Exploring motivating and hindering factors for consumer adoption to online purchase and payments in Sri Lanka

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Abstract

In this digital economy, many countries in the world are benefited with advancements of technologies while Sri Lanka is still in its primary stage. Thus, this study aims to explore motivating and hindering factors for consumer adoption to online purchases and payments in Sri Lanka. Semi structured interviews were conducted with a mix of 30 individuals who belong to four consumer groups such as 1. those who do online purchasing, 2. who do not do online purchasing, 3. who make online payments and 4. who do not make online payments, in Western Province, Sri Lanka who were chosen based on the non-probabilistic judgmental sampling method. The study found several motivational and hindering factors that determine adoption to online purchase/ payments which vary among identified four consumer categories. As managerial implications, this study provides insights to business organizations on how to motivate their customers to purchase and pay through online platforms.

Keywords: Online purchase, online payments, e-Commerce, digital technologies

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1. Introduction

The worldwide consumer purchasing is now moving towards online platforms which take place through e-Commerce websites and online payment systems(Tan, Tyler, & Manica, 2007). This shift provides many benefits to consumers such as convenience, time saving, cost saving, easy product searching, comparison, etc (Reynolds, 2000).Business organizations are also benefited through increasing efficiency and effectiveness of their businesses by reducing cost, service outlets, queues and staff(A. Molla & P. S. Licker, 2005a).Online payments become a significant part of online purchasing which allows consumers to pay the cost of goods or services remotely with a few clicks on their computer or mobile phone. Automated payment modes which are completely handled by the software systems can avoid many inefficiencies happening in manual cash collections, manual bank transfers, time-consuming reconciliations and burdensome cash-on-delivery processes of payments (Kollmann, 2019).

While online payments are still relatively new to Sri Lanka as a mode of payment (Kapurubandara & Lawson, 2006), the infrastructure, technology, products and services are already available since several years ago. Currently many business organizations in Sri Lanka are providing online payment facilities for their customers. Not only e-Commerce organizations who sell consumer goods such as groceries, fashion, electronics; the service organizations such as educational institutes, food delivery services and taxi services are now extending to online payments as a mode of payment (Rustamov, 2016). Even though we notice such a fast adoption for online payments from business organizations, practically the case is not the same with consumers.

As A. Molla and P. Licker (2005)pointed out, many studies have been carried out in developed countries while very few studies in developing countries investigate the adoption for e-Commerce. However, research outcomes of such studies in developed contexts cannot be generalized to the developing countries (Pathirana, Dias, Samarasinghe, & Sinnathamby, 2018)due to the mismatches in infrastructure availability, technology developments, social and cultural issues, etc (Kurunananda & Weerakkody, 2006). Therefore, this study aims at exploring the influencing factors (motivating and hindering) for customer adoption to online purchase and payments in Sri Lanka.

Next, the paper presents the conceptual background of the study, subsequently, the methodology of the study is elaborated before providing the finding and discussion. Third, theoretical and practical contributions are discussed along with the limitations and future research directions.

2. Literature Review

2.1 e-Commerce and Online Shopping

Online shopping includes many activities that take place in online platforms (Jusoh & Ling, 2012)such as searching for product information, buying products or services, and communicating with retailers and other consumers(S. Lee & Cude, 2012). It helps buying and selling over an internet based electronic networks (Mahmood, 2016). e-Commerce supports transactions(Chen & Chang, 2003)and online relationships with customers across multiple channels (Grabner-Kraeuter, 2002). The literature describes the Internet and e-Commerce as an essential part of the development process of a country (Hwang, Jung, & Salvendy, 2006) which improves efficiency and productivity (Lawrence & Tar, 2010).

Koponen (2006)categorized e-Commerce based on different contexts as Business to Consumer (B2C), Business to Business (B2B), Consumer to Consumer (C2C), Business to Government (B2G) and Mobile commerce (m-commerce). Katawetawaraks and Wang (2011) recognize internet shopping as widely accepted as a way of purchasing products and services while Mahmood (2016) forecasts that e-Commerce as the norm of the future of shopping.

