

# **Trends in mobile customer journeys: Are you ready for mobile customer decision-making?**

**A. E. Schurink**

University of Twente  
P.O. Box 217, 7500 AE Enschede  
The Netherlands

Email: a.e.schurink@student.utwente.nl

**Dr. E. Constantinides**

University of Twente  
P.O. Box 217, 7500 AE Enschede  
The Netherlands

Email: e.constantinides@utwente.nl

**Dr. S. A. De Vries**

University of Twente  
P.O. Box 217, 7500 AE Enschede  
The Netherlands

Email: s.a.devries@utwente.nl

## **ABSTRACT**

Nowadays, businesses are increasingly impacted by the consumer's usage of mobile technologies. Businesses and consumers are able to interconnect anytime, from pretty much anywhere. With embracing mobile technologies, businesses and consumers have more access to relevant information. As a result, the customer experience during the decision-making process is changed. The mobile decision-making process is distinguished by different stages, which take place in and out of a store. These stages are characterized by interactive activities that lead to a more personalized interaction between businesses and their customers. In all these stages, businesses have the opportunity to impact mobile consumer behavior and purchase decisions in a more meaningful way. When guiding mobile consumers through the specific moments of the decision-making process, businesses can influence consumers shopping behaviors. Hereby, businesses are able to send customized communications targeted to consumers at critical touch points in their shopping journey in order to create richer and more relevant customer experiences. During the mobile decision-making process, there are golden rules: (1) be present, (2) be useful, and (3) be quick. Therefore, businesses have to appear in the most relevant areas of the consumer decision-making process, and give enough information to build a relationship and help them make the purchase decision. Mobile technologies allow businesses to create highly personalized offers in real-time, which makes consumers more likely to purchase their products or services.

## **Keywords**

Mobile marketing trends, consumer decision-making process, mobile technologies, customer experience, customer journey, online and offline shopping environment

## 1. INTRODUCTION

Mobile marketing is growing rapidly, as well as its impact on consumers' lives. Nowadays, businesses and consumers can interconnect anytime, from pretty much anywhere; on the bus, traveling by train, or while walking in a park. This defines the reality of how consumers actually use mobile technologies most of the time. Mobile technologies refer to the digital tools used for communication. These tools include mobile phones, laptops, and tablets. Compared to other marketing activities including other electronic channels, the mobile channel provides marketers with a few advantages (Wolfgang, Sohn, & Seegebarth, 2017). First, consumers can accomplish a number of activities at the same time and make decisions on the move, and so, consumers are allowed to surf the web, use multiple apps, and use audio-visual features, such as talking and viewing. Second, the mobile channel is able to deliver contextually relevant information to consumers, such as location, time, date events, weather, and speed of travel. Third, businesses can use mobile to view and hear consumers' voices and manage customer relationships better. Lastly, businesses get transaction data from consumers, allowing them to analyse and predict consumers' needs and wants. With these advantages, businesses are able to individualize the decision-making process for both parties across all stages of the purchase process (Shankar, Kleijnen, Ramanathan, Rizley, Holland, & Morrissey, 2016).

Because Internet users are generally shifting from desktop devices to mobile devices, a mobile website is now more important for businesses than ever before (Heusinkveld, 2017). According to Heusinkveld (2017), 44% of all searches in 2017 in the Netherlands are performed on mobile devices. Additionally, one-half of Dutch consumers make their purchases on mobile devices (Van Bokhoven, 2017). The continuous searches and purchases on mobile devices indicate that mobile has enormous market potential. As a result, businesses are increasingly impacted by the consumers' usage of mobile technologies, and so, the customer experience during the decision-making process is changed (Zmags, 2012). Now, the customer journey is characterized by continuous, unstructured, location-based interactions, which result in a more personalized interaction between businesses and their customers (based on Martin, 2013). This process happens in real time and gives businesses opportunities to influence the decision-making process more directly. During the decision-making process, businesses send customized communications at critical touch points to their customers (Faulds, Mangold, Raju, & Valsalan, 2018). Additionally, it is important to send the communications at the times the consumer is most likely to respond. Therefore, it is important for businesses to understand how the mobile consumer decision-making process works in order to lead consumers through the process in a more meaningful way. It is important to understand how the mobile consumer decision-making process works, since mobile is affecting the consumer decision-making process altogether (Faulds et al., 2018). Hence, understanding how this works, businesses are more able to lead the customers through the process in a more meaningful way.

