# **CHAPTER II LITERATUR REVIEW**

## 2.1 Reference Review

There has been a considerable shift from a product to a service in the Gross Domestic Product of many countries, which is supported by internet and advanced technology. Self Service Technology, which also known as SST, is considered to play a part in the marketing strategies and has been much discussed globally. SST is a free, non-employee direct service technology interface for customers. As stated in S-D Logic (Service-Dominant Logic), the customer contribute as an important participant, because they are the element of value co-creation in the co-production of service which could give a competitive advantage (Fernandes & Pedroso, 2017).

At recent days, automatic payment, touch screen display, mobile applications, and other advanced technology has been used to meet the consumers' and retailers' needs and preferences. Generally, there are two options of SST, due to the retailers diverse and growing needs over time: "on-site" (ATMs, in-store kiosk, hotel checkout, supermarket self-checkout etc) and "off-site" (mobile banking and online shopping) (Fernandes & Pedroso, 2017).

Unfortunately, there have not been many studies and research that discussed the off-site technologies compared to on-site technologies.

Self-checkout has been heavily eyed by supermarkets, due to its benefits as a way to increased productivity, reduce expenses for staffs, reach new customer segments, maintain a consistent services, and save spaces that can be used for

additional sales. Even so, the reason why customers preferred self-service rather than provider–client interaction is still unclear as it can be a lead to a better selfservice's technology implementation. It also noted that, although some customers preferred to use SST, there are others that are much likely to avoid using them. As the participant of service co-creation through self-service, customers must be persuaded by the benefits that they may receive in using SST to avoid providers' losses. Therefore, understanding the customers' perceived benefits is very crucial (Fernandes & Pedroso, 2017).

#### 2.2 Previous Study

The significance of SST has been increasing as retailers thrive to find a way in providing better services to the customers, hence studies on SST have been carried out in a broad range of research contexts, using a wide variety of research designs and technologies, which provide information concerning the factors of SST's adoption, but there is still no confirmation of a widely accepted SST's conceptual framework. In this case, the model that often used in identifying customers' usage behavior toward new technological services or products is Technology Acceptance Model, also known as TAM. Ajzen and Fishbein (1980), stated the variables that influence attitudes are perceived usefulness and perceived ease of use, which will lead to intentions, thus customers' usage. However, TAM cannot fully determined SST adoption due to the fact that SST is highly affected by co-creation of value and social context. Previous studies suggested to consider other frameworks, such as Technology Readiness (TR), which is introduced by

Parasuraman (2000), that explain optimism, innovativeness, discomfort, and insecurity. Research by Kelly, et al., 2010, suggested that TR need to be adapted with technology attributes and other consumer traits, either directly or as moderators. Dabholkar (1996), propose two alternative models to explore SST's service quality: Attribute-Based Model, which put forward speed of delivery, ease of use, reliability, enjoyment, and control; and Overall Affect Model, which suggested the need to interact with a service employee and customers' attitude in technological products usage (Fernandes & Pedroso, 2017).

## 2.2.1. Speed of service delivery

Speed of transaction is one of the most important aspects to be considered. Dabholkar (1996), stated that Speed of transaction is described as the period required to make transactions using SST. Customers have to be convinced that by using SST, they can cut the time of a service to delivered (Lee et al., 2013), overcome service barriers such as location and time (Collier & Sherrell, 2010). It is suitable for customers who put forward time efficiency (Durkin, 2004). Previous studies by Meuter et al., (2000), Howard & Worboys (2003), and Collier & Kimes (2013) have proved that the speed of transaction is one of the main factors that could influence customer satisfaction in using SST. In conclusion, the faster the service is, the more positive the customers' evaluation will be (Dabholkar, 1996), on the other hand, the longer it takes for a customer to wait, the less satisfied they will be (Collier and Sherrell, 2010).

#### 2.2.2. Ease-of-use

According to Davis (1989) ease of use is define as "free of effort", a customers' perception that they can enjoy using the available service with minimum wasted effort (Timmor & Rymon, 2008). The situational factors that influenced this variable are operating hours, location, and overall availability of the SST. Lee et al. (2013) and Oghazi et al. (2012) talked about the psychological perception of the customers, where they tend to avoid self-service that give them hassle, difficulty, and uneasiness since not all of the customers are skilled in using the new technology adoption. Customers need to believe that SST will be easy to learn and use, which will lead to their willingness to use it again (Davis & Wiedenbeck, 2001). Researches by Zhao et al. (2008), DeJong et al. (2003), Lim & Dubinsky (2004), and Curran & Meuter (2005) have shown a positive result regarding the role of ease of use in explaining customers' behaviors and satisfaction towards the new technology adoption.

