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**DIGITAL TOUCHPOINT IN CUSTOMER PRE-PURCHASE JOURNEY -  
QUANTITATIVE RESEARCH IN THE RETAILING INDUSTRY FOR SKINCARE  
PRODUCT**

Master's Thesis 2021

Supervisor: Associate Professor Anssi Tarkiainen

## ABSTRACT

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The thesis research focuses on the first stage of customer journey, namely the search process in a business to customer (B2C) context. The previous literature talks about the general effect of touchpoints; however, this research aims to understand what specific digital touchpoints are and their effectiveness concerning the retailing industry. In the thesis, the product category is skincare and cosmetics products.

In detail, the customer search journey is researched with touchpoints effectiveness on different search stages. Well-known previous literature about customer journey and the customer behaviors is the foundation for the thesis. Moreover, digital touchpoints are investigated deeper through quantitative research, which consists of questions about touchpoint definitions, customers' shopping habits, digital touchpoint effectiveness, and the relationship between online and offline touchpoints. The questionnaire asks respondents' opinions about their attitudes towards online touchpoints and channels, their trust towards those channels, attitudes towards the Internet, and buyers' criteria when searching for a product. The research brings rich insight into customers' perspectives on the common digital touchpoints and their effectiveness. The correlation analysis was applied to find out different relationships between digital touchpoints. The findings support the previous literature about the search process and consumer behaviors and attitudes towards the search process. The thesis contributes to the theory by adding the most important touchpoints, which are identified in each stage of the search journey, besides information about duration of customers search time '1 hour' with the 'Internet' tool into the customer search process. To sum up, the digital touchpoints take the majority of places during the search process; however, physical touchpoints still have their impacts on the customers' time of making purchase actions.

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# 1 INTRODUCTION

## 1.1 Background

The customer journey (CJ) has been a very fascinating topic since the consumer is constantly changing in today's world. Internet nowadays provides plenty of information, which enables customers to find information online easier than ever (Jacques et al., 2011). Therefore, to ensure the customer experience is seamless, the firm needs to understand the channels customers are using, and manage these channels effectively (Bitner et al., 2008; Edelman et al., 2015).

In retailing business, a supermarket concept is familiar to shoppers. Nowadays, with the digital disruption, shoppers can find the product's information on the Internet before going to the physical shop. The customer journey can start with either a personal need (Puccinelli et al., 2009) or a trigger when the customer is using her social media. Hence, the customer journey appears in many different forms. Especially, digital touchpoint increasingly plays an important role in the customer search journey (Clark et al., 2013; Edelman et al., 2015). This has enabled more research about online Internet into the topic of customer journey and customer experience management, to enrich and understand the customer behaviors when they shop online. (Edelman et al., 2015).

It is important to study the digital touchpoints that customers are using in their search journey in the retailing context. As Rosenbaum et al. (2017) have written, most customer journey is critically flawed, as the customer journey should be based on the customers' perspectives and feedbacks, not from the firm's guesses of customer touchpoints (Rosenbaum et al., 2017; Edelman et al., 2015; Clark et al., 2013). Therefore, more research should listen and bring in the customers' way of thinking and their perspectives. The research aims to bring insights about different digital touchpoints that matter to retailing customers, from the customers' way of thinking.

Moreover, the research contributes to managerial application for the retailing business to roll with today's unpredictable future to make an innovative adaptation. When the global pandemic

forces everybody to stay at home, it is the chance for the company to boost customer engagement through digital touchpoints (Altman, 2020). Customer journey (CJ) matters in retailing since understanding retailing's customer journey helps to answer how CJ helps business to gain more revenue. Plus, marketers can improve the customer journey and trigger the consumers' needs through different channels in the search process.

## **1.2 Literature review**

As the goal is to serve customers, engaging customers is one of the key activities for the business. Islam et al. (2016) has written, customer engagement refers to activities that connect, build and enhance long relationships between customers and businesses. It is a multi-dimensional concept comprising of cognitive, emotional, behavioral, and social dimensions (Islam et al., 2016). In theory, customer engagement is 'the readiness of a customer to actively participate and interact with the focal objects which vary in direction (positive or negative) and magnitude (high or low) depending upon the nature of a customer's interaction with various touchpoints (physical or virtual)' (Islam et al., 2016).

Many works of literature are explaining the customer journey, which represents similar the three core stages: pre-purchase, purchase and after purchase (Katherine et al., 2016; Rosenbaum et al., 2017; Clark, 2013; Butler et al., 1998). In the pre-purchase stage, there are three components: need-recognition, search, and evaluation before making the purchase. (Court et al., 2009; Puccinelli et al., 2009). Bruner et al. (1988) also described different factors triggering the personal needs for shopping, so-called 'desired state' and 'actual state'. Other authors such as Schmidt et al. (1996), Puccinelli et al., 2009) listed out other factors impacting the search journey such as personal goals, ability, motivation, memory, and atmosphere.

As digitalization has increasingly impacted people's lives, companies can engage with customers online easier than ever. The digital platform becomes one of the first touchpoints for customers, while the customers are taking the initiative role in their journey search for products (Court et al., 2009, Edelman et al., 2015). The dominated service sector highlights the importance of a 'meaningful' and 'memorable' customer experience, as all services provide

customers with experiences (Bitner et al., 2008). To manage the customer experience effectively, it comes down to the mission of fulfilling the customer expectations (Bitner et al., 2008). In retailing, one element of the service sector, it is crucial to understand the customer journey via the lens of the customers (Bitner et al., 2008).

Butler et al. (1998) said understanding the customer behavior on the Web is crucial to understand the customer journey as a whole. The flow of customer journey on the Web is similar to the on-stage market, in which the pre-purchase stage starts with the problem recognition, which enables the internal and external information search (Butler et al., 1998). Regardless of the online or physical context, to effectively manage the customer journey, marketers need to understand the customers and their behaviors (Butler et al., 1998)

Social media plays an important role in assisting the customer journey (Clark, 2013), in terms of engaging the customers with its information, interactive contents to name a few. Through online touchpoints, the company can listen and read the customers' opinions about the brand and their shopping experiences. When the company replies and reacts with customers, this drives the customer engagement that increases the engagement between both sides. The digital platform can also enable the company to actively 'shape' customer journey, via active data and analysis of customers' needs and activities (Edelman et al., 2015). When the customers choose the advertisement they want to see, providing relevant information that benefits their shopping journey will encourage the customer to move on to the next purchasing stage (Edelman et al., 2015).

### **1.3 Research problem and research question**

Different internal and external touchpoints that trigger during the customers' prepurchase are found from previous research. The pre-purchase stage, like other stages, is combined of digital and physical touchpoints, as illustrated in the Figure 1. Different touchpoints relate and contribute to each other, enable the customer journey to become more seamless.

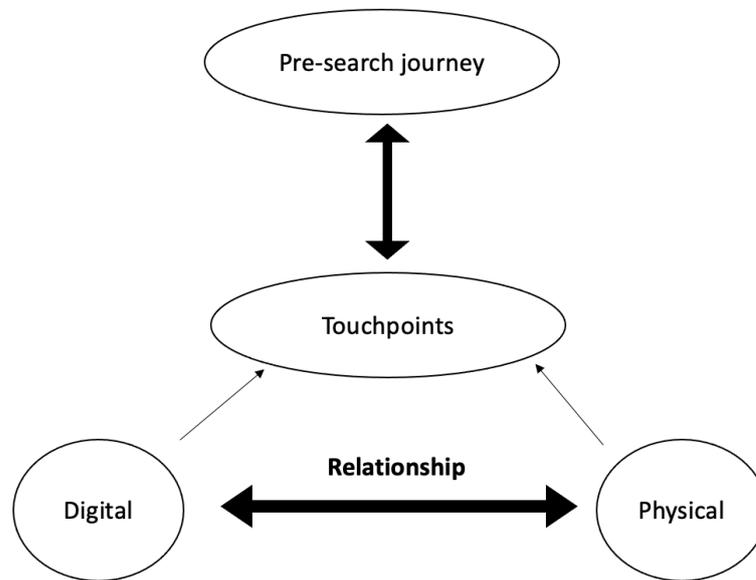


Figure 1 Elements of touchpoints in the pre-search journey

It would be interesting to dig deeper into how digital channels standing as the touchpoints during the pre-purchase process contribute and how digital touchpoints relate to the physical touchpoints in retailing. The research aims to find out the most common digital touchpoints that customers occur and use during the search process. By understanding how digitalization stands as initial touchpoints in the customer journey for retailing customers, firms can improve the impact of customer engagement via the online channels since the beginning of the search process. Secondly, the correlation between different touchpoints, in retailing context, can bring interesting insights for managers. Evaluating and understanding different touchpoints will lead the customers to the purchase stage easier, happier, and faster, which makes the customer journey more seamless.

In the digital environment, there are five elements that relate to customers: customer behavior, social media, online platforms, search engines, and contextual interaction (Kanan et al., 2017). The researcher decided to focus on the consumer behavior aspects, as it interacts strongly with the customer journey in terms of understanding from customers' perspectives. Kanan et al.

(2017) has done intensive research about different literature discussing the digital marketing framework. In their conclusion, throughout the research history developments, there are four research areas analyzing the consumer behaviors, illustrated in Figure 2:

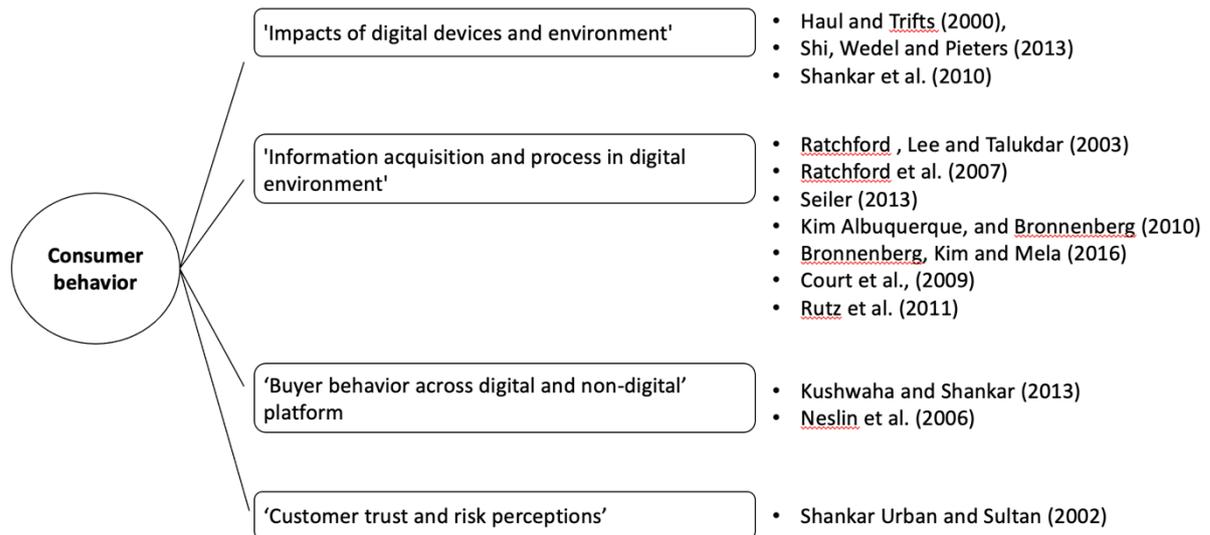


Figure 2 Research areas and literature about consumer behaviors (Adapted from Kanan et al., 2017)

From the previous literature, there have been many aspects of the digital role in consumer behavior. However, there is a need for further research about the digital touchpoints in the customer pre-purchase journey, in terms of the definition (what they are), how digital touchpoint impact and contribute to the consumer behavior in the search process, the relationship with the physical touchpoint and the answers to the question: Is digital touchpoint useful for the retailing business? Therefore, this research is dedicated to analyzing and answering the question 'What are the digital touchpoints in the customer pre-purchase journey in retailing?' The title describes the thesis's main topic: to find out different digital touchpoints in customer search journey, in a retailing context. With the sub-questions of:

- What are digital touchpoints?
- What is digital touchpoint effectiveness?
- How digital touchpoint impact the pre-purchase process of the customer journey?
- What is the relationship among digital touchpoints?

- What is the relationship between digital and offline touchpoints?

## 1.4 Theoretical framework

The theoretical framework defines the structure of the theory that is discussed in the thesis. The framework describes the pre-purchase process in the customer journey, with different factors affecting each customer journey stage before reaching the purchase decision. Touchpoint plays an important role in affecting all the stages (Court et al., 2009).

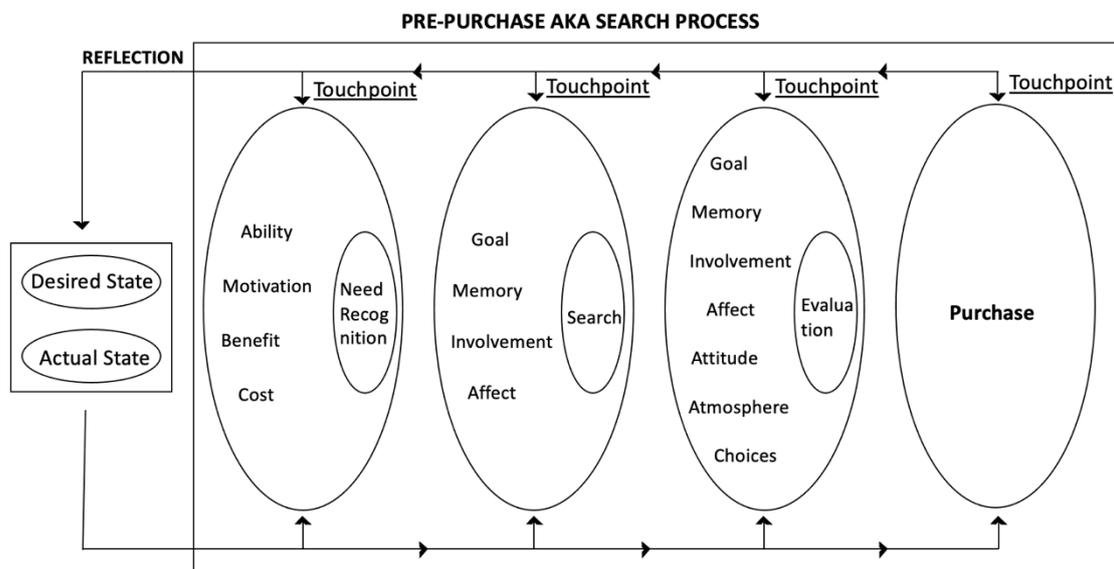


Figure 3 Preliminary theoretical framework

As described in Figure 3, there are three stages in the pre-purchase process: need recognition, search, and evaluation (Puccinelli, 2009). Before making a purchase, the customer starts with a need cognition, motivated by the actual needs or desired needs (Bruner et al., 1988). The need recognition is shaped and affected by the customer's self-ability, such as cognition and education level, customer's self-motivation, the possible benefit, and costs of purchasing the product (Schmidt et al., 1996; Bruner et al., 1988). The need recognition can also be created during the online search process, or in the store when the customer sees the product, which is affected by the store's product arrangement. From Lemon et al. (2016) perspectives, there are

different touchpoint categories: brand-owned, partner-owned, customer-owned, and social/external (Lemon et al., 2016).

When the need for having the product is clear, the search process begins. In this state, the customer's previous experience of the product influences the customer information process. The memories and involvement of the product define the feeling towards the product and the goal of whether to have this product or not (Puccinelli et al., 2009; Bruner et al., 1988). For a new product, help from store assistant or brand recognition (Court et al., 2009) have impacts on customer decision to try a new product to meet customer's goal. In a retailing environment, product route, sample, and direction enable the customer's search process to be smoother, faster, or possibly challenging. Hence, several touchpoints affect the search process of the customer in the pre-purchase stage.

In the evaluation stage before purchase, all the previous factors (goals, memory, involvement and affect) along with customer attitude (Puccinelli et al., 2009) at the product, surrounding atmosphere, and different available choices for product differentiation and price affect the customer's evaluation of the original product's need (Court et al., 2009; Puccinelli et al., 2009; Bruner et al., 1988). These internal factors and external touchpoints from the surroundings enable the customer to evaluate and make up their decision towards the product (Schmidt et al., 1996), whether at a fast or slow pace (Butler et al., 1998).

The step after the evaluation is the purchasing decision. At this point, touchpoints still make an impact on customers to whether to keep the product, or to return, or to add more product for purchase. Touchpoint at this stage can be other customers, cashiers, product counter near the cashier and online app promotion. The more effective touchpoints that can satisfy the customer's needs and help solve the customer's problem (Nobel, 2011), the more sales and purchase the customer makes. The pleasant or unpleasant feeling after purchasing can enable the product's memory towards the customer's next shopping (Puccinelli et al., 2009; Lemon et al., 2016). Ideally, good reflection is required to trigger the desired state of the customer for more purchase of that product (Bitner et al., 2008).

The theoretical framework explains the core flow and structure of the pre-purchase in the customer journey, however, more touchpoints, which are not mentioned above, can occur during the customer's search process. Moreover, different customers can encounter different touchpoints during their search process. Digitalization can affect and differentiated the original retailing pre-purchase journey. Therefore, the framework highlights the existence of different touchpoints within the customer journey before making a purchase decision.

## 1.5 Definitions and key concepts

In this section, several relevant theories will be described: customer engagement and customer journey.

Customer engagement: Customer engagement is the responses from customer behavior towards a firm's activities which can be 'behavior' or 'psychological'. Another perspective towards the definition of customer engagement is the customer's voluntary contributions to the firms further than the transaction itself (Harmeling et al., 2016). There are different definitions in the research literature about customer engagement, which is illustrated in Figure 4.