2.2 Online Payments and Payment Gateways

The success of electronic commerce depends upon effective electronic payment systems. However, consumers have the choice between different payment methods when shopping which strongly influence customer behavior (Deufel, Kemper, & Brettel, 2019). According to them across the globe, consumers transact millions of non-cash retail payments every minute using different payment methods such as credit card, PayPal, deferred payment via invoice, etc.

Online payment is characterized as "payment by means of electronic exchange of details of credit cards, direct credit or some other electronic means other than payment with money and cheque" (Khan, F, Mehraj, Ahmad, & Assad, 2017, p 69).According to Nagasubramanian and Rajagopalan (2012), online payment would be the best way of producing payments for various purposes such as utility payments, fund transferring etc. Online payment provides a large number of advantages to vendors (Deufel et al., 2019)as well as clients(Khan et al., 2017). However, e-Commerce systems mainly depend on the Payment Gateway service providers who facilitate payment transactions. An efficient payment system reduces the cost of exchanging goods and services while a poor payment system may severely drag the stability and developmental capacity of an economy resulting in inefficient use of financial resources (Raja & Seetharaman, 1970). According to Nagasubramanian and Rajagopalan (2012), any online payment system typically contracts with merchants as their main vendors who will cater to the online payment of their customers.

2.4 Consumer Adoption to online purchase and payments

Consumer adoption is defined as "an individual's decision to become a regular user of a product which may be an innovation in form of a good, service, or idea" (Aarikka-Stenroos & Jaakkola, 2012; Baddeley, 2004, p 235). Technological advancements including the Internet (Wang & Somogyi, 2018) has drastically changed consumer shopping behavior(Moon, 2004), allowing them to shop through online platforms while staying at their convenient locations(Hansen, 2005). Online shopping provides access to many stores via websites (A. Molla & P. S. Licker, 2005b) and let consumers purchase anything from groceries to insurance policies without traveling store to store (Wymer & Regan, 2005). Though the technology has enormously expanded over the past years, still people take time in adopting the technology (Singh, Keswani, Shilpy, & Sukanya, 2016). Still some people prefer to do shopping at physical outlets while a considerable number of consumers moved to online shopping (Ko, Kim, & Lee, 2009).

Consumer education   is important in online purchase adoption (Katta & Patro, 2017), since it reduces perceived risk and uncertainty of adopting new technology and doing transactions (Ariffin, Mohan, & Goh, 2018). Both e-Commerce and online payments can be viewed as innovation of technology, thus consumer adoption requires a higher level of awareness and knowledge(Miyazaki & Fernandez, 2001). Altering the Technology Acceptance Model, the e-Commerce adoption model was built concerning the significance of perceived Ease of Use, Perceived Usefulness and Perceived risks in the contexts of transaction and product/services (D. Lee, Park, & Ahn, 2001).Even though existing literature explains customer online purchase, studies on customer adoption to online payments are rare (Dongwon & Joongho, 2000).

In Sri Lanka, it can be witnessed an increasing trend of business organizations including SMEs present in online platforms (Govinnage & Sachitra, 2019), providing opportunities for customers to do online purchasing (Kapurubandara & Lawson, 2006). According to Withanagamage and Wattegama (2017), Internet usage among Sri Lankans also gradually increasing. Accordingly, customer engagement in online purchasing also has been increasing over past decades (Peiris, Kulkarni, & de Silva Mawatha, 2015). Though online payments interrelated with online purchases, practically it can be seen that many of the customers used to pay 'cash on delivery', rather than paying for their online purchases through online platforms.

2.6 Barriers for e-Commerce Adoption

In the literature, barriers for consumers to adopt to e-Commerce/ online purchase are mostly globally recognized. Barbonis and Laspita (2005) recognized 'lack of trust' as one of the major obstacles to e-Commerce adoption. Similarly, Karakaya and Charlton (2001)stated that internet bandwidth, privacy and security of transactions, product delivery and return are barriers for consumers. Farhoomand, Tuunainen, and Yee (2000) stated legal barriers (user privacy, copyright laws, legitimacy of electronic signatures, ISPs' responsibilities, cryptography and public key encryption), technical barriers(security, infrastructure, and the integration of old systems and the availability of applications that can support local languages), economic barriers (income, literacy level, social infrastructure, currency and the cost of buying technologies, cultural barriers (ethnicity, religion and language, organizational barriers (negative attitudes, lack of knowledge, resistance to change and lack of top management commitment) and political issues such as government attitudes and inter-agency coordination as obstacles for consumer adoption towards online purchasing.

