels when reaching this stage (Hagberg & Jonsson, 2016; Lammgård, 2016). Accordingly, the result of the survey indicated that participants who experienced an offline OOS situation will use the IKEA website to a greater extent in the post-purchase stage, i.e. after the IKEA visit, than they did in the prepurchase as well as the purchase stage. Almost none of the focus group participants considered the option of ordering IKEA products online, regardless if they had been OOS or not at the physical store. Instead, the participants were more keen on changing their behavior in terms of looking up stock status before their next IKEA visit, which implies that they will be steered into using online channels and thus forced to embrace an omnichannel behavior. This seemed to be based on the realisation of how an extended research prior to the purchase might help optimize the purchase stage and prevent possible events of experiencing an offline OOS situation at the physical store.

Moreover, the consequences in terms of consumer responses to offline stock-outs are claimed to be significantly important for retailers to acknowledge and act upon (Fitzimmons, 2000; Zinn & Liu, 2001). In 50,9 % of the cases, the survey shows that the respondents would delay the purchase to another time. 21,1 % would buy a substitute product at a different retailer and 14,3 % at a different IKEA warehouse and 6,9 % decided not to proceed with the purchase at all. This result highly corresponds to the outcomes featured in the SDL framework presented by Zinn & Liu (2001). The focus group discussions somewhat confirmed the result of the survey. However, the result showed a rather clear distinction of responses to stock-

outs depending on different channel behavior, which will be presented in more depth below.

#### *Omnichannel behavior*

In the post-purchase stage, after having experienced an offline OOS situation, participants adopting an omnichannel behavior seemed to respond by choosing a different product either at IKEA or a competitor. One participant declared that:

We went to Mio. You want to buy the product when you have planned to buy it, otherwise you get disappointed. (Larry, 65)

There were cases of delay, but it was evident that these participants applied to the element of substitute, presented in the SDL framework (Zinn & Liu, 2001).

What also characterised this channel behavior appeared to be the consciousness and eagerness to solve the so-called offline OOS problem quickly, finding possible solutions in order to complete the purchase as soon as possible. One customer explained that:

I went to Kållerød after I went to Bäckebo, so it's all set. They had a great amount of the particular product I wanted. But the personnel at Bäckebo didn't seem to be aware of that. (Andy, 43)

As a general reaction to an offline OOS situation, participants with omnichannel behavior tended to use both online and offline channels, including the IKEA smartphone application and website as well as getting help from personnel, to find information such as stock status. In other words, these participants adopt a certain form of "post-purchase research shopping behavior", trying to solve the OOS problem by researching other alternatives. Hence, gaps in information and product fulfilment caused by offline OOS situations (Bell et al. (2014), indicates that retailers should evaluate communication and product distribution (Hagberg et al., 2016) and provide complementary channels for these consumers in which they can proceed their purchase process.

### *Multichannel behavior*

In comparison to the previously described channel behavior, multichannel behavior mostly corresponded to another element of the SDL framework, namely delay (Zinn & Liu, 2001), as most participants of this group tended to delay their purchase to another time. Although they indicated to have less solvent capacity and eagerness to complete the purchase by looking up information using different online and offline channels, they showed a willingness to change their channel behavior for future purchases. One declared that “In the future, if I go to IKEA just to buy one product, I will actually check stock status before” (Louise, 39). This is also shown as many of them asked for solutions that might ease this process, as one participant declared:

I want information when products will be in stock again. It didn't say anything about that at the warehouse or at the website. (Joanna, 32)

Despite the fact that some appeared to have a positive attitude towards adopting an omnichannel behavior, there were still participants with multichannel behavior that did not intend to convert to an omnichannel behavior in the future. While some were truly open minded to the use of smartphone applications in the future, others declared that they would stick to their current routines:

I won't do anything different in the future. The OOS situations haven't been a problem for us so it doesn't motivate us to change. If you will experience this more often, however, you might become more active and check stock status online. (Adrian, 31)

### *Single-channel behavior*

Opposed to participants with omnichannel and multichannel behavior, the result revealed that in most cases, participants with single-channel behavior tended to correspond to the act of leave in the SDL framework (Zinn & Lui, 2001), not proceeding with the purchase at all. What also clearly distinguished participants with single-channel behavior from the other two channel behaviors where their unwillingness to adopt to an omnichannel behavior. Participants with

single channel behavior showed less tendencies of solvent capacity, i.e. proceeding with the purchase online or check when the product was back in stock again, but rather chose to visit the physical store at a later occasion. Consequently, when dealing with customers adopting a single channel behavior in an offline OOS situation in the post-purchase stage, it is evident that retailers need to make an effort in converting them to use multiple channels while shopping.

### **Conclusion**

Motivated by the importance of evaluating OOS situations and by the lack of research studying this phenomenon in the light of the digitalized retail landscape (Peinkofer et al., 2015), this study focused on how consumers respond to offline OOS situations in an omnichannel retail context. A comprehensive study was made with IKEA customers experiencing an offline OOS situation in the physical store, aiming to answer the research question: how do consumers respond to offline OOS situations in an omnichannel retail context? By viewing the three stages of the purchase process (Grewal et al., 2013), our findings suggest that channel behavior affect consumer responses to offline OOS situations. Specifically, participants with omnichannel behavior tended to research products in multiple integrated channels in the prepurchase stage, creating high expectations on product availability. Therefore, they expressed high levels of disappointment when experiencing an offline OOS situation and mainly responded by switching channel to find a substitute. Moreover, participants with multichannel behavior tended to some extent research products in the prepurchase stage. However, despite not checking stock status in any online channel, they expressed to have high expectations on product availability and tended to delay the purchase. On the other hand, participants showing single-channel behavior did not research products in the prepurchase stage and showed low expectations on product availability. Hence, they responded neutral to the offline OOS

situation by mainly leaving the purchase. Based on these findings, we may draw the following two main conclusions.

