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Social and Situational Influences on Customer Shift Towards Self-Service Technologies

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Abstract

In recent years, significant developments have occurred in the service sector, most notably the introduction of technological interfaces to customer care interactions. Even though businesses invested heavily in Self-Service Technologies (SSTs) in the hope of maximizing their benefits, customers have not adopted the technology in the manner anticipated. Among many reasons behind customer movement towards SSTs, this study investigates the social and situational influences which have received little attention in scholarly work. To accomplish this purpose, a qualitative methodology is used, with 25 semi-structured interviews performed with SST users who were chosen using a purposive sampling method, and the responses were analyzed using the thematic analysis method. The study identified the influences of numerous social groups and classified them into three categories: personal sources, organizational sources, and the society at large. Eight situational factors were found as influencing to use SSTs: travel limitations, crowding, urgency, number/volume of transactions, nature of transactions, task complexity, payment mode, group/alone behaviors. This understanding fills the gap in the literature while providing insights to SST service providers that are needed to promote SST use and handle various conditions in which their customers' SST usage may fluctuate from situation to situation.

Keywords: Self-Service Technologies, consumer behaviors, social factors, situational factors

Introduction

Though traditionally, customers used to visit service organizations and meet service employees to get the service transactions done, with the development of technologies, organizations altered the service encounters with technologically advanced service processors [1]. Self-service technologies have modernized the service encounter [2] by enabling consumers to conduct transactions via a technical interface without interacting with a human representative from the business [3, 4]. By using these technological encounters, customers are able to perform many service transactions independently [5]. Many of these self-service technologies allow customers to stay in their comfort zones and perform service anytime when they are free [6]. Such SSTs provide 24-hour service
allowing customers to skip their busy schedules and work leisurely [7]. SSTs have altered how organizations manage interpersonal care in service premises, letting customers perform their own service [8:246]. SSTs have become the common practice in the modern marketplace [9], and 'automated social presence' is predicted for the near future, with businesses interacting with customers on a social level as 'humanoid robots' through technology-based service frontline experiences [10].

However, simply introducing SSTs does not guarantee their adoption by the customer, as some customers are averse to them [11]. When incorporating technology into the service encounter, it is critical to determine whether the consumer sees an attractive experience or if the technology detracts from the client’s entire service experience [12]. Customers will avoid SSTs if they perceive them to be uncomfortable and ineffective [13]. Even though SSTs give a plethora of benefits to their users, customers have not been adopted sufficiently, and some people still prefer traditional face-to-face service interactions managed by service employees [14]. However, whether willing or not, people may occasionally be influenced to utilize SSTs by various situational circumstances [15].

Social influences become critical, which affect the customer choice of SSTs [16]. Apart from SST benefits, the influence of certain third parties becomes significant in terms of customers' adoption of SSTs [17]. Simultaneously, the utilization of SSTs is contingent upon scenarios in which they can conduct service transactions via interpersonal encounters or technical interfaces. Though numerous societal and situational elements determine how people use self-service devices, existing scholarly work elucidating this practical implication is extremely rare. To fill this gap in the literature, this study seeks to accomplish two research objectives:

1: To investigate the social influences that determine customer preference for SSTs.

2: To investigate the situational aspects that influence a customer’s decision to switch to SSTs.

**Literature Review**

The literature review part began by discussing self-service technology in further detail. Following that, it discusses the elements that drive client acceptance of self-service technologies. Finally, the social and contextual elements influencing customer adoption of SSTs were elucidated.
Self-Service Technologies

The service environment, which may take the form of a real place or a virtual area, is widely recognized as crucial to customer interactions with businesses [17]. Previously, service encounters were referred to as the context in which interpersonal interactions occurred between the client and the service provider [18] and were described as "the dyadic interaction" between the customer and the service provider [19:87]. Bitner [20] distinguishes three categories of service capes based on this perspective of service interfaces: self-services, interpersonal services, and remote services. According to Meuter, Ostrom [21], self-service represents a paradigm shift in the service environment, whereas technology-enabled service interactions are considered critical in service transactions. Customer self-service behavior is encouraged with the advancement of technologies. Instead of the 'marketplace', it resulted in 'market space' in which today’s service sector has high demand [22]. Self-service technologies are a classic example of market space transactions [21].