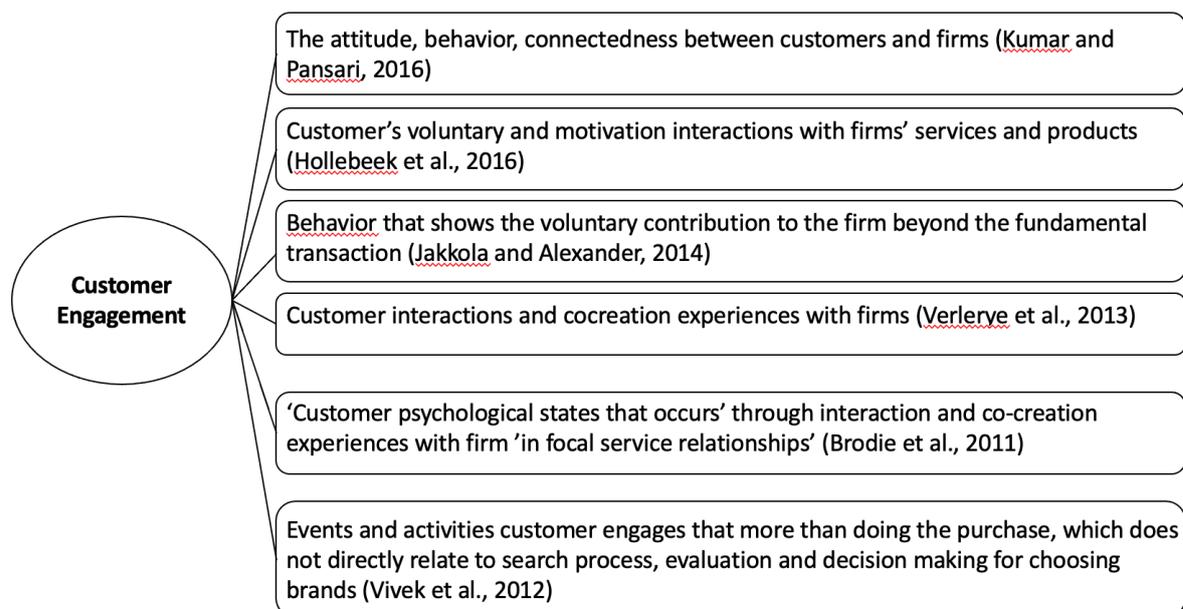


Figure 4 Definitions of customer engagement (Adapted from Harmeling et al., 2016)

Customer journey: Customer journey is a popular concept in the literature resources. Via mapping out the customer journey, the firm can visualize different steps that the customer goes through while using the company product or services. Customer journey also shows customers' intentions in each step, their challenges and difficulties with company's products/services, moreover, the feeling the customers have during each interaction as well. Customer journey also enables companies to realize different opportunities to develop and innovate their operations and products to make the process easier and smoother for customers. (Adam, 2016)

Customer experience: Andre et al. (2007) in the Harvard Business Review paper about 'Understanding Customer Experience' has written, the 'internal and subjective' responses from customers for 'direct' or 'indirect' contact with firms. Direct contact can happen via customers purchasing and using the products, often, these contacts are started by the customers. Indirect contact can be seen as the 'unplanned counters' with the firms' representatives such as product, salesman and brand image.

Retailing service: Retailing services are often seen as a brick-and-mortar concept, which stands for physical retail stores. Nowadays, the concept of 'online retail sales' is gaining popularity, which expands the traditional brick-and-mortar concept. Multi-channel retailing (or omnichannel retailing) refers to the use of different channels in customer's experience shopping experience, from prepurchase to after-purchase stages. The channels can be retail stores, online stores, mobile stores, mobile app stores, telephone sales. These channels have one common characteristic, which involves with 'transacting method' with customers. (Hollensen, 2015)

Touchpoint: The elements that create and contribute to the customer journey, which can enable satisfied or satisfied feeling for customers (Kranzbuhler et al., 2019). The touchpoints can be analyzed, edited, and improved to develop the customer journey. Touchpoints are also the interactions between a customer and a company or a brand, direct and indirectly. Touchpoint is more than just a 'contact point' because it goes along with the customer's reaction. (Straker et al., 2015)

Digital touchpoints: The interaction between customers and firms that is happening online. Examples of digital touchpoints are 'website, mobile applications, emails, social media'. Digital touchpoints bear lower customer interactions, and they can be one way of communication. (Straker et al., 2015)

Physical touchpoints: Physical touchpoints can be seen as the traditional communication and interaction between customers and sellers. In the supermarket context, it can also be any physical object. For example, cashier, counters, parking lot, entrance door, supermarket worker are the physical touchpoints the customer might encounter during the pre-purchase stage.

Digitalization: the evolution from traditional digital business, the use of technology to renovate the business model to increase revenue and create new opportunities (Jukka, 2020)

## **1.6 Delimitations**

The research focuses on the pre-purchase stage in the customer journey, to understand different online channels in this process that are relevant to customers. Therefore, the research will not go in-depth about the impact of digitalization on the purchase and after purchase stages. Moreover, the service sector has a variety of business types. This research will only focus on the context of retailing. There are two customer types: Business to business (B2B) and business to customer (B2C). The research will take the perspectives with the focus on the B2C customers. Due to the context, like retailing, the suitable target that can describe the majority of customers are the customers, not the business customer themselves. From a theoretical point of view, the research focuses on the pre-purchase journey with different touchpoints, both online and offline.

## **1.7 Research methodology and data collection plan**

The research methodology used in this thesis is quantitative research. Data is collected through an online survey aimed at shoppers who have purchased skincare products before or have the intention to purchase skincare products in the future. The data is gathered and analyzed to understand the importance of digital touchpoints for retailing customers. The survey will be

delivered through social media, and it is analyzed based on the answers provided. The empirical survey aims to verify these questions above from retailing customers' perspective, to show the relevance of digital touchpoints to their shopping journey.

## **1.8 Structure of the study**

This is the preliminary table of content for the thesis. In chapter two, a further literature review is performed. The first content is the explanation of different types of digital touchpoints. The second sub-section analyses further how these digital touchpoints impact the customer pre-purchase journey. Then the relationship between physical and digital touchpoint are illustrated and described in sub-section three. Finally, some benefits and costs from the customers' perspectives when they use digital touchpoints in different research are discussed.

The empirical research of the thesis is presented in chapter three about the research context, with different goals that this research aims to get. Then, the data collection and analysis methods are presented. The result of the empirical research, which is presented in chapter four, will be analyzed to answer the research questions and the theoretical framework. A new framework will be created, if necessary, based on the empirical result. The last chapter of the thesis concludes the research with the theoretical contributions and practical recommendations for managerial and further research.

## 2 DIGITAL TOUCHPOINTS IN THE PRE-PURCHASE JOURNEY

The chapter discusses the theoretical literature for the study. The aim is to research different theories and hypotheses around the topic of the customer journey, focusing especially on the digital touchpoint role in supporting the journey, the relationship between different digital touchpoints, and between traditional offline touchpoints and digital touchpoints in a retailing context.

### 2.1 Customer journey

The customer journey is divided into different stages, where the customers as individuals go through. Customer journey is also regarded as an interactive customer problem-solving process, where consumers and firms interact (Hollensen, 2015). The flow is in order as need recognition, search process, evaluation, purchase, and after purchase stage, as shown in Figure 5.

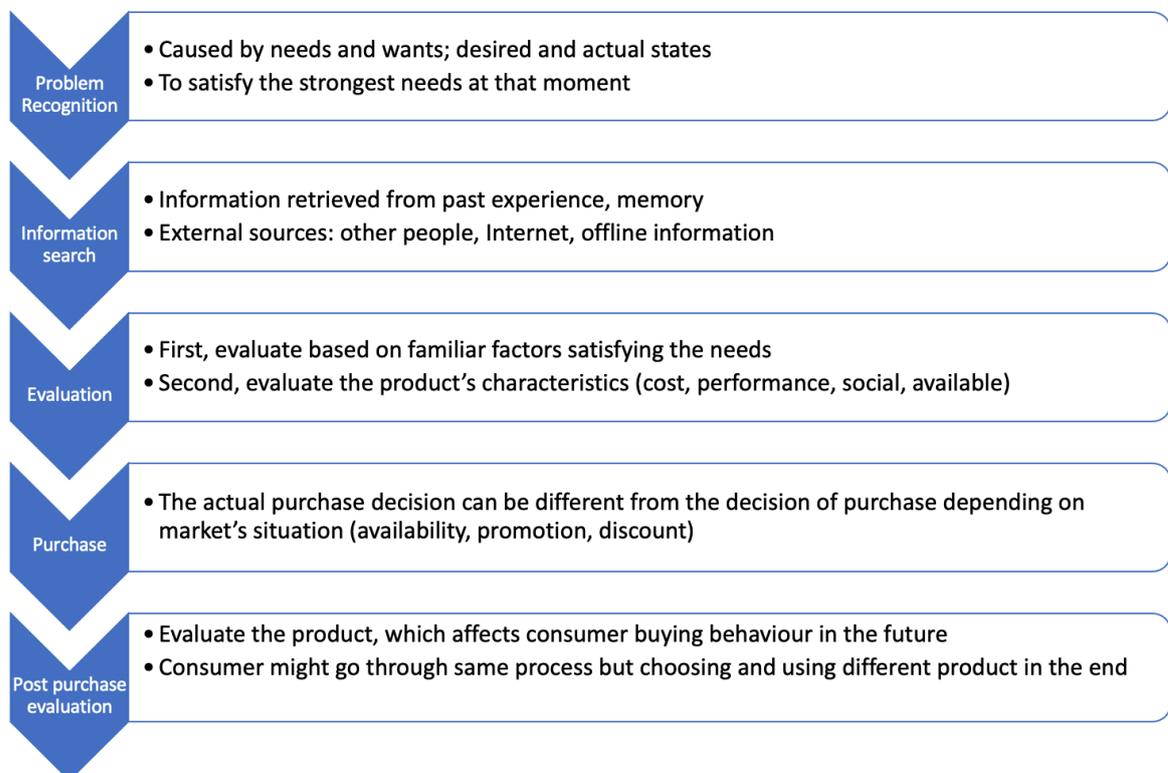


Figure 5 Customer journey process (Adapted from Hollensen, 2015)

Different customer goes through different touchpoints and ends up buying different products (Hollensen, 2015). In the pre-purchase phase, in which customers are searching and evaluating their choices, it requires differences in marketing channels compared to other stages (Framback et al., 2007). During each stage, touchpoints are the components that interact and link the consumers and companies as product providers together. Touchpoints, specifically, are presenting in different forms as they can be either online or offline channel (Framback et al., 2007). Touchpoint can also be understood as the ‘direct’ or ‘indirect’ interaction point between the firms and the customer (Hallikainen et al., 2019). Touchpoints can be short, real or artificial, two-way or one-way communication between customers and customers, or customers and firms (Verhoef et al., 2015). The touchpoints facilitate the exchange of information and exclude the transactions (Verhoef et al., 2015).

### **2.1.1 Pre-purchase stage**

The pre-purchase process in the customer journey is an opportunity for a firm to be for the customers at the right place at the right time, providing the customers the information to support customers making the right decisions (Court et al., 2009). The pre-purchase process is the stage that the customer experiences before the actual service in the customer journey (Rosebaum et al., 2017). Touchpoint, such as media, enables a firm’s brand to be included in customers’ initial consideration when the consumers begin their journeys (Court et al., 2009). There are several factors affecting the pre-purchase stage, in which shopping goal defines the purchase decision, quantity, and timing for the purchase (Puccinelli et al., 2009). The pre-purchase process includes three steps: problem recognition, information search, and evaluation.

#### **Problem recognition**

There is a distinct difference between product function and its job (Nobel, 2011). Moreover, the product is created for the customers to solve their problems, needs, and wants. Therefore, the product should be marketed based on its function, to solve the customer’s problem (Nobel, 2011; Bruner et al., 1988). The problem recognition stage is also regarded as the ‘cornerstone’ in the consumer’s decision process (Bruner et al., 1988). Hence, the product creation and

marketing should be based on customer data (Nobel, 2011) to be relevant to customers. Especially marketing bases on the information on how customers use the product to market the customers when they are searching for products as solutions. Therefore, the step of need recognition enables the customer to engage in shopping to achieve the predefined goals and solve problems (Puccinelli et al., 2009).

#### Information search

According to Court et al.'s research (2009), consumer considers a limitedly initial number of brands, based on previous experience and brand exposure during initial touchpoints. Customers actively search, gather different information, and evaluate different information. Furthermore, based on individual needs and desires, customers add and subtract brands of consideration. The majority of touchpoints are consumer-driven, such as online customer reviews, word of mouth recommendations from closed connections, in-store interactions, and past experiences. During offline interaction such as physical touchpoints, merchandise, and packaging influence substantially customer's search journey. Therefore, effective marketers should interact and recommend the product from the consumer's perspective, on how they perceive the brand, rather than as the company to promote the product. (Court et al., 2009)

#### Evaluation

More consumers are holding off their decision-making process until coming to the store, in the last – evaluation step before the actual purchase. As mentioned before, product packaging, placement, and interactions with salespeople can change consumers' initial decisions. (Court et al., 2009)

Different factors affecting the pre-purchase stage consists of as shown in Figure 6:

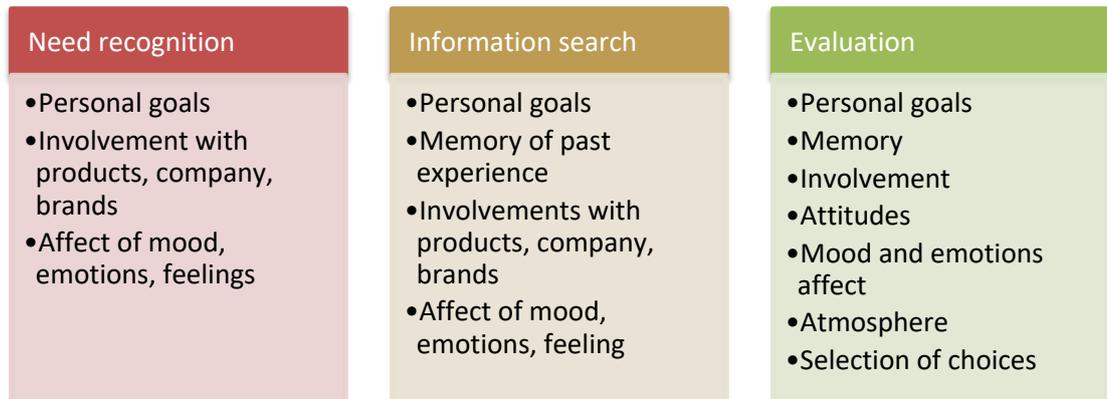


Figure 6 Different factors affecting the pre-purchase stage (Adapted from Court et al., 2009)

A personal goal is a factor impacting customer behavior during the whole customer journey process. Goals, while dependent on needs, trigger the previous memories and facilitate the behavior directions. The personal goal also links to the consumer shopping experience and customer evaluation of brands and shopping satisfaction. Demographics variables such as external environment and free sample can affect the customer need-recognition stage. Interaction between employees and customers is also a key determining factor to customer satisfaction (Court et al., 2009).

Ads are an important touchpoint during the pre-purchase stage, which can define customers' attitudes and evaluation of products. Meanwhile, consumers' attitudes are influenced greatly by a previous memory. Emotions and feelings are also driven by advertisement outlook and theme. Emotions driven from ads can be named according to the themes of the ads, such as shocking, not relevant or impressed, interesting, triggered. At the same time, consumer mood, emotion, feelings also affect customer evaluation of products. (Court et al., 2009)

### 2.1.2 Factors impact customer journey

In these recent years, there are changing trends in consumer buying environment, such as age complexity; gender complexity; individualism; active, busy lifestyles; cocooning (making home environment as comforting as possible), pleasure pursuits, health emphasis (Kenneth E

& Donald B., 2017). Customers, with their buying behavior, set boundaries and decide which product to stay in the market. Ultimately, customers will shape the market's need and characteristic (Hollensen, 2015). Therefore, customers' perspectives, buying behaviors and characteristics matters in the customer journey.

Customers nowadays are taking initiatives in their journey (Edelman, 2010; Hollensen, 2015). At the same time, firms are also active in monitoring the controllable variables, which makes the roles of the firm strong in designing suitable touchpoints to support customers' purchase decision (Hollensen, 2015). Moreover, with the constant impact from media and products choice, the customers focus on only sets of products based on their personal criteria. Due to customers' differences in personal characteristics such as personal needs, values, past experience, lifestyle and social influences such as social class or family situation, their customer journey can be different (Hollensen, 2015; Edelman, 2010). Customer's choice is also impacted by external factors such as online reviewers, retailers, company brand (Edelman, 2010). Indeed, society matters, however, its effect on customers' decision is affected by customer characteristics (Verhoef et al., 2015). The more customers buying behavior information are retrieved and understood, the better marketers can facilitate their customer journey process to solve customers' problems and desires (Hollensen, 2015).

Hollensen Svend, in his book Marketing Management (2015), had an interesting separation theory between customers and consumers. There are many types of customers, which define the customer roles in the customer journey. To understand the customer journey, the starting point is to recognize which roles the customer play in different stage. Different roles sometimes can be applied to the same person throughout the whole customer journey process. (Hollensen, 2015). For example, the initiator is the one who starts the shopping journey searching for the desired product. The influencer(s) appear in the search stage looking for information or giving advice to the customer who is looking for a product. The decider is the one who which product to purchase, under the influence of the initiator and the influencer(s). The purchaser makes the actual payment to get the product. The user is the one who uses the product at the end of the pre-purchase stage. There is also the gatekeeper role, who controls the information flow during the buying process. (Hollensen, 2015)

Different roles of customers affect the customer journey process can be performed by different individuals, as they affect the purchase decision and usage of the product. Therefore, it is crucial to differentiate different roles as people during each stage of the customer journey, so that the marketing methods can be adapted to suit the different needs of customers.

The process impacting customer behavior, which indirectly affects the customer journey and different touchpoints, is ‘stimulus’, ‘organism’ thus, ‘response’. The examples of stimulus, as triggers, can be culture, social influence, different connections, marketing mix. The examples of ‘organism’ result from ‘stimulus’ are psychological factors, physiological factors, perceptions, and feelings. The examples of ‘response’ result from this process are customer responses in different buying behavior, brand attitude, and actual purchase. (Hollensen, 2015)

Different customers can have different shopping journeys and experiences due to their personal perception of product importance and risk. A product can trigger high involvement from one customer, but low involvement from another. Customers’ personal perceptions can relate to their self-image. For example, buying a car for some customers is a high-involvement shopping process, in which the car can show their identity and lifestyle. Whereas buying a bottle of ketchup is a low-involvement shopping process that does not require much searching and consideration. High-involvement products are usually evaluated, or quality already is expected before purchasing, while low-involvement product’s quality is evaluated after testing. (Hollensen, 2015)

## **2.2 Digital touchpoints**

This section includes digital touchpoints’ definitions, their effectiveness, and roles in the pre-purchase journey defined in the previous literature.

### **2.2.1 Definitions of digital touchpoint**

The rapid development of technologies has expanded the original touchpoints of the customer journey with digital touchpoints, the channels where customers and firms interact directly and indirectly over the Web. Due to its online availability 24/7, digital channels have become the

important communication channels between firms and customers. Digital channels are a must in a firm's consideration to improve the customer journey and seize the unseen opportunities to improve the customer's satisfaction and its services. (Straker et al., 2015)

In Hallikainen et al.'s research (2019) about customers' preferences over digital touchpoints, they summed up different touchpoint definitions. In the Figure 7, different touchpoints are categorized based on the source or initiator, either the customers, firms, or the two-side interaction itself, followed by the research source.

