Technology Playfulness and Anxiety as Motivators and Hindrances of SST Adoption: Commercial Banking Sector in Sri Lanka

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

The swift growth of technological improvements has supported the continuing transformation of the service sector, in its conversion from conventional physical service encounters handled by service professionals into customer-controlled self-service technologies (SSTs). Even though prior research attempts have been made in assessing the acceptance of technology in general, the insufficient focus is placed on self-service technologies. Further, understanding the target customer is crucial with the fierce competition existing in the market sided with the development of technology. Therefore, the purpose of this study is to investigate which elements comprise the customers' technology playfulness and anxiety and how it influence the use of self-service technologies in the Sri Lankan commercial banking sector. The study undertook a qualitative approach with 50 semi-structured interviews from Western province banking customers who use SSTs utilizing a non-probabilistic purposeful sampling strategy. The data were analyzed using the technique of thematic analysis. The findings revealed "Enjoyment", "Fun", "Innovativeness", "Entertaining", "Creativity", "Pleasure" and "Appealing features" as the seven themes of technology playfulness motivating the use of SSTs and "Transaction doubts", "Elderly difficulties", "Verification doubts" and "Security doubts" as the four themes of hindering factors towards the use of SSTs in the banking sector. The

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findings would contribute to the literature gap on the customer movement towards self-service technologies. Insights from the study would support the practitioners in understanding how to improve with the proper use of technology and delivery of self-service technologies in the commercial banking sector of Sri Lanka.

1. INTRODUCTION

Self-service technologies (SSTs) are being introduced at an increasing rate to promote efficient and effective service delivery. Traditional "high-touch and low-tech" human engagements have been intentionally augmented or even replaced by "high-tech and low-touch" service offerings [1]. Banks, for example, offer several technology-based self-service choices to their consumers, such as automated teller machines (ATMs), telephone banking, and online and mobile banking. Firms profit from SSTs because they lower labor expenses [2]. Firms, on the other hand, will not reap the benefits unless a large number of customers adopt the technology.

The customer interactions with retail banks include connections between a customer and a bank using a variety of self-service channels, including Automated Telephone Banking (ATB), SMS Banking, ATMs, and Web Banking all playing a crucial role [3] which could be observed by Fig. 1 Reflecting a continual increase compared to the beginning despite few fluctuations. Despite the presence of a few private and foreign banks, three state-owned banks dominated the banking sector in Sri Lanka until the late 1980s. After the 1980s, when the banking industry was greatly influenced by information technology, private sector banks began to emerge [4]. ATMs were first introduced in Sri Lanka, followed by mobile and electronic banking implementation [5,6] and the Cash Deposit Machine, was recently launched (CDM) [7]. The 26 commercial banks serving the country's 21.2 million residents have made the banking sector in Sri Lanka extremely competitive [4].

The theoretical foundation of the present study is grounded with several attempts of prior assessments of technology adoption behaviors of banking customers [9,10,11,12]. A composition of several theories and models comprising of the Technology Acceptance Model [13], Unified Theory of Acceptance and Use of Technology [14], Innovation Diffusion Theory [15], and Theory of Reasoned Action [16] (e.g., Akturan & Tezcan, [17]; Giovanis et al., [18]; Pikkarainen et al., [19]) have been used in assessing information-technology innovations in the various context of studies (e.g., automated and online technologies). Nevertheless, Blut et al. [1] and Galdolage [20] have pointed out that the context of SSTs is not sufficiently explained by such models assessing general technology adoption. Further, slow growth of SST adoption has been revealed in the developing countries in comparison to the projected growth rates despite the benefits offered by the SSTs [21]. In using an SST the consumers have to use a technological interface by themselves to produce the service [22]. However, the context of usage may differ remarkably from one another [23]. Technologies can be found in on site locations (e.g., ATM) as well offsite situations (e.g., Online banking) [24]. Except for few exceptions (e.g., Dabholkar & Bagozzi, [23]) prior studies on the acceptance of SSTs hardly address the technology perspective being assessed a hindering or motivating factor. Hence, identifying how technology may act as a hindering and a motivating factor on the acceptance of SSTs in the Sri Lankan banking sector is worthy to be studied. Therefore, the purpose of this research is to investigate how technology act as a hindering and a motivating factor for the SST adoption in the commercial banking sector in Sri Lanka.

