Factors influencing switching intention from cash on delivery to e-payment Services in e-commerce transaction during the post covid-19 pandemic period with special review on Sri Lankan food and beverage sector.

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Declaration

I hereby state that this research report and the findings presented in it are my own and it has not been submitted before nor is it currently being submitted to any other academic programme. Where material has been used from other sources due recognition has been given by mentioning the source.

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Abstract

This research focuses on factors influencing switching intention from cash on delivery to e-payment services during the post pandemic period. The aim of the research is to identify the changes in e-consumers' intention towards each factor that influences transition from cash on delivery to e-payment services during the post pandemic period focusing on scope of problem/knowledge gap that is regarding lack of knowledge on role of post pandemic period on variation of consumers perception during the transition to cash on delivery to e-payment services. To achieve the aim of this scope, aim of this research divided into five objectives such as analyzing factors that attracts consumer towards cash on delivery, analyzing factors that make consumers leave cash on delivery, analyzing factors that attract consumers towards e-payment service and analyzing factors that hinder consumers from selecting e-payment services. Systematic literature review was conducted to achieve the objectives of the research through which factors that influence consumers switching behavior was identified and this research has used some theories to identify some factors such as UTAUT, transaction cost theory and health belief model. Identified factors were categorized based on push-pull-mooring theory where the factors that attract consumers to e-payment were grouped under pull factors and factors that shows the barriers of existing cash on delivery were grouped into push factors. The remaining factors that inhibiting consumers to switch from COD to e-payment service and factors that encourage consumers to switch from COD to e-payment services were grouped into mooring factors through which hypothesis were generated and data was collected via online questionnaire targeting population of e-consumers who are using food and beverage e-commerce sector since this study only focused food and beverage e-commerce sector. According to Cohen (1992) sample was determined as 150 whereas Collected data was 170 where 12 data were removed in the Preliminary analysis. The tests used in preliminary analysis are straight line error test, cooks distance test and common method bias analysis using SPSS tool. After that PLS-SEM technique was used to analyze the data and to test the hypothesis using SmartPls-04 where independent variable health consciousness and social influence were significant to dependent variable switching behavior while independent variables such as control over buying process, return/refund policy, related laws on online fraud, previous experience, economic benefit and transaction inconvenience showed insignificant

relationship with dependent variable switching behavior where economic benefit and previous experience were shown to be negative relationship with dependent variable switching behavior while the moderating variable reputation of merchant has no significant moderation effect in the relationship between return/refund policy and switching behavior and also the moderation of variable reputation of merchant did not show any significant moderation effect on relationship between previous experience and switching behavior. Finally health consciousness and social influence were considered as most influential factors on switching behavior while health consciousness was identified as effective push factor and social influence was identified as effective pull factors whereas no mooring factors including moderation variable showed any influential effect on switching behavior. So that it was concluded that those mooring factors are not effective one in determining switching behavior and also transaction inconvenience in push factors and economic benefit in pull factors also were considered to be non-effective push and pull factors based on the data collected and context of the study.

Kew words: switching intention, cash on delivery, e-payment and covid-19.

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Contents

1) Introduction

This chapter possesses a detailed description of the research title in line with the background of the study, scope, purpose, objectives of the study, research questions, and the expected outcomes of the research. It concludes with the elaboration of the dissertation structure.

1.1 Background of the research

1.1.1 E- Commerce

E-Commerce is considered to be electronic commerce which consist of buying and selling of good, placing orders as well as transmitting funds and data over an electronic network, primarily the internet which enable e-commerce to operate throughout different market segments via computers, laptops, tablets, smartphones and other smart devices.

Almost every imaginable product and service is available via e-commerce transactions including financial services such as stock investing and online banking. Therefore, it's considered to be a very disruptive technology now a days. Further, these days since it is becoming more trend among business, e-commerce is a highly competitive field in the business world. The main reason for this is because e-commerce has emerged as a substitute for brick-and-mortar stores, though some businesses even maintain both ways.

As I mentioned above, e-commerce is powered by internet only that means customer access an online store to browse and search products or services, place order for what they have chosen, select the payment type whether cash on delivery or e-payment services and paying online. The above-mentioned functions are primary functions for e-commerce transaction of each e-commerce platform. To enable those function e-commerce platforms to have features such as payment gateways, product details, return policy and contact details etc. Even though e – commerce platforms have various features for e-payment services, still cash on delivery dominate in e-commerce money transaction in Sri Lanka and some developing countries. Our research also will focus on payment methods of e-commerce in Sri Lanka.

There are many famous internationally recognized e-commerce platforms such as Amazon, Flipkart, Shopify, Myntra, eBay, Quikr and Olex whereas Sri Lanka is also booming in e-commerce sector. Kapurka.com, Daraz.lk, Takas.lk, Ikman.lk, Wow.lk, Wasi.lk and Zigzag.lk are some of famous e – commerce platforms in Sri Lanka. This e-commerce business can be categorized into six types such as B2B, B2C, C2C, C2B, B2A and C2A where my research will focus on B2C business type. B2C type can be written as business to customer in full form that means business sell products or services

to non-business customers such as online retail store where my research will focus food and beverage sector which is considered to be subset of online retail industry.