SSTs are defined as "organization-provided technologies that enable customers to engage in self-service behaviors" [23:862, 24:3]. Advances in information technology and rising labor costs have compelled businesses to change their procedures into technologically advanced operations [25]. Additionally, the technological breakthrough has moved beyond internal corporate procedures to firm-customer interfaces via self-service solutions [13]. Thus, SSTs might be regarded as a natural consequence of technical development [26]. SSTs have gained widespread acceptance as a result of the transformation of business processes over the previous decade [13], and are currently used in all businesses to accomplish activities more effectively and with fewer resources [3].

Numerous digital technologies provide their clients with a highly personalized environment that is rich in information and interactive [27]. Now, technology-enabled services are becoming a fundamental aspect of marketing [4], and an increasing number of customers are relying on technologies to create services rather than on the firm’s employees [21]. Emerging new clients are referred to as ‘working customers,’ and many of them are content to serve other customers as well [28].

Self-service technologies enable clients to create and consume services remotely [29] without directly interacting with the firm’s workers [30]. The roles of customers and enterprises are constantly changing in SSTs [31], and Bitner, Faranda [32:197] define self-service choices as an extreme in which the client produces a complete service with little
or no assistance from organizational workers, acting as a 'full participator.' Online banking, automated hotel checkouts, self-check-in at airports, self-service fuel pumps, self-scanning at retail locations, and automated teller machines (ATM) provide examples for SSTs [21]. Certain self-service technology, such as self-fueling and ATMs, have grown ubiquitous, with over half of all banking transactions currently conducted without the help of a teller [21].

Currently, the majority of enterprises have adopted SSTs with the goal of completing more tasks with the least amount of work possible, while clients collaborate with machines, transforming their position from primarily passive to active [23]. Although SSTs were once restricted to conducting routine and simple transactions, they are now used to perform more complicated non-routine tasks.

Customer Adoption to Self-Service Technologies

Although the self-service technologies are new in service encounter studies, a substantial body of prior research exists in related contexts such as technology acceptance/trial/adoption. Most of the past studies used Technology Acceptance Model (TAM) or the Unified Theory of Technology Acceptance and Use (UTAUT) to understand the customer adoption to SSTs, despite the fact that these models do not adequately explain the context of self-service technology [33]. Apart from those models, few research specifically acknowledges the SST uptake using several criteria. Blut, Wang [33] recently created a model for SST acceptability using a meta-analysis based on TAM, UTAUT, and innovation diffusion theory (IDT).

Davis established TAM in 1985, leaning heavily on the Theories of Reasoned Action and Planned Behavior. The TAM has been regularly upgraded as TAM 2 [34] and TAM 3 [35] to incorporate elements pertinent to e-commerce, such as trust and perceived risk associated with system use. According to Oh, Jeong [36], TAM alone is insufficient to explain SST adoption; so, they included two variables, namely 'situational factors' (waiting, service complexity) and 'attitudinal variables' (technology trust and technology anxiety), and discovered substantial effects. Lee [37] highlights that TAM provides conflicting results when applied to diverse cultural contexts (e.g. western versus non-western), and hence calls into question its applicability in these circumstances. As a result, Weijters, Rangarajan [38], Lee [37], Pikkarainen, Pikkarainen [39] employ TAM extensions to measure SST acceptance.
To understand the intention to use and actual use of technologies, Venkatesh, Morris [40] proposed the Unified Theory of Acceptance and Use of Technology (UTAUT) model, which includes four core variables: performance expectancy, effort expectancy, social influence, and facilitating conditions, as well as four moderating variables: gender, age, experience, and voluntariness of use. However, Blut, Wang [33] point out that generic technical acceptance models, including TAM and UTAUT, are not fully articulated in the context of self-service technology and are hence unsuitable for understanding client acceptance of self-service technologies. Apart from these established technological acceptance models, which have been used in previous research to understand both general technology acceptance and SSTs in particular, some scholars attempted to introduce several new measurements to better understand self-service technology trial/acceptance/intention/use, as discussed below.