The aim of this paper is to review and explain the extent to which mobile technologies have an impact on the decision-making process and consumers' purchase decisions. When more information about the changing decision process to purchase is obtained, businesses can

inform their marketers about the nature and timing of mobile marketing efforts, and use targeted communications at critical touch points in the customer journey, and sympathize the customer experience better. And so, more purchases can be generated. Therefore, this research is relevant from an organizational point of view. To examine this, the following research question is formulated:

*“How do mobile technologies impact the consumers’ decision making process?”*

We conducted a literature study to answer this research question. Different studies about mobile marketing are analysed in a qualitative approach. The studies are obtained from journal databases and library catalogues.

The decision-making process (Kotler and Armstrong, 2016) is used to discuss the relevant literature of the effects of mobile technologies on a consumers’ purchase decision. In the next chapter, the mobile decision-making process is discussed. The third chapter focuses on the pillars of the mobile decision-making process. Finally, the conclusion of this literature research is presented.

## **2. TRENDS IN MOBILE DECISION-MAKING PROCESSES**

Mobile marketing has changed the established decision-making process. In the past, this process ranged from simple to complex and was influenced by various factors (Kocyigt, 2016). According to Kocyigt (2016), the consumer decision-making process began with the (1) recognition of a need and was followed by the (2) information search. In this stage, the consumer started to search for information from internal and external resources. Once the consumer found information and alternatives, he/she started to evaluate the information in the (3) evaluation stage. After evaluating the alternatives, the consumer made a (4) decision regarding which product or service to purchase. Finally, in the (5) post-purchase stage, the consumer has an experience using the product or service that has been purchased. During this decision-making process, the consumer moved one step at a time toward the purchase and businesses targeted them as they moved closer to making the purchase. Additionally, businesses influenced the process through marketing mix strategies, derived from the 4-Ps of marketing (product, price, place, and promotion), with the goal to impact the purchase stage (Faulds et al., 2018).

In mobile marketing, the decision-making process is not in such an organized order. The mobile decision-making process is a complex and long path that is distinguished by different stages, which take place both in and out of a store (Puccinelli, Goodstein, Grewal, Price, Raghubir, & Stewart, 2009; Lemon and Verhoef, 2016; Grewal, Roggeveen, & Nordfält, 2017). The steps in these stages are happening all the time, and are continually changing because of the customers’ needs and life situations (Kocyigt, 2016).

The mobile decision-making process starts when consumers’ needs emerge. Second, consumers search for information in the search stage. Third, they evaluate the different

alternatives. Fourth, the consumer ends up with a purchase decision and finally, the consumer evaluates his/her purchase in the post-purchase stage. In all these stages, businesses have the opportunity to impact mobile consumer behavior and purchase decisions in a more meaningful way. The opportunities are based on the needs and life situations (Kocyigt, 2016), but also on times, locations, and mindsets to interact with mobile consumers to impact the actual purchase decision (Martin, 2013).

Given this perspective on the mobile decision-making process, what does this suggest that marketers should do? First of all, it is important that the mobile strategy should focus on all the stages of the decision-making process rather than on the purchase stage alone (Hettiarachchi, Wickramasinghe, & Ranathunga, 2017; Yadav, Valck, Henning-Thurau, Hoffman, & Spann, 2013). Second, marketers have to understand both the businesses' and customers' perspective of the decision-making process, identifying touch points in each stage (Lemon & Verhoef, 2016). Third, marketers should then begin to identify the touch points that occur throughout the customer journey. Lastly, marketers should try to identify specific touch points that lead customers to continue their journey (Lemon & Verhoef, 2018). Once marketers have identified these touch points, they can more effectively target information and send customized communications to reach and influence consumers during the whole process. The stages of the mobile decision-making process often occur together in real time. As a result, marketers get a chance to directly influence the decision-making process through the use of the customized communications targeted to consumers at the critical touch points in their shopping journey (Faulds et al., 2018). Additionally, marketers can deliver their customers better services, because they can identify consumer behaviors, preferences, and expectations during the specific moments of the mobile decision-making process (Constantinides, Romero, & Boria, 2008). Recent research from Google Insights indicates that consumers are 51% more likely to make a purchase when they use mobile search to help make a decision (V12 Data, 2018). According to Hancock (2018), there are three golden rules during the mobile decision-making process to achieve successful leads through the mobile field: (1) be present, (2) be useful, and (3) be quick.

Next, the stages of the mobile decision-making process are discussed to get a better understanding of how mobile technologies impact consumers' purchase decisions.