Thus, the current research contributes to the existing literature with a greater knowledge of how technology may motivate or demotivate a customer in the adoption of SSTs in the commercial banking sector of Sri Lanka rather than focusing on one particular model or framework. In addition, the authors believe that the findings of the study will provide implications for the banks to discover how technology can be used appropriately in improving the customer adoption of SSTs with the vast improvements of technology in the banking sector.
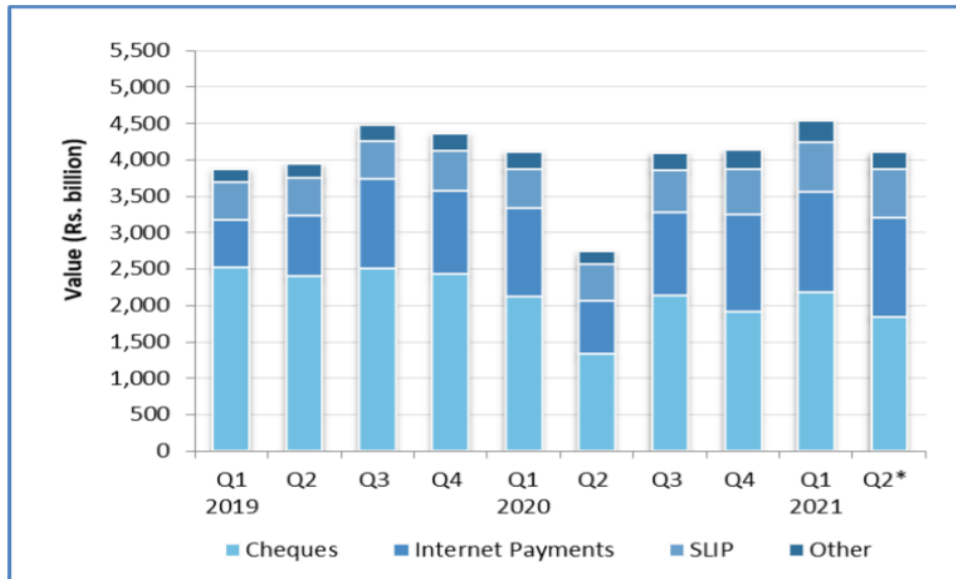
Fig. 1. The growth of use of self-service technologies [8]

The remainder of the paper is organized as follows: The following section includes a comprehensive literature review elaborating the topic of the paper and the inherent aspects, followed by the methodology of the study. Subsequently, the data analysis and discussion of the findings are elaborated. The study will then come to a closure with a brief discussion of the theoretical and managerial implications, as well as the limitations and future research opportunities.

2. LITERATURE REVIEW

2.1 Self Service Technologies

Self-Service Technologies allow customers to complete service transactions without the assistance of the service organization's workforce [25]. As a result of rapid technical improvements, low hardware prices, and growing labor expenses, SSTs have risen in popularity in the service sector [26]. With the competitive nature of today's retail environments, several organizations incorporate technology into their service processes [27]. Customers can employ SSTs to produce their services [28] resulting in cost savings and increased efficiency [29].

According to Meuter et al. [22], SSTs are the "technological interfaces that enable customers to provide a service without direct employee engagement". Technology interfaces allow organizations to instantaneously delight customers by allowing them to use technology to solve problems [2] as cited in Cho & Fiorito, [30]). Many digital technologies enable customers to experience a highly customized environment [31] comprising rich information and more interactivity [32]. Since the advent of this new service delivery paradigm, customers' interactions with service providers/staff have switched to engagements with technology [29].

Nonetheless, customer acceptance or value addition is not always guaranteed by the introduction of SSTs [33]. Even with a small number of customers being hesitant to utilize SSTs, their adoption in numerous industries has been impeded [34]. As a result, SSTs provide both great and negative experiences for customers, making them a double-edged sword [35]. Further, it has been stated that self-service checkout stations are being removed from some locations in order to improve customer experience [36].

In order to realize the full benefits of technology services innovation, organizations must overcome customers' reluctance to SSTs [37]. The most challenging task is recognized as persuading customers to use SSTs, which will require considerable behavioral adjustments [38]. Customers must assess if the service meets their expectations, while businesses must improve customer interactions with SSTs [39]. Therefore, it is essential to study how technology may act as a hindering or a motivating factor in the adoption of SSTs.