Meuter, Bitner [13:63] claim that the literature on "why customers choose to test SSTs" is sparse, highlighting the importance of identifying elements that adequately describe the SST environment. They establish the significance of 'novel SST characteristics' and 'individual variation' in SST trials. Both 'consumer contexts' (their abilities, experience, social and psychological aspects) and 'organizational contexts' (interface features, speed, control, and reliability) are recognized as critical in the customer selection of SSTs [23]. Liljander, Gillberg [11] investigate the role of technical readiness in SST acceptance and discover disparities in between users and non-users of SSTs. Lin and Hsieh [41] discover that technical readiness has an effect on behavioral intentions and customer satisfaction in self-service technologies, whereas Lin and Hsieh [42] discover that it has an effect on both satisfaction and behavioral intentions in SSTs. The literature has revealed a negative influence of users' technology anxiety on their use and ratings of self-service devices [43]. According to Wang, Barua [44], individuals' fear and lack of faith in technology contribute to their hesitation to utilize SSTs and unhappiness. The requirement for engagement with the service employee results in a negative attitude about SSTs [25]. Lee [45] establishes an adverse association between the desire for engagement with service personnel and the intention to use SSTs. Additionally, Anton [46] believes that customers are increasingly wanting personal relationships during service encounters, which would have a detrimental effect on SSTs.

Wang, Harris [47] investigate the role of situational factors on customers' selection of SSTs, particularly self-scanning in supermarkets. According to their research, 'perceived line wait time, perceived task complexity, and companion influence' are the most relevant
situational elements influencing consumer choice between SSTs and interpersonal service. Demoulin and Djelassi [48] additionally investigate the effect of contextual factors (time constraints, basket size, coupons, and wait length at SSTs and staffed checkouts) on real customer SST utilization. SST adoption has also been discovered to be influenced by one's habit and familiarity with similar technology [48]. According to Wang, Harris [49], past habit is the most powerful predictor of SST use. However, Castro, Atkinson [26] suggest that prior experience with SSTs is critical when the technology is new. Lee and Allaway [50] recognized the influence of personal control on the adoption of self-service technologies. Perceived empowerment and enjoyment have been established as significant predictors of customers' propensity to participate in online value co-creation [51].

Customer perceptions of SSTs are cited as a factor in self-service technology adoption [52, 53]. The SST Attitude-Intention Model [12] elucidates the effect of numerous SST attitudes on customers' behavioral intentions on SST selection. Lee and Lyu [54] assert that 'personal values' and 'consumer characteristics' are critical in shaping intents to use SSTs via attitude formation. Wu, Quyen [55] discover that characteristics of the e-services cape have a substantial effect on consumer perceptions and trust in websites. Dabholkar [25] identified the importance of service quality in the context of SST adoption, which has been validated by various researchers [56-59]. Dean [60] discovers that consumer demographics, particularly age, have an effect on SST use, with older generations having less familiarity with and confidence in performing via SSTs. Consumer demographics, according to Eriksson and Nilsson [61], are insignificant in a developed context. However, Dabholkar, Michelle Bobbitt [62], and Weijters, Rangarajan [38] discovered that age had no effect on the use of SSTs. Blut, Wang [33] established that age and gender are ineffective determinants of SST acceptance.