Vatanasakdakul, Tibben, and Cooper (2006) found language as a very severe challenge specially for any country where English is not the primary language. Del Aguila-Obra and Padilla-Meléndez (2006) identified' organization culture' as an 'conversion barrier' which prevents transforming from old systems to new systems (Chircu & Kauffman, 2000). In a similar note, Barbonis and Laspita (2005)revealed security, privacy, state of anonymity of the Internet, restricted ways of payment and lack of personal communication as barriers to the adoption of ecommerce. Additionally, religion (Siala, O'Keefe, & Hone, 2004), subculture (Chau, Cole, Massey, Montoya-Weiss, & O'Keefe, 2002)and personal characteristics (Barbonis & Laspita, 2005)are also found as important determinants of customer adoption to digital technologies. However, these factors can be varying among different countries based on their level of development, technology enhancement and consumer behavior. Therefore, it is needed to explore which factors motivates or hinders customer adoption to online purchase and payments in Sri Lankan context.

3. Methodology

This study uses the qualitative research approach to explore the reasons, problems, opinions, and experiences of adopting online purchase and payments among Sri Lankans. Data collection was done by conducting semi-structured interviews using interview protocols as the data collection instrument. A mix of 30 individuals who belong to four consumer groups such as 1. who do online purchasing, 2. who do not do online purchasing, 3. who make online payments and 4. who do not make online payments, in Western Province, Sri Lanka were chosen to the sample based on the non-probabilistic judgmental sampling method.

First a pilot study was carried out using initially developed interview guide to test the superiority of the interview protocol. Subsequently the interview protocol was improved with the experience from the pilot study and the actual study was carried out thereafter. Interviews were carried out like conversations allowing respondents to freely express their opinions and experiences.The interviews were conducted until achieving information redundancy and transcribed into word documents and analyzed using thematic analysis method.

4. Data Analysis

The study used four groups of people who have different responses regarding online purchase and payments. Thus, it was decided to provide their responses accordingly. These customer groups are given in figure1.

Figure 1: Four customer groups related to online payments
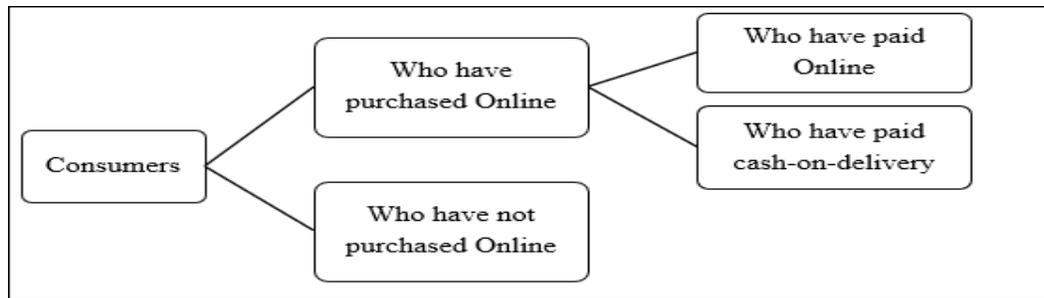
These four customer groups revealed important information related to; 1. reasons for purchasing online, 2. reasons for not purchasing online, 3. reasons for making payments online, and 4. reasons for not making payments online.

4.1 Reasons for purchasing Online

The study found six main reasons as motivating factors for purchasing online: convenience, home delivery, special offers, availability of more choices, ability for comparisons and unnecessary prior checking in repeat purchasing.

Convenience

Time convenience: It was identified that many customers prefer purchasing online due to its convenience that saves time. Consumers do not want to spend their time visiting shops, rather they can do purchasing while conveniently staying at home or in the middle of office breaks.

> *It's very convenient for me to do online shopping. And there's no waiting lines when we purchase Online, login to the computer or even to my phone is enough. You know. These days' time is the most precious.   (Female, Age 30)*

Locational convenience: As respondents noted if they physically do shop, they have to go to many places to purchase some items. However, online, they can log in to websites and purchase while staying in a convenient location. As one respondent mentioned it is reallya good solution for a person who's busy or lazy to shop physically.