2.2 SSTs in the Global and Local Banking Sector

The SST bandwagon was approached by the banks to provide improved delivery of service, increase the transaction volume while aligning to the present technology by offering the customers several alternatives comprising of mobile banking, internet banking, and ATMs [40]. Banks are being challenged to find ways to improve customization to give a service that is not only one-of-a-kind but also unrivaled (Pine & Gilmore, 2017 as cited in Ugwuanyi et al., [41]).

The advent of an ATM and a debit card kicked off this technological revolution, which was quickly followed by core banking (The branches having connections among each other in changing the customer as a customer of the entire bank rather than being a customer attached to one branch). Limited banking hours are available in the traditional banks, whereas SSTs operate 24 hours a day, seven days a week to serve consumers' requirements (Marr & Prendergast, 1993 as cited in Fernando & Dinesha, [39]). In addition, internet banking is another SST option, which was initially developed with the aim of providing information about the bank's offerings. However, it is now available 24 hours a day, seven days a week, and allows for financial transactions. Another SST actively pushed by the banks is mobile banking [42]. Internet-based interfaces (e.g., Internet banking and online shopping facilities), interactive kiosks (e.g., Automated Teller Machines), and telephone/interactive voice response (IVR) interfaces (e.g., Tele-banking) [2,43] are all widely utilized in the service industries [44]. Banks must make sure they would have an approach on how to handle SSTs with the familiarity the customers gain with them. A lot of money can be saved through the use of wide use, but they can also be highly expensive if they do not undergo proper installation and maintenance.

The banking industry in the developing countries resembles a less acceptance of SSTs leading a less usage being observed in comparison to developed countries [45,46,47]. This explains, the reason underlying the limited scholarly work in the context of study in relevance to developing countries [44]. Hence, businesses and other organizations should have a proper understanding of the choice of customers in using SSTs before investing a large sum of money in the development, implementation and management of SSTs.

People attempting to engage in their financial transactions without the assistance of a banking employee has led to the popularity of SSTs in the banking sector [48]. Extensive use of Information and Communication Technology was observed by the late 1980s in the banking sector of Sri Lanka [49]. Self-banking and internet banking are present SST facilities available in Sri Lanka. The ATMs being allowed to be used 24 hours a day during the seven days of the week has led to a key revolution in the banking sector in Sri Lanka. However, Sri Lankan banking customers have still not gained the full advantage of SSTs, despite the numerous benefits the customers may get by the use them [50].

2.3 SST Adoption by the Customers

The extant SST literature focuses on the factors that influence a client's willingness to embrace or reject technology. Customers' adoption of technologies has been studied using the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology Model (UTAUT). Scholars focused on numerous variables to better understand how consumers adopt SSTs, pointing out the inadequacy of these generic models to comprehend SST context [1]. The original TAM and its extensions have continually surfaced as key indicators across a wide range of situations, aside from perceived usefulness, perceived ease of use, perceived playfulness, and perceived accessibility [51,52].

Customers' expected roles [32] as well as changes in their skill and interest [13,2,53,54], pose issues for businesses looking to extend SST use. Users consistently place importance on speed, control, simplicity, and reliability [22,55,56]. In writing about how people use interfaces, the word "fun" is frequently employed [55,57]. In addition, willingness to adopt SST varies based on perceived benefits [2] such as the ability to complete a task quickly, at any time of day or week [22] saving money or time (Ding et al., 2007 as cited in Hilton et al., [58]). If customers enjoyed SSTs, they were more eager to try them. The fate of the trial was thereafter up to them (Bitner et al., [2] as cited in Kelly et al., [59]).

Customers' use of SSTs will be limited by their lack of technological experience [60], functional

capacities [61] and preference for human interactions [62]. Gender and age are frequently associated with technology uptake [27]. Other essential social and psychological components include self-control [58] and social anxieties (Dabholkar & Bagozzi, [23] as cited in Hilton et al., [58]). Some SSTs find it difficult to obtain momentum because service providers fail to see that they require high levels of client participation, and the consumer is not always compensated for his efforts [63]. As a result, understanding the consumer's point of view is critical to SST awareness, adoption, use and continuous loyalty in commitment [59].