Additionally, technology characteristics such as ease of use, the convenience of time and place, security, standardization of equipment, availability of technology, efficiency, and average competence are recognized as encouraging customer use of self-service technologies, while habit, preference, fear, and a lack of sufficient benefits discourage customer use [63]. The effects of perceived usefulness and multichannel satisfaction [61], cost savings, time savings, and behavioral control [8], individuals’ capacity, perceived risk, relative advantage, desire for personal contacts and [64], willingness and ability [65], have also been recognized as significant. Galdolage [66] note the importance of social support, especially in the early adoption period to SSTs. Additionally, a well-designed
interface, accessibility, personnel support, store advertising, and quick delivery were all identified as critical features of retail kiosks [67]. Picot-Coupey, Hure [68] identified the issues that e-retailers faced when synchronizing clicks and bricks to improve the customer buying experience.

**Situational Factors and SST Adoption**

Wang, Harris [47] investigate the role of situational factors on customers' selection of SSTs, particularly self-scanning in supermarkets. According to their research, 'perceived line wait time, perceived task complexity, and companion influence' are the most relevant situational elements influencing consumer choice between SSTs and interpersonal service. Demoulin and Djelassi [48] also discovered that situational factors (time constraints, basket size, coupons, and wait length at SSTs and staffed checkouts) have an effect on real customer SST utilization.

Similarly, reported waiting time (Dabholkar, 1996), perceived waiting time and social anxiety [53], and perceived service complexity [69] have all been identified as situational factors that influence the selection of SSTs. Oh, Jeong [36] discovered that 'situational factors' such as waiting, and service complexity play a significant role in SST adoption. Additionally, Dabholkar and Bagozzi [53] noted that 'crowding' has an influence on 'social anxiety,' particularly when other customers can observe how they utilize unknown types of SSTs. Moreover, Oh, Jeong [36] criticize TAM for failing to account for critical 'non-technology' aspects such as 'situational factors' when assessing SST adoption. Galdolage [70] points out the importance of situational factors in customer adoption of self-service technologies.

**Social Influence and SST Adoption**

The importance of social influence in technology adoption is discussed in the UTAUT model. Venkatesh, Morris [40] noted that social influences in the UTAUT model become insignificant in determining technological acceptance without any moderating effects, however, were significant when all four moderators were included (gender, age, experience, and voluntariness). Additionally, the findings of this study corroborate Venkatesh and Morris [71:132] observation that "gender may be a key to understanding the role of social influence on initial technology adoption decisions and persistent use of new technologies." Additionally, Venkatesh, Morris [72] show that women are more receptive to the ideas of others, i.e. social influences. Additionally, Curran and Meuter [73] show how social approval plays a role in SSTs' intention to modify behavior.
Selnes and Hansen [74], recognized a possible hazard in the use of self-service technologies to increase client loyalty, which may result in the deterioration of social relationships. Fernandez-Sabiote and Roman [75] discovered that customers are more satisfied with traditional channels than with online platforms due to the way they maintain social bonds in their premises. Social media as web-based applications and social networking sites motivate customers’ use of online platforms [76]. Hilton, Hughes [23] recognized the importance of both 'consumer contexts' including social influences and 'organizational contexts’ as critical in the customer selection of SSTs. Zhang, Hu [77] define co-creative customer experience in online brand communities in terms of three dimensions: social support (informational and emotional), social presence, and flow, and discovered favorable correlations between experience and customer engagement.

**Methodology**

Aligning with the research objectives which aimed at exploring situational and social factors that effect on customer shift toward self-service technologies, exploratory research work was carried out with qualitative inquiries [78, 79]. The study was conducted in East Riding Yorkshire of United Kingdom. A non-probabilistic purposeful sampling technique was used in recruiting participants for the study with the intention of hiring information-rich cases [80-82]. The sample size in this study was limited to 25 SST users, as that level of data saturation was achieved. Palinkas, Horwitz [81] point out that the sample size in qualitative research is more likely to depend on the researcher’s attainment of required information or, in practice, on the point at which new categories, themes, or explanations cease to emerge.