## **2.1 Need recognition**

First of all, the mobile decision-making process generally starts when consumers realize that they have a need for something. Needs are desires that arise when a consumers' current state does not match the consumers' preferred state (Kotler & Armstrong, 2016; Phiri & De Ponte, 2017). In this stage, marketers can design mobile communications in order to create an imbalance by seeking to create a need and make consumers look for and buy their product or service. As a consequence, mobile communications act as an external cue that helps consumers to recognize a need (Netmera, 2015), triggering a decision-making process that might result in a purchase (Kocyigit, 2016). Mobile technologies help marketers to connect with their customers anywhere and anytime, whether they are at work, in a store, or surfing the web. And so, mobile technologies help marketers to deliver their products or services to

consumers by customizing their products or services to the needs of the consumers (Vachhani, 2017). Furthermore, recent research from Bellini, Cardinali, and Grandi (2016) indicates that the usage of mobile technologies in the need recognition stage can help customers to make better decisions during the whole decision-making process. Indeed, when consumers notice that mobile technologies deliver values, such as effort, money, and saving time, mobile marketing can stimulate consumers to start the decision-making process (Kocyigit, 2016; Google, 2018).

Moreover, marketers have to position their product or service as a solution to a problem or need that a consumer encounters at this stage (Netmera, 2015). Here, marketers should send information services to consumers, for instance, news messages, reminders, updates and promotional items to mobile devices to act as external drivers. According to the Elaboration Likelihood Model (ELM) (Petty & Cacioppo, 1986), mobile marketing is most appropriate for getting attention of needs and possibly creating wants of products and services that are related to low levels of customer involvement. Specifically, mobile communications influence the peripheral route to persuasion. This route to persuasion focuses on superficial information that makes it easy for consumers to form an opinion without much thought, rather than into the central route to persuasion. The central route to persuasion focuses on information that is important for forming an accurate attitude, such as strong arguments and detailed information. Moreover, the ability to think about the communications is high, and also customer involvement is high. Additionally, marketers want their customers to follow the central route to persuasion, because this route leads consumers to form strong attitudes that are long-lasting. According to Shankar and Carpenter (2012), mobile communications can be used to supply specific pieces of information, and, thus, assisting a high-involvement purchase.

## **2.2 Information search**

Second, when a problem is recognized, consumers will search information to inform their purchase decisions (Kotler & Armstrong, 2016; Phiri & De Ponte, 2017). In this stage, consumers try to get information from memories to remember past experiences with brands and their attributes. This is known as internal search and is related to low involvement decisions that mostly consist of consumers' routine purchases. When consumers cannot get enough information from internal search, they will seek information from external sources. External search includes personal sources and market sources, as follows advertisements, public sources, and product trial. Due to mobile technologies, consumers get more opportunities in their search strategies, as mobile can serve as an intelligent agent (e.g., Siri and Google Now). Additionally, consumers are able to search product reviews and experiences of other customers quickly and instantaneously while on the move. Compared to other marketing activities including other electronic channels, the mobile channel gives the advantage of making it very easy for consumers to retrieve and share information. Mobile optimized and search engine friendly web shops are likely to quicken search and discovery. For example, searching a store on a mobile device should give store contact details with maps and hours of operation, increasing the chances of consumer's selection of the store (Kim,

Wang, & Malthouse, 2015; Wang, Kim, & Malthouse, 2015). Additionally, mobile technologies offer a realization of having everything accessible. Marketers who aid a sense of discovery and serendipity during this stage will likely profit from increased user engagement (Shankar et al., 2016). As a result, the whole shopping experience of the consumer can be improved. Additionally, in the information search stage, marketers' have to make sure that their products or services appear in front of their customers at the right time and the right place. To do so, mobile search ads, in-app popups, location based campaigns, and mobile display ads can be used to impact consumers' decisions (Kocygit, 2016). Location-based capabilities provide consumers with relevant information while away from home. As a result, consumers can, for example, compare prices across local stores. To deliver these location-based services, mobile devices have sensors that can identify the context, location, and viewing direction of the individual consumers. In turn, this information allows marketers to send customized and relevant communications to the likely needs of consumers in that specific situation (Dhruv, Yakov, Spann, & Zubcsek, 2014).