# 2.2.3. Reliability

Parasuraman, et al. (1998) and Davis (1988) stated that reliability referred to the ability of the new technology to consistently perform the service accurately and dependably. Walker & Johnson (2006) and Weijters et al. (2007) defined it as the ability of the SST in carrying out the expected service consistently, dependably, and accurately to prevent undesired risk. Reliability played as one of the factors that influenced customers' technology acceptance. Poor SST's technical function could

lead to customers' dissatisfaction and losses (Zhu et al., 2013). Studies by Dabholkar (1996) found that reliability can be used to asses self-service technology, while Ding et al. (2011) research findings stated that there is a positive relationship between customers' satisfaction and accuracy in self-service.

## 2.2.4. Fun or Entertainment Enjoyment

From the hedonic aspect, SST may be considered as the source of entertainment that could motivate customers in technology acceptance, regardless of the consequences. Apart from the utility aspect which discuss the efficiency of the using the technology, enjoyment could also be an evaluation factors of service quality (Fernandes & Pedroso, 2017). The customer uses self-service options just for fun especially for those who are enjoying playing with machines (Dabholkar 1996). Thus, the use of SST is mainly triggered by natural motives related to the enjoyment of modern technology besides the motives that are related to efficiency (Childers et al. 2001; Wang 2012). Therefore, enjoyment with the usage of SST systems is one of the main attributes that determine the evaluation of service perceived quality by Dabholkar (1996), Dabholkar and Bagozzi (2002), and Anselmsson (2001). As SST gradually replaces the role of employees, customers will progressively perform service tasks or produce service by themselves (Hilton and Hughes 2013).

2.2.5. Perceived control

Perceived control can be defined as the how much of control that the customer feels over the process/service outcome at hand (Bateson and Hui 1987). From a self-service point of view, perceived control is defined as a belief in a person's ability to rule and control the processes and outcomes of the self-service experience (Collier and Sherrell 2010). By operating services for themselves, some customers have a tendency to feel more in self-control (Bateson 2000; Rodie and Kleine 2000; Dabholkar et al. 2003). This tendency is more intense driven by pandemic situations. According to Bateson (1985) and Anselmsson (2001), the more control perceived by consumers when experiencing a service, their level of satisfaction will be increase. According to Meuter et al. (2000), perceptions of control affect satisfaction from technology use, while also decreasing perceived risk and increasing adoption intentions (Lee and Allaway 2002; Elliott et al. 2012). Dabholkar (1996) indicates that perceived control has a positive impact on intention to use SST and on evaluation of service quality. According to Collier and Sherrell (2010), a lack of control can frustrate customers and prevent further self-service transactions in the future. Perceived control was identified as one of the differentiating factors between SST users and non-users (Walker et al. 2002; Howard and Worboys 2003).

#### 2.3. Conceptual Framework

Since it was implemented in September 2020, company management felt the need to evaluate the implementation of Gramedia Pay & Go as a whole. Starting from the readiness of the technology infrastructure, the necessary operational Universitas Multimedia Nusantara | 16 preparation, investment, and most importantly the implications for in-store sales. It is necessary to study whether the concept of self-checkout can indeed be accepted by customers as a feature with good quality (perceived quality) so that it can increase people's interest to go back to shopping at stores, given the pandemic conditions that have introduced new habits of interacting with other people (new normal). If this concept is well accepted, it is hoped that people will feel comfortable and satisfied shopping at the store (overall customer satisfaction), so there will be an intention to shop again (repurchase intention). To measure the perceived quality of the self-checkout concept, the TAM (Technology Acceptance Model) method is used with the assessment criteria are speed of delivery, ease of use, reliability, fun or attractiveness enjoyment, and the independence of the process (self-control).

Based on the literature review described above, this is the conceptual framework and hypothesis of the research are shown in Figure 5.



Figure 5. Conceptual Framework

#### 2.4. Hypotheses Development

Dabholkar (1996) explained that the attribute-based model is used to test whether consumers evaluate service quality for self-service checkouts based on these five attributes: speed, ease of use, reliability, fun or entertainment, and perceived control. The main idea of Dabholkar's attribute-based model is that consumers evaluate service quality using a compensation process in which attributes associated with SST are combined.