3. METHODOLOGY

The technological perspectives hindering or motivating the adoption of SSTs in the banking industry in Sri Lanka were investigated using an exploratory research design with qualitative inquiries [64,65]. The study was carried out in Sri Lanka's Western Province. Fifty semi-structured interviews with SST users were conducted using a non-probabilistic purposeful sampling technique [66,67,68]. At the start of the interviews, a brief introduction and description of the research were given, emphasizing the importance of the respondents' feedback. A formal consent form was produced before the interview to elicit the respondent's voluntary involvement in the study. The interviews were recorded to help transcription [69]. An interview guide was built to make the interviewing process simple, frictionless and focused. For 30 to 45 minutes, each participant was interviewed. Thematic analysis was used to find, analyze and summarize patterns (themes) within the data throughout this phase of the research [70]. The final step was to read related prior studies to make a strong justification for the chosen themes [71].

4. FINDINGS

The study identified several critical parameters of technology influencing the adoption of the SSTs which were reclassified into seven themes of motivating factors recognized as Technological Playfulness as "Enjoyment", "Fun", "Innovativeness", "Entertaining", "Creativity", "Pleasure" and "Appealing features" and four themes of hindering factors recognized as Technological Anxiety as "Transaction doubts", "Elderly difficulties", "Verification doubts" and "Security doubts" as elaborated below.

4.1 Technology Playfulness

Enjoyment: According to the findings of the study, SSTs used in banking operations are not only considered as a solution to the financial transactions of the customers but also as a mode of enjoyment as revealed by the respondents. Respondents stated the fact that trying out these new applications makes them enjoy doing it. The applications interface and how it operates brings an amusement in using them as revealed by the respondents of the study which can be illustrated as below;

"See, the online banking app and also the mobile app of all the banks I am using are quite interactive including a wonderful interface to work with. So, it makes me enjoy the processing of financial transactions rather than filling slips at the counters of a bank. So yes, I enjoy using these facilities a lot" (Female, 35 years old, Interior Designer)

Fun: This indicates that the different features integrated into the mobile application bring fun to the customers in using them as revealed by the respondents of the study. The respondents acknowledged the fact that it is fun for them to use the mobile application, its navigations and different settings in making the transactions with the banks rather than physically visiting the bank. The following is an example from one of the respondents:

"I use all of these applications, ATM, CDM, Online banking and mobile application as well. The mobile app I use is so fun to use. It has a lot of features to try. For example, registering the payees and stuff. So, going through them, trying out these new features makes it more fun to use" (29 years old, male, IT Security Analyst)

Innovativeness: The respondents agreed that SSTs comprise many innovative features which make them use them instead of staying in the queues at the bank for long hours. The different transactions, the interfaces, the updates, the novelty in security with biometrics include several features revealed as innovative by the respondents about the SST facilities in the banking sector. Further, it was revealed that these innovative features also assist them in completing their transactions without a hassle which saves their time. Following is an example provided by a participant of the study;

"These are obviously very innovative. There are so many innovative features, especially when it comes to the mobile app. You can have several transactions done from the same applications whereas if we go to the bank, we will have to stay in the long queues and fill up several forms to complete our transactions. So, innovative features like biometric security systems make them very easy to use." (23 years old, female, undergraduate student)

Entertaining: This represents that the SST applications provide a perspective of entertainment in the use of them when compared to the physical visits to the bank, which most of the respondents stated as a fact they dislike. The respondents revealed the fact that the mobile applications and internet banking facilities are much more entertaining to use because of their interactive features as well as with different incentives they receive from the bank for using them. As a result, performing transactions with SSTs entertains the respondents, as shown below.

"If we go to a bank or any other place to pay bills, such as the electricity board, we will have to wait in long lines and waste time. But now with the mobile app and internet banking applications with their interactive features, it helps me a lot in my work. They are quite entertaining with all the new features they have like favorite transfers. Also, sometimes they offer cashback facilities and offers at shopping when we use these facilities. So, it is very entertaining to use them."(35 years, Female, Teacher)

Creativity: The vast development of technology has revolutionized the SST facilities with updates and creativity as revealed by the respondents of the study. They further elaborated the fact that the proper navigations, the tabs for each transaction make the applications very creative to work with. Hence, the SST facilities were revealed to possess creative interfaces which make the respondents prefer using them instead of physical banking facilities. Following is an example provided by a respondent;