Touchpoints	Input from			Research by
	Customers ←	Interaction	→ Firms	
Categorize	Earned channel		Owned channels Paid channel	Stephen and Galak (2012)
	Community	Cooperate	Function touchpoint	Straker et al. (2015)
	Customer-owned	Social / External	Brand-owned Partner-owned	Lemon and Verhoef (2016)

Figure 7 Digital touchpoint categories

Nakano and Kondo (2018) categorized different customers group based on their shopping channel, namely 'multichannel enthusiasts', 'uninvolved shoppers', and 'store-focused customers'; 'paid channels', 'owned channel' and 'earned channel' by Stephen and Galak (2012); 'brand-owned touchpoints', 'partner-owned touchpoints', 'customer-owned touchpoints' and 'social/external touchpoints' by Lemon and Verhoef (2016); functional touchpoints, social touchpoint, community touchpoints, and cooperate touchpoint by Strater et al. (2015).

To dig deeper, the first concept of a digital touchpoint is explained through 'owned media' and 'earned media'. The concept is taken from the firm's perspective, which explains 'owned media' as the channel firm can manage, such as the firm's website, and 'earned media' as the channel the customer creates for the firm, such as brand ambassador (Hallikainen et al., 2019). Similarly, in Stephen and Galak's research, 'earned channel' is the 'media activity' generated for the firms or brands by outsiders, such as customers. The word-of-mouth concept (WOM) is

a popular marketing strategy that can also be understood as the powerful touchpoint between the firm and the customer.

Through research of Straker et al. (2015), Stephen and Galak (2012), and Lemon and Verhoef (2016), digital touchpoints can appear through different forms. For example, in the research of Straker et al. (2015), live chat is the channel where real-time two-way interaction happens with higher personalized involvement. Forums and blogposts stand as the community representative (Straker et al., 2015). Frequently asked questions and customer feedback are ‘cooperate touchpoints’, where the company tries to answer customers’ questions and get the customers’ feedback. Social media, such as Facebook, Pinterest, YouTube to name a few, have different uses and strengths as the networking platform, photo-oriented, or video-focused sharing platform (Straker et al., 2015).

### **2.2.2 Digital touchpoint effectiveness**

The effectiveness of the channel also depends on the user’s willingness to use Internet-based technology. Different customer age groups might react differently to digital technology ranging from optimism to discomfort and insecurity. Therefore, the firm cannot reach all customers if only using only digital touchpoints, because some customers will prefer the traditional channel better. Moreover, there are different preference levels among digital touchpoints. As the ‘anti-social media’ segment, customers find the emails, company website, and search engine result more trustworthy and beneficial than the social media touchpoints. (Hallikainen et al., 2019)

On the other hand, the ‘digital channel enthusiasts’, who are generally younger at ages (Hallikainen et al., 2019; Stephen and Galak, 2012) and have more experience with Internet usage (Frambach et al., 2007) find the digital touchpoints highly beneficial and innovative. The fast-adapting attitude towards digital channels encourages retailers to utilize digital channels further with younger customer group, which grows into the main customer population.

The ‘earned’ digital channels, as previously defined, highlight the highly active involvement from customers towards the firms digitally. This active participation and contribution from customers play an important role to improve the effectiveness of digital channels. It is also

possible to recognize the active contribution of consumers via digital channels with its impact on firms' sales via analytics.

There are many reasons why customers taking initiatives in different digital channels. First, customers can express their questions and concerns about the products directly with the firm anywhere they are without having to go to a physical shop. Secondly, they can actively involve to co-create products and services with the firm to suit their needs better. Thirdly, with an online community of other customers involved, customers can share experiences and look for advice, both negative and positive feedbacks from others directly without the firm's permissions (Straker et al., 2015). The information about the product and firm's activities are transparent and constantly shared by customers digitally, such as the information about 'product quality, lack of availability, poor service and high price' (Straker et al., 2015).

Usually, the customer trusts the reviews from others rather than the company itself. the communication between the firm and customers can start from online social media to the interaction in the retailing shop between customers and retailer (Edelman, 2010; Hallikainen et al., 2019). Therefore, it is crucial for marketers to understand how customers use different channels to communicate with retailers (Hallikainen et al., 2019). At the same time, the concrete line between offline touchpoints and digital touchpoints is blurring (Hallikainen et al., 2019) when the concept of multi-channel is booming among retailers.

Not only customers' experiences with the Internet, their desires, and trust affect the effectiveness of the digital touchpoints, but the channel itself plays a vital role helping customers to fulfill their needs. Customers usually evaluate different channels while searching for their solutions to decide which website information is worth consideration (Framback et al., 2007). The large pool of information enables digital channels to be the preferred channel in the information search, because of timesaving, lower cost, and fast speed. Moreover, online channels provide customers with social platforms for customers' needs of 'social presence and positive psychosocial benefits' (Framback et al., 2007). The channels that can drive customer positive psychosocial benefits win more customers. Therefore, marketers need to understand each unique and interdependent role of different touchpoints to the customers' feelings

(Framback et al., 2007), and enhance the feeling of excitement, fun, happiness, self-assurance to different digital touchpoints.

Through different channels, more customers' information is collected, which increases the understanding of the customer journey better (Edelman, 2010; Hallikainen et al., 2019) and boosts innovation and improvement of the customer journey (Hallikainen et al., 2019). The current open-access of available data worldwide has made Technology 4.0; particularly, big data and analytics become more common and useful to understand customers than ever before (Straker et al., 2015). This data collection is easier with digital channels due to its online availability; therefore, digital touchpoints can boost the understanding of customers.

Along with data analytics, digital touchpoints also increase the visibility of brand exposure through an online large-scale customer reach, fast connection and online interactions between customers (Edelman, 2010; Straker et al., 2015). Therefore, digital touchpoint influences the brand image for customers, enabling reaching the customers faster and broader at a cheaper cost (Hallikainen et al., 2019). Moreover, Verhoef et al.'s (2015) research about omni-channel retail highlighting the impact of digital channels has innovated the retail business model, along with the shopper behavior.

Digital touchpoints benefit not only retailers but also customers. When the customers are taking initiative in their search journey, digital channels enable better information flow with a variety of information aiding customers' decision-making process (Hallikainen et al. 2019). When customers use different digital touchpoints frequently throughout their journey, the interaction between the firm and customers increases. This interaction happens all the time with customers who always like to view, search, and inquire about different information on digital channels. (Straker et al., 2015)

It is also difficult to join all the different channels that the Internet provides. However, being active in which channel you are present is the key to drive the most effectiveness out of the digital channel (Straker et al., 2015). Meanwhile, the right touchpoints that customers use, those that matter in the customer journey should be in the focus (Edelman, 2010; Hallikainen et al., 2019).

As explained above, the customers might trust other people's opinions more than those that from the company. Hence, there is an increasing trend in research about firms working with an influencer, to promote the product, to increase the customers' trust, and encourage purchases. While it requires heavy investment to each touchpoint for the firm to improve the customer journey, a hybrid combination of different channels is highlighted again to utilize and boost the effectiveness of all the touchpoints (Edelman, 2010).

### **2.2.3 Roles of digital touchpoints in the pre-purchase stage**

Digital touchpoint is one of the customer preferred channels in the search process (Framback et al., 2007). In the customer's search process, advertisement influences consumers' moods, feelings, and perceptions towards the brands and product during the search process (Puccinelli et al., 2009; Bruner et al., 1988). Moreover, digital touchpoints stand as one external source of information that has both marketers'-controlled and consumers'-controlled touchpoints types (Schmidt et al., 1996). At the same time, the amount of relevant information also shapes the market competition to win customers where physical product appearance cannot be compared (Butler et al., 1998).

Digital touchpoints are important factors to understand consumer behavior. They enable consumers to be proactive in consumers' search journey, which is also based on consumers' experience using the Internet. Digital touchpoints provide unlimited channels for firms and consumers to interact and communicate. Images, videos and texts enhance the firm's brand, which delivers the product information into consumers' memory during the search process. The virtual customer journey, which combines digital touchpoints, is also similar to the offline customer journey in the process:

- Problem recognition
- Information search
- Evaluation
- Purchase decision
- Post-purchase decision

. (Butler et al., 1998)

Internet cookies enable firms to track consumers' activities while shopping (Butler et al., 1998), which helps to understand more the consumer's shopping characteristics, consumer behaviors and to customize the firm-controlled touchpoints with different customers' needs and styles.

The Internet also facilitates 24/7 communications between firms and customers. Digital touchpoints, such as automated marketing emails, social media informational posts also proactively trigger customers' needs and desires for a product via push and pull marketing. The information is also relevant for customers' future shopping.

During the evaluation stage, digital touchpoint stands as the majority touchpoints (Court et al., 2009). Virtual communities with different feedbacks (negative and positive) gain trust from the consumers, similar to traditional word of mouth from closed connections such as family and friends. There is no big difference between the impact of traditional and digital touchpoints on the customer journey. All touchpoints matter. Therefore, understanding consumer behavior is the core. It is not about the quantity of the touchpoint, but the touchpoint's quality (Butler et al., 1998), standing at the right place at the right time.

## **2.3 Relationships of touchpoints**

This section discusses the relationship between digital touchpoints, and between digital and traditional offline touchpoints in the customer journey.

### **2.3.1 The relationship between different digital touchpoint**

As the customers are moving simultaneously between different smart devices such as phones, tablets, and pc, the boundaries between different digital channels themselves also fading quickly. This results also from the fact that the customers nowadays have more touchpoint options available to choose and use (Hallikainen et al., 2019). It is good to understand different digital touchpoint's effectiveness for customers. In Hallikainen et al.'s research (2019), different benefits and customer preferences for each touchpoint categories also highlighted. Customers prefer the digital touchpoints that provide 'clear functionality' such as emails and the firm's website over social media, which at the same time, these touchpoints are firm-owned

channels where firms can control. Although social media and community platform provides real-time sharing and interaction, they appear to have less impact on the customers' preference. Therefore, these social touchpoints can be more beneficial towards brand awareness, product attraction and interest for retailers. The research also highlighted that the benefits of digital touchpoints should not be separated from the evaluation of all touchpoints.

As the customer journey can be mixed between various online and offline interactions, therefore, retailers should focus on the touchpoints that benefit the most, mix channels rather than single channel (Hallikainen et al., 2019). Hence, Edelman (2010) recommended marketers to focus investment on the customer decision journey, instead of putting the money across media. Framback et al. (2007) had written in their research that firms should reach customers with both online and offline channels throughout the pre-purchase stage to improve the customer journey's effectiveness (Framback et al., 2007), to know the effectiveness of the different channels. Through understanding different touchpoints that the firm owns and matter to the customers, firm can improve the customer journey much better with efficient resources. At the same time, when using the efficient multi-channel strategies, all the channels contribute to the customer journey process in the way of connecting and contributing the information across each other (Straker et al., 2015; Verhoef et al., 2015)

Multi-channel retailing and omni-channel retailing have been a fascinating topic among researchers since the landscape of retailing and consumer behavior change continuously due to the impact of technology. While Straker et al. (2015) research encouraged using different channels to boost the flow of communication, another research from Verhoef et al. (2015) in the same year 2015 recommended retailers to unify and synergize different channel smoothly to break the barriers of two-way or one-way communication between firms and customers. Omni-channel management is defined as the control and use of various touchpoints (offline and online, different digital channels) in a way that optimizes the customer experience and the channel performance (Verhoef et al., 2015).

Stephen and Galak (2012) suggest in their research that the advertising impact from one digital channel can affect other digital channels positively. However, Straker et al.'s research (2015)

points out it is more difficult to make customers engage with a particular channel, as customers have a variety of channel choices available. In this way, they can get the most value out of different touchpoints to complete the journey in their satisfying standard. For example, the customer might search information in one channel, swift to another for purchase and receive the product in another channel (Straker et al., 2015; Verhoef et al., 2015). Verhoef et al. (2015) studied the impact of different factors affecting customers’ choices of an online touchpoint in the UK grocery market. The research has shown that online channels are the popular starter among retailer lists. However, the higher involvement of different online shopping experiences increases, consumers’ loyalty to particular retailers decreases (Verhoef et al., 2015).

### 2.3.2 The relationship between physical and digital touchpoint

Customers switch between offline and online touchpoints simultaneously in their customer journey (Framback et al., 2007). Customers are different in their shopping characteristics and preferences; therefore, a variety of touchpoints can suit different customers’ needs (Lemon et al., 2016). Both traditional and digital touchpoints impact customer engagement (Islam et al., 2016), through engaging the customers with relevant touchpoints to optimize their experiences. Furthermore, it takes several various touchpoints to build trust with customers and increase the brand’s credibility, as illustrated in Figure 8 (Jeavons, 2020).

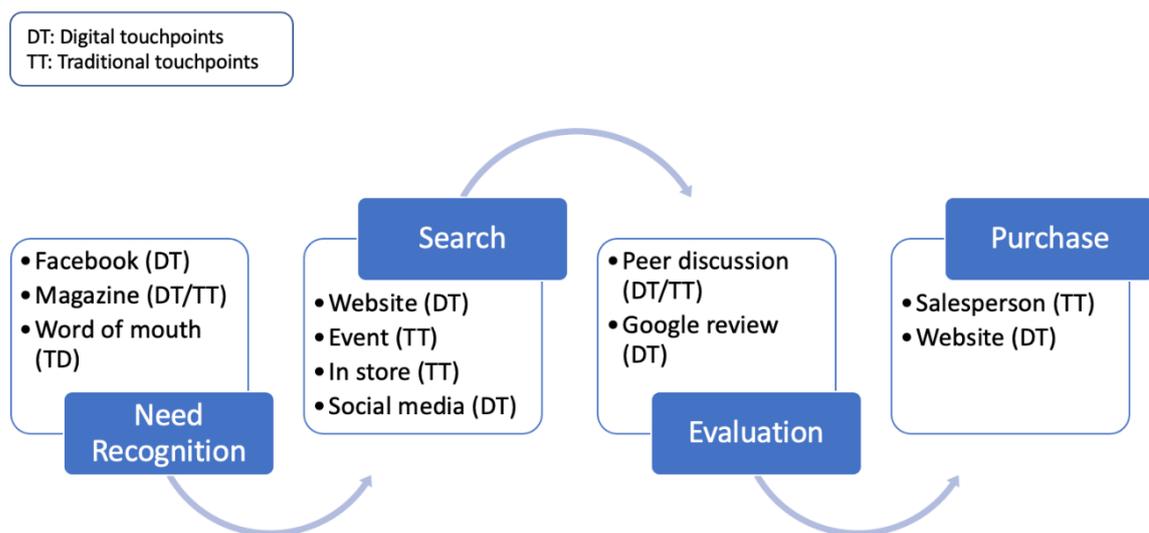


Figure 8 The customer journey with digital and traditional touchpoints (Adapted from Jeavons B., 2020)

In Edelman et al.'s research (2015), using both digital and physical touchpoints enables the firm to 'aggressively shape' the customer path, and lead customers effectively in their shopping journey. Physical and digital touchpoints modernize the customer journey with deep customer understanding and automated personalization. Physical and digital touchpoints are the combination of 'sophisticated IT' and 'creative design thinking & novel managerial approaches'. The knowledge about customers physically and virtually helps firms to predict and enable the customer's next step or next purchase in the customer journey (Edelman et al., 2015).

Meanwhile, in Lemon et al. research in 2016 about the customer experience through the customer journey, different mixed touchpoints are important to drive customer's cognitive, emotional, behavioral, sensorial, and social responses. Different touchpoints enable the customer to co-create the experience with the firm. Interactive touchpoint connections create opportunities to connect firms and consumers and increase customer engagement. Channels are different in benefits and costs, which make them useful at different stages and at different times in the customer journey. At the same time, touchpoints affect one another in the customer journey. However, it is important to identify the critical touchpoints for customers that influence the heaviest to the purchase outcome (Lemon et al., 2016).

## **2.4 Direction from the previous theories to the empirical research**

All in all, there are a few key topics that need to be investigated in the empirical research, in order to find out the key touchpoints in customers' search journeys. There are five key research topics of the research: Digital touchpoints definition, digital touchpoint effectiveness, impacts of digital touchpoints to the pre-purchase process, relationships among digital touchpoints, and the relationship between digital and offline touchpoints. In the area of digital touchpoint definition, few previous theories are tested such as touchpoint roles between customers and firms, customers roles in customers search journey and their impact, touchpoints categories, the effectiveness of two ways communications between firms and customers.

In the area of digital touchpoint effectiveness, the previous theories which are tested are customer search habits, customers time of making purchase decisions, different factors affecting customers shopping habit, the trust to the Internet and its channels. In the area of the relationship among digital touchpoints, it is essential to know customers' opinions about different online touchpoints, and at which stages, in the search journey, customers use the specific channels.

In the area of the relationship between digital and offline touchpoint, the previous theories about various physical touchpoint effectiveness are tested, such as product packing, product placement, and interaction with sales seller. Moreover, it is also good to understand customers' own shopping criteria, which can shape the customers' search habits and product evaluation.

All of these previous theories are tested in the empirical part through a self-design questionnaire for customers to understand their opinions and draw the updated theoretical framework about the customer search journey.

## **3 RESEARCH DESIGN AND METHODS**

### **3.1 Research design**

Research design describes the research direction to answer the research questions (Saunders et al., 2019). As pre-defined in the research methodology, quantitative research will be applied for this specific research, based on the mass scale advantages that the quantitative method of research can provide. Quantitative research is the data collection technique that results in and utilizes numerical data (Saunders et al., 2019). To add, the research follows the mono method of quantitative study, in which getting the data through a questionnaire as a single data collection method and follow the corresponding quantitative analytical procedure. Therefore, quantitative research, through a questionnaire, is the tool to collect and analyze real customers' data uses of different touchpoints in the search journey.

The research is a mix of exploratory study and descriptive study, which is called explanation – descripto study (Saunders et al., 2019). An exploratory study is a way to explore one topic of interest and gain insights into the topic by asking relevant questions (Saunders et al., 2019). The main topic of the research is about the search process in the customer journey, with the sub-questions about touchpoints definitions and relationships to gain insights about the main topic research, the search journey. Therefore, the main research question starts with the question ‘What’, as ‘What are the digital touchpoints in the customer journey?’, along with the sub-questions ‘What is digital touchpoint effectiveness?’, ‘What is the relationship among the digital touchpoints?’, ‘What is the relationship between digital and offline touchpoints?’. The exploratory question also usually begins with the question ‘How’ (Saunders et al., 2019), as in the how sub-question about the relationship: ‘How digital touchpoint impact the pre-purchase process of the customer journey?’. An exploratory study is helpful to enrich the literature world with more insights and understanding about the touchpoints from the customer perspectives in the popular key search theme ‘customer journey’ in the business to customers perspective. Therefore, a rich amount of previous popular literature is used as fundamental blocks for this research, at the same time, some theories standing as the hypothesis to test in the empirical part to today’s customers’ perceptions and usages.

The research is partially a descriptive study in the way to gain deep insights to support further study in the future (Saunders et al., 2019). The research provides various impacts and roles of online touchpoints of the real current customers through survey, to gain accurate opinions from the customers' perspectives in today's world. Also, the research extends to include the description of online touchpoints' characteristics and uses, besides its definitions. Therefore, this research is not providing an end but a means to deepen the literature about touchpoints in the customer journey, along with providing insights and opening more ideas for future researchers who are keen on customer journey and roles of touchpoints.