Firstly, the findings of this study suggest that channel behavior affect consumers responses to offline OOS situations. More specifically, based on the categories of omnichannel behavior, multichannel behavior and single-channel behavior, the study proposes that each type of channel behavior generates different responses. From a theoretical perspective, findings within this study support the already existing framework of SDL (Zinn & Liu, 2001), showing that the most common reactions to offline OOS situations are substitute, delay or leave. However, the most important acknowledgment revealed from this study that particularly sheds new light to this area of research, is that consumer responses to stock-outs appears to depend on their level of channel behavior. More specifically, participants with omnichannel behavior tended to respond to the offline OOS situation by finding a substitute product, participants with multichannel behavior seemed to delay the purchase and turn to the physical store and participants with single-channel behavior tended to leave the purchase.

Secondly, the findings of the study suggest that consumer responses to offline OOS situations depend on their level of expectations on product availability. We extend the EDT-framework (Oliver, 1980; 1981) by concluding that digital elements, affecting the consumer purchase process (Grewal et al., 2013), influence the degree of dissatisfaction in an offline OOS situation. In fact, the possibility to research stock status online raises expectations on product availability, which leads to a greater level of dissatisfaction. Correspondingly, it appeared that participants adopting an omnichannel or a multichannel behavior, researching stock status online before continuing the purchase in the offline channel, had higher expectations on product availability than those participants with single-channel

behavior. Consequently, these participants expressed a higher level of dissatisfaction when experiencing the OOS situation in the physical store.

Given this, the present article fills a gap in existing theory regarding consumer responses to OOS situations (Peinkofer et al., 2015) by presenting findings that give light to this phenomenon in an omnichannel context. Research within this area is important due to digital innovations affecting modern consumer behavior and the purchase process (Grewal et al., 2013; Verhoef et al. 2007). By viewing the purchase process in a digitalized retail environment, consumer channel behavior revealed to be highly influencing expectations on product fulfillment and how consumers respond to offline OOS situations. Accordingly, our study contributes to an understanding of this particular area. Hence, there are managerial implications to be extracted from this article in order to more effectively manage and control consumer responses to offline OOS situations in an omnichannel retail context.

### **Practical implications**

Due to the digitalization of the retail landscape, it is evident that offline OOS situations need to be viewed through the lens of omnichannel retailing. As a scenario where inventory levels are always perfect seems to be unrealistic, even for IKEA, retailers need to learn how to deal with offline OOS situations in order to prevent loss of customers. This study illustrates that channel behavior; whether it concerns omnichannel, multichannel or single-channel behavior, impact how consumers respond to offline OOS situations. Hence, in order for financial efforts that retailers put into providing multiple channels to pay off, it is important for retailers to fully understand how different channel behavior impact consumer responses to OOS situations. The greater level of omnichannel behavior, the more effort consumers put in completing the purchase after experiencing an offline OOS situation and vice versa. Hence, channel behavior influence how much consumers engage

before, during and after the purchase and thus their reactions to offline stock-outs. Although consumers with an omnichannel behavior show tendencies in increasing revenues, they also tend to have higher expectations on product availability, indicating greater challenges for retailers to overcome. Moreover, as consumers using multiple channels are stated to be more lucrative, this raises questions on how to inform and educate consumers to adopt an omnichannel behavior. Lastly, as our study suggests that consumers adopting a single-channel behavior tend to easily leave the purchase when experiencing an offline OOS situation, retailers might suffer from loss of sales if they not manage to help these consumers to learn how to proceed with the purchase. These implications can provide retailers with an understanding of how to successfully manage the purchase process, as channel behavior in all three stages has shown to affect how consumers respond to offline OOS situations. Consequently, as digitalization of the retail landscape is predicted to further develop, omnichannel behavior is becoming a central part for retailers to take into account in order to stay competitive. Accordingly, with an increasing amount of consumers predicted to become omnichannel users, expectations will rise on retailers in general, especially on product delivery, further

emphasizing the importance for retailers and researchers to evaluate issues regarding consumer responses to offline OOS situations in the future.

### **Future Research**

As this article has taken a consumer perspective on offline OOS situations in an omnichannel context, there are additional aspects to develop from our research. As this study elaborated on the retailer IKEA, the findings drawn from this study is limited. Hence, other studies should further explore consumer responses to an offline OOS situation in an omnichannel retail context in the light of another type of retailer. A suggestion could be to analyse offline OOS situations in a context where the retailer sells products which can easily be found at other stores, for instance at a high street where multiple shops provide similar or even identical products. Additionally, as we have argued that consumer responses to offline stock-outs are influenced by level of channel behavior, other aspects such as brand loyalty and emotions could be further explored in the light of offline OOS situations in an omnichannel context. In general, it is of great importance to acknowledge that there is a limited amount of research dealing with OOS situations in an omnichannel context, which calls for extended studies.

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