To search for information, consumers use smartphones and tablets to research products and services before they even consider going to the store (Google, 2017). 65% of Dutch respondents in Google's survey did their research mainly on smartphones, and 48% of the respondents said that they watched videos about the products they wanted to buy (Google, 2017). In addition, in a research from Deloitte (2017), 57% of Dutch respondents read reviews about products or services on a mobile device. In this case, mobile marketing is a pull medium instead of a push medium. Specifically, marketers push relevant customized communications about their products or services to the consumer, to be pulled by the consumer accordingly to their timeframe, mindset, and location (Martin, 2013). Hereby, marketers have to understand what information is important for the consumers early on in the decision-making process. Similarly, marketers have to make sure that they deliver relevant information. Consumers in the information search stage of the decision-making process need a lot of appropriate information. As a consequence, the risk of choice and information overload increases for them. Therefore, it is important for marketers to make sure that consumers do not get overwhelmed with information (Shankar et al., 2016).

### **2.3 Evaluation**

Third, the evaluation stage occurs when customers are near the actual product or service they consider buying. In this stage, consumers evaluate the diverse attributions of the alternative products or services, such as price, quality, and location. McKinsey & Company found in their research that digital touch points, including mobile devices, were highly relevant at all of the stages of the decision-making process, and especially in the evaluation stage (Banfi, 2013; Shankar et al., 2016). Actually, the study found that digital touch points have replaced traditional touch points (i.e., face-to-face interactions) as the primary contact between the marketer and the consumer. Indeed, mobile technologies make it possible for consumers to experience the advantages of physical and online worlds at the same time (Netmera, 2018). Mobile technologies allow consumers to evaluate alternatives even when they are at physical stores. Actually, already 14% of respondents in Google's survey (2017) research products or

services on their smartphones when in a physical store. With mobile technologies, consumers can navigate online or offline, evaluate different offers, and consider possible solutions. With these advantages, marketers can create rich interactive experiences for consumers.

Furthermore, with mobile technologies, marketers are allowed to interact in real time with consumers and have the potential to move to real-time pricing (Martin, 2013). For example, consumers could be walking by a particular store or product and receive real-time offers, such as a discount on that product. When a number of these products have been sold, the inventory will be updated and the offers could be discontinued to more consumers that walk by. Additionally, mobile technologies in combination with shopping avatars or smart agents make it possible to suggest accessories and complementary products based on stored information about the customers' inventory and prior tastes. These tips could then be translated into choice by the use of quick response (QR) codes and other instantaneous interventions delivered to the device on a location-specific and targeted basis (Shankar et al., 2016). As a consequence, consumers can for example read reviews and more detailed product attributes, and compare the prices of different products (Martin, 2013). And so, consumers are better informed about the product they consider buying, and marketers are better informed about the interests of consumers, which leads to more targeted and customized experiences for the consumers. Therefore, mobile marketing instruments can be very effective if they are used in relevant mobile mediums in order to reach consumers who are evaluating alternatives. The use of suitable mobile marketing instruments and relevant communications might result in a purchase.

#### **2.4 Point of purchase**

After evaluating alternatives, consumers make a final decision and purchase the product or service they decide. The purchase decision is already affected by the previous decision-making stages, but still, marketers have a chance to impact consumers who are already at the purchase stage. Additionally, marketers have to make their products or services available to consumers in this stage and have to make sure that the purchase process is easy and enjoyable for the consumer (Netmera, 2015; Hancock, 2018). Herewith, mobile technologies are very important. For example, mobile technologies can optimize the shopping experience by making the product ordering, buying, and payment processes more suitable (Vachhani, 2017). Accordingly, marketers can comply mobile self-checkout options, which are embedded into point-of-sale systems, offers, and counteroffers. These options can be presented to consumers during the product ordering, buying, and payment process (Martin, 2013). Hence, these developments might provide customers to save time and money (Vachhani, 2017).

According to Hancock (2018), during the purchase stage it is important that marketers provide a well-textured purchase process to the customers. Hereby, customers are looking for reassurance, trust signals, and a clear way to progress their purchase, without any issues or disruptions to the flow. These days, the decision-making process follows no longer only one channel. For example, when searching for a product, 80% of Dutch consumers first orient themselves online before buying the product in a physical store (Moes & Van Vliet, 2017). In

addition, 20% of people make purchases weekly on a mobile device, and 24% of people have prepared themselves online for an immediate purchase offline (Google, 2017). When marketers analyse past behaviors from their customers, they have a better chance to impact the purchase stage. Specifically, consumers leave traces in the purchase stage, such as conducting a search, adding a product to the basket and leaving it, and commenting to a product page. As marketers analyze these traces and construct communications related to this information, they can achieve better results (Netmera, 2015).