> *When we visit a shop and purchase stuff, we need to go here and there to buy, and endup with things that waste time, money and effort. Personally, I'm also very lazy to shop, I like to stay at home and do shopping. (Female, Age 42)*

Home delivery

Many respondents mention the ease due to home delivery as a key reason to purchase online. Even though merchants charge an extra fee for the delivery of online orders, respondents see it as worth in return for the convenience it brings.

> *It is a cumbersome work to roam around to find something which I normally don't like. When I purchase Online, they deliver it to the doorstep, even though we have to pay a delivery fee for that, I think it's very worthy". (Female, Age 26)*

Special Offers and Discounts

Discounts and special offers presented by the merchants also identified as one common reason for customer motivation to purchase online. Most of the time consumers have seen advertisements on such special offers in social media and through them they get attracted to purchase Online.One respondent shared her experience on how she was attracted to social media advertisements and motivated to purchase Online through them.

> *More than 20% of the online purchases I did was due to special offers. I usually see ads on Facebook about such offers and I click those ads to check the offers. If I find something suitable, I mostly buy it from that websites. (Female, Age 30)*

Availability of choices

It was identified that some consumers purchase online only if the items that they're looking for are not available in known physical stores. Such consumers are using global online markets such as eBay and Ali Express to get that kind of items delivered to them from other countries.

> *I mostly buy from eBay if the items are not available in shops in Sri Lanka. If some issue happens, eBay is involved and helps to get the payment refunded or connect us with the seller properly.(Male, Age 44)*

Ability for comparisons

Many female respondents especially highlighted the ability to compare items, especially the fashion items such as dresses and shoes when purchasing online. As female consumers spend more time on physical shopping in their day-to-day life to search and compare items between one shop and another, they feel it very convenient and time saving to be able to compare items between online stores instantly.

> *It's very easy to compare. I can compare a frock or some garment from GF lock with a similar one from Kelly Felder instantly. So, I can save the time I spent on visiting shops and comparing stuff from different shops. I have benefits like that when shopping Online. (Female, Age 28)*

Unnecessary prior checking in repeat purchasing

It was identified that consumers tend to purchase online when they want to repurchase a known item repeatedly as they do not want to check before purchasing. Many respondents who are not comfortable to purchase products without checking shared this experience.

> *When purchasing some items, we cannot get an exact idea on the features as we go to shop. But for the repeat purchases we do, it is definitely very convenient, time saving and cost effective. We don't have to waste time on searching for items, comparing prices. (Male, Age 32)*

4.2 Reasons for not purchasing Online

The study recognized five key reasons for not purchasing online as, inability to check the item before purchase, doubts on the quality dimensions, time taken to receive items, fear to try the first time, and not technologically literate to purchase online.

Inability to check items before purchase

It was identified that many consumers do not prefer to purchase online as they cannot check and try out the item before they purchase. Both female and male respondents highlighted this especially with related to garments as they cannot fit-on the sizes and check the material before purchase.

> *I normally don't purchase dresses online since I have a sizes problem. Also, I doubt whether the material and the design are good for me. Some online merchants do not give the chance to return products., So I don't prefer online.(Female, Age 30)*

Doubts on the quality dimensions

Another fact identified was the doubts in consumers mind about the quality dimensions of the items listed on websites. Some consumers have experienced that the items they received are not exactly the same displayed on the website.

> *Most of the time the displayed color on the website is not the actual color of the dress when it's delivered. I have experienced many times like that. The size is also different sometime. The quality of the material and the stitches is not as seen.(Female, Age 26)*

Time taken to receive items

The long-time taken to receive purchased items was also identified as another fact for why consumers do not purchase Online. Some respondents stated that mostly the consumers in the remote areas have this problem.

> *You can do anything when you in Colombo. The situation is very different when we go to remote areas. If we place an order from Colombo, we receive the item within 1 or 2 days. But if a person in a remote area orders something, it will take a lot of time when the item get delivered to him, so he can get fed up with waiting for the ordered item to receive.(Female, Age 38)*

Fear to try the first Online purchase

An important fact identified was the consumers who have tried an online purchase once, continue purchasing online. However, many consumers have done their first purchase with lots of fear which is expressed by the risk-minimizing actions they have taken in their first purchase. One respondent shared how he minimized the risk by purchasing small value items at the first stages.