There are hypotheses based on the previous literature and tested through the questionnaire for respondents. Hypotheses' goal is to help to answer the research question on a deeper level regarding the customer search journey and different affecting factors.

### **3.2 Data collection methods**

The goal of the research is to understand the customer search process before purchasing skincare and cosmetics products, regardless of purchasing methods (online or offline). The data for the research is collected from anonymous consumers' answers. In order not to generate a positivist result, the audience for the survey will be random anonymous customers of any skincare and cosmetics brands. The consumers volunteer to participate in the survey at their preferred time and place. The data collection method is described in figure 9.

The questionnaire is carefully created based on the goal of the research, along with the previous literature standing as the foundation of the survey. The questions then combined into an online answers collection tool (Qualtrics). After the answers are recorded, they are cleaned, re-recorded, and arrange to support the analyzing systems, which are correction analysis and mean analysis in STATA. These methods are chosen to verify customers most common opinions about different digital touchpoints and their effectiveness, along with finding out the particular relationship between customers actions with touchpoints and among touchpoints.

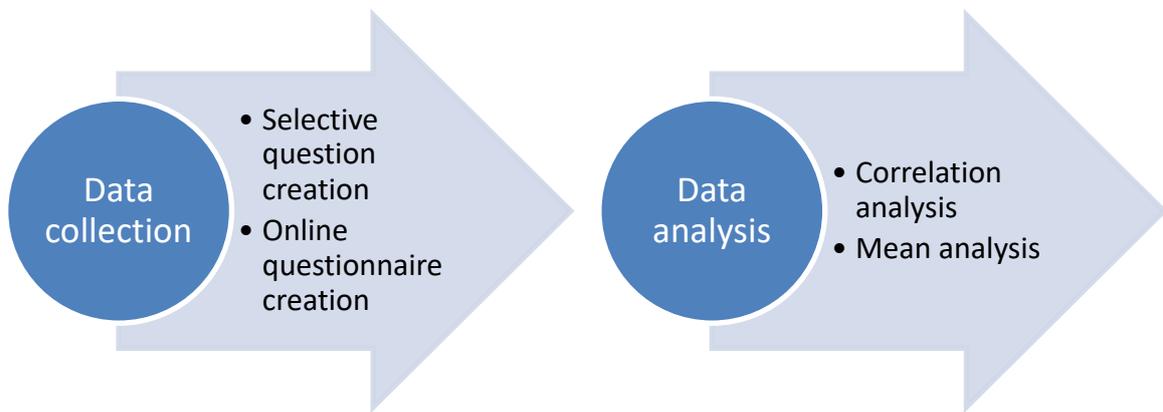


Figure 9 Data collection and analysis

The data collection is through an online survey Qualtrics. Therefore, in this research, a sample of valid random 198 responses is collected to analyze the impact of different touchpoints during the search process. The greater size of the sample, the higher likeliness of the target population it can represent. Moreover, the mean calculated for the sample represents the mean for the target population (Saunders et al., 2019). Therefore, there is a mean table that summaries different customers' opinions, which can be found in Table 6. After submission, the respondents cannot go back and change their answers. The audience of the research is two sets of consumers: Finnish consumers and international consumers (America, South Korea, Vietnam, Finnish to name a few). The time frame for collecting data is two weeks from March 2nd to March 16th, 2021. The survey was promoted online through Facebook, LinkedIn, and websites focusing on cosmetics and skincare users.

### 3.3 Survey studies – Questionnaire

As previously mentioned, the study is an explanation – descripto study, therefore, the data collection's questions also start with 'What' and 'How', to explore customers' opinions about

different touchpoints. Moreover, the questions aim to gain a description of customers' search process using different touchpoints, as to how often they use online touchpoints, and in which purposes. The goal is to use the deductive research approach to go deeper in researching online touchpoints, through the questionnaire. The survey studies also provide an easy and economical comparison for a collection of data representing a sizeable population (Saunders et al., 2019), in this case, representing the ideas of users of cosmetics and skincare products. The survey method is chosen for its possibility to generate and model the relationships between online and offline touchpoints in the customer journey process.

Moreover, the goal of the questionnaire is to describe the population's characteristics at whether a fixed time or overtime for comparison. Questionnaire and corresponding analytics support quantitative research method as the mono quantitative study with the single data collection technique. When every respondent is provided with the same question, it enables the efficiency of collecting data for quantitative analysis. A questionnaire has many types: self-completed questionnaires, Internet questionnaires (which is distributed through the Internet), web questionnaire (respondents accessing through a hyperlink or mobile devices). Different data can be collected through the questionnaire as shown in Figure 10: facts, demographics, respondents' attitudes and opinions, behaviors, and events. (Saunders et al., 2019).

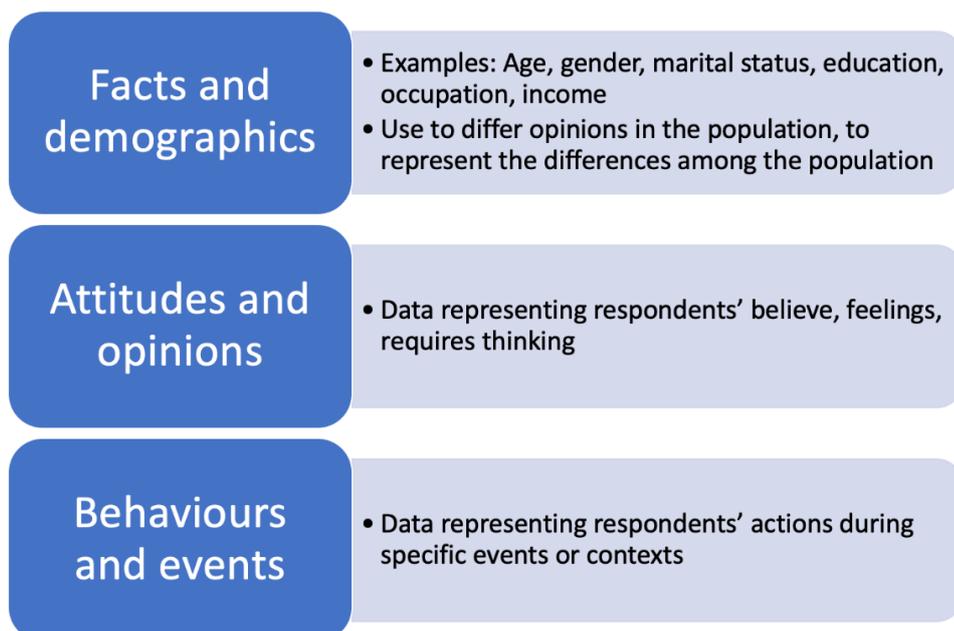


Figure 10 Questionnaire question types (Adapted from Saunders et al., 2019)

The consumers are provided with a questionnaire containing different kinds of questions about the pre-purchase stage activities they experienced in the past. The questionnaire focuses on different channels aka touchpoints, especially the online touchpoints that the customers have experienced. The questionnaire will be distributed through the online platforms (social media), with a time frame of a two-week data collection period. The questionnaire language is in English and Finnish, with a focus audience living, studying, and working in Finland and abroad. The tone and expression of the questionnaire need to be clear, transparent, and logical, so the questions can be understood by different participants. A set of multiple choices and rating questions are created, with a scale from 1 to 7 to give the respondents more chances for accurate ratings. There are also extra questions about respondents' thoughts of different touchpoints, which also stands to give more data about other touchpoints, which are not included in the research analysis. The questionnaire is included in Appendix 1.

The first part of the questionnaire is to list out different touchpoints customers often go through and different customer roles while searching for cosmetics and skincare products. The set of questions also includes questions about respondents' age. The questionnaire was self-designed. Different previous theories described earlier in the theoretical part are used to understand different respondents' roles and the touchpoint they go through in the searching process.

The second part of the thesis is to understand deeper about different digital touchpoint effectiveness. Moreover, there are different questions about customers' motivation for searching, intention, platform, Internet uses, online channel preferences. These questions are to understand customer motives behind going online for searching.

The third part of the questionnaire is about the online touchpoint's influence on the customer pre-purchase process and the relationship between online touchpoints. The questions focus to measure customer's opinions about Internet information rating, time spent for information searching, the effectiveness of more touchpoints to the customers' purchasing process.

The final part of the questionnaire is to understand the relationship between digital and offline touchpoints. The questions focus to find out about what offline touchpoint most often affect customer buying decision, assuming they have made product decision through online research. Moreover, consumers' product criteria and opinions about the separation between online and offline are included in this final part of the questionnaire. The respondents are asked to answer all the questions besides the open questions to avoid missing data.

Especially, in the questionnaire, there is a set of ranking questions to measure the respondents' value orientation towards the search process, which is measure by self-designed portrait values questionnaires (PVQ), adapted from the Schwartz Portrait Values Questionnaire. PVQ method was chosen to be user-friendly and easy for respondents to understand the question context, along to understand different values and factors influencing respondents' actions (Chowdhury, 2021). The PVQ is presented in Table 1:

Table 1 PVQ questions

	PVQ measures
<b>Touchpoint influence</b>	
BuyTP_RetailDiscount	Retailing discount
BuyTP_OnlinePromotion	Online promotion
BuyTP_MediaAds	Social media ads
BuyTP_Influencer	Influencers post and videos
BuyTP_Newspaper	Newspapers and ads
<b>Searching reasons</b>	
SearchPurpose_Ideal	To look for ideal product
SearchPurpose_Prices	To check price
SearchPurpose_Info	To find information about the product

SearchPurpose_Use	To know how to use the product
<b>Shopping habit</b>	
BuyCriteria_PreviousPostExp	Product with previous positive experience
BuyCriteria_WishList	Product on shopping list
BuyCriteria_Promotion	Product on promotion
BuyCriteria_Trending	Product in trending
BuyCriteria_SeeAtShop	Product seen at the shop
BuyCriteria_RecommendedOnline	Product recommended by online reviewers
BuyCriteria_RecommendedFamilyFriends	Product recommended by family or friends
<b>Online channel</b>	
InternetSearch_SearchEngine	Online search engine's top results
InternetSearch_SocialMedia	Social media
InternetSearch_Firm'sWeb	Firm's website
InternetSearch_ForumBlogs	Online forum and personal blogs
InternetSearch_Other	Other channels
<b>Channel trust</b>	
Trust_RetailWeb	Retailing website
Trust_SellingPlatform	Online selling platform (like Amazon) information
Trust_Blogs	Online personal blogs
Trust_Media	Social media

In the PVQ questions, the respondents are asked to evaluate different choices on a scale from 1 to 6 (1 is the least used/trusted/important, 7 is the most used/ trusted/important). The choices are generated from the previous literature.

### **3.4 Data analysis methods**

The research's hypotheses are tested through these respondents' answers. The survey will test the application of the previous theories with the current consumers' behaviors. At the same time, the survey result will be analyzed their correlation and similarities to find out and develop a new theory (if applicable). Moreover, the result of the questionnaire will examine the relationship between different touchpoints, which are measured and visualized by statistical and graphical techniques (Saunders et al., 2019). Stata is used as the software for data analysis to test the validity and credibility of the research, along with Excel visualizing the data and other analysis, such as hypothesis testing, in which compare the data from respondents' answers to a theoretical scenario, through testing the likelihood of a relationship (Saunders et al., 2019). The numerical data are tested for normally distributed populations, contain equal variances, independence. For categorical data, the non-parametric statistic measure whether the data are not normally distributed. Meanwhile, data normality will be tested with the value of the mean, median, and mode. (Saunders et al., 2019).

### **3.5 Reliability and validity**

Reliability and validity are important qualities to validate the usage of empirical research. With the data collection method via questionnaire, the questions must be interpreted by the respondents the same way as the researcher, and the answers are understood the same way by the researchers as the respondents. The data needs to be collected consistently to be reliable. There are three types of validity for the questionnaire: content validity, criterion-related validity, and construct validity. Content validity is the extent to which the questionnaire questions cover the questionnaire goals of the research. Criterion-related validity, which is also known as predictive validity, is the ability to generate predictions via correlation analysis from the respondents' answers, such as customers' future buying behaviors. Construct validity is the

extent to measure the whole set of questionnaires is useful for the goal of the research. (Saunders et al., 2019).

The questionnaire is designed with three main parts with detailed sub-questions, as shown in Figure 11, to cover the research topic (*Content validity*). With the first part of ‘Touchpoint definitions’, there are six sub-questions to 1) understand the customers’ roles in the searching process (predefined multiple choice), 2) different firm-owned touchpoint and consumers/owned touchpoint that customers have met (predefined multiple choice), 3) Other touchpoints that customers personally met (free text), 4) the importance of different touchpoints to customers decision making process (rating score from 1 to 7), and the questions about customers demographics information: 5) Gender and 6) Age.

The second part of *Customer searching habit*, there are six sub-questions to research customers’ opinions about 1) Instore communication effectiveness (Yes/No multiple choice), 2) Time to make purchase decision (Multiple choice), 3) Time of searching for information (Multiple choice), 4) Emotion state while searching (Multiple Choice), 5) Purpose of the searching process (Rating score) 6) Criteria for the product (Ranking score). Getting deeper into the online touchpoints, the third part is designed to understand the online touchpoint effectiveness with 9 questions ranging from 1) the number of Internet uses every day (Scaling question), 2) Popularity of different online sites (Rating score), 3) Other Internet channels (Free text), 4) Online searching preference (Yes/No multiple choice), 5) Internet hour spent for searching (Scaling question), 6) The effectiveness of information from the Internet (multiple choice), 7) Preferences of more touchpoint (Yes/No multiple choice), 8) Frequency to buy the online promoted product (multiple choice), 9) Effectiveness of online channels information (Rating score).

The last part, which is to answer the last research question about the relationship between online and offline touchpoint contains 4 sub-questions. These sub-questions are created based on a scenario that customer has searched the cosmetics product online (online touchpoint), and now he/she is going to the store to purchase the product (offline touchpoint): 1) Influence of different offline touchpoint to the product decision (Multiple choice), 2) Product criteria 3) Other criteria

(Free text), 4) Opinions about isolation between online and offline touchpoint (multiple choice).

The questionnaire limits three parts to go along with the main research questions about different touchpoints (online and offline), customer searching habits, and the Relationship/ Effectiveness between online touchpoints and online touchpoints. With a population of 198 respondents, the analysis generates general customer searching habits and shopping trends based on the product criteria, time of searching, and emotion while searching (*Criterion-related validity*). The questionnaire is built based on the research sub-question to understand the main question of the customer searching journey and the effect of different touchpoints on the customer journey. Moreover, the questionnaire question is built based on the previous literature, to test the hypotheses about customers' searching habits. Therefore, the research questionnaire provides insightful information about customers' searching habits under the Internet dominant age (*Construct validity*).

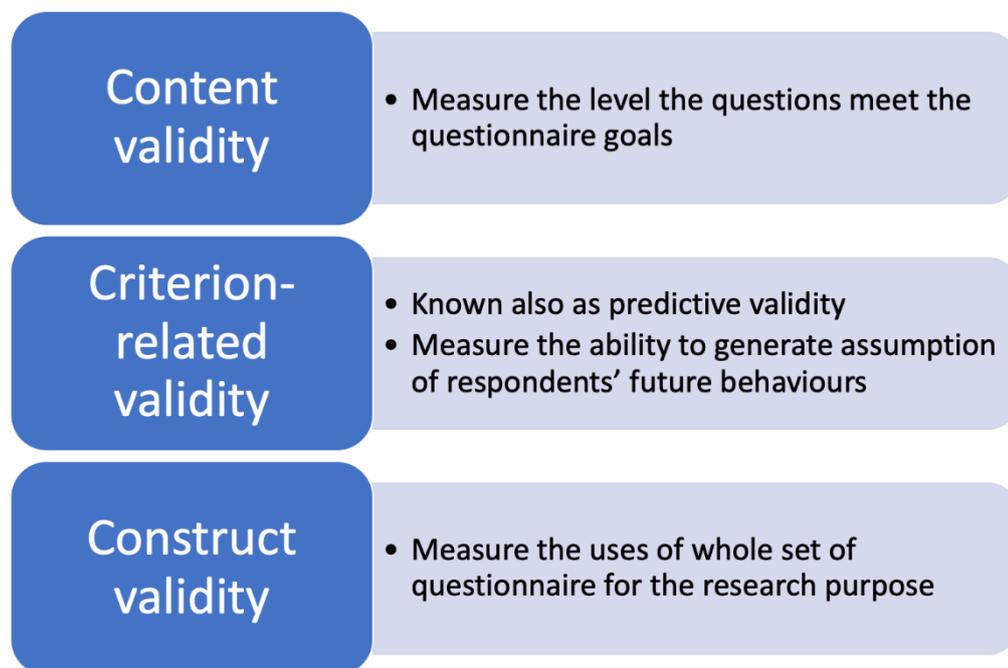


Figure 11 Research validity (Adapted from Saunders et al., 2019)

Reliability stands for consistency in the research process. It refers to the questionnaire being consistent, highly logical, and related to the research goal. There are three ways to evaluate the reliability of the questionnaire, as illustrated in Figure 12, which can be considered throughout the research process. Test re-test is the approach that encourages the researchers to ask respondents to answer twice the survey to test for consistency in the answers. Internal consistency measures the consistent correlation between different answers, in which Cronbach's alpha is a frequently used method. Alternative form measures the reliability of the questionnaire with a method of the same question being asked in a different form to compare the respondent's consistency in responding, along with checking the questionnaire's questions. (Saunders et al., 2019).

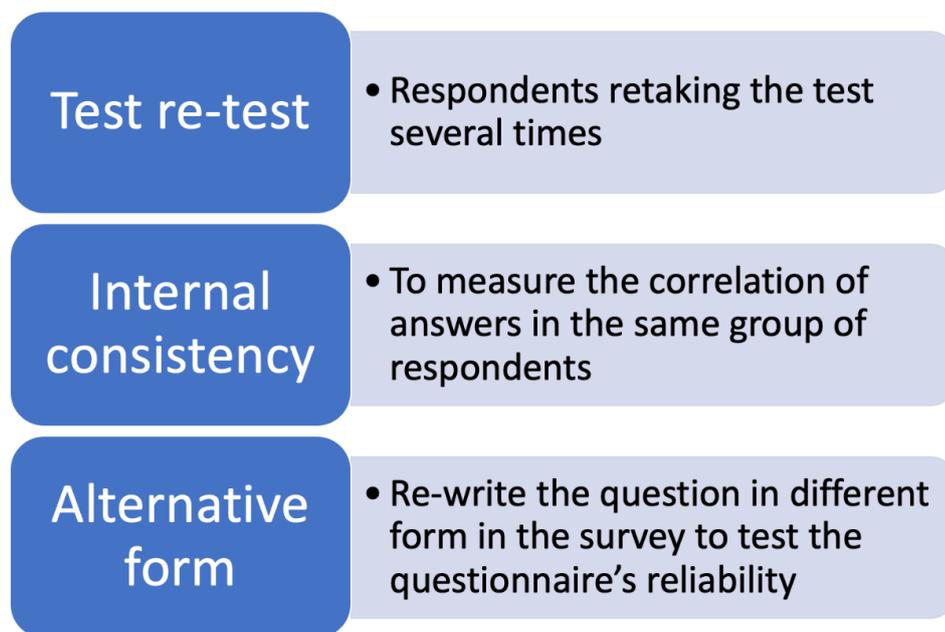


Figure 12 Research reliability (Adapted from Saunders et al., 2019).