## **2.5 Post-purchase**

Finally, the post-purchase stage begins after the actual purchase. After consumers made their purchase decision, they constantly evaluate their purchase and expect satisfaction to occur from their decision. Satisfaction is important for businesses, because satisfaction influences future purchases (Kotler & Armstrong, 2016). If their decision does not meet their expectations, then dissatisfaction might occur, and, thus, businesses lose their chance to make this customer a loyal user. For this reason, businesses want to make sure that their customers are completely satisfied and do not develop any negative post-purchase feelings (Vachhani, 2017). Similarly, regarded to post-purchase behavior, research shows that online customers are more loyal than offline customers, so migrating customers from offline to online could improve customer loyalty (Shankar, Smith, & Rangaswamy, 2003; Hult, Sharma, Morgeson, & Zhang, 2018).

Generally, mobile is a beneficial channel to share customer opinions. After purchase, customers can share their shopping experience with others. Customers can easily share photos, videos, reviews, and information about their recent purchase via their mobile devices with friends and colleagues (Shankar et al., 2016). With sites as Pinterest, customers are able to share pictures of their favourite products, “pinning” them to personalized boards that they can share with friends and family. Other customers provide immediate feedback to communities, posting pictures, uploading videos, and writing comments via forums, such as Facebook, Twitter and YouTube. For marketers it is important to create more memorable experiences that can be shared with online communities. At the same time, marketers can continue to connect with customers after purchase through mobile-linked loyalty programs and customization tools. To do so, marketers can use different instruments, such as following up their customers via push notifications and sending them promotions, free trials and etc. (Netmera, 2015). The potential to influence this process of value creation is huge.

Summarized, all these mobile technologies will continue to present the mobile shopping environment with opportunities that will require the development of creative strategies and a new mindset that focuses on actively influencing the consumer’s path to purchase (Faulds et al., 2018).



### **3. PILLARS OF THE MOBILE DECISION-MAKING PROCESS**

According to Faulds et al. (2018), the mobile consumer decision-making process is characterized by four interrelated pillars that impact every stage of the before mentioned process. The authors redefined the consumer decision-making process into four pillars – (1) consumer-businesses interconnectedness, (2) consumer empowerment, (3) proximity-based consumer engagement, and (4) web-based consumer engagement – and suggest that these pillars are often individually presented in reshaping the shopping experience for both the consumer and businesses in new and distinct ways. These pillars represent the essential ways and means through which businesses can employ mobile technologies to interconnect, empower, and engage with their customers. To be successful in mobile marketing, businesses must fully understand the associations of these pillars related to the consumer decision-making process and merge them into their marketing strategies.

The technologies used in mobile shopping form the basis for the four pillars (Faulds et al., 2018). This revolution is built upon the use of consumer-based devices such as smartphones, tablets, and other emerging technologies. In 2018, Centraal Bureau voor de Statistiek (CBS) reported that 89% of Dutch adults age 12 and over owned smartphones, 82% owned laptops of netbooks, and 71,7% owned a tablet (CBS, 2018). According to Nationaal Luister Onderzoek (2018), the use of mobile devices is still growing. In addition, market research company GfK found in their study that mobile consumers are already highly dependent on these technologies, and even 17% of Dutch respondents find it hard to not use mobile technologies (Customer Talk, 2017). When consumers become more dependent on these devices, businesses are forced to be more innovative in their use of these technologies to meet the consumers' demands (Kibo Inc, 2016). Also, these new technologies help businesses improve every aspect of the shoppers' experience (Motorola Solutions, 2014). Hereby, Martin's (2014) observations about the continuous nature of the decision-making process as undertaken by the mobile consumer, as well as the need for businesses to constantly monitor the consumers' adoption and use of these technologies are very important. Consequently, businesses can rapidly adjust their marketing strategies and tactics accordingly.

#### **3.1 Pillar 1: Consumer – businesses interconnectedness**

Mobile technologies allow businesses and consumers to connect anytime, from anywhere in order to individualize the customer journey for both parties across all stages of the consumer decision-making process. Successful businesses use the concierge approach (Brynjolfsson, Hu, & Rahman, 2013; Faulds et al., 2018) in their strategy to create a more relevant experience for their customers. This strategy relies on the two-way flow of information between the parties and continues beyond traditional in-store activities to include out-of-store dimensions of shopping. With this information, businesses can deliver better value, efficiency, savings, and engagement directed at accomplishing personal shopping needs of the customers. As a result, businesses can individualize, influence and reset a consumer's path to purchase by predicting purchase habits and deliver relevant communications at critical touch points in the shopping journey. Hereby, timing, context, relevancy, and content

of the communications are important components in creating the relevant shopping experience that mobile consumers will demand from retailers (Faulds et al., 2018).