1.1.2 Food and beverage sector

In e-commerce there are many sectors today such as Media, Food, Beverages, Beauty, Health, Personal hose hold care, Toys, Furniture, Electronics and Fashion but here my research will focus only food and beverage sectors. Items in the food sector include fresh produce, seafood, fast foods while beverage sector includes all alcoholic drinks and non-alcoholic drinks such as sodas, juices, hot drinks like coffee and tea.

For decades, food ordering and delivery has been famous among consumers of the food and beverage sector. At the beginning stage, restaurants took orders via phone calls but now we have e-commerce platforms with delivery operations. As we all know, there are many e-commerce platforms for food and beverage sector with delivery services such as Grubhub, DoorDash, UberEats and Zomato while UberEats and PickMe are among e-consumers. Rather than those third-party platforms there are many food and beverage restaurants with their own e-platform and delivery services.

Even if purchasing food and beverage online had been popular among youngsters it was so far to elders but today it had become a booming trend among all age groups after the outbreak of covid – 19 pandemics followed by government restriction for social distance as well as nationwide lockdowns. So, Pandemic had shifted consumers to physical stores to virtual stores that had severely influenced the food and beverage sector as well since food and beverage items are necessary need of humans.

As a results of acceleration on e-commerce transaction on food and beverage sector globally following severe spread of pandemic and government restriction, the trend had reflected on Sri Lankan consumers and food and beverage sector as well. In this situation due to the government restriction on public gatherings and social distancing Sri Lankan e – consumers also had to adopt e-payment services for their e-commerce transaction while cash on delivery method has been play a major role in e-commerce growth in both Sri Lanka and other developing countries. Here my research will focus both cash on delivery and e – payment service in the context of Sri Lankan e-consumers who depends on food and beverage e-commerce sector. The reason I have chosen this sector is because most of the consumers have been shifted to virtual platform of food and beverage sector during the pandemic. so, it would be feasible for me to study how

those e-consumers transaction has been changed during post pandemic period based on payment style.

1.1.3 Cash on delivery

There are two types of payment trends in e-commerce platforms such as Cash on delivery and e – payment services but mostly cash on delivery is the reason for driving the e-commerce sectors in developing countries like Sri Lanka. Even if e – consumers have adopted the other payment options, still cash on delivery dominate on money transaction among majority of e-consumers in developing countries including Sri Lanka which accounts for 60% of all e-commerce transaction in Sri Lanka based on previous research [NavodikaKarunaratna,2021].

Cash on delivery initially means a payment mode in which customer buys a product online but chooses to pay for the purchase at the time of delivery instead of paying for it in advance. it's also known as 'Cash on demand' or 'Collect on delivery'. However, this payment mode seems to be beneficiary for e-consumers because they pay after confirming that order is delivered while on the online retailers' side those payments are received after delivery, which means delay in cash accrual by 2-3 days.

Following the outbreak of the pandemic, consumers were pushed to leave cash on delivery due to the reason for health conscious that pandemic could spread via cash since it is shared by touching through people. So, there was a slight change in e – commerce to leave cash on delivery whatever still countries like Sri Lanka have cash on delivery modes even after pandemic. So here my study will focus on post pandemic trends over cash on delivery among Sri Lankan e – consumers.

1.1.4 E -Payment Services

As I discussed above, there is another famous e-commerce payment mode which is called e-payment or electronic payment literally it can be defined as payment via internet. Since everything in physical stores has been changed into virtual format in e-commerce platform. So, it's crystal clear that payment mode also would reflect into virtual mode. Accordingly, now a days majority of e-commerce platforms have shifted to e-payment services for the easy transaction of both online retailers and e-consumers.

There are many different types of e-payment methods available in e-commerce platforms such as Credit Card, Debit Card, Smart Card, E-wallet, Net banking, Mobile payment and Amazon payment etc. On the other hand, e-wallet seems to be most

trending globally. In Sri Lanka master card, internet banking and mobile payment considered to be famous among customers.

DirectPay Founder and Chief Executive Kanishka Weeramunda said **"With the exponential growth of mobile payment transactions and the never-ending consumer hunger for online shopping, e-Commerce companies around the world are benefiting from Digital Payment mechanisms."**

As per the quote above, In Sri Lanka e-commerce giants like Takas, Wow and Mogo Super have started to offer digital payment options as the primary methods of making payments. Many fashion stores on the outskirts of Colombo such as "Molly Boulevardare going online to reach new customers beyond their city limits that has led in achieving a visible difference in online sales compared to walk-in sales due to the widespread availability of digital payment options. Furthermore, now a days elders have adopted the e-payment services after the pandemic out break and government warning and restriction over health concern, even though before pandemic youngsters were more exposed to electronic payment system bun now government have lifted restriction over pandemic and we are getting into post pandemic era so here my research will focus on consumers intention after the pandemic era towards e-payment services they have adopted during the pandemic period.