As Turner [83] says, preparation for field interviews is critical to their effectiveness. Three pilot interviews were conducted in this study to determine whether the respondent could easily understand the questions, to identify any repetitions in the questions or problems with the interview’s flow, to determine how probing works in practice, to determine the length of a typical interview, and to determine whether the interview covers all the types of information required. Semi-structured interviews with some leeway in probing were undertaken to ensure the sufficiency and quality of data collection [84]. The interviews were done in a natural (non-contrived) context [78], solely for the respondents' convenience in terms of interview location. Prior to beginning the interview, a formal consent sheet was used to gain the respondent’s consent to participate willingly in the research. A request was made informally to record the interviews in order to expedite the
transcription process. Additionally, information sheets containing a research brief and the researcher’s contact information were distributed. An interview guide was created as the research instrument to facilitate a simple, smooth, and focused interviewing process. According to Creswell [85], an interview protocol consists mostly of opening remarks, responder instructions, interview questions, follow-up questions, and a closing statement. Respondents were urged to discuss situational and social factors that influenced their decision to embrace self-service technology. The research environment resembled a conversation, with each subject receiving 30 to 45 minutes of time.

The interviews were audio-recorded and transcribed into word documents. The researcher went through a single transcription many times, highlighting the phenomenon that was perceived to be relevant. Data collection and analysis occurred simultaneously, such that the researcher transcribed and analyzed the finalized interviews while continuing the data collection process. Ideas that appeared during the analysis were documented in memos and stored chronologically. The data in this phase of the study were analyzed by means of ‘thematic analysis’, which is a method “for identifying, analyzing, and reporting patterns (themes) within data” [86:6]. Thematic analysis is a "method for systematically identifying, organizing, and providing insights into patterns of meaning (themes) across a data set" that enables the researcher to make sense of commonalities and shared meanings [87:57] by transforming emerging themes into analysis categories [88]. The results of theme analysis show the most prominent patterns of meaning in the dataset, which encompass a variety of emotive, cognitive, and symbolic dimensions [89]. Rather than simply extracting themes from qualitative research, it should strive to connect them in order to create models based on the findings [90]. Finally, a compelling argument for selecting the themes must be developed, primarily through reading related literature [91]. Six stages of the thematic analysis process have been proposed: data transcription, data organization, data familiarization, data coding, topic generation, and rigor assurance [92].

Findings
This study aims to achieve the main two objectives, which focused on exploring situational and social factors that affect customers’ choice of self-service technologies. The findings are separately provided below.
Situational Factors that Influence Customer Shift Towards SSTs

As the study found, some of the respondents are not regularly using self-service technologies. They use SSTs only in some specific situations. The study found eight specific situational influences where customers tend to use SSTs. Accordingly, travel restrictions, crowding, urgency, number/volume of transactions, nature of transactions, the complexity of the tasks, payment mode, and whether the customer in a group or alone influence their choice of SSTs.

**Travel restrictions:** When clients perceive travel limits as a result of their geographical location, lengthy excursions that squander their time lead them to choose online platforms, particularly for purchasing. They emphasize the ease with which things from any country can be purchased via internet platforms. Self-service technology has also aided in the recent Covid 19 epidemic. Due to travel restrictions, the majority of individuals prefer to obtain food and other necessary things via online ordering.

I’ve never made an online transaction before. We were unable to travel anywhere due to Covid 19. As a result, I learned about and began using online shopping. I used to order all of my groceries online from supermarkets. It’s actually quite simple. They send items directly to our homes (Female, 38 years).

I used to shop online because it allows us to buy things from anywhere in the world. It’s astute. You are not restricted to a specific geographical location for walking. You have numerous options (Male, 43 years).

**Crowding:** The study recognized the propensity to use SSTs as high when physical service encounters are crowded. Especially at occasions where the service encounters are operated by organizations service staff are free, customers would like to get the services from them. However, customers tend to use SSTs, mainly in supermarkets, banks, airports, when they see lengthy queues at service encounters. Following interview quotes

If I visit the bank during office hours, I know that I have to wait in the queue, and it wastes my time. So, I do all the banking transactions via ATM machines in a time free to me. I do a lot of banking transactions via online too. It made my life very easy (Male, 48 years).