## 4 RESULTS

This chapter presents the analysis of the survey result. The analysis will include descriptive statistics for the data set, different models, and charts for valid data.

### 4.1 Descriptive analysis

These are the data for the first part of the questionnaire about touchpoint definition. In total, 188 respondents completed the survey among 298 respondents. The demographics of the respondents are shown in Table 2. Most respondents are from the age of 20 to 29 years old (59.57%), 20.74% are from 30 – 39-year-old, 40 – 59-year-old takes 15.43% and older ages take around 3.19 % (Figure 13). Almost 50% of the respondents are female from the age 20 - 29, while 10% are male at the same age and other gender takes 1% (Figure 13).

Table 2 Respondents' demographic information

Age	Gender		
	Male	Female	Third Gender
<20		2	
20-29	19	91	2
30-39	7	32	
40-49	2	13	
50-59		14	
60-69		5	
70-79		1	

The customers play several roles while searching for cosmetics and skincare products. The role that most people have is the 'User', with a total of 145 respondents. The second place is the role 'Curious - Having the needs/desires to buy' with 133 respondents. There are 92 respondents

with the role ‘Authority - Deciding which product to buy’, 41 with the role ‘Wisdom - Giving others product recommendation to buy’ and 103 respondents with the role ‘Powder - Paying the money for the product’ (Figure 14).

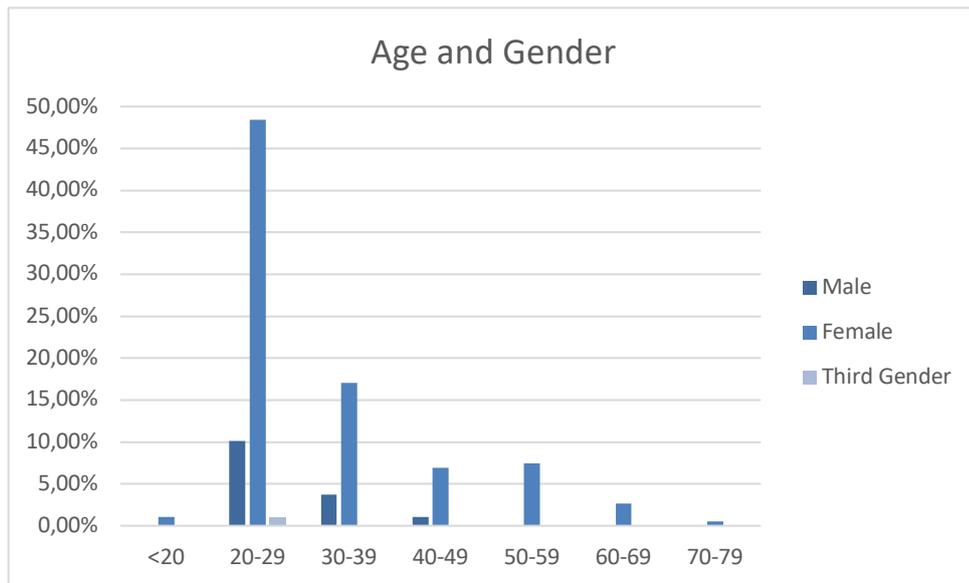


Figure 13 Age and Gender of Respondent

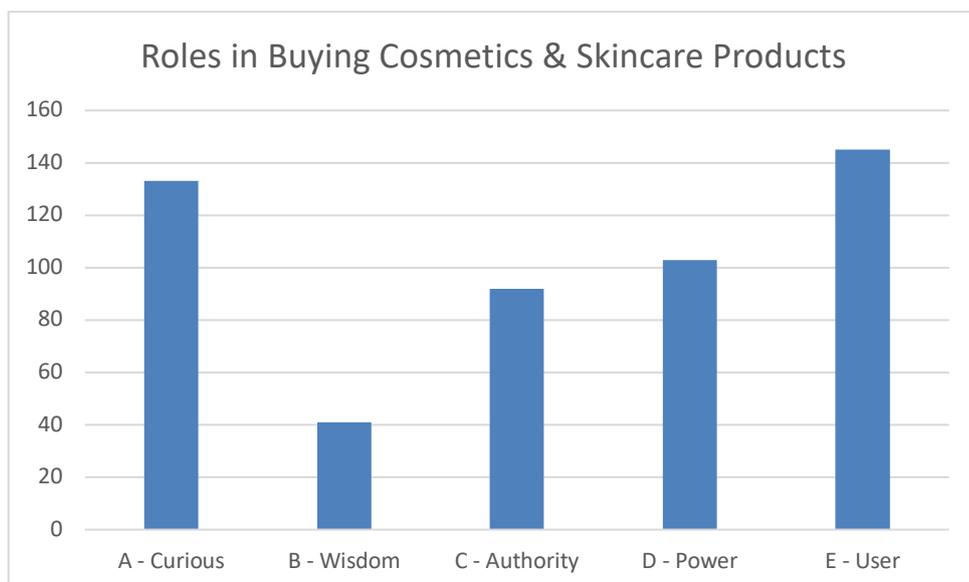


Figure 14 Respondents' role in searching process

These are the data for the second part about customers' searching habits. Most respondents (76,40%) are not clear about the effectiveness of communicating with the store employees while searching for the product. However, more people agree that it is effective (34.57%) than people who disagree (25%) to communicate with the store employees (Figure 15). The time of making purchase decisions, whether it is before or after going to visit the store, is not much differentiated: 36.70% of respondents makes their decisions before visiting the store, 34.57% do not matter any time, and 28.72% of respondents make decisions after visiting the store (Figure 16). When it comes to the time respondents usually search for information for the product, they usually search before purchasing the product (88.83% of the total respondents) (Figure 17). Respondents have different emotions and attitudes while searching, with the majority of respondents search when their skins have problems (55% of the total respondents) (Figure 18).

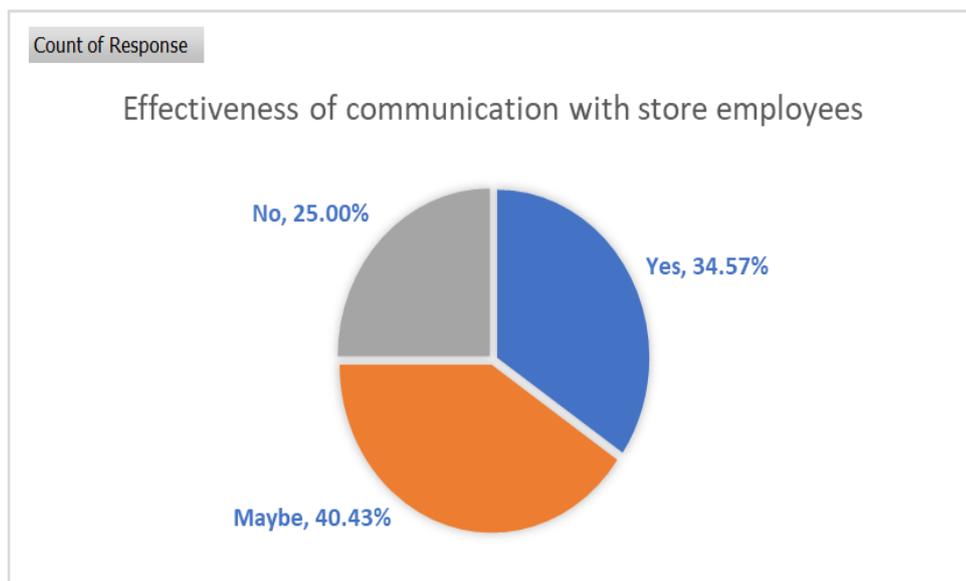


Figure 15 The effectiveness of communication with store employees

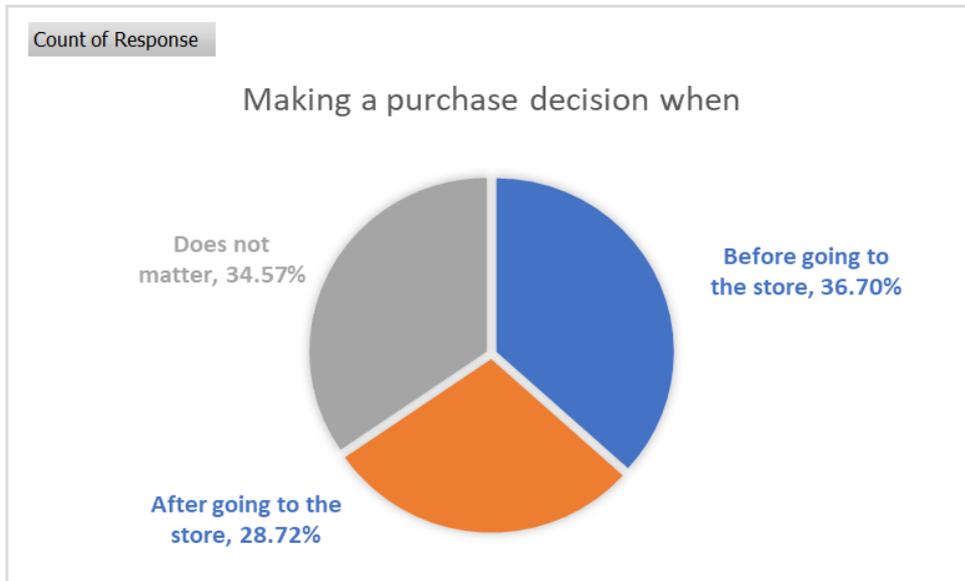


Figure 16 The time respondents making purchase decision (Before/After visiting the store)



Figure 17 Respondents' usual time for searching information

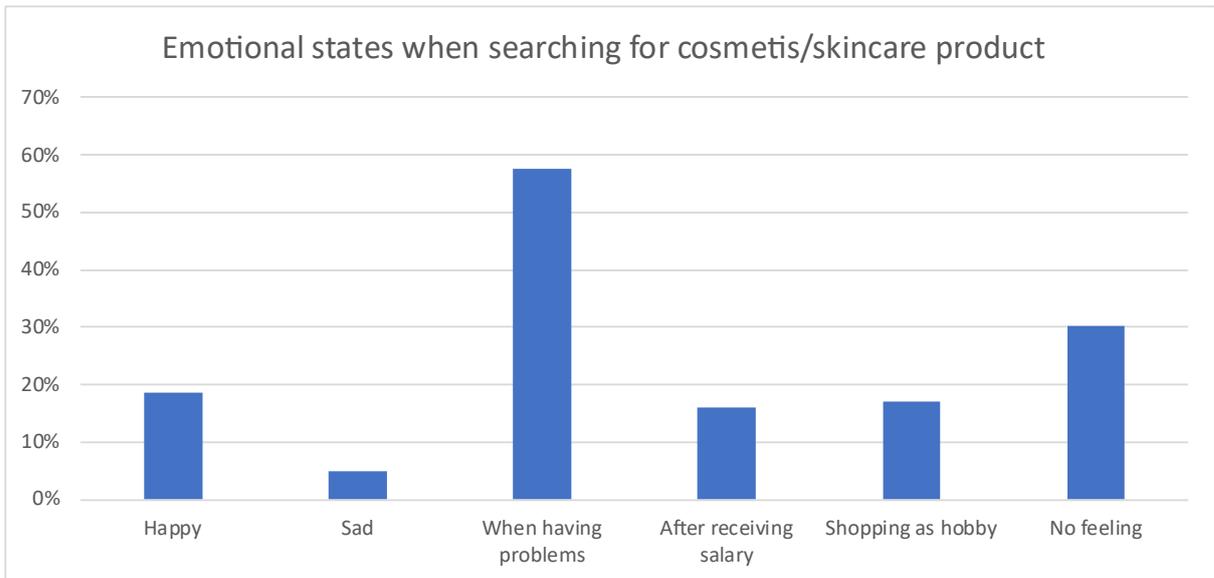


Figure 18 Respondents' emotions and attitudes while searching

These are the data about the online touchpoint effectiveness. Internet takes a huge amount of time in respondents' day: almost half of respondents (41%) spends 4 to 6 hours on the Internet every day (Figure 19). About the online touchpoint's perspectives of cost and time saving, 54.26% of respondents rate 'Definitely yes' for the perspective, 32.98% rate as 'Probably yes' (Figure 20). The most common answer for the number of hours respondents spent for searching information is 1 hour (58.51% of the respondents), with the second most common is 2 hours (17.55%) (Figure 21). About the Internet's efficiency to find information, 57.45% of respondents responded 'Probably yes', followed by 15.43% responded 'Definitely yes' (Figure 22). More touchpoints are believed to enable the purchase decision faster for the respondents, with 51.06% of respondents 'somewhat agree', followed by 27.13% of respondents 'strongly agree' (Figure 23). 63.80% of respondents sometimes purchase cosmetics and skincare products through email and social media ads, whereas 17.02% of respondents never bother with the ads, and 11.17% of respondents purchase through these ads channel half of the time (Figure 24).