1.1.5 Switching intention

Switching intention is mostly used in business to explore the customer behavior to identify the changes that happen to customer mindset and practices over the period of time. Industries use those switching behavior of customer to check whether customers are loyal to them or customers are changing their loyalty towards another service or product because of that customer satisfaction has been considered as measurement tool to measure the customer loyalty over one service and product [Kotler,2003]

While another researcher defines switching intention as group of customers who perform product or service switch to one choice to another [Schiffman & Kanuk,2000]. Furthermore, switching intention or switcher behavior is considered as freedom in choosing item preferred as per the customers ease of use within time period. So, my research will focus how customer switching behavior/intention have been changed during the transition to cash on delivery to e-payment services, as they are getting into

post pandemic period from pandemic period in which they were pushed to adopt e-payment services over cash on delivery.

1.1.6 Post pandemic

The word post pandemic denotes the period after a disastrous health risk getting solved and reduced without any major effects on humans. These kind of post pandemic periods had been faced by world many times for example Spanish flue. But today we are also slowly getting into post pandemic period after the outbreak of covid-19 virus spread since vaccination has been discovered and people got immunity against those viruses so now people are getting exposed to public as fear of virus spread is decreased among people.

However during the pandemic period e-commerce have been used by many customers but e-commerce had reached a change of using e – payment services among customers so, since everything is becoming normal in this post pandemic period there might be a changeover e-consumers intention on switching cash on delivery to e-payment services that means customer might have go into old payment method like cash on delivery again in this post pandemic period or else they might get used to new e – payment methods that they have been using during the pandemic era. So here my research will focus on those consumers switching intention in the post pandemic era.

1.2 Purpose of Research

The aim of this study is to identify the changes in e-consumers' intention towards each factor that influences the transition from cash on delivery to e-payment services during the post pandemic period.

1.2.1 Justification of the Research

This study pays much attention on problem of lacking knowledge regarding role of post covid-19 pandemic situation on variations of e-consumers' intention during the transition from cash on delivery to e-payment services within the context of Sri Lankan food and beverage sector. More elaborately considering of the research problem, the research study focuses regarding how the role of post pandemic on changes in consumers' switching intention and how the factors that determines the consumers switching intention have been changed as people are now slowly getting into post pandemic period.

As we all know, the outbreak of the covid-19 pandemic was a major tool on driving e-commerce industry in Sri Lanka and other developing countries because of the governments' nation-wide long lockdowns and restrictions on public gathering and social distancing which pushed the people into virtual mode for everything whether education, other public events or business.

So along with the covid-19 pandemic effect, people in Sri Lanka were get adopted to e-commerce business transaction for two years due to severe attack of pandemic nationwide. Therefore, many people who were in isolation and under lockdown were pushed to use e-commerce platforms for their necessary needs like food and beverage and also, they had to adopt the e-payment services over traditional cash on delivery for their e-commerce transaction due to the health concerns and warning of the health sector on physical touching of the cash and interacting with people over spread of covid-19 virus.

However, today people are slowly getting into post pandemic which means people in get exposed to public as they did before pandemic but we could not understand whether the Sri Lankan people who got adopted to the e-commerce transaction like e-payment services during the pandemic period still prefer those methods and like to enter new normal era of money transaction or they like to go back to old method of money transaction like cash on delivery. Here is the need of study for e-commerce platforms to understand transformation of e-consumers switching intention of cash on delivery to e-payment services based on the changes in factors that determines their switching intention using health concern and addictiveness to e – commerce as moderating or mediating variable.

1.2.2 Scope of the Research

This study focus on constructing model to understand the transformation of factors that determines the switching intention of e-consumers from cash on delivery to e-payment services and identify how the switching intention has been changed during the post pandemic era and study effect of health concern and addictiveness on e-commerce electronic payment services for two years of pandemic to explain the role of post pandemic on changes in consumers switching intention based on the factors in which consumers' perceptions have been changed.

To reach the scope of this study the research will focus on the food and beverage e-commerce sector on the side of B2C model and will focus both cash on delivery and e-payment model from the customer perspective in relation to the post pandemic effect.

Here is the concept map below to show the scope of research that will be covered in this research study.