"Initially, I had no idea what these apps are about. Then a bank employee showed me the different features it has and how convenient it is for use. Now I use them for almost all of my financial transactions. The most important thing is that the applications have great features like proper navigations through the app, different tabs for different activities which make them so creative."(27 years, Male, Brand executive)

Pleasure: This refers to how pleasurable the customers feel in using the SST facilities for their banking activities. As stated by the participants of the study with the fact that the customers can perform the banking transactions at home or wherever the location they want and using just a mobile device which includes mobile phones and laptops is much pleasurable to them when compared to listening to the bank employees and staying in the queues. The following is an example from one of the respondents;

"I haven't gone to the bank since I started using the smartphone app. I don't recall going to the bank for anything in the last three to five months. I don't want to rely on them because I can do it myself, and it's a pleasure to use them whenever I want, including at home.."(27 years, Female, Finance officer)

Appealing features: This refers to the different interactive and unique features available in the SST applications as stated by the respondents of the study. The ability to save the utility payees in mobile applications and internet banking is one aspect highlighted as one of the appealing features. In addition, the cardless transactions offered at the CDM machines were also revealed as an appealing feature in the use of SSTs according to the respondents. One of the examples provided by a participant is illustrated below;

"Well, why I mostly use these facilities is especially because of the appealing features they have in each of them. The mobile applications anyway have a lot of appealing features. I like the option to save the payees which help to save me a lot of time that I use to spend in filling slips. Also, the cardless option available in the CDM machine is another impressive feature which is much convenient in depositing cash"(30 years, Female, Hotel Assistant Manager)

4.2 Technological Anxiety

Transaction doubts: This refers to the instances where the respondents felt unsure about the transactions with the improper completion of the financial transactions performed using the SST facilities. The ATMs getting stuck in the middle of a transaction and some cases where the customers have not received the one-time passwords for their transactions resemble the reasons of why customers feel doubtful about the transactions

processed with the use of SST facilities as stated by the respondents of the study. Following is an example provided by a participant of the study;

"I did start using these facilities when the bank employees encourage me to use them. But once I did not receive an OTP for a transaction I tried to process it through my mobile app. Also, once I was at the ATM, I remember I did everything right, but suddenly the machine was not working. I was scared to death. So, now I do not use these much as I earlier did for the important financial transactions because I always have this doubt whether the transaction would be completed properly"(40 years, Female, Government worker)

Elderly difficulties: This refers to the difficulties faced by the older customers in using the SST facilities in comparison to the tech-savvy younger generation. According to the respondents, most of the elderly are getting their transactions done with the support of their children as they have a difficulty in remembering the steps and the feeling that they would not properly attempt the transaction. Following is one of the examples provided by a respondent of the study;

"I had to start using the mobile application with this pandemic situation as we were restricted to go out. But the thing is once or twice I used it, I always get something wrong, maybe a password or the steps I have to follow. So, I have to always tell my son do it for me when I am performing a transaction using these applications because it is hard for me to remember everything in it"(50 years, Male, Retired school teacher)

Verification doubts: This indicates the feeling of fear the customers have on the verification of the transactions they perform using the SST facilities. As revealed by the respondents of the study, there are instances where they have not received the confirmation of transactions and had to communicate to the bank to get it verified. Following is one of the examples from a participant revealing the doubt on verifications;

"I do transactions using the ATM and CDM machines which are near the bank so that I can quickly communicate to the bank if there is anything wrong. I do not prefer using the mobile application much now. Actually, I am scared of doing transactions through the app, because two to three times I did not get my SMS confirmation and had to call the bank again and verify"(40 years, Female, Administrative clerk)

Security doubts: The feeling of doubt the customers possess about the level of security offered by the SSTs resembles the doubt on security. According to the respondents of the study, with the inability to memorize the passwords and the usernames they keep them saved in their mobile phones or written in a diary. Therefore, they have the fear in their mind of the passwords and usernames getting hacked and getting all the money lost. Following is an example from a respondent;

"I can't remember the passwords and usernames always. So, I keep them saved on the phone. So, I always have this doubt in mind whether the hackers are able to access the mobile app if I lost my phone. Then I would lose all my money right"(45 years, Male, Electrician)

5. DISCUSSION

"Enjoyment", "Fun", "Innovativeness", "Entertaining", "Creativity", "Pleasure" and "Appealing features" as the seven themes of technology playfulness motivating the use of SSTs and "Transaction doubts", "Elderly difficulties", "Verification doubts" and "Security doubts" as the four themes of hindering factors towards the use of SSTs in the banking sector were revealed according to the findings of the study.