When shopping, normally I use Self-service checkouts if only there were a lot more people in the till. Otherwise, I used to go to the till (Female, 50 years).
The fuel pumps, I would rather be going and paying. But if it is crowded, I will do it by myself with the machine... so you can choose which one, whether you do it in the machine or go to a till. It depends on, say how big the queue is and how much I am hurry (Male, 52 years).

Urgency: As respondents point out, if customers are in a hurry, based on the situation, they choose SSTs or physical outlets. On the occasions that they find more free time and leisurely do their service transactions, they naturally choose traditional service encounters. On the other hand, especially in online purchasing since it takes some time to deliver the products, if they need to quickly purchase it, they choose physical stores.

Normally I used to leave some money in their (parents) hands when I visited them. Because now they are not earning. You know, if I want to urgently send some money for them, I do online bank transfers too. Coz I can’t wait; it’s something that we need to do immediately (Male, 45 years).

I like online shopping. But it takes some to deliver. If I urgently need that thing, I spend some time visiting the store and buying it (Male, 52 years).

Number/ Volume of Transactions: According to the findings of the study, when clients need to complete a large number of transactions or acquire a large number of product items, they visit physical places. However, if customers conduct simple or routine transactions, or if they only purchase a small number of product items, they can handle their transactions through the use of self-service technologies.

I do simple banking transactions via ATMs or CDMs. I normally transfer small amounts of money to other accounts using online banking. But, if I need to do many transactions like updating, money transferring, depositing, and many things, I will visit the bank (Female, 42 years).

Especially when shopping at supermarkets, if I’ve got a few items, I choose machines. If my trolley is packed with a whole lot of goods, I never go to the machines. Because it says whatever the wrong with items (Female, 50 years).

Nature of Transactions: As respondents mentioned, people use SSTs for selected transactions. Though some people used to withdraw money via SST machines, they hesitate to deposit money on their own using machines. Further, respondents mentioned that some of the items such as alcohol and lotteries are prohibited from purchasing via
self-service counters at supermarkets. In such situations, customers necessarily need to meet service employees at physical service encounters.

!I am using machines. But it depends on which task. I used to withdraw money in ATMs. But not sure of depositing via machines. I am afraid if something happens. So I would like to visit the bank (Female, 62 years).

You know. If you bought liquor, definitely you have to go to the till. Supermarkets do not issue liqueur in self-service checkouts (Male, 38 years).

Task Complexity: As the study found, most people choose self-service technologies to accomplish simple and routine tasks that they carry on a continuous basis. If they recognize that they have to perform some complex tasks that they have not much experienced before, they wish to get the support of service employees.

If it is some kind of a simple task like money withdrawal, I definitely choose ATMs. But if the task is a bit complicated, like self-checkouts at airports, I am afraid to choose it. I wait in the queue and manually get it done. Or choosing an insurance policy for my vehicle, though I do it online, I usually get support from someone who knows it very well (Male, 42 years).

I like to do simple things with machines (Male, 58 years).

Payment Mode: Especially when making purchases, if customers use SSTs mostly, they have to pay using credit or debit cards. Customers, those who are not using such facilities, reject SSTs. Further, especially when customers make cash payments, redeem points, purchase via vouchers, withdraw money from the till, and when they do not have exactly requested money by the machines, they tend to visit service encounters operated by service employees.

I normally use machines if I make card payments or if I have exact money with me. Otherwise, I choose tills. Sometimes when I go shopping, I need to withdraw some money from my bank from the till. Sometimes I have redeemed points. In such cases, I used to meet employees rather than the machine (Female, 53 years).

Group or Alone: As the study found, there is a tendency to use self-service technologies, mainly online-based SSTs, when people are alone. When they are in a group, maybe with friends or peers, they would like to visit physical outlets such as cinema or shopping,
If I am alone, I feel lazy to go shopping. Then I do it online. But if my friends say, shall we do shop today, surely, I join with them (Male, 28 years).

A summary of the situational factors that affect the use of SSTs is provided in figure 1.