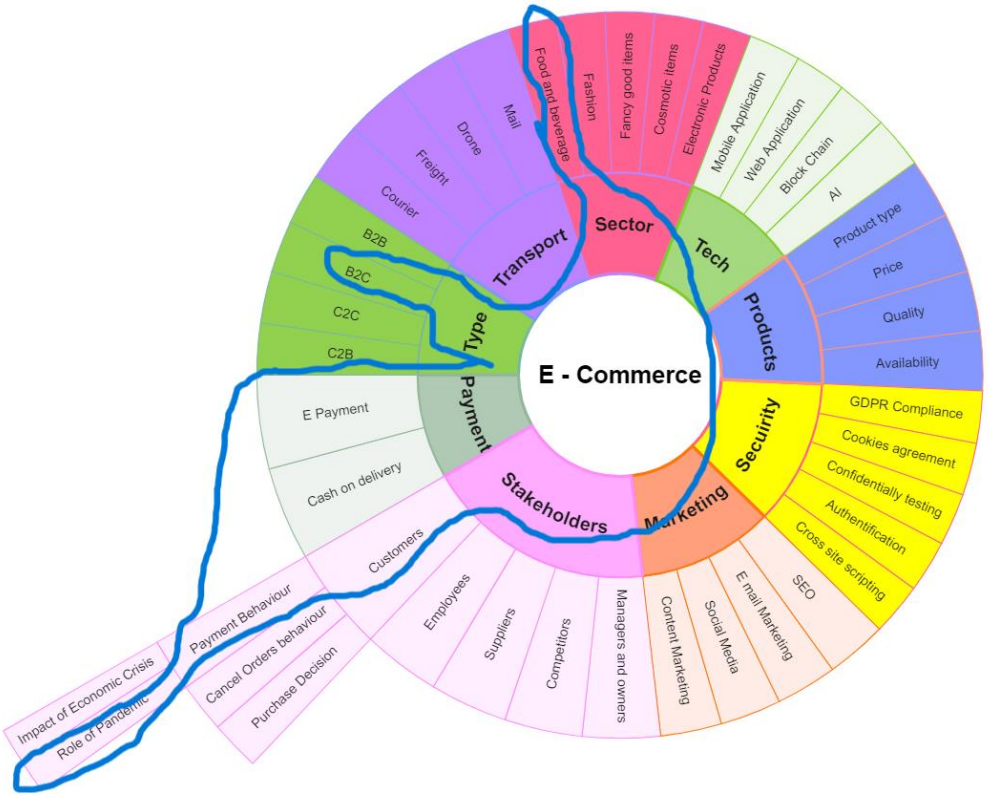

Figure 1 Concept map

1.3 Objective of Research

1.3.1 Research Question

a. What are the factors that attract customers to cash on delivery?
b. What are the factors that prevent customers from choosing cash on delivery?
c. What are the factors that attract customers to choose e-payment services?
d. What are the factors that prevent customers from choosing e-payment services?

e. How those factors have significantly changed during the post covid-19 pandemic period?

1.3.2 Research Objectives

a. To analyze the factors that attract consumers towards cash on delivery.
b. To analyze the factors that make consumers leave Cash on delivery.
c. Analyzing the factors that attract consumers towards e-payment services.
d. To analyze the factors that are hindering consumers from selecting e-payment services.
e. To analyze the significant changes on each influential factors during the post pandemic period

1.4 Expected outcome/Deliverables.

a. Systematic analysis using literature of past studies and categorize the past factors that influence the switching intention of e consumers based on advantage and disadvantage of both cash on delivery and e-payment services.
b. Conceptual model with supportive theoretical approach to explain the current relationship between switching intention and factors that would be identified using literature review.
c. Deductive approach to explain the role of post pandemic based on the mediating/moderating factors such as health risk and addictiveness to e-payment during the pandemic to discuss the variation in the factors that already influenced on consumers switching intention before/during the pandemic.
d. Compare and discuss the changes in consumers switching intention during the post pandemic period.

1.5 Summary

This episode presented an introduction to the aforementioned research study, with a clear explanation of its background, scope and the rationale. It also discussed the objectives, expected outcomes of the study, and the organization of the dissertation.

2) Literature Review

This chapter mainly focuses on methodically analyzing and presenting the existing literature on switching intention, e-payment adoption and cash on delivery.

2.1 Cash on delivery

In 2020, a study was conducted to identify the ways of delivery performance enhancement in Sri Lankan e-commerce logistic sector with special reference to cash on delivery which was done using integrative review. The main purpose of this study is to identify the solutions and strategies for performance enhancements of E-Commerce deliveries with special reference to CODs in order to overcome the associated issues and challenges. During this study they had identified reasons for selecting COD, factors affecting the COD, Advantage and disadvantage from both customer and consumer perspectives and solution and strategies [Navodika karunaratna,2020] but this study have some limitations that this study was not narrowed to e-commerce sector, but it was extended up to logistic sector as well as this study did not pay much attention about pandemic situation and post pandemic situation to check whether role of pandemic and post pandemic have significant impact on COD of e-commerce sector.

In 2021, there was a study which explored about motivating and hindering factors for consumer adoption to online purchase and payments in Sri Lanka, which had been done through qualitative approach to derive the findings where they had divided the consumers into two categories such as those who purchase online and those who don't purchase online and had done the interview to collect the data. Here they had identified some reasons from e-consumers why they don't pay online so it literally means they are using cash on delivery for their e-commerce transaction. The reasons they identified from the consumers using COD are Lack of Trust, Lack of security, Bad experience and lack of knowledge in modern e-payment services [Danika Perera Sandamali Galdolage ,2021]. However, even though this study had focused on reason for people adopting COD, this study was only conducted in western province and also, they did not focus any e-commerce sector. Moreover, this study did not pay much attention to pandemic situation and post pandemic effects which are considered to be gaps of this study where my research will focus more on post pandemic effect in this case.