Dabholkar et al. [55] have stated that SST interactions bring enjoyment to the customers recognizing it as an important dimension of technology-based SSTs. Consumers dislike waiting, according to research, and managers have noticed this as well. These options may be chosen for the enjoyment they provide or because they are viewed as fast in the case of technology-based self-service [23]. Hence, enjoyment being a motivating factor complements the prior literature.

Innovativeness, creativity and appealing features being revealed as two other motivating factors in the present study are supported with the suggestions made by Laukkanen et al. [72] revealing that customers' doubts and concerns about the use of SSTs could be alleviated through creative and innovative features. Furthermore, these are seen as a more innovative technology in terms of consumer satisfaction concerning banking operations, hence increasing the efficiency of banking transactions [7]. However, with the increasing competitiveness, it is important for the service

providers to properly advertise, including face-to-face communication strategies in introducing the features to the non-adopters as well [72].

Further, the findings of the present study complement with prior literature with the finding of pleasure and entertainment being motivators for the adoption of SSTs because customers that sense entertainment, pleasure and satisfaction in using novel channels view mobile banking to be able to attain higher levels of use [73]. They have further stated that the mobile banking channel is a cost-effective and entertaining approach to deliver financial services complementing the current study. Consumers who have a low need for interaction with a service staff would choose technology service delivery solutions that are considerably easier to use, much more reliable and much more fun than consumers who have a high need for interaction with a service employee [23].

Technology anxiety and its underlying perspectives recognized in the present study are supported by the fact that the customers who are not comfortable using technology-based services have been said to experience anxiety and tension as a result of their existence [74]. Some bank clients are concerned that hackers may use PIN codes to get access to their accounts (Poon, 2008 as cited in, Laukkanen et al., [72]) complementing with security doubts revealed by the respondents of the current study. Technology anxiety has been proven in studies to diminish the chance of SST use [22].

Customers with higher degrees of technological anxiety are less likely to choose to utilize SSTs, according to prior research [75]. Similar to the doubt on the verifications and transactions revealed by the current study, it has been revealed that individuals may possess risk perceptions on whether the transaction would be completed accurately, or the performance of task would be consistent in the use of technology-based facilities (Lee et al., [76] as cited in Laukkanen et al., [72]).

Elderly difficulties revealed as another hindering factor revealed through the present study to resemble technology anxiety is supported with previous studies stating that in the context of SSTs, older people have demonstrated more technology fear, while consumers with a higher income have shown less worry [76]. The installation of new user-friendly kiosks that require no effort from the user is suggested as a way to alleviate technology fear [77].

6. CONCLUSION

With this qualitative study, seven motivating factors recognized under Technological playfulness and four hindering factors identified under Technological Anxiety which related to the use of SSTs in Sri Lanka's commercial banking sector. A summary of the findings is given in Fig. 2.
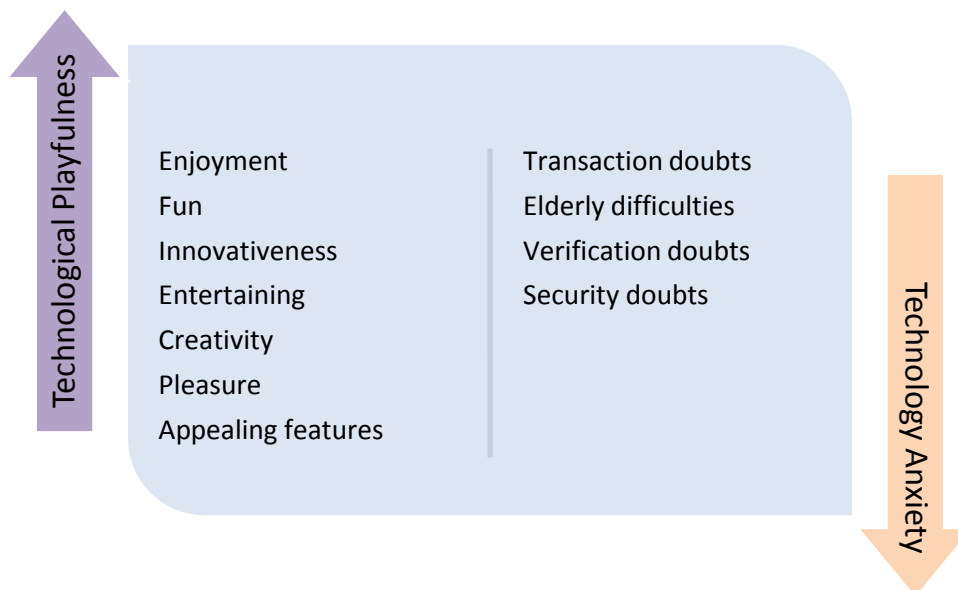
Technological Playfulness