> *What I first did was paying for small-value items, about less than Rs.3000. So, by the time I was doing few transactions like that, my concern on the security of the Online transactions went away through that experience. I think most people are not confident enough to do try their first purchase Online.(Male, Age 44)*

Lack of Technological literacy

The lack of knowledge and technology literacy is also identified as another reason.

> *I think people are fear as they are not aware about Online purchasing. Only if people get knowledge, their fear will go away. May be by getting details from someone who have done Online purchases, they can gain the knowledge.(Female, Age 30)*

One respondent highlighted that the knowledge and technology literacy of the consumers depends on their geographical location. As she mentioned the people in her hometown which is a remote area have no idea about technology.

> *Most of the time I think people are not familiar with the technology. My hometown is far away from the city. The people in those rural areas have no idea about technology."(Female, Age 28)*

4.3 Reasons for making Online payments

The study identified that some consumers who purchase goods online regularly, use online payment methods to settle bills, while some others prefer to make the payment offline through cash after the goods get delivered to them. Those who make the payments viaonline stated various reasons and categorized into 5 themes as inconvenience with dealing with cash, motivations due to card payment offers, credibility of the merchants, risk and security standards and getting extra time to settle when paying through credit cards.

Inconvenience of dealing with cash

As the study found, the main motivation to make online payments was the inconvenience of dealing with cash.

> *I always prefer to pay online since it's very convenient for me. otherwise, if I choose cash-on-delivery, I may not have cash in my hand when they come to deliver the goods.(Female, Age 28).*

Motivations due to card payment offers

Some consumers prefer to pay Online instead of paying cash-on-delivery, due to the card promotions they get from their banks. Many banks offer seasonal discounts and special offers for their credit and debit cards through a selected set of Merchants. So, the card holders of such banks are naturally motivated to leverage those discounts.

> *There are some benefits in cards, such as cash-back offers, discounts given by banks. My cards have such benefits, so I can leverage them also.(Male, Age32)*

Credibility of the merchants

It was identified that the decision of paying online or cash-on-delivery sometimes depends on the credibility of the merchants. If customers purchase from a well-known and credible merchant, they pay online. But if they are purchasing from some websites for the first time, they prefer to pay by cash, after they receive the item into their hands.

> *When I purchase Online through reliable companies, I'm sure that the product will be delivered to me. So, I have no doubt and I don't have to wait until the product comes to my hand. So, I don't hesitate to pay them Online.(Male, Age 30)*

Risk Vs Security standards

Another fact identified was that now consumers do not feel a risk of exposing their card details when making online payments, since many of them are aware of standards such as dual authentication with a PIN number sent to their mobile to complete a payment.

> *I use my People's bank debit card to pay Online. Thereafter I enter my card details, they send a PIN number to my mobile phone. Since it asks to enter that PIN number, I know it's secure and has a dual authorization. Even if my card details are exposed, no one can do a transaction from my card without having my mobile to receive the PIN. So, I have no doubt about that. (Male, Age 30)*

Another respondent also mentioned about the One-Time-Password (OTP) as his rationale for not feeling any risk about making a payment Online.

> *I didn't feel any insecurity. The OTP code sent to my mobile by my bank is unique.(Male, Age 46)*

Getting extra time to settle when paying through credit cards

Credit Card holders normally get a credit period to settle their card without incurring any credit interest and this is also found as a reason for consumers to pay online.

> *I normally do my financial stuff, especially payments with a plan. So, when I do payments with my card, I know I have a 52-day credit period. And even when I make a payment by card, I check from which card I have the longest credit period. So, it's easy for me to manage my payments (Male, Age 44)*

4.4 Reasons for not making Online payments

Even though some consumers purchase online, they prefer to pay cash-on-delivery. The study recognised five reasons for this trend as lack of trust about the good/service delivery, lack of trust about the website's security, bad prior experience of online payments, lack of knowledge and technology literacy and some merchants not accepting online payments.

Lack of trust about the good/service delivery

It was identified that many consumers choose to pay cash-on-delivery for their online purchases, since they have doubts whether they will receive the item or not.