2.2 E-payment services

In 2021, A study was conducted about exploring motivating and hindering factors for consumer adoption to online purchase and payment in Sri Lanka. To bring this study forward, they had used semi structured interview with qualitative approach where they had separated the consumers into two groups such as consumers using cash on delivery

and consumers using e-payment services where they had identified reasons for consumers making payment online. Accordingly, that study reflects some reasons such as inconvenience in COD, Motivation on card payment offers and credibility of the merchants. [Danika Perera Sandamali Galdolage ,2021]. However, this study did not focus on some other factors like social influence and healthy risk that has been perceived during the pandemic period as well as the post pandemic period. So, my research will focus on the gap of post pandemic effect that could not be identified in this research.

There was a study which was conducted in 2021 that aims to study impact of fear of online identity theft on online purchase intention in Sri Lanka to examine the role of trust in e-payment system on the relationship between fear of online identity theft and online purchase intention [shamindi Madawala & shehnai Shanika,2021]. this study had been done using quantitative method while this study also has some limitation that this study did not focus the pandemic and post pandemic effect on e-payment service adoption whereas this study had focused only trust but there are other factors as well in determining adoption of e-payment services such as social influence, laws related to e-payment thefts and when it comes to pandemic health risk is considered to be another factor so here my study will focus the gap of post pandemic effect that seems to be one of gap in this research.

2.3 Switching intention of E-consumers

My study will focus on consumers switching intention from cash on delivery to e-payment services during the post pandemic period where I have to take into consideration both Cash on delivery and e-payment services. In Sri Lankan context I had identified one study that simultaneously discuss both cash on delivery and e-payment services along with benefits of cash on delivery and drawbacks of e-payment services which was conducted in 2021 focusing critical factors influencing online consumer preference towards cash on delivery method[Navodika Karunaratne,2021] which has some limitation because this study did not pay much attention on benefits of e-payment services as well as draw backs of COD. Moreover, this study was not conducted based on post pandemic or pandemic situation. So those gaps will be solved using my research that mainly will focus on post pandemic and attracting and hindering factors of both e-payment and cash on delivery.

2.4 Push-Pull-Mooring framework

This study has used a theory called PPM theory which is identified as push-pull-mooring framework in several past studies. Push-Pull-Mooring framework has long been used in studies to explain human motivation based on migration behaviors on humans which means human intention to migrate from one service or product to another service or product [Adirinekso,2021]. This framework discusses considering three factors such as push factors, pull factors and mooring factors. Here, push factor reviews factors that encourage consumers to leave the initial service/products or condition [Loh,2021]. Whereas pull factor discusses factors that attracts consumers towards destination condition or new service/new product. When considering of mooring factors those are inhibiting or encouraging factor that influence human migration between two services or product mostly those factors are rest of the internal and external factors that influence human migration behavior [Handarko,2020]. While pull factors are defined as attractive factors that induce users to use new service or product due to the advantage possessed by new service or product and also push factor is considered to be negative factor that exist in existing system which is interpreted as weakness in existing system that make consumers to abandon/ leave services or product [Hsieh,2021]. This study initially covers the part of switching intention of consumers from cash on delivery to e payment services. According to past studies switching intention or behaviors were discussed by push-pull-mooring framework. So, this study tends to approach research using PPM theoretical framework [Le Wanga,2019].

2.5 Summary

This segment focused on a systematic review of literature related to the research title, which supported the justification of the study area, with an overview of the reviewed literature. It was presented under the study areas cash on delivery, e-payment service, switching intention of e-consumers and push-pull-mooring theory.

3) Research Methodology

This chapter focuses on the methodology used to conduct the research, with the presentation of the research approach, research design and the conceptual design is elaborated in this chapter. Furthermore, the chapter explains the types of data needed, sources of data and methods of analyzing data, stages of data collection, sampling and qualitative and statistical data analysis with justification for selecting study samples and basis for sampling.

3.1 Research Model and hypothesis

This research model has been designed integrating push-pull-mooring framework with health consciousness based on HBM model, UTAUT model and Transaction cost theory perspectives considering the past studies [Purwandari,2022; Tsai-Ling Liu,2022] which is more relevant to the context of the study. This study has discussed ten variables out of which it has one moderating variable, one mediating variable, one dependent variable and eight independent variables as illustrated in figure below