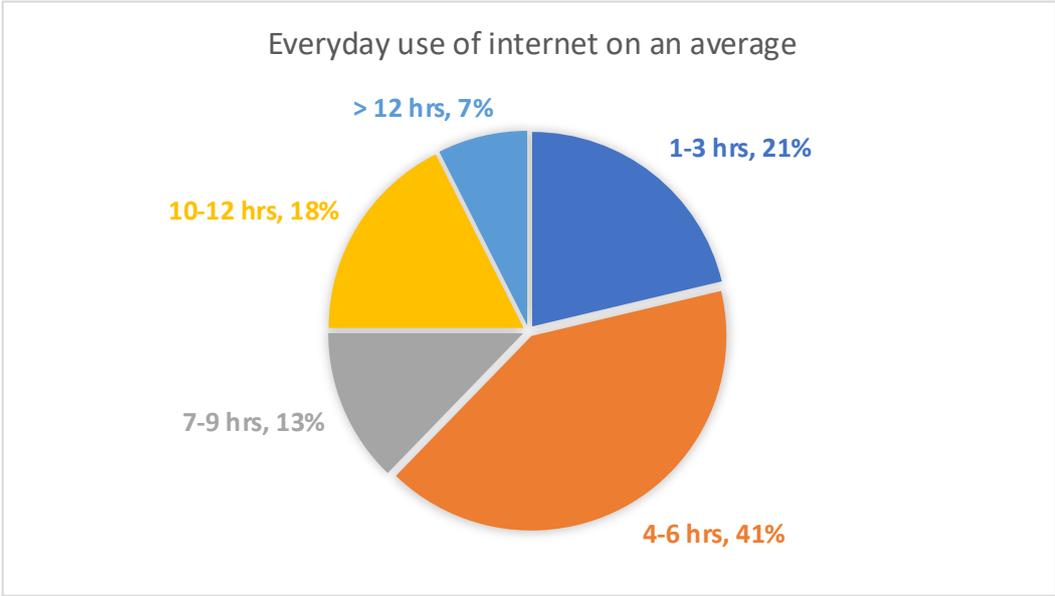


Figure 19 Amount of time spent on the Web

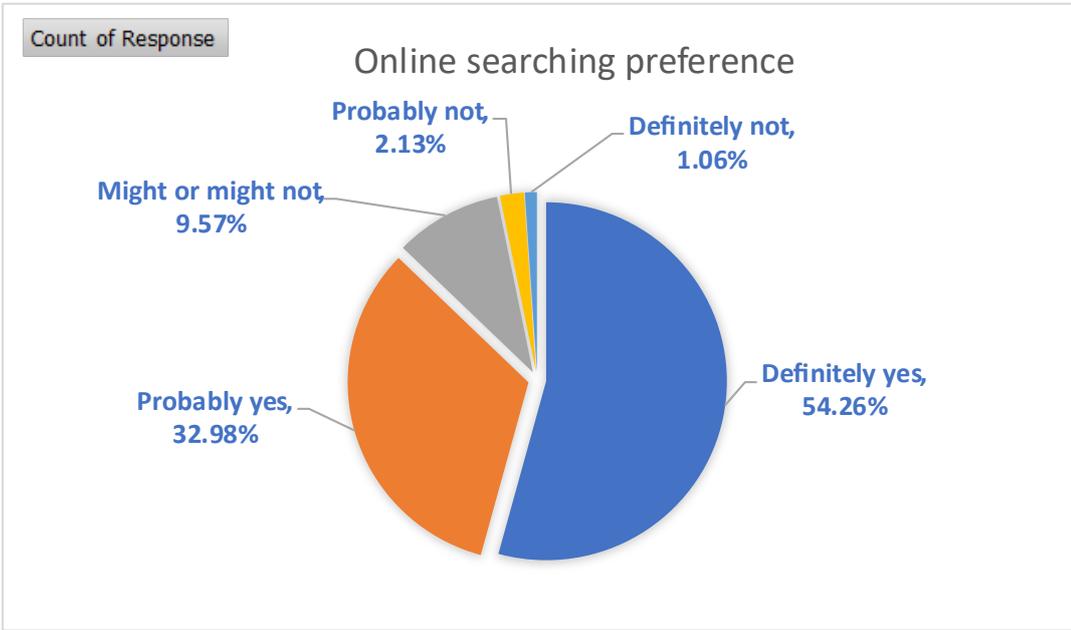


Figure 20 Respondents' opinions about online touchpoint effectiveness

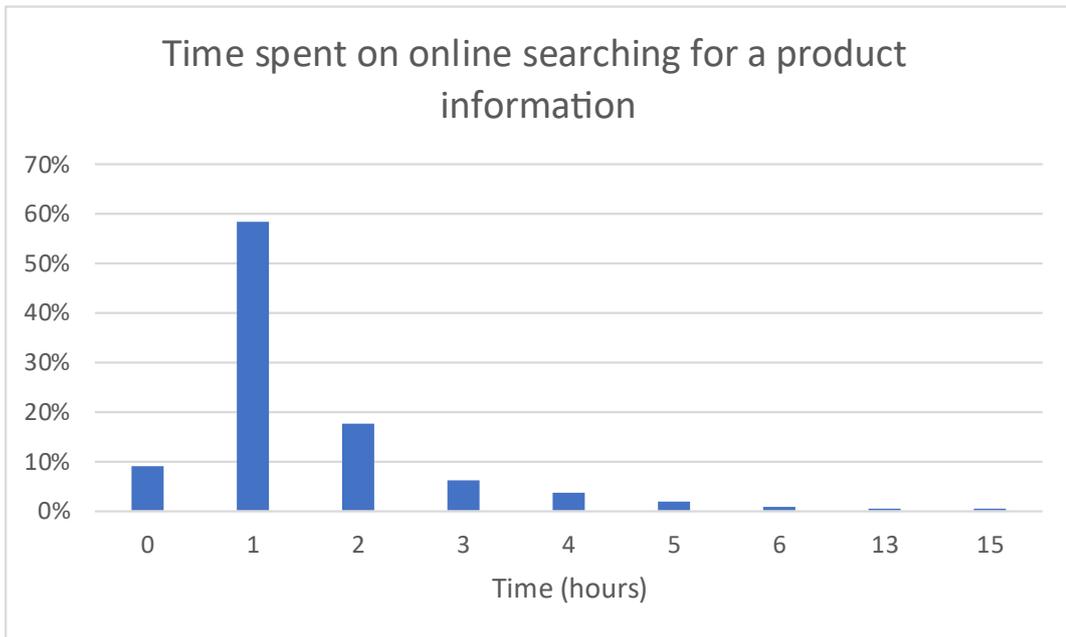


Figure 21 The amount of time spent for information searching

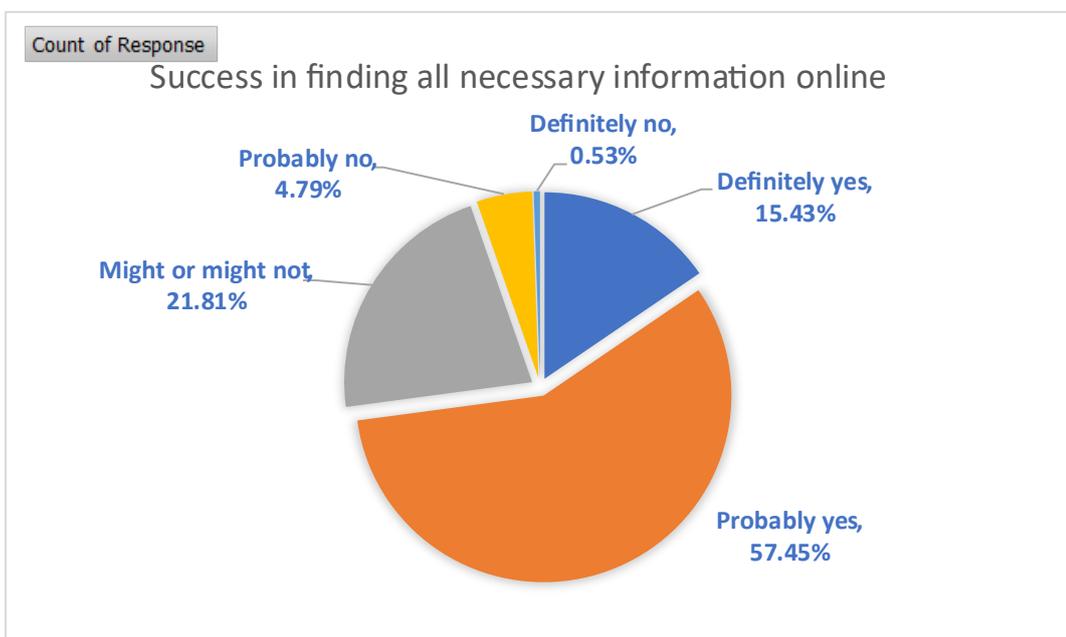


Figure 22 Respondents' opinions about the Internet efficiency

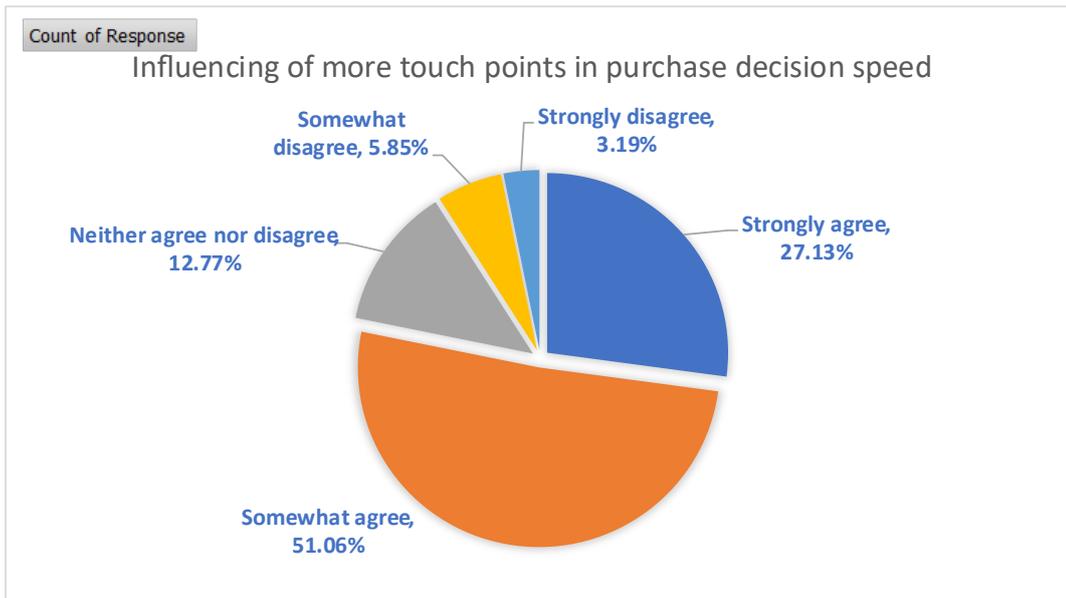


Figure 23 Respondent percentage on effectiveness of more touchpoints

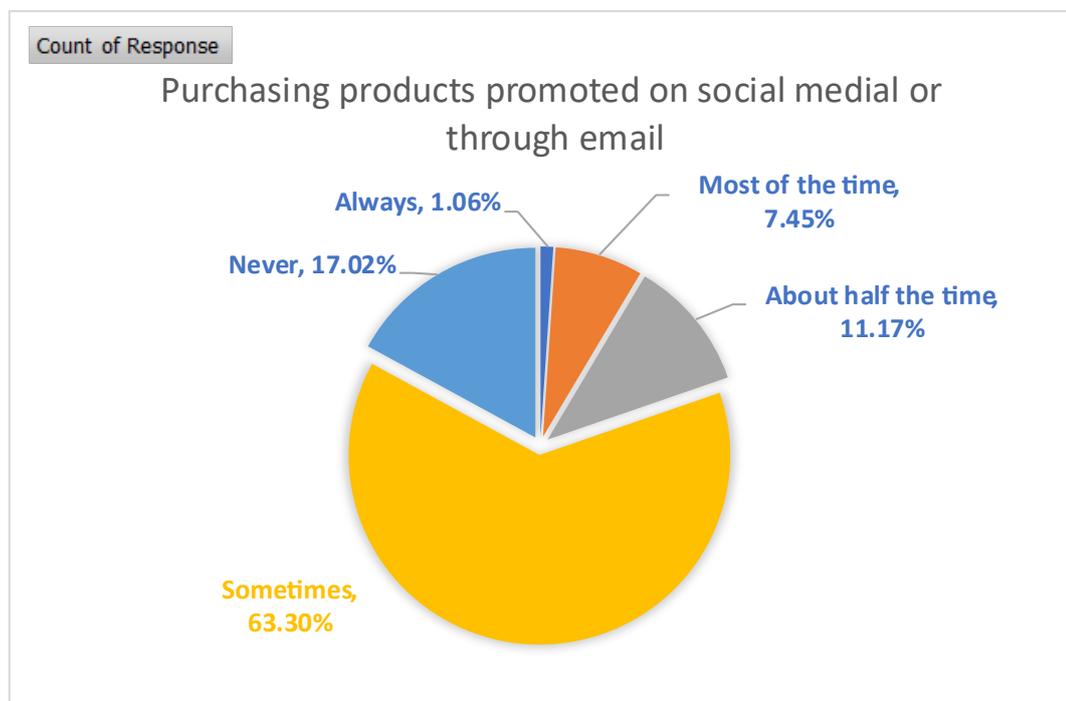


Figure 24 Respondent percentage on the effectiveness of email and social media ads

These are the data for the fourth part of the survey, about the relationship between online and offline touchpoints. There are different criteria when respondents look for a product, top 3 criteria are products with reasonable price (77.13%), products that match with personal lifestyle and standard (68.09%), and familiarity with the brand (47.34%) (Figure 25). The isolation between online and offline touchpoints is unclear to the respondents (35.64%), and 46.08% of respondents believe there is a separation between these channels (Figure 26).

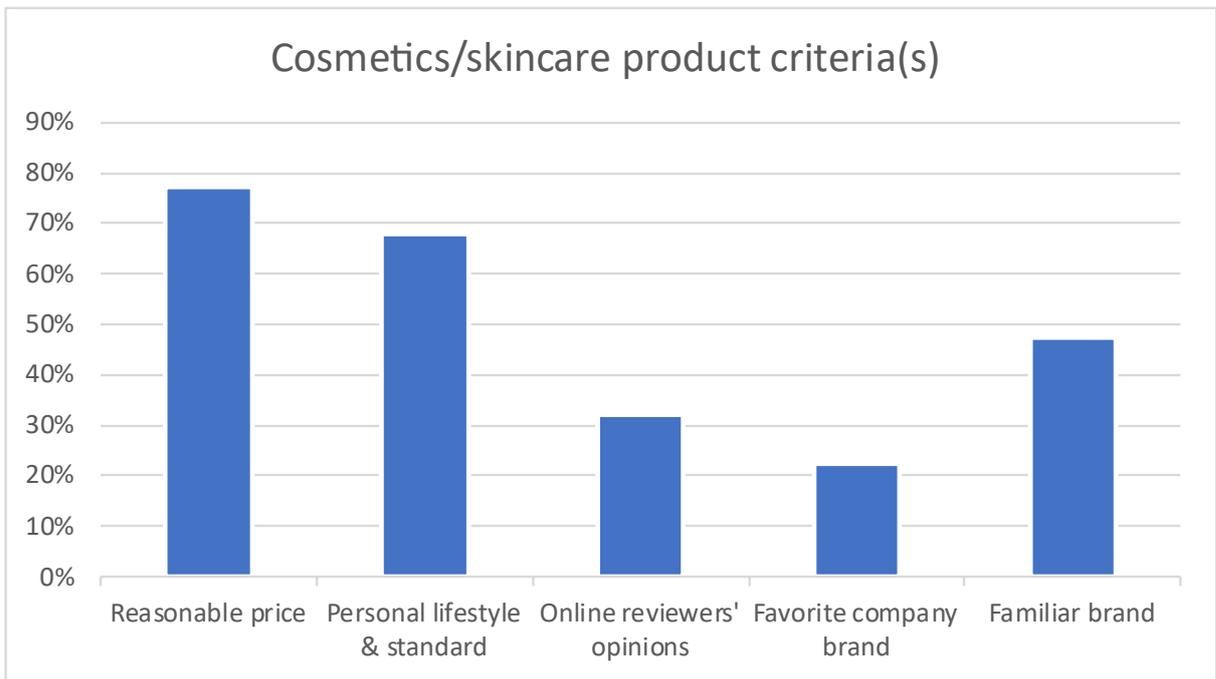


Figure 25 Respondent percentage on cosmetics/skincare product criteria

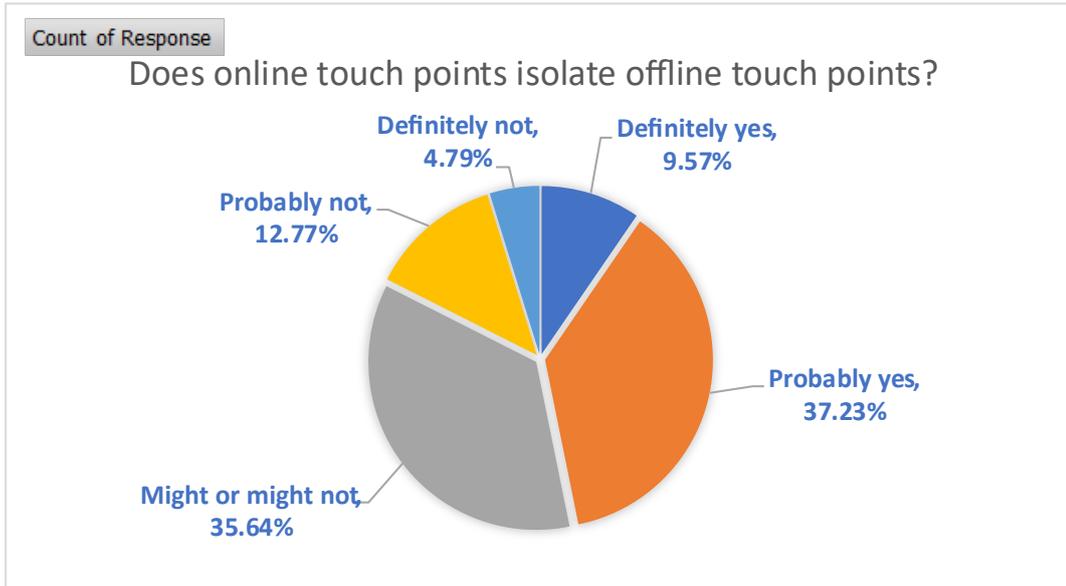


Figure 26 Respondents opinions about isolations between online and offline touchpoints

## 4.2 Reliability test

Cronbach's alpha test is used to test variable reliability, with a value above 0.6 is acceptable. All groups of PVQ questions' reliability and correlation are tested. The Cronbach's alpha result is presented in Table 3.

Table 3 Cronbach's Alpha values on different group variables

Group variable	Item-item correlation	Item-test correlation	Average interitem covariance	Cronbach's alpha
Touchpoint influence (Group 1)				0.73
BuyTP_RetailDiscount	0.55	0.33	1.50	0.74
BuyTP_OnlinePromotion	0.75	0.56	1.07	0.66
BuyTP_MediaAds	0.77	0.61	1.09	0.64

BuyTP_Influencer	0.69	0.45	1.19	0.71
BuyTP_Newspaper	0.71	0.54	1.20	0.69
Searching reasons (Group 2)				0.63
SearchPurpose_Ideal	0.64	0.43	1.04	0.56
SearchPurpose_Prices	0.64	0.31	1.07	0.64
SearchPurpose_Info	0.76	0.50	0.71	0.49
SearchPurpose_Use	0.72	0.44	0.83	0.54
Shopping habit (Group 3)				0.68
BuyCriteria_PreviousPostExp	0.87	0.74	0.50	0.51
BuyCriteria_WishList	0.49	0.31	1.05	0.67
BuyCriteria_Promotion	0.26	0.08	1.24	0.71
BuyCriteria_Trending	0.79	0.64	0.68	0.56
BuyCriteria_SeeAtShop	0.59	0.41	0.93	0.64
BuyCriteria_RecommendedOnline	0.44	0.23	1.08	0.69
BuyCriteria_RecommendedFamilyFriends	0.50	0.31	1.03	0.67
Online channel (Group 4)				0.60
InternetSearch_SearchEngine	0.80	0.56	0.24	0.40
InternetSearch_SocialMedia	0.29	0.02	0.72	0.68
InternetSearch_Firm'sWeb	0.40	0.15	0.62	0.63
InternetSearch_ForumBlogs	0.67	0.45	0.40	0.49
InternetSearch_Other	0.82	0.61	0.22	0.37
Channel trust (Group 5)				0.61
Trust_RetailWeb	0.59	0.29	0.90	0.61

Trust_SellingPlatform	0.75	0.47	0.55	0.47
Trust_Blogs	0.69	0.38	0.70	0.54
Trust_Media	0.68	0.42	0.72	0.52

The correlation and Cronbach's alpha are described for different groups. The Cronbach's alpha reliability is tested with STATA software. The alpha value increases when the internal consistency between items increases (Saunders et al., 2019). The alpha for group 1 is good (0.73), with high individual consistency. The alpha for group 2 and group 3 are lower than group 1 but still over 0.60, which is acceptable. Group 2 consists of questions about respondents' search reason, while group 3 contains questions about shopping habits. The research accepts that group 4's alpha value is the lowest among the group (0.60) but still reaches the acceptability level for reliability. The alpha for group 5 (0.61) is acceptable. Group 4 contains questions about online channels as touchpoints, along group 5 contains questions about respondents' trust for online channels.

### 4.3 Distribution analysis

The analysis continues using the PVQ question, due to the individual reliability value shown in Table 3. For distribution analysis, the Shapiro-Wilk test is utilized, since the test is appropriate for the research sample size ( $n = 188$ ). A tested variable is normally distributed when  $p > 0.05$ , while a tested variable is not normally distributed when  $p < 0.05$ . It is important to test the normality of the data to decide statistical methods for hypotheses testing, along with deciding the measures of central tendency and statistical methods for data analysis (Mishra et al., 2019). The normality test for the data is summarised below in Table 4.

Table 4 Table of normality test

Group variable	Obs	W	V	z	Prob>z
Touchpoint influence					

BuyTP_RetailDiscount	187	0.95	6.44	4.27	0.00
BuyTP_OnlinePromotion	188	0.98	3.36	2.78	0.00
BuyTP_MediaAds	188	0.96	5.42	3.88	0.00
BuyTP_Influencer	188	0.97	4.09	3.23	0.00
BuyTP_Newspaper	188	0.98	3.13	2.62	0.00
Searching reasons					
SearchPurpose_Ideal	188	0.84	22.02	7.09	0.00
SearchPurpose_Prices	188	0.97	3.73	3.02	0.00
SearchPurpose_Info	188	0.96	6.19	4.18	0.00
SearchPurpose_Use	188	0.99	2.00	1.59	0.06
Shopping habit					
BuyCriteria_PreviousPostExp	188	0.93	8.00	4.77	0.00
BuyCriteria_WishList	188	0.99	1.43	0.81	0.21
BuyCriteria_Promotion	188	0.99	0.32	-2.60	1.00
BuyCriteria_Trending	188	0.98	3.49	2.87	0.00
BuyCriteria_SeeAtShop	188	0.99	0.79	-0.55	0.71
BuyCriteria_RecommendedOnline	188	0.99	2.10	1.70	0.04
BuyCriteria_RecommendedFamilyFriends	188	0.99	2.02	1.61	0.05
Online channel					
InternetSearch_SearchEngine	188	0.98	2.69	2.73	0.01
InternetSearch_SocialMedia	188	1.00	0.39	-2.16	0.98
InternetSearch_Firm'sWeb	188	1.00	0.50	-1.61	0.95
InternetSearch_ForumBlogs	188	0.99	1.50	0.92	0.18

InternetSearch_Other	188	0.98	3.32	2.75	0.00
Channel trust					
Trust_RetailWeb	188	0.99	1.11	0.25	0.40
Trust_SellingPlatform	188	1.00	0.66	-0.95	0.83
Trust_Blogs	188	0.98	2.49	2.09	0.02
Trust_Media	188	0.98	2.28	1.89	0.03

The analysis shows that there are data that are and are not normally distributed. All different influencing touchpoints variables (RetailDiscount, OnlinePromotion, MediaAds, Influencer, Newspaper) are not normally distributed ( $p < 0.05$ ), so the group's variable is not normally distributed. The reasons for the searching group contains one normally distributed variable (Use,  $p > 0.05$ ) and three not normally distributed variables (IdealProduct, Price, Info,  $p < 0.05$ ). Since there are more not-normally distributed variables, the group's variable is not normally distributed. The shopping habit group has four normally distributed variables (WishList, Promotion, SeeAtShop, RecommendedFamilyFriends,  $p > 0.05$ ), and three not normally distributed variables (PrivousPostExp, Trending, RecommendedOnline,  $p < 0.05$ ). Online channel groups contain two normally distributed variables (SocialMedia, Firm'sWeb,  $p > 0.05$ ) and two not normally distributed variables (SearchEngine, Other,  $p < 0.05$ ). The two-Two pattern also applies for the channel trust group, with two variables that are normally distributed (RetailWeb, SellingPltform,  $p > 0.05$ ), and two not normally distributed variables (Blogs, Media,  $p < 0.05$ ).