### **3.2 Pillar 2: Consumer empowerment**

Because consumers now have access to real-time information, they can create experiences that exist on their own terms. This means that consumers have admission to endless information and more control over when and how they let content into their lives. As a result, consumers feel that they are “more in control” during the decision-making process (Nordstrom, 2016). According to Faulds et al. (2018), businesses can respond to empowered consumers by personalizing the shopping experience through the use of communications directed at critical touch points in their journey. For example, welcoming messages, digital shopping lists, in-store navigation tools, individualized coupons and promotions, and convenient checkout procedures are activities made possible by the use of mobile technologies that improve consumers’ sense of empowerment. Empowerment is changing the consumer-businesses relationship from transaction-based to more value-based, thus creating brand loyalty for businesses and delivering the relevant experience that mobile shoppers now ask for.

### **3.3 Pillar 3: Proximity-based consumer engagement**

The essences of the mobile shopping revolution is about identifying the geographical location of consumers and then target them with customized communications to improve the overall consumer experience (Martin, 2014; Thamm, Anke, Haugk, Radic, 2016). Google Shopper Marketing Council (2013) found in their research that customized communications at critical touch points in the customer journey increased basket size, unplanned purchases, and customer loyalty. Indeed, research has found that using a mobile device to place orders online increases the order rate and order size and improves the future incidence or ordering habitual products through mobile and locking them in for subsequent purchases (Wang, Malthouse, & Krishnamurthi, 2015). Moreover, according to Faulds et al. (2018), information about the customers’ location, past purchase behavior, and the consumer’s immediate shared purchase intentions allows businesses to better understand the situational relevance of a particular shopping encounter and better influence and add value to the consumer’s shopping journey.

### **3.4 Pillar 4: Web-based consumer engagement**

The last pillar discussed by Faulds et al. (2018) is about the primary ways businesses can interact with the mobile shopper. These mediums are apps and mobile websites. Consumers use both mediums for different purposes and at different stages in the decision-making process. Mobile websites are frequently used to gather information and make price comparisons among different products or services (Tania, 2017). With a mobile website, businesses can reach a broader audience than with a mobile app. According to Tania (2017), mobile apps are mostly used when consumers frequently engage and interact with businesses. Hereby, mobile apps provide better customer experiences, load content faster, and are easier to use than mobile websites. Also, mobile apps allow consumers to set preferences, create personal accounts, and keep vital information at hand. The risk of choice and information

overload increases for consumers, as businesses try to increase their presence via apps. Particularly, the constraints of space in mobile apps as extensions of websites may exacerbate the sense of overload and frustration. Therefore, it is important that businesses view apps not just as extensions of their websites, but as tools to create and sustain engagement through customized and user-relevant solutions. Additionally, businesses need to highlight the unique capabilities offered across different form factors to provide a seamless and painless interactive experience. These capabilities include geo-targeting (based on user's location) and micro-content (very short duration content designed for mobile devices) (Shankar et al., 2016). From a business point of view, mobile apps make it possible to better target an audience. As a result, brand loyalty might increase. However, businesses need both mobile websites and apps to meet the needs of the mobile consumers (Faulds et al., 2018).

#### **4. CONCLUSION**

In order to answer the research question, “to what extent do mobile technologies impact the consumers’ decision-making process?”, literature is reviewed. Based on this review, the consensus is that mobile technologies impact the whole consumer decision-making process. With consumers embracing mobile technologies, marketers have more access to consumer data. Marketers can use this information to send real-time customized communications to their customers in order to create richer and more relevant customer experiences. As a result, consumers are better informed about the product they consider buying, and marketers have more information about consumers’ interest, which results in more targeted and customized experiences for the consumers.

When marketers have a well-defined mobile strategy, they are able to understand their customers (behaviors) and prospects, including where they tend to use mobile in the purchase process. These insights allow marketers to better understand the entire customer journey and adjust their strategies accordingly, so they can provide the types of experience consumers are seeking. More concrete, with mobile technologies, marketers have a chance to better impact the purchase decision, and consumers are able to make better and more suitable decisions.