> *For my Online purchases, I pay cash when items are delivered to me. Because I doubt whether the goods will be delivered to me or not, so for the safe side, I prefer to pay after I receive the goods in my hand. (Male, Age 29)*

Lack of trust about the website's security

Another reason identified was the doubts consumers have on the security of the websites. Since many fraudulent websites are available which purposely deceive consumers and steal their money through Online payments, consumers think twice before they make an Online payment.

> *Yes, I have doubts whether this transaction was proceeded, blocked, whether the Merchant received it and also, whether the website is a fraud one or not. But that feeling of risk comes only in the first attempt, the second time you purchase through the same website, it's not there (Male, Age 32)*

Bad prior experience of an online payment

Another fact identified was, the consumers who have faced a bad experience regarding online payments mostly hesitate to use their bank cards again to pay online.

> *Before several years ago, I ordered some stuff from ABC company. But I didn't receive it. That is even after I paid through my card. So, whenever the Cash-on-delivery option is there, I prefer to choose that.(Male, Age 19)*

As per above respondent, it is seen that even a one incident happened before several years can still affect the consumer decision to make their payments Online or not.

Lack of knowledge and technology literacy

If consumers are to pay online for their online purchases, they need to know about the process that they should use to pay online. Lack of this knowledge and technology literacy is identified as another reason for why consumers do not pay Online.

> *The lack of knowledge may also be a problem. When we consider the country's population, most people don't have any idea on what this is. Most are not literate for IT related stuff, that may also be a reason. (Male, Age 19)*

Merchants not accepting online payments

Another reason for why consumers choose to pay cash-on-delivery for their online purchases is the unavailability of the support from merchants to accept online payments. When the merchant does not have the capability to accept the payment online, the only option is to pay cash on delivery. Many respondents stated this reason as to why they do not pay online.

> *For over 90% purchases, I paid Online. Only if the Vendor does not support Online payments, I've used cash on delivery. (Male, Age 44)*

5. Conclusion and Discussion

The factors that affect consumer decisions on purchasing online and paying online, can be summarized as follows.

Table 1: Summary of the findings

Purchasing online	Not purchasing online	Making payment online	Not making payment online
Convenience	Inability to check the item before purchase	Inconvenience of dealing with cash	Lack of trust about the good/service delivery
Home delivery	Doubts on the quality dimensions	Motivations due to Card Payment Offers	Lack of trust about the website's security
Special Offers and Discounts	Takes so much time to receive items	Credibility of the merchants	Bad prior experience of an Online Payment
Availability of choices	Fear to try the first Online purchase	Risk and security standards	Lack of knowledge and technology literacy
Ability for comparisons	Not aware and technologically literate to purchase Online	Getting extra time to settle when paying through credit cards	Merchants not accepting payments Online

Similar to the findings of this study, Singh et al. (2016) mentioned that though technology has immensely developed over the past years, people still take time in adopting the technology. Mahmood (2016)has identified the influence of technical, economic, cultural, organizational and political barriers as hindering the e-Commerce adoption. Saaksjarvi (2003)notes the importance of consumer education while   Dongwon and Joongho (2000) explains the influence of different demographics variables on online purchase adoption. Trust (Barbonis & Laspita, 2005), privacy (Karakaya & Charlton, 2001), legal barriers, technical barriers, economic barriers (Mahmood, 2016), language (Vatanasakdakul et al., 2006), organization culture(Del Aguila-Obra & Padilla-Meléndez, 2006) and conversation barriers (Chircu & Kauffman, 2000) were found in the literature as hindering the online purchase adoption. However, As Withanagamage and Wattegama (2017) view internet usage among Sri Lankans is increasing rapidly.

6. Implications, Recommendations and Future Research Directions

This study recognized factors which motivate and hinder the online purchase and online payments. Since these factors are specific to a particular consumer category, the strategies which influence the adoption also should vary with each consumer category (who do online purchase, do not do online purchase, make online payments, do not make online payments).

Therefore, we advise business organizations to know theircustomers well and develop marketing programs to influence the identified hindering factors while stimulating the motivational factors to increase the adoption.

The scope of this study was limited to the Western Province in the country. Therefore, to provide a better conclusion about the online payment adoption in Sri Lanka as a country, the same study should be carried out in other areas as well.

Acknowledgement

Conflict of interest
The authors declare no conflicts of interest.

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