Social Influences on Customer Shift Towards SSTs
This study defines social influences as "the degree to which individuals perceive the relevance of other people’s and society’s impacts" (adopted from Venkatesh, Thong [93:159]. The study identified three distinct types of social influences: those emanating from personal sources such as peers, family, and friends; those emanating from organizational sources such as service staff; and those emanating from societal variables such as social norms/trends. As respondents noted, service organizations/employees exert influence over SST use in two ways: through a helpful hand and through coercion.

Personal Sources: As most of the respondents point out, they were influenced or guided by their families, peers, or friends for using SSTs. According to them, adults such as parents, elder siblings guided them on how to use such technologies. However, few older people mentioned that they are not more towards using technologies, and their children have taught them how to use basic SSTs. Some of them first used some SSTs while they were with friends who have used such SSTs before. Knowing how to operate such machines once from an experienced person helped them to get used to such technologies.
First, I also was a bit afraid of using them. Once I went shopping with one of my friends, she showed me how to do the stuff... it’s nothing, now I do it always. Service staff also direct and help to use self-service checkouts. (Female, 22 years)

You know, my wife always goes to the till to make payments. When shopping with me, I used to use self-checkouts. Then she realized there was nothing in there than doing very simple tasks. Now she also goes to self-checkouts (Male, 38 years).

I don’t like to use machines. We haven’t brought up with technologies. However, my son taught me how to use some basic things like vending machines. But if I have a chance always, I do physical outlets (Female, 62 years).

Organizational Sources: As the study found, some of the time, people were influenced by organizational staff or SST service providers. The staff encourages and helps people to use SSTs. Some of the time, they force customers to use SSTs as a solution for some organizational issues such as reducing the crowd at organization premises, reducing the workload for staff, and using the time to engage with crucial issues.

Normally they (staff) are hanging around the machines. If something goes wrong, they come for help. They normally, encourage us to use machines to reduce their work (Female, 42 years).

Sometimes they force us to use machines. Sometimes especially after 8.00 pm, no one works there. No option. You have to choose machines. Better you learn how to use them. It will help you when it happens for you to perform such transactions on your own (Male, 50 years).

Influence of the Society: As the respondents mentioned, moving to SSTs is a social trend that no one can stop. Therefore, adapting to this trend will provide advantages to customers. The younger generation is found as adapting to SSTs to be matched with the new trends and appreciate the convenience they received with SSTs. They said that not moving with technologies makes the old-fashioned, and therefore, they encouraged to use SSTs.

I know. Society is changing. We also must accept it and change. Otherwise, we will be old-fashioned and cannot move with new trends. It made me try these machines and work with them (25 years, Female).
A summary of the social influences on customer choice of SSTs is given in figure 2.

![Social Influences of SSTs](image)

**Figure 2: Social Influences of SSTs**

**Discussion**

This study found eight specific situational influences where customers tend to use SSTs such as travel restrictions, crowding, urgency, number/volume of transactions, nature of transactions, the complexity of the tasks, payment mode, and whether the customer is in a group or alone influence their choice of SSTs. Similarly, Wang, Harris [47] investigate the role of situational factors on customers' selection of SSTs, particularly self-scanning in supermarkets, and found 'perceived line wait time, perceived task complexity, and companion influence' as the most relevant situational elements influencing consumer choice between SSTs and interpersonal service. Demoulin and Djelassi [48] also found that situational factors (time constraints, basket size, coupons, and wait length at SSTs and staffed checkouts) have an effect on real customer SST utilization. Similarly, reported waiting for time (Dabholkar, 1996), perceived waiting time and social anxiety [53], and perceived service complexity [69] have all been identified as situational factors that influence the selection of SSTs. Oh, Jeong [36] discovered that 'situational factors' such as waiting and service complexity play a significant role in SST adoption. Demoulin and Djelassi [48] also discovered an effect on actual customer utilization of SSTs of situational factors such as time constraints, basket size, coupons, and line length at SSTs and staffed checkouts. Additionally, Dabholkar and Bagozzi (2002) noted that 'crowding' has an influence on 'social anxiety,' particularly when other customers can observe how they utilize unknown types of SSTs. Additionally, Oh, Jeong [36] criticizes TAM for failing to account for critical 'non-technology' aspects such as 'situational factors' when assessing SST adoption.
The study found the influences such as personal sources, organizational sources, and the society at large as important in customers' movement towards SSTs. Social influence was proven to be a significant predictor of customer value co-creation intention, particularly among the younger generation. The majority of respondents stated that the usage of SSTs is a 'social norm' and that adoption is therefore appropriate. Additionally, it was determined that the influence of 'personal sources' such as friends/peers was greater among younger people. Respondents also mentioned the influence of 'organizational sources,' such as service staff. Despite the fact that the qualitative study yielded such insights.