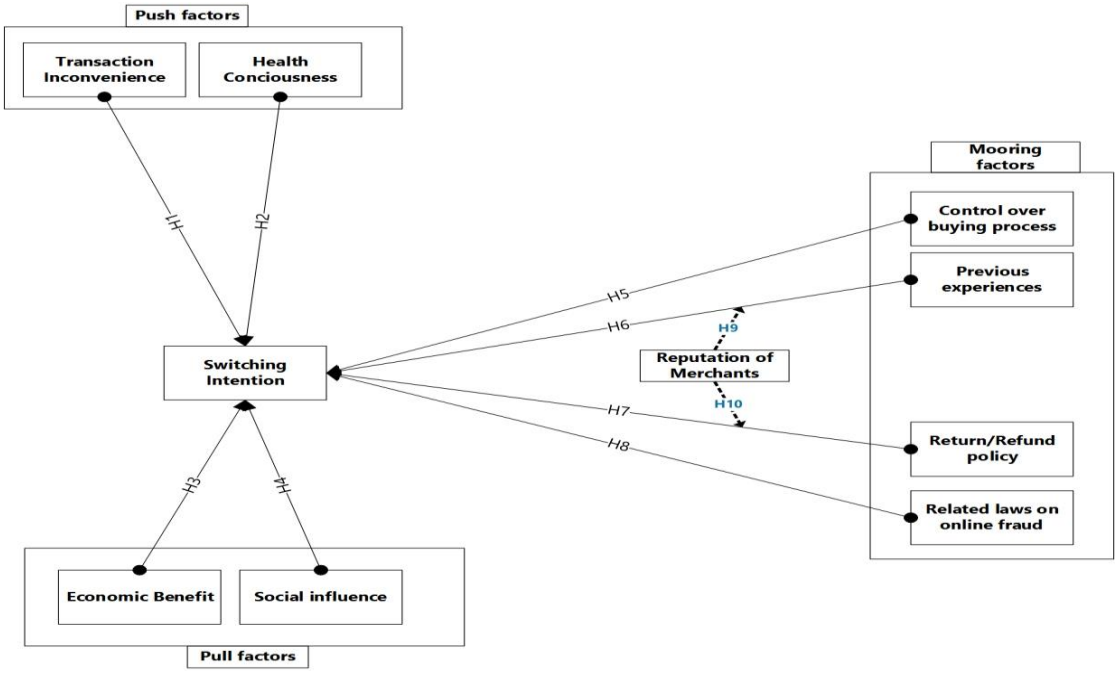

Figure 2 Conceptual framework

3.1.1 Push factors

This study uses Push-Pull-Mooring framework as the main theoretical model to determine the variables used in the study. Accordingly, the study takes two push factors based on previous studies such as transaction inconvenience and health consciousness. Health consciousness is considered which extend health problems are related to persons daily transactions and activities[Baura,2020;Damberg,2021] and also Health consciousness majorly consider as to how consumers are aware of their health, thereby inducing them to switch from Cash on delivery to E-payment services that includes how far they focus to stay healthier, how important for consumers to stay healthy, how active they are to maintain their health and how much effort they put to stay healthy[Barua,2020]. According to HBM model, which is called health benefit model,

it simply indicates some characteristics on behalf of health consciousness where perceived susceptibility, perceived severity, perceived benefits, perceived threat, and cues to action are considered to be indicators of health consciousness based on those studies proposed hypothesis for health consciousness is as follows

H1 – Health consciousness has influence on switching intention from COD to E-payment services

According to the study [Lu,2021], Transaction cost theory is defined any of the costs or efforts faced to facilitate transactions. Based on the study [Thao An Tran,2022] inconvenience of cash payment is defined as amount of cash carrying in wallet, suffering on uncomfortable feeling such as worrying about losing their wallet or limiting in spending what they have on hand or just a “thick” or “heavy” wallet. In terms of the payment speed, cash is lower than credit cards or mobile payment. With mobile payment, customers can make the financial transaction very simple for the goods or services at anytime from anywhere, save time, and reduce personal risk [Zhou,2011]. [Moreover, Keaveney,1995)] and Lai et al,2012] pointed out that inconvenience is a negative factor that pushes customers away from the existing service. While Time-consuming, tiring, untrustworthy, and uncomfortable conditions are considered to increase transaction costs. On the other hand, factors such as saving time, saving energy, being trustworthy, and being comfortable are considered to reduce transaction costs. Consumers will evaluate the total cost and effort of the transaction to determine whether to adopt or change their behavior. In this study, the inconvenience factor was considered as the push factor. Tran et al. in their research proposed this variable as an inconvenience factor that encourages users to leave cash payments and switch to mobile payment services [Tran et al,2019]. Based on those studies’ transaction inconvenience is considered as push factor and hypothesis is developed as follows

H2 – Transaction Inconvenience has influence on switching intention from cash on delivery to e-payment services.

3.1.2 Pull factors.

In the pull factors this study uses two factors that derived from UTAUT model and Transaction cost theory such as economic benefit as well as social influences. Unified theory of acceptance and use of technology or UTAUT used to identifying motivation

use of technology that developed by Venkatesh et al. (2003). UTAUT theory was developed through a comprehensive synthesis and an integration of the theory of reasoned action (TRA), the Technology Acceptance Model (TAM), motivational models (MM), theory of planned behavior (TPB), combined TAM and TPB (C-TAMTPB), the model of the PC utilization (MPCU), innovation diffusion theory (IDT) and social cognitive theory (SCT). UTAUT has four constructs namely performance expectancy, effort expectancy, social influence, and facilitating conditions that affect the intention and use of technology. Here study use social influence factor from UTAUT model as pull factors but most of the study nearly more than 60% percentage of study has considered performance expectancy and effort expectancy rarely social influence has been considered in past literatures therefore social influence is considered. Based on the past studies hypothesis for social influence was developed as follows

H3 – Social influence has influence on switching intention from cash on delivery to e-payment service.