#### 4.4 Correlation analysis

Based on the data distribution analysis, different variables are analyzed for their correlation with the Spearman method, since the correlation analysis between both normally and non normally distributed, while the number of non-normally distributed data (15 variables) outweigh the number of normally distributed data (9 variables). Moreover, the Spearman

method also works with monotonic data while Pearson ‘ evaluates only a linear relationship between two continuous variables’ (Juhi R., 2020). The correlation coefficients’ absolute values under 0.40 show a low correlation, 0.40 to 0.60 show a moderate correlation, 0.60 to 0.80 show a high correlation, and 0.80 to 1.00 show very high correlations.

The correlation analysis result is in Appendix 1. From the analysis, a moderate to high relationship correlation is summarised in Table 5.

Table 5 Significance Correlation Analysis

rho Sig.Level	Touchpoint Influence (Group 1)		
	BuyTP_Newspapers	BuyTP_Online	BuyTP_Influencers
BuyTP_MediaAds	0.53 0.00	0.52 0.00	0.42 0.00
Searching Reasons (Group 2)			
SearchPurpose_Info			
SearchPurpose_Use	0.40 0.00		
Shopping Habit (Group 3)			
BuyCriteria_SeeAtShop BuyCriteria_Trending			
BuyCriteria_PreviousExperience	-0.49 0.00	-0.73 0.00	

Online Channel (Group 4)		
	InterneSearcht_Firm's Web	InternetSearch_En gine
InternetSearch_Others	-0.40 0.00	-0.70 0.00
InternetSearch_Blog	-0.40 0.00	
Channel Trust (Group 5)		
	Trust_Media	
Trust_Blogs	0.48 0.00	
	Trust_RetailWeb	
Trust_SellingPlatform	0.44 0.00	

Table 6 shows that in group 1 of different touchpoints influencing customers buying decision, customers whom newspapers, social media advertisement influences buying decision, tends to be affected by also social media ads. Plus, customers who are influenced by social media ads tend to be affected by online promotion. In another word, the more social media ads affect customers buying decisions, the higher the online promotion's effectiveness. Social media ads also correlate positively with influencers' posts and videos, which indicates that customers' buying decisions that are affected by social media ads also can/are affected by influencers' posts and videos. For search reasons, customers who search for the product information, they also

tend to look for the instruction how to use the product. In the shopping habit question, the analysis shows that customers who have previous experiences with the product, product presentation at the shop, or especially the product trend will not affect their searching habit for their product in mind. For Internet channels, customers who frequently visits to online blogs are less likely to visit the firm’s website for product information and reviews. For online information trust, the more customers trust social media platforms (such as Facebook, Instagram...), the more customers trust online personal blogs.

Likewise, the more customers trust information from the retailing website, the more customers trust information from the selling platform. The mean is calculated to measure respondents' attitudes towards the variable groups (Touchpoints influences, searching reasons, shopping habit, online channel, channel trust). The scale is from 1 to 7, with the exception for the group online channel, 1 to 5, which 1 indicates the lowest importance, uses, trusted, and 5 in online channel group and 7 for other channels indicates the highest importance, uses, trusted. The mean table is illustrated below in Table 6.

Table 6 Mean table

Group variable	Obs	Mean	Std. Dev.	Min	Max
Touchpoint influence (Group 1)					
BuyTP_RetailDiscount	187	4.62	1.68	0	7
BuyTP_OnlinePromotion	188	3.44	1.97	0	7
BuyTP_MediaAds	188	2.29	1.76	0	7
BuyTP_Influencer	188	2.77	2.11	0	7
BuyTP_Newspaper	188	2.20	1.70	0	6
Searching reasons (Group 2)					
SearchPurpose_Ideal	188	5.95	1.34	1	7
SearchPurpose_Prices	188	4.83	1.90	1	7

SearchPurpose_ Info	188	5.10	1.84	1	7
SearchPurpose_ Use	188	4.43	1.84	1	7
Shopping habit (Group 3)					
BuyCriteria_ PreviousPostExp	188	3.69	2.73	1	7
BuyCriteria_ WishList	188	3.92	1.67	1	7
BuyCriteria_ Promotion	188	3.96	1.56	1	7
BuyCriteria_ Trending	188	4.11	2.23	1	7
BuyCriteria_ SeeAtShop	188	4.08	1.85	1	7
BuyCriteria_ RecommendedOnline	188	4.07	1.90	1	7
BuyCriteria_ RecommendedFamilyFriends	188	4.18	1.82	1	7
Online channel (Group 4)					
InternetSearch_ SearchEngine	188	2.70	1.71	1	5
InternetSearch_ SocialMedia	188	2.87	1.16	1	5
InternetSearch_ Firm'sWeb	188	3.04	1.13	1	5
InternetSearch_ ForumBlogs	188	2.91	1.25	1	5
InternetSearch_ Other	188	3.48	1.62	1	5
Channel trust (Group 5)					
Trust_ RetailWeb	188	4.47	1.50	1	7
Trust_ SellingPlatform	188	3.96	1.73	1	7
Trust_ Blogs	188	3.93	1.69	1	7
Trust_ Media	188	3.38	1.47	1	7

From the table, the study shows that in group 1 of different touchpoint effects, the retailing discount has the highest impact on average (4.62 / 7). In group 2 of searching reasons, searching for the ideal product that matches with personal criteria has the highest score on average, which is a higher reason than price information, how to use, or product information. However, the number of these variables in the group is quite close and high (above 4), which indicates that this information is quite important. In group 3 of shopping habit, the habit of asking family and friends for advice is the highest on average, which indicates the powerful effect of word of mouth. In group 4 of online channels, the most common channel people use is other channels, which are specific websites such as Youtube, Amazon, Tiktok. Firm's website, general results on Google or online blogposts are not popular choices nowadays for skincare users. In group 5, the channel that has the highest trust is the retailing website (4.47/7).

## **5 DISCUSSION AND CONCLUSIONS**

The final chapter will conclude the study and present the answers for the research questions and sub-questions in the theoretical contribution, followed by the managerial contributions concluded from the study. The research limitations and future research will be suggested in the last part of the chapter.

The research objective is to understand customers' perspectives and usage of online and offline touchpoints, with a more focus on the online touchpoints' effectiveness. The study finds out different types of digital touchpoints the customers use and their effectiveness, along with the relationship between offline and online touchpoint. Furthermore, the research also brings out different customers' roles while searching for the product together with their product criteria and shopping habit.

### **5.1 Theoretical contributions**

The previous literature has shown the importance to understand customers' behaviors on the Web (Butler et al., 1998). Another researcher such as Clark D. (2013) also highlighted the importance of social media as the assistant for the customer journey. In the digital environment, five elements of customer behavior, social media, online platforms, search engines, and contextual interaction relates to each other (Kanan et al., 2017). To understand customer behavior and their engagement, it is a multidimensional concept composing of cognitive, emotional, behavioral and social dimensions (Islam et al., 2016). This has inspired the research to ask questions about these perspectives regarding customers' search journey specifically, to understand different touchpoint effectiveness to the customer search journey. As a result, the research contributes to the deeper understanding of customers' search journey through the presence of digital and physical touchpoints with their effectiveness. The discussion continues with main and sub-research questions, with previous literature aligning with findings from the research.

*Research question: What are digital touchpoints?*

Relevant previous literature has had interesting theories, which were used as the theories for testing for the study. Hollensen (2015) stated that there are different customer roles in customers' journey process, which results in different buying behavior, brand attitude, and actual purchase. Straker et al. (2015) highlighted the importance and frequency of the two-way communication interaction between customers and employees in the customer journey. Nobel C. (2011) wrote that effective touchpoints enable more sales. Moreover, in Verhoef et al.'s (2015) literature, touchpoint can be two-way, or one way between customers and firms, in another perspective, owned media and earned media touchpoints (Hallikainen et al., 2019). Through the respondents' answers, there are five customer roles when they are searching for cosmetics products, in which cosmetics users and cosmetics enthusiasts take the dominant lead in customers roles (Curious buyers, knowledge sharer, purchase maker, users). Only half of the total respondents, who are searching for the cosmetics product make the purchase decisions and purchase the products. Owned media and earned touchpoints are tested in the study, in which the result features that spectacularly for skincare users, the earned media such as word of mouth, online influencers, forums, and blogposts outweigh the number of firm's owned touchpoints that the respondents have experienced (Firm's ads, product's ads, firm's website, firm's social media). All of these touchpoints have been existed and/or experienced by respondents: Online influencers, firm's ads, product's ads, firm's website, firm's social media, forum, and blog post; The least experienced touchpoint is firm's social media and the most experience digital touchpoints are online influencers and firm's website. In another test to re-confirm respondents' answers, respondents choose the firm's website as the most used digital touchpoint, followed by online forum and personal blogs, social media, search engine's top results, and other channels.

As the research context is that specific skincare product, the touchpoints appear in all the stages that the customer goes through in the search journey, through both offline and online channels. However, with the result from the survey, the online channels have overpowered the presence of offline channels when the customers' age is younger than 40. This can be the reason that they expose to online social media more often and get used to using the Internet. This theory,

moreover, is the reason that the information searching process for them is dominant via digital channels.

In specific, digital channels such as YouTube, Amazon, Tik Tok, are the most 'repeated' channels when customers being asked what digital channels they use. Moreover, the information search is important, not only for purchasing product but also it affects customer's expectation and evaluation of the product and brand, which creates customer's loyalty and memory about brands. Moreover, the online channels are critically important for young customers as they believe the information from the digital touchpoints provide is adequate. If the product matches the needs and personal lifestyles, there is a high possibility that they invest to purchase that product.

*Sub research question: What is digital touchpoint effectiveness?*

Court et al. (2009) mentioned that customers actively search and gather information on their own. Moreover, he mentioned that the majority are customer-driven touchpoints. Many factors are affecting the product evaluation such as personal goals, emotions, memories, which determine the effectiveness of the digital touchpoints. Therefore, having the right touchpoints at the right place and at the right time is crucial to enable the customer journey better. Different Internet frequency users also have different trust levels for different online channels. (Hallikainen, 2019). In the study, among different touchpoints, the retailing discount has the biggest impact influencing customers buying decisions, followed by online promotions, influencers' posts, and videos. Customers search regardless of the time before or after going to the store, so the touchpoint effectiveness does not depend on the time customers going to the store. However, 88.83% of customers search before purchasing the product, therefore, providing necessary information for customers before they purchase a product can influence customer's decisions enormously. Emotions and other psychological feelings are also tested in the study, in which most respondents search for skincare products when their skin has problems (57.53%), meanwhile, other factors such as the emotional effect (Happy – 18.62%, sad – 4.79%) are less than the state searching as a hobby (17,02%), after receiving a salary (15,69%) and no feeling (30.32%) when searching et al. In Nobel C. (2011) paper, effective touchpoint enables

more sales. However, the study is based on customers' opinions and attitudes for their usual search process, therefore, there is no real data about purchase sales to analyze sale-driven effectiveness from touchpoints.

*Sub research question: How digital touchpoint impact the pre-purchase process*

Digging deeper based on the previous theories about digital touchpoint effectiveness, different touchpoint effectiveness is measured in the study, in which the most popular purpose is to help customers find their ideal product. At the same time, digital touchpoints are favored by respondents for their cost and time-saving. Therefore, digital touchpoints are effective in providing customers with information about prices, different product portfolios, product information, and product instruction. The Internet roles and uses are also taken into consideration for the study, based on Hallikainen's (2019) theories about different Internet use with respondents' trust. On average the respondents spend around 1 hour searching for the product at most 2 hours, regardless of their ages. The dominant respondents are from the age of 20 to 29, therefore, the research does not cover enough context to compare different ages attitudes about trust for different digital channels. Still, the Internet plays a huge role in customers' search journey, with the majority of respondents find all the information they need through the Internet (72,88%). The number of touchpoints matters in customers' search journey, as the more touchpoints such as social media information, website information, customers review together enable customers to make purchase decisions faster; 78,19% of respondents agree with the statement. This contributes to the theory that different touchpoint with its different function enables a bigger picture about the product and evaluations for the customers. Besides, the ads promoted on social media or email touchpoint have a high effect, for a vast number of respondents purchase product through this channel ranging from sometimes (63,30% of total respondents) to the half of the shopping time (11,17% of total respondents).

*Sub research question: What is the relationship among digital touchpoints*

Different digital touchpoints have different impacts, for which company website and emails gain more trust from the customers (Hallikainen et al., 2019). The research also shows that retail websites are the most trusted source for information (4,47/7 on average), followed by online

selling platforms such as Amazon (3.96/7 on average), while social media information has the least trust from the respondents (3.38/7 on average). Through correlation analysis, different strong relationships between particular channels are found such as between social media ads with online promotion. The more social media ads, the more widely known the online promotion. Social media ads also correlate positively with influencers' ads and videos. On the opposite, online blogs have negative correlates with the firm's website. This indicates that users who often use or trust the online blog information have less tendency to use or trust less the firm's website information.

*Sub research question: What is the relationship between digital and offline touchpoint*

Furthermore, in the Court et al. (2009) study, customers change buying decisions via product packaging, placement, interaction with sales-sellers. Furthermore, physical touchpoints such as store assistants impact customers' decisions (Court et al., 2009, Schmidt et al., 1996). Customers' product criteria can be based on different variances (Hollensen 2015). The study's data is not sufficient to make a reliable conclusion about the relationship between digital and offline touchpoint, since the question is based on a scenario that customers are going to the store to purchase a cosmetics/ skincare product they have made research online. Nevertheless, there are data about offline touchpoints' impact and customers' product criteria that affect buying decisions. The study shows that one-third of the customers hold off decisions until coming to the store. Among physical factors that potentially affect customers' purchase decisions, on average, product placement and arrangement at the store has the highest impact (2.84/5), followed by product packaging (2.75/5) and employee interactions (2.60/5). At the same time, product availability at the store does not have much impact on the customer buying decisions (1.61/5). For skincare/cosmetics products, the top three criteria are reasonable prices (No. 1, 77.13%), personal lifestyle and standard (No. 2, 69.09%), and familiar brand (No. 3, 47,34%). The study does not find out a clear answer from the respondents' opinions about the separation between online and offline touchpoints when the answers are divided between 'probably yes' (37.23%) and 'might and might not' (35.64%).

## 5.2 Revised theoretical framework

The chapter presents the new version of the theoretical framework for the research, which is updated through the findings in the study. The updated theoretical framework is illustrated in Figure 27.

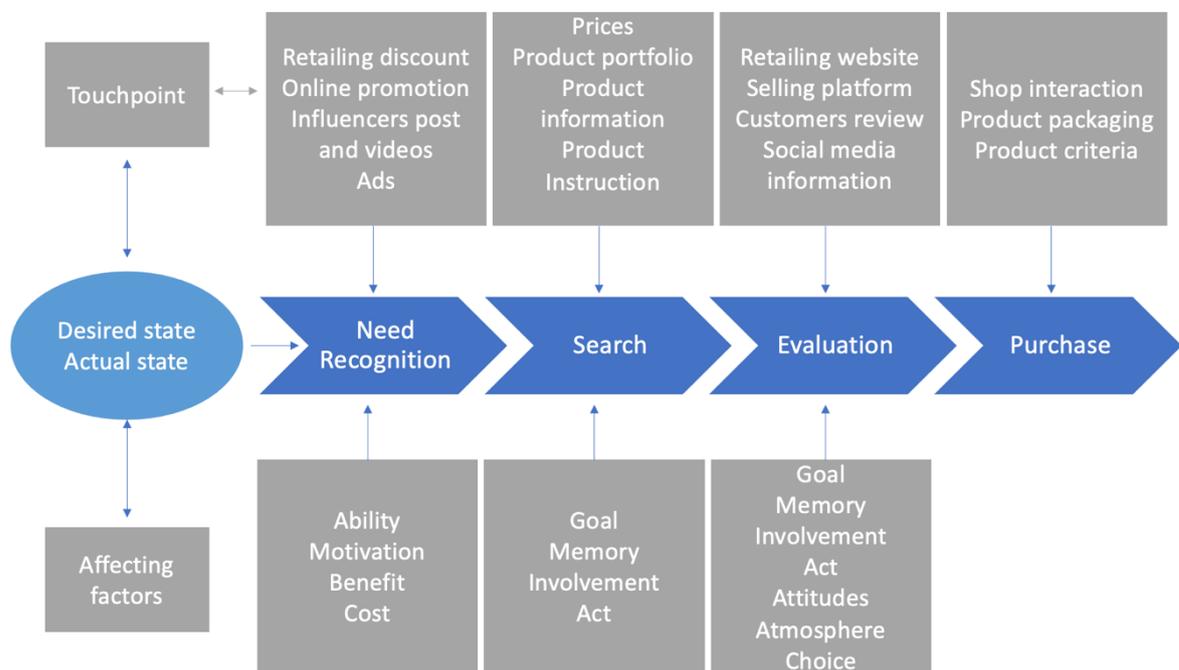


Figure 27 Updated theoretical framework

In the framework, the search journey, customer states, and the affecting factors based on articles from Puccinelli (2009), Bruner et al., (1988), and Schmidt et al., (1996) are kept the same. The improvement with the new framework is the clearer examples of digital and offline touchpoints affecting the search process researched through empirical study. Overall, digital touchpoints take the main role when the customers' search for information about the product, still, the physical touchpoint can influence the customers buying decisions via physical packaging, shop interaction, and own customers criteria.

Based on respondents' major answers, a personal buyer for cosmetics and skincare products are built, with shopping habit and her search journey illustrated in Figure 28.