Similarly, Venkatesh, Morris [40] discovered that when data were analyzed without any moderating effects, social influences in the UTAUT model were unimportant in determining technological acceptance but were significant when all four moderators were included (gender, age, experience, and voluntariness). Additionally, the findings of this study corroborate Venkatesh and Morris [71:132] observation that "gender may be a key to understanding the role of social influence on initial technology adoption decisions and persistent use of new technologies." Galdelage [94] notes that inadequate social support will cause customer rejection of SSTs which finally cause value co-destructions in technology platforms. Additionally, Venkatesh, Morris [72] show that women are more receptive to the ideas of others, i.e. social influences. Additionally, Curran and Meuter (2007) show how social approval plays a role in SSTs' intention to modify behavior.

**Theoretical Implications**

This study contributes to the theory by expanding the body of knowledge about existing self-service technologies. The study investigated the influences of situational and social factors on customer choice of self-service technology, which had previously gotten little attention from existing scholars. Thus, it contributes to closing a research gap in the self-service technology setting that has previously been identified through other research efforts. It contributes to the theory by recognizing eight situational factors; travel restrictions, crowding, urgency, number/volume of transactions, nature of transactions, task complexity, payment mode, group or alone, which affect customer choice of SSTs. Aside from that, the study discovered three types of social effects that influenced their decision to use SSTs: personal influences, organizational influences, and societal influences in general.
**Practical Implications**

It is hoped that this research will help SST service providers and business organizations understand how social and situational aspects influence customers’ decisions to use SST services. They can put this knowledge to good use in advertising and push customers to utilize SSTs. Knowing the conditions in which customers are most likely to use SSTs will assist service providers in better managing their service interactions and controlling demand fluctuations. For example, lengthy queues in bank counters can be reduced by promoting customer use of banking SSTs such as ATM, CDM, Online/Internet/SMS banking, etc. According to the findings of the study, customers are rejecting SSTs because of their perceived ‘task complexity.’ Thus, to encourage the use of SSTs, service providers can simplify the process that consumers should go through by implementing few-stepped processes with a choice of language. In addition to that, providing the necessary training on how to utilize such SSTs as a method to encourage their adoption also can be recommended. Knowing the sources of social influences would assist service providers in targeting such groups in order to encourage or assist customers in using SSTs in the future.

**Limitations and Future Research Directions**

Among the many factors, this study is limited to exploring only the social and situational factors that influence customer choice of SSTs. Future researchers can broaden the understanding by exploring other important factors which influence the customer use of SSTs. Further, this study is focused on common SSTs. Future researchers can focus on specific types of SSTs. With the aim of exploring customer insights, this study employed a qualitative research method. Future researchers can extend this to a quantitative stage so that they can generalize the findings.

**Conclusion**

The study found the influences of several social groups and classified them into three categories: personal sources, organizational sources, and the society at large. Eight situational factors were recognized as influencing to customer use of SSTs: travel limitations, crowding, urgency, number/volume of transactions, nature of transactions, task complexity, payment mode, group/alone behaviors.
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Conflict of Interest
The author declared no conflict of interest.

References