Another factor the study considers as a pull factor is economic benefit. The economic Benefit variable was brought from the results of the synthesis of variables in the Transaction Cost Theory proposed by Lu and Wung (2020) [lu,2020]. According to [lu,2020], economic benefit considers how many rebates, discounts, and bonus points are provided by mobile payment services, as well as how cheap the use of these payment services is compared to using cash payments [lu,2020]. Therefore, the economic benefit variable is identified by measuring how e-payment can provide discounted prices, cashback, and bonus points on online shopping transactions through e-commerce, as well as how cheap it is compared to cash on delivery payment services. If the value for this variable is high, it will describe the tendency of users to switch from cash on delivery payment services to e-payment services. Therefore, the proposed hypothesis for the EBE variable is as follows.

H4 – Economic benefit has influence on switching intention from cash on delivery to e-payment services.

3.1.3 Mooring factors

As Mooring factors, the study has discussed four variables such as control over buying process, Previous experiences, return/refund policy and related laws on online frauds when considering of control over buying process consumers tends to capture decision making power from starting of the purchase to end of the purchase (Rao et al., 1998). Customers have serious fear of fake and low-quality product while placing an order online according to the study (Chiejina & Olamide, 2014). Therefore, they prefer to check the product quality before paying for it. Cash on Delivery offers a human interaction since suppliers must communicate with the customer over phone before sending the product, which gives an opportunity to get their concerns addressed (Chiejina & Olamide, 2014; Halaweh,2017). Furthermore, cash on delivery reduces the possibility of low-quality product, wrong delivery, or no delivery at all (Chiejina &Olamide, 2014; Jana, 2017). Moreover, Cash on delivery also offers a chance of product replacement if the purchase is not in good condition. Therefore, customers perceive more control over the buying process as they have to pay for the product after checking the product physically [Safia Anjum,2020]. Also, more details of the customers are on record when they use e-payment methods for purchases. This information can be used at any time to track customers' particulars and preferences (Halaweh,2018). Customers perceive more control over the buying process in case of Cash on delivery as there are fewer chances of tracking personal information for future advertisements [Safia Anjum,2020]. Those consumers who considered privacy and security more are lesser purchasers from online (Kwaek et al., 2002; Miyazaki & Fernandez, 2001). Educated consumers are more demanding and control over purchasing process and also, they are the decision makers from start to completion of online purchase (Rao et al., 1998). Based on those studies this study identified control over buying process has influence on switching intention to test those behaviors this study developed a hypothesis as follows

H5 – Control over buying process has influence on switching intention.

The second Mooring factor the study talks about is previous experiences. According to the study conducted in Sri Lanka [Dhanika Perera,2021], the study identified bad prior experience as reason for not using online payment based on interview method also that study identified that the consumers who have faced a bad experience regarding online

payments mostly hesitate to use their bank cards again to pay online. Furthermore, the same study says that as per respondents, it is seen that even one incident happened before several years can still affect the consumer decision to make their payments Online or not. In another study Automatic information filling and previous experience on the e-payment method were considered to facilitate the ease of use [Roosa Antinoja,2019]. As per the study, perceived ease of use is determined by prior experience with new technology. Perceive ease of use is one of the variables in technology acceptance model previously discussed so according to that prior experience has an influence on switching to e-payment services. In accordance with the study [Halaweh, 2017], customers perceive e-commerce websites as more trustworthy when Cash on delivery is used as they can verify whether the item is exactly as they expected before purchasing it. Consumers do not have this advantage when they make a payment using a credit card in advance of receiving the ordered item. Customers might have negative past experiences with e-commerce websites, such as receiving incorrect, fake or unexpected products. Here the study has pointed out negative past experience might have influence to adopt e-payment services. So, based on those studies, the hypothesis for previous experience factor has been developed as follows.

H6 – Previous experience has influenced switching intention from cash on delivery to e-payment services.

As third mooring factor the study has used return/refund policy. Few studies have discussed return/refund policy has effect on trust on e-commerce as well as online adoption. As such return policy has some inconvenience to consumers according to study [Rubyet Hossain,2020] which says one of consequence of particular e-payment service is having inconvenience return policy. Most buyers hope to receive some kind of compensation and clear return policy for any service failure they may experience [Gomaa Agag,2017] which says consumers focus clear return policy to get them into online transactions. In the context of this study [Emmanuel Candia,2022], a ‘good experience’ means having had no problems with making the order online,
at a relatively reasonable price, and the goods were promptly delivered and as expected. It further means having experienced good customer care, effective communication, and the exact product ordered for is delivered. It also means.

being allowed to cancel an order, return a product, get a refund, or repurchase an alternative product where defects in what gets delivered. This study also has focused and pointed out that return or refund policy has influence on consumer experience that makes them to use online transaction. In another study [Manish jha, 2014], that says respondents feel and strongly agreed that return policy affected consumer trust and performing online transactions. So, return/refund policy has an influence on online transaction among e-consumers. To test it on this study the hypothesis regarding return and refund policy has been developed as follows.