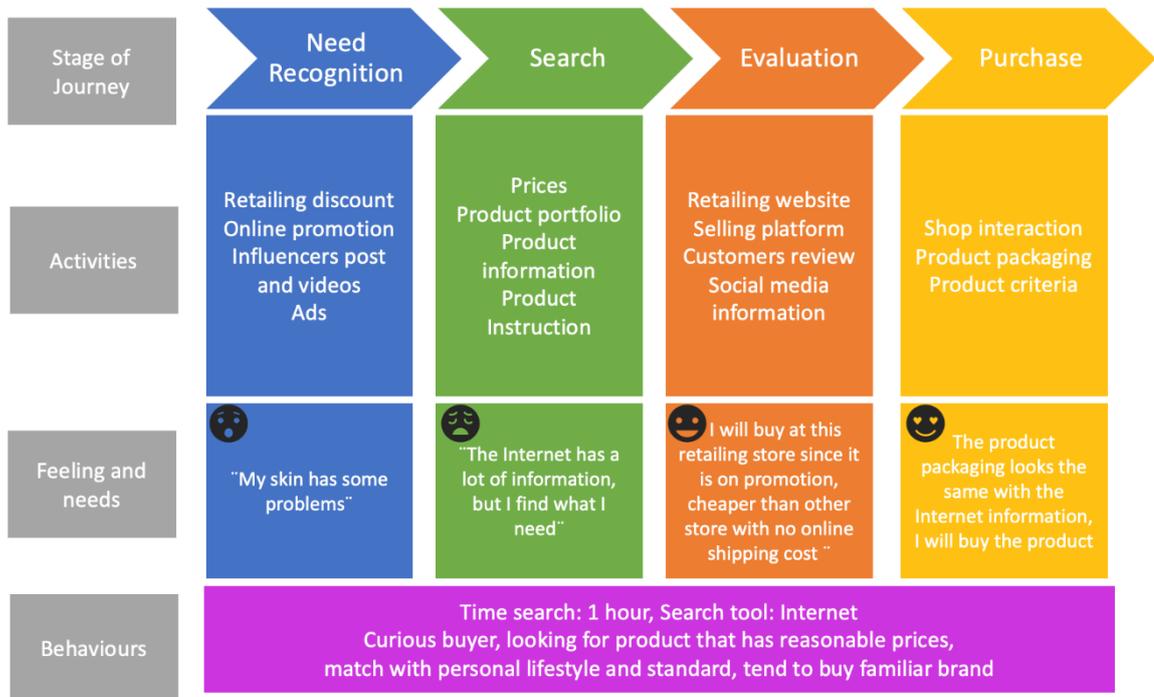


Figure 28 Personal buyer for cosmetics and skincare products

The sample personal buyer X, who is in her 20s, with searching for skincare and cosmetics as her hobby. Based on the most common reasons in the survey why people search for skincare products is when their skin has some problems, therefore, Ms. X starts her search journey with the same skincare problem reasons. The majority of respondents found out the Internet has all the information they need. Ms. X wants information about product price, portfolio, information, instruction, so she decided to search solely online. She spends around 1 hour searching for the information. She visits the retailing website and selling platforms such as Amazon first, to get her opinions about product prices and customer reviews, meanwhile, she also goes to her social media platform to search for friends and family advice and recommendations. She found out after her search that the local retailing store is offering a discount for her desired product, so she decided to purchase the product in the store. At the store, the product matches information with her findings through the Internet, with the same product packaging, so she decided to buy

the product at the store. The searching time is short (1 hour) with simple methods through online channels information and purchase decisions are made at physical channels, due to the low product complexity.

### **5.3 Managerial implications**

Through the study, there are major digital touchpoints that impact customers' searching journey, especially through the retailing website and online selling platforms. For information, the firm needs to provide detailed and precise information about product information, instruction on how to use, product portfolio, and customer review. The firm's website however still needs to be taken into consideration since customers also visit the firm's website for official information. The firm's website also stands as the number one channel customer visit for information, before social media or results from online search engine. Word of mouth still takes the heaviest influence on customers choice of product, therefore, in marketing, influencer marketing needs to be invested and carried out strategically to win long-term customers and their trust. The maximum time on average customers spend for product searching is one to two hours, it is crucial to condense the important information. The advertisement through emails and social media works quite well with the respondents in their 20s, therefore, maintaining and updating the ads through these social media channels are necessary. Customers usually start searching for the product when their skins have problems, therefore, it is crucial to understand different skin types with their usual problems according to weather and other factors such as seasons, so the information can reach the customers more effectively at the right time. Moreover, it is recommended to advertise the product with previous customers and product on-trend/seasons, since the top three product criteria for customers are the products customers have previous experiences and product on trends.

For retailing stores, store communication can have an impact on customers' decision making, Moreover, the product placement and arrangement have the importance impacting customers buying decisions, as it is one of the top three customers product criteria. Customers mainly search for information on the Internet, therefore, maintaining marketing and online information is crucial for retailing firms to attract customers traffic to their websites, with up-to-date

information about product availability in the physical store and the opportunity to purchase the product online. The more relevant information, the more beneficial for the firms since it increases the speed of customers making purchase decisions. For retailing firms, it is recommended to promote products through social media and emails (if existed) as well, since customers pay attention, especially to the promotion through social media (Youtube, Tiktok, Facebook) and email advertisement. The retailing website earned the customers' trust; therefore, it is important to provide up-to-date and precise information for the customers to maintain their trust and loyalty.

#### **5.4 Limitations and future research**

The sample is biased due to the voluntary answers from anonymous respondents. However, the respondents come from the author's social network's connection, therefore, the result of the research cannot be generalized to a wide extent. Therefore, to increase the credibility for future research, the sample size should be bigger. The number of respondents can also be increased for further generalization. Even though the survey collected almost 300 respondents, only 198 respondents finish the survey, which is fairly a small number compared to the skincare user community. Moreover, the majority of respondents are from 20 to 29, with the dominant gender is female due to the personal author's social network and research object – skincare and cosmetics. Therefore, the application for the study is exclusively applied to the field of skincare and cosmetics products in retailing and cannot be generalized with other product categories and services. Different research needs to be carried for other categories. The more ideal scenario would be to include the ability to measure the real amount of purchase with different touchpoints to measure different touchpoints effectiveness in monetary terms. The research takes the approach from the customers' perspectives, therefore, it is unknown about the sales traffic coming from different digital channels, to measure where customers stop at each channel and what makes customers move from one channel to another.

Stephen and Galak's research (2012) had shown that social media gained increasing popularity as a digital channel. This leads to future research of the effectiveness of social media for retailers along with the opportunity for retailing firms to drive customers to social media via emails and

the company's website. Moreover, future research can analyze deeper the relationship between online and offline touchpoints, as different touchpoints seem to be blended and theorized to contribute to each other. Therefore, a clear relationship between different channel touchpoints is beneficial so that the effectiveness of touchpoints combination can be maximized, as 'What gets measured, gets managed' (Klaus, 2015). The relationship between different digital touchpoints can be investigated, at which the ideal case would apply for a specific firm to compare their different online channel effectiveness. The research focuses on touchpoints during the search process. However, these touchpoints affect other stage in customers journey such as purchasing and after purchasing. Different stages can be investigated to build a fuller picture of different touchpoint effectiveness for the whole customer journey.

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## **7 APPENDIX**

Appendix 1. The full correlation matrix table for all PVQ questions

```

. spearman BuyTP_RetailDiscount BuyTP_OnlinePromotion BuyTP_MediaAds BuyTP_Influencer BuyTP_Newspaper SearchPurpose_Ideal SearchPurpose_Prices SearchPurpose_Info SearchPu
> rpose_Use BuyCriteria_PreviousPosExp BuyCriteria_WishList BuyCriteria_Promotion BuyCriteria_Trending BuyCriteria_SeeAtShop BuyCriteria_RecommendedOnline BuyCriteria_Rec
> ommendedFamilyFr InternetSearch_SearchEngine InternetSearch_SocialMedia InternetSearch_FirmsWeb InternetSearch_ForumBlogs InternetSearch_Other Trust_RetailWeb Trust_Se
> llingPlatform Trust_Blogs Trust_Media, stats(rho p) star(0.05)
(obs=187)

```

Key
<i>rho</i>
<i>Sig. Level</i>

	BuyTP_~t	BuyTP_~n	BuyTP_~s	BuyT~cer	BuyT~per	Search~l	Search~es	Search~o	Search~se	BuyCr~xp	BuyCri~t	BuyCri~n	BuyCri~g	BuyCr~op	BuyCri~e	BuyCri~r	Intern~e
BuyTP_Reta~t	<b>1.0000</b>																
BuyTP_Onli~n	<b>0.3760*</b> <b>0.0000</b>	<b>1.0000</b>															
BuyTP_Medi~s	<b>0.2367*</b> <b>0.0011</b>	<b>0.5248*</b> <b>0.0000</b>	<b>1.0000</b>														
BuyTP_Infl~r	<b>0.1718*</b> <b>0.0187</b>	<b>0.3207*</b> <b>0.0000</b>	<b>0.4227*</b> <b>0.0000</b>	<b>1.0000</b>													
BuyTP_News~r	<b>0.2405*</b> <b>0.0009</b>	<b>0.3807*</b> <b>0.0000</b>	<b>0.5273*</b> <b>0.0000</b>	<b>0.4020*</b> <b>0.0000</b>	<b>1.0000</b>												
SearchPurp~l	<b>0.0506</b> <b>0.4920</b>	<b>0.1518*</b> <b>0.0381</b>	<b>0.0369</b> <b>0.6163</b>	<b>0.0717</b> <b>0.3292</b>	<b>0.0465</b> <b>0.5271</b>	<b>1.0000</b>											
SearchPurp~s	<b>0.3478*</b> <b>0.0000</b>	<b>0.2597*</b> <b>0.0003</b>	<b>0.1461*</b> <b>0.0460</b>	<b>0.2342*</b> <b>0.0013</b>	<b>0.1925*</b> <b>0.0083</b>	<b>0.1571*</b> <b>0.0317</b>	<b>1.0000</b>										



InternetSe~s	-0.0517 0.4820	0.1126 0.1250	0.0166 0.8217	-0.0169 0.8188	0.0342 0.6420	0.0855 0.2448	-0.0134 0.8552	0.0675 0.3586	-0.0064 0.9304	-0.3233* 0.0000	-0.1460* 0.0462	-0.1538* 0.0356	0.2470* 0.0007	0.0000 0.9999	0.3759* 0.0000	-0.0012 0.9868	-0.4347* 0.0000
InternetSe~r	0.0143 0.8461	-0.0351 0.6337	-0.0208 0.7776	-0.1413 0.0537	0.0906 0.2177	-0.1431 0.0507	-0.0560 0.4465	-0.0418 0.5697	-0.1487* 0.0423	-0.5968* 0.0000	-0.1540* 0.0353	-0.0002 0.9973	0.5227* 0.0000	0.3803* 0.0000	0.1683* 0.0213	-0.1285 0.0796	-0.7019* 0.0000
Trust_Reta~b	0.2306* 0.0015	0.1638* 0.0251	0.0874 0.2341	-0.0501 0.4962	0.1368 0.0619	0.0872 0.2355	0.1318 0.0722	0.1132 0.1228	0.2259* 0.0019	0.2095* 0.0040	-0.0200 0.7856	0.0322 0.6621	-0.2097* 0.0040	-0.0511 0.4872	-0.1257 0.0866	0.0872 0.2354	0.1340 0.0676
Trust_Sell~m	0.1305 0.0750	0.1699* 0.0201	0.1653* 0.0237	0.0291 0.6930	0.1512* 0.0389	0.0639 0.3851	0.1254 0.0873	0.1259 0.0861	0.1113 0.1294	0.0749 0.3084	-0.0707 0.3366	0.0641 0.3834	-0.0171 0.8160	0.0855 0.2444	-0.1236 0.0918	-0.0320 0.6633	0.0258 0.7257
Trust_Blogs	-0.0109 0.8824	0.1729* 0.0179	0.1560* 0.0330	0.3933* 0.0000	0.1678* 0.0217	0.1089 0.1380	0.1734* 0.0176	0.3332* 0.0000	0.1504* 0.0400	0.0328 0.6557	0.0428 0.5610	0.1960* 0.0072	-0.0649 0.3775	0.0606 0.4097	-0.1064 0.1472	-0.1007 0.1702	0.0273 0.7108
Trust_Media	0.0798 0.2774	0.2532* 0.0005	0.3788* 0.0000	0.4475* 0.0000	0.3304* 0.0000	0.1033 0.1593	0.2751* 0.0001	0.2533* 0.0005	0.2263* 0.0018	0.0549 0.4555	0.0180 0.8064	0.1127 0.1245	-0.1446* 0.0484	-0.0092 0.9008	0.0431 0.5577	-0.0681 0.3542	0.1718* 0.0187

Intern~a Intern~b Inter~gs Intern~r Trust\_~b Trust\_~m Trust\_~s Trust\_~a

InternetSe~a	1.0000																
InternetSe~b	-0.3773* 0.0000	1.0000															
InternetSe~s	-0.2193* 0.0026	-0.4025* 0.0000	1.0000														
InternetSe~r	-0.2099* 0.0039	-0.2477* 0.0006	0.1302 0.0758	1.0000													
Trust_Reta~b	-0.0059 0.9363	-0.0753 0.3055	0.0573 0.4362	-0.0983 0.1807	1.0000												
Trust_Sell~m	-0.0778 0.2900	-0.0889 0.2264	0.0935 0.2033	0.0389 0.5967	0.4436* 0.0000	1.0000											
Trust_Blogs	0.0811 0.2698	-0.0360 0.6243	0.0316 0.6681	-0.0415 0.5724	0.0523 0.4771	0.2560* 0.0004	1.0000										
Trust_Media	0.0025 0.9726	-0.1105 0.1322	0.0141 0.8482	-0.0472 0.5209	0.0977 0.1836	0.2910* 0.0001	0.4843* 0.0000	1.0000									

## Appendix 2. Survey questionnaire

### Block 1: Touchpoint definitions

- What role are you usually in buying cosmetics and skincare products?  
You can choose several roles.

- Curious A (Having the needs/desires to buy) (1)
- Wisdom B (Giving others product recommendation to buy) (2)
- Authority C (Deciding the product to buy) (3)
- Power D (Paying money for the product) (4)
- User E (Using the product) (5)

What do you use, or occur to you during the search process, including stages when you recognize the needs, search for product and evaluate the product?

Firm means the cosmetics/skincare company; Touchpoints refer to all interactions between you and the firm.

You can choose several touchpoints.

- Talking with family and friends about the needs or products (1)
  - Online influencers on social media promoting product (2)
  - Firm's ads on social media or search engine (3)
  - Product's ads on social media (4)
  - Firm's website (5)
  - Firm's social media (6)
  - Forum and blogposts (7)
  - Other touchpoints (8)
- What are other touchpoints that you use or see during the search process that are not listed above?
  - How are these touchpoints influencing your desire to buy the product?  
Drag the bar to specify your opinion, 1 is the least important, 7 is the most important.
    - Retailing discount
    - Online promotion
    - Social media ads
    - Influencer's posts and videos

- Newspapers and social media advertisements
- What is your gender?
  - Male (1)
  - Female (2)
  - Non-binary / third gender (3)
  - Prefer not to say (4)
- How old are you?

Drag the bar to specify your age, 0 - 100 years old.

## **Block 2: Searching habit**

- Communicating with store employees makes your shopping faster and easier. Does this apply to you?
  - Yes (1)
  - Maybe (2)
  - No (3)
- Do you make decision to purchase before or after seeing the product at a store?
  - Before going to the store (1)
  - After going to the store (2)
  - It doesn't matter to me (3)
- When do you search for cosmetics/ skincare product information?
  - Before purchasing (1)
  - After purchasing (2)
  - I do not search for information. (3)
- In which emotional state do you want (or need) to search for cosmetics/skincare product?
  - When I feel happy (1)
  - When I feel sad (2)
  - When my skin has problems (3)
  - When I receive salary (4)
  - Searching for shopping is my hobby (5)
  - I don't have any feeling before searching (6)

- For what purpose do you search for the information?  
Please rate. 1 star is the the least important, 7 stars are the most important
  - To look for the ideal product (1)
  - To check different website prices (2)
  - To find out information about the product (ingredients, specification...) (3)
  - To know how to use the product (4)
  
- What criteria do you base to buy cosmetics/ skincare product?

Please arrange the list according to your frequent shopping habit, 1 is the most bought product, 7 is the least often bought product.

- Product that you had previous positive experience (1)
- Product on your shopping list (2)
- Product on promotion (3)
- Product in trending (4)
- Product you see at the shop (5)
- Product recommended by online reviewers (6)
- Product recommended by family/ friends (7)

### **Block 3: Online touchpoint effectiveness**

- How often do you the Internet everyday?  
Number of hour(s)
  
- What site from the Internet do you use to search for information?  
Please arrange the order of these channels. 1 is the least used site, 4 is the most used site.
  - Online search engine (Google, Firefox...) 's top results (1)
  - Social media (2)
  - Firm's website (3)
  - Online forum and personal blogs (4)
  - Other channels (5)
  
- What are other online channels that you use frequently to search for cosmetics/skincare products that are not listed above?

- Do you prefer online channels while searching for information due to its cost and time saving?
  - Definitely yes (1)
  - Probably yes (2)
  - Might or might not (3)
  - Probably not (4)
  - Definitely not (5)
  
- How long time do you usually spend for searching product information online?  
  
e.g: 2 hours
  
- Do you find all the information you need through the Internet?
  - Definitely yes (1)
  - Probably yes (2)
  - Might or might not (3)
  - Probably not (4)
  - Definitely not (5)
  
- More touchpoints (social media info, website info, customers reviews....) make purchase decision faster. Does this work for you?
  - Strongly agree (1)
  - Somewhat agree (2)
  - Neither agree nor disagree (3)
  - Somewhat disagree (4)
  - Strongly disagree (5)
  
- How often do you buy product promoted on social media or email?
  - Always (1)
  - Most of the time (2)
  - About half the time (3)
  - Sometimes (4)
  - Never (5)
  
- How much do you trust these channels' information?  
Please rate. 1 star is the least you trust, 7 stars is the most you trust.

- Retailing website (1)
- Online selling platform (like Amazon) information (2)
- Online personal blogs (3)
- Social media (Facebook, Instagram..) (4)

#### **Block 4: Relationship with physical touchpoints**

You find the "perfect" product to buy from online researching. You decide to buy the product at one store.

- How is the buying decision affected by these factors on the store?

Extremely likely (1) Somewhat likely (2) Neither likely nor unlikely (3) Somewhat unlikely (4)  
Extremely unlikely (5)

- Free product sample (1)
- Product placement and arrangement (2)
- Interactions with seller (3)
- Availability at the store (4)
- Actual product packaging (5)
- What is (are) your cosmetics/skincare product criteria?
  - Reasonable price (1)
  - Personal lifestyle & standards (2)
  - Online reviewers' opinions (3)
  - Favourite company brand (4)
  - Familiar brand (5)
- Do you think online touchpoints (online retailing, social media) separate from the offline touchpoints (retailing shop/supermarket)?
  - Definitely yes (1)
  - Probably yes (2)
  - Might or might not (3)
  - Probably not (4)
  - Definitely not (5)