Satisfaction is defined as the level to which an individual develops positive feelings from consumption (Lin and Hsieh 2006), or as a judgment by the consumer that the product or service provides a pleasant level of consumption-related fulfillment (Lin and Hsieh 2007). the correlation between perceived service quality to customer satisfaction has been studied recently in terms of self-service technology (Kuo et al. 2009; Dabholkar and Spaid 2012; Orel and Kara 2014). How the impact of self-service on Overall Customer Satisfaction, causing the importance of evaluating a self-service product has been recognized in the literature. If consumers are satisfied with SST products based on the attributes, they consider important, such as speed, convenience, reliability, and independence, they are more likely to be satisfied with the overall in-store experience (Meuter et al. 2000). Also, according to Collin and Sherrell (2010), previous research has noted that, when a customer experiences more benefits in a product or service, their satisfaction will be increased. Therefore the hypothesis is :

- Hypothesis 1 (H1): Perceived Quality of Self-checkout influences Overall Customer Satisfaction.

In this paper, researchers believe that when an SST product or service has a good perceived quality, it will endorse users to use the product more often because they feel joyful and fun. Therefore, the next hypothesis is

- Hypothesis 2 (H2): Perceived Quality of Self-checkout influences usage frequency.

On the other hand, the frequency of use will influence the evaluation of the self-checkout attributes. The more consumers interact with SST products, the more skilled and less worried they will be with their ability to use the products. That is why usage frequency will surely increase customer capability to operate the product (Beatson et al. 2007; Wang et al. 2013). The more frequent customer using the product, the more experienced they become, and the barriers to adopting SST will be reduced (Rodie and Kleine 2000; Hilton et al. 2013). Buell et al. (2010) said that consumer who always choose to do their transactions through a particular self-service channel, may be more likely to be efficient and confident and have more control over the self-service feature, and therefore may experience higher overall customer satisfaction, rather than a consumer who does not use the self-service regularly. These consumers will find self-service as a tool that offering greater control, being faster, more reliable, easy to use, and enjoyable (Dabholkar et al. 2003). This will develop the next hypothesis.

- Hypothesis 3 (H3): Usage Frequency influence Overall customer satisfaction

With almost the same reason as hypothesis 2 (H2), the researcher thinks that when a customer is comfortable with the SST product based on the good perceived quality, then without any feelings of satisfaction, the customer will most likely come to visit the store again to do a repurchase. This will lead to another hypothesis.

- Hypothesis 4 (H4): Perceived Quality of Self-checkout influences Repurchase Intention.

Likewise, if a consumer has experienced an overall customer satisfaction with a store, they will likely want to return to the store again in the future (Beatson et al. 2007). Therefore, supermarkets and stores are assuming that SST will enhance the customer experience and will be saving the retail business sustainability (Orel and Kara 2014). A variety of self-service research has shown evidence that there is a significant positive impact of customer satisfaction on behavioral intentions (Lin and Hsieh 2007), both in traditional and technological perspectives (Orel and Kara 2014). Satisfaction as a primary driver of product repurchases has been identified in prior research (Wang et al. 2013). In the perspective of SST usage, a customer who is satisfied with the quality of the services accepted will not easily switch between alternatives and will have the intention to build a better relationship with their current service provider (Wang 2012). Thus, there is an expectation that overall customer satisfaction of the self-service experience to have a positive impact

on the intention to visit the store in the future (Marzocchi and Zammit 2006), described in this hypotheses:

- Hypothesis 5 (H5): Overall Customer Satisfaction influences repurchase intention.

Reinders et al. (2008) when studying the compulsory use of SST, found that feelings towards SST usage had an impact on feelings towards the service provider in this case store, it is called transferring intentions. Another hypothesis is developed based on the assumption that when people often use some product, they will become addicted to using the same. In this case, the more customers use the self-service product, the more they have an intention to do a repurchase.

- Hypothesis 6 (H6): Usage Frequency influences repurchase intention.

As we can see in the framework, those hypotheses above are explaining the direct effect between two variables. Two mediating variables create an indirect relationship between an independent variable and a dependent variable. Those two mediating variables are the overall customer variable and usage frequency. In this study, the researcher will examine how are those mediating variables affecting the relationship. Are those variables create a more significant effect between independent and dependent variables compare to their direct relationship. Therefore, the researcher develops these three hypotheses.

- Hypothesis 7 (H7): Perceived Quality of Self-checkout affects repurchase intention using Overall Customer Satisfaction as mediating variable.
- Hypothesis 8 (H8): Usage Frequency affects repurchase intention using
  Overall Customer Satisfaction as mediating variable.
- Hypothesis 9 (H9): Perceived Quality of Self-checkout will affect repurchase intention using Usage Frequency as mediating variable.