H7 – Return/Refund policy has influence on switching intention from cash on delivery to e-payment services.

In the mooring factors this study considers related laws on online frauds which has been identified from Sri Lankan research as limitation where that research has studied influence of online identical theft on purchase decision and e-payment services during the online transaction at which the study pointed out related laws regarding online theft [shamindi Madawala,2021]. so that limitation has been considered as a fourth mooring variable in the study. Moreover, according to the study done in Pakistan [Safia Anjum1,2020], online payment rules and cyber laws are not mature and fail to provide enough sense of security to the customer. Therefore, events of hacking and misuse of e-payment information are frequently reported. Such scams hinder the prospects of adoption of e-payment methods. So, consumer has no satisfaction with laws that are regarding to online frauds in developing countries like Pakistan so there is a need of study to check the related laws regarding online frauds. Furthermore, a study that was conducted in 2013[Sidek,2013] which says that rules and regulations related to e-payment transactions such as ICT and cybercrime were not yet transparent and not widely known to the public at large. Furthermore, they claimed that enforcing those laws and regulations was not yet being addressed successfully. So here is the need of study to conduct measuring awareness of e -consumers about those laws and opinion of consumers about those laws regarding transparency of those laws. As per those studies a hypothesis was developed to check the related laws on online fraud on switching intention as follows

H8 – Related laws on online fraud has influence on switching intention from cash on delivery to e-payment services.

Apart from the independent variables in the mooring factor, this study uses reputation of merchant as moderating variable between switching intention and return/refund policy on online fraud as well as switching intention and previous experiences. Considering of factor reputation of merchant, the study conducted in Sri Lanka has pointed it as one of influencing factor that influencing e-payment adoption where the reputation was measured using credibility of particular merchant [Dhanika perera,2021]. A paper describes that E-commerce systems are unable to analyze three essential requirements including that during a new transaction a buyer should consult other buyer to check reputation of seller, a seller with good reputation must not involve in fraudulent activities and a buyer having a good experience with a bad reputed seller must be able to undergo further transactions [Muhammad, 2021]. So here consumer experience and reputation has been pointed out to be analyzed. Moreover, the reputation of merchant never used as moderating variable and also return, and refund policy has influence on trust as discussed above. so, there is a need of study as to how reputation of merchant has moderated the relationship between switching intention, previous experience and return/refund policy. Therefore, two hypothesizes developed to test moderating effect of reputation of merchant as follows

H9 – Reputation of merchant has moderating effect between switching intention and previous experience

H10 – Reputation of merchant has moderating effect between switching intention and previous experiences.

3.2 Data collection and Analysis method

Primary data gathering was planned to do via online survey because after developing a conceptual framework, the study needed to conduct the survey among consumers to identify the relationship between the factors that conceptual framework points and switching intention between transition of cash on delivery to e-payment services.

This online survey was approached with deductive method with quantitative research design to explain the relationship between the independent, dependent and moderating.

Moreover, the online survey for data gathering was feasible for this study since these studies targeted group was e-consumers of the food and beverage sector who mostly use e-devices. so online survey can be easy access for all e-consumers in this sector.

And sampling technique for this study was convenient sampling technique since wide range of e-consumers are end users in this food and beverage sector so population was large. There fore According to Cohen (1992) sample size was identified based on number of variables, effect size (0.1) and significant level (0.5).

For the preliminary analysis, SPSS software was used to check the quality of data and cleaning the unnecessary data where straight line error test, cooks distance test, skewness and kurtosis test and Harman's single factor test was conducted to clean extreme outliers, straight line pattern of data and to check the common method bias as well as to determine the normality of your distribution.

The PLS-SEM (Structure equation model) test was used to analyze the data and to identify causal relationship between variables. Using those results, based on the conceptual framework developed and hypothesis generated from frameworks findings were derived in the conclusion part.

3.3 Operationalization

Operationalization means turning abstract concepts into measurable observations. This simply means strictly defining variables with limited mensurable factors. In quantitative research, it's important to precisely define the types of variables that you want to study. Without transparent and specific operational definitions, researchers may measure irrelevant concepts or inconsistently apply methods. Operationalization reduces subjectivity, minimizes the potential for research bias, and increases the reliability of your study[Pritha Bandari,2022].

Dimensions	Indicator	Measures	References
Health Consciousness	• Seriousness • Barriers • Benefits • Self-efficacy	Likert scale	[Purwandari ,2022]

Transaction Inconvenience	• Saving time • Saving energy • Trustworthy • Comfortable	Likert scale	[Purwandari ,2022]
Economic Benefit	• Discounts • Bonus • Cheapness • Rebates	Likert scale	[Purwandari ,2022]
Social Influence	• Mass media • Relatives • Colleagues • Friends	Likert scale	[Purwandari,2022] [Jain,2022] [Junadi,2015] [Dhanika Perera,2021] [Hamed,2020] [Jegerson,2022] [Rahayu,2022]
Control over buying process	• Decision making • Fear of fake • Wrong delivery • Chance