## 5. REFERENCES

- Bellini, S., Cardinali, M. G., & Grandi, B. (2016). Does shopping preparation influence consumer buying decisions? *International Business Review*, 9(10).
- Bokhoven, B. (2017). Helpt Nederlanders doet aankopen op mobiel [onderzoek]. Retrieved February 7, 2018, from: <https://www.marketingfacts.nl/berichten/helpt-nederlanders-doet-aankopen-op-mobiel-onderzoek>
- Brynjolfsson, E., Hu, Y. J., & Rahman, M. S. (2013). Competing in the age of omni-channel retailing. *MIT Sloan Management Review*, 54(4), 23-29.
- Cacioppo, J. T., Petty, R. E., & Kao, C. F. (1986). Central and peripheral routes to persuasion: An individual difference perspective. *Journal of Personality and Social Psychology*, 51, 1032–1043.
- Centraal Bureau voor de Statistiek. (2018). Internet; toegang, gebruik en faciliteiten. Retrieved March 18, 2018, from: <http://statline.cbs.nl/Statweb/publication/?DM=SLNL&PA=83429NED&D1=0,2-5&D2=0,3-6&D3=0&D4=a&HDR=T&STB=G1,G2,G3&VW=T>
- Constantinides, E., Romero, L. R. & Boria, M. A. G. (2008). Social media: A new frontier for retailers? *European Retail Research*, 22, 1–28.
- Customer Talk. (2017). Technologie is de nieuwe verslaving van Nederland geworden. Retrieved March 18, 2018, from: <https://www.customertalk.nl/nieuws/technologie-is-de-nieuwe-verslaving-van-nederland-geworden/>
- Deloitte. (2017). Global mobile consumer trends, 2<sup>nd</sup> edition – Mobile continues its global reach into all aspects of consumers’ lives. Retrieved 30 March, 2018, from: <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/technology-media-telecommunications/us-global-mobile-consumer-survey-second-edition.pdf>
- Dhruv, G., Yakov, B., Spann, M., & Zubcsek, P. P. (2016). Mobile advertising: A framework and research agenda. *Journal of Interactive Marketing*, 34, 3-14.
- Faulds, D. J., Mangold, W. G., Raju, P. S., & Valsalan, S. (2018). The mobile shopping revolution: Redefining the consumer decision process. *Business Horizons*, 61, 323-338.
- Google. (2017). Consumer barometer study 2017 - The year of the mobile majority. Retrieved March 30, 2018, from: <https://www.thinkwithgoogle.com/intl/en-gb/advertising-channels/mobile/consumer-barometer-study-2017-year-mobile-majority/>

Google/Heart+Mind Strategies. (2018). Getting things done on mobile. Data aggregated across US, UK, AU, DE and JP.

Google Shopper Marketing Council. (2013). Mobile in-store research: How in-store shoppers are using mobile devices. Retrieved April 18, 2018, from: [http://www.marcresearch.com/pdf/Mobile\\_InStore\\_Research\\_Study.pdf](http://www.marcresearch.com/pdf/Mobile_InStore_Research_Study.pdf)

Hancock. (2018). Mobile and the customer journey. Retrieved March 30, 2018, from: <https://www.silverbean.com/blog/mobile-customer-journey/>

Hettiarachchi, H. A. H., Wickramasinghe, C. N., & Ranathunga, S. (2017). The role of social commerce on consumer decisions: A theoretical foundation. *Journal of Business and Technology, 1*(2), 120-139.

Heusinkveld, O. (2017). Waarom je je nu volledig moet focussen op mobiel. Retrieved February 6, 2018, from: <https://marketingfacts.nl/berichten/waarom-je-nu-volledig-moet-focussen-op-mobiel-tips-en-mogelijkheden>

Hult, G. T. M., Sharma, P. N., Morgeson, F. V., & Zhang, Y. (2018) Antecedents and consequences of customer satisfaction: Do they differ across online and offline purchases? *Journal of Retailing, xxx*(xxx), xxx-xxx.

Kibo Inc. (2016). The new online shopper: 10 Essential e-commerce strategies for retailers in 2016. Retrieved March 16, 2018, from: <https://kibocommerce.com>

Kim, S. J., Wang, R. J. H., & Malthouse, E. C. (2015). The effects of adopting and using a brand's mobile application on customers' subsequent purchase behavior. *Journal of Interactive Marketing, 31*, 28–41.

Kotler, P., & Armstrong, G. (2004). *Principles of Marketing*. 16<sup>th</sup> Edition. New Jersey: Pearson Prentice Hall.

Lemon, K., N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing, 80*, 69-96.