Enjoyment
Fun
Innovativeness
Entertaining
Creativity
Pleasure
Appealing features

Transaction doubts
Elderly difficulties
Verification doubts
Security doubts

Technology Anxiety

Fig. 2. Technology Playfulness and Technology Anxiety in SSTs

7. THEORETICAL CONTRIBUTIONS

This study discovers different perspectives of Technological playfulness and Technological anxiety as hindering and motivating factors on the adoption of SSTs in the commercial banking sector of Sri Lanka. Despite the fact that earlier researchers have concentrated on this context, there is minimal research work relevant to poor countries like Sri Lanka, and commonly used models like the TAM and UTAUT have been favored, even though they do not closely mirror the context of SSTs. Further prior research has recognized the importance of studying the viewpoint of customers concerning new technologies with the fact that some SSTs have not been able to gain momentum in the service industry. Hence, the present study explored the hindering and motivating factors on the adoption of SSTs in the commercial banking sector of Sri Lanka. In comparison to the commonly utilized technology acceptance models, this research discovers "Enjoyment", "Fun", "Innovativeness", "Entertaining", "Creativity", "Pleasure" and "Appealing features" as motivating factors on the adoption of SSTs in the Sri Lankan Commercial Banking sector while "Transaction doubts", "Elderly difficulties", "Verification doubts" and "Security doubts" were recognized as the hindering factors.

8. MANAGERIAL IMPLICATIONS

Although there are several benefits the customers can gain using the SSTs, there is a slow growth observed in the adoption of SSTs in relevance to the developing countries as mentioned under the background of the study. Hence, it is important to focus on understanding what factors may hinder and what factors may motivate the adoption of SSTs in service industries. According to the present study, several perspectives of technological playfulness and technology anxiety were discovered as the motivating and hindering factors respectively.

The customers are motivated to you SSTs when the technological interfaces are interactive and enjoyable to use. Hence, the banks could incorporate interactive features in the technological interfaces including the navigations and the instructions provided in the use of SSTs. As mentioned in prior studies, with the incorporation of enjoyment the adoption could be improved even in the marginally unproductive systems and platforms. However, it is important to advertise and conduct face-to-face awareness sessions on the innovative features and how fun they are to use to make the customers feel the use of SSTs is much worthy to use instead of staying in a long queue physically at the bank.

Referring to the fact that technology anxiety hinders the adoption of SST facilities in the commercial banking sector according to the findings of the present study, the banks need to undertake appropriate measures in alleviating such insecurities or doubts the customers have in their mind in the use of SSTs. The banks can share readable instruction posters at the ATM and CDM machines which would make the process easier and eliminate the doubt on the verification of the transactions when the customers are aware of the process. Furthermore, the banks to undertake appropriate measures in identifying the failure points including the delays in sending the one-time passwords which would help to minimize the doubts on the transactions.

In addition, marketing and advertising strategies could be undertaken to encourage the elderly population to use the SSTs by enhancing the user-friendliness of the platforms so that they will feel comfortable to continue using them instead of being dependent on their children or bank employees for support in completing the transactions. Finally, the banks should make continuous improvements in evolving the innovative features to capture the attention of the customers and maintain their commitment to using them despite the heavy competition existing in the market. The above-mentioned strategies and improvements incorporating the understanding of hindering and motivating factors would help the commercial banking sector in Sri Lanka to gradually improve the adoption of SST facilities provided.

9. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

One of the study's shortcomings is that it only looked at the western province as a geographical area and only conducted semi-structured interviews. As a result, the current study's conclusions could be empirically tested through a field survey. Further, future research could look into the supportive technologies which could be incorporated in alleviating the hindering factors or Technology anxiety on the adoption of SSTs in the commercial banking sector.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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