Martin, C. (2013). *Mobile influence: The new power of the consumer*. New York, NY: Palgrave Macmillan

Martin, C. (2014). How beacons are changing the shopping experience. *Harvard Business Review*. Retrieved March 16, 2018, from: <https://hbr.org/2014/09/how-beacons-are-changing-the-shopping-experience>

Moes, A., & van Vliet, H. (2017). The online appeal of the physical shop: How a physical store can benefit from a virtual representation. *Amsterdam University of Applied Sciences*, 3(6).

Motorola Solutions. (2014). Motorola Solutions shopping study: Key findings. Retrieved March 16, 2018 from: [http://content.motorolasolutions.com/promo/retail/docs/msi/7th\\_Annual\\_MSI%20\\_Shopping\\_Study\\_Highlights-2014.pdf](http://content.motorolasolutions.com/promo/retail/docs/msi/7th_Annual_MSI%20_Shopping_Study_Highlights-2014.pdf)

Nationaal Luister Onderzoek, (2018). Bezit van mobiele devices en het gebruik daarvan om te internetten groeit door. Retrieved March 18, 2018, from: <https://nationaalluisteronderzoek.nl/2018/02/22/bezit-van-mobiele-devices-en-het-gebruik-daarvan-om-te-internetten-groeit-door/>

Netmera. (2018). Effects of mobile marketing on consumer decision-making process. Retrieved April 16, 2018, from: <https://www.netmera.com/wp-content/uploads/2017/07/Consumer-Decision-Making-Process-1.pdf>

Nordstrom, E. (2016). Nordstrom: Customer is more in control than ever. Retrieved April 16, 2018, from: <https://www.cnbc.com/video/2016/11/30/nordstrom-customer-is-more-in-control-than-ever.html>

Phiri, M. A., & De Ponte, J. (2017). Risks and factors of the consumer relations governance in a cosmetic industry. *Risk Governance and Control: Financial Markets & Institutions*, 7(4-2), 260-269.

Puccinelli, N., Goodstein, R., Grewal, D., Price, R., Raghurir, P., & Stewart, D. (2009). Customer experience management in retailing: Understanding the buying process. *Journal of Retailing*, 85(1), 15-30.

Shankar, V., & Carpenter, G. S. (2012). *Handbook of Marketing Strategy*. Northampton: Edward Elgar Publishing Limited

Shankar, V., Kleijnen, M., Ramanathan, S., Rizley, R., Holland, S., & Morrissey, S. (2016). Mobile shopper marketing: Key issues, current insights, and future research avenues. *Journal of Marketing*, 34, 37-48

Shankar, V., Smith, A. K., Rangaswamy, A. (2003). Customer satisfaction and loyalty in online and offline environments. *International Journal of Research in Marketing*, 20(2), 153-75.

Tania, H. (2017). Pros and cons of mobile websites and mobile apps. Retrieved April 18, 2018, from: <https://rubygarage.org/blog/mobile-app-vs-mobile-website>

Thamm, A., Anke, J., Haugk, S., & Radic, D. (2016). Towards the omni-channel: Beacon-based services in retail. *Business Information Systems* (pp. 181–192). Springer International Publishing.

V12 Data. (2018). How mobile influences today's retail shoppers along the omni-channel purchase journey. Retrieved April 16, 2018, from: <http://www.v12data.com/blog/how-mobile-influences-todays-retail-shoppers-along-omni-channel-purchase-journey/>

Vachhani, A. (2017). A descriptive study of impact of mobile marketing on consumer behavior in India. *International Journal of Advanced Research*, 5(6), 1823-1827.

Wang, R. J. H., Kim, S. J., & Malthouse, E. C. (2015). *Branded apps and mobile platforms as new tools for advertising. The new advertising: Branding, content and consumer relationships*. Santa Barbara, CA: Praeger.

Wolfgang, F., Sohn, S., & Seegebarth, B. (2017). Broadening the perspective on mobile marketing: An introduction. *Psychology & Marketing*, 34(2), 113-118.

Yadav, M. S., de Valck, K., Hennig-Thurau, T., Hoffman, D. L., & Spann, M. (2013). Social commerce: A contingency framework for assessing marketing potential. *Journal Interactive Market*, 27, 311–323.

Zmags. (2017). Meet the connected consumer: How tablets, smartphones, and Facebook are changing the way consumers shop across retail categories. Retrieved February 6, 2018, from: [http://www.secimavi.org/uploads/9/6/8/3/9683840/the\\_connected\\_consumer\\_20.01.12.pdf](http://www.secimavi.org/uploads/9/6/8/3/9683840/the_connected_consumer_20.01.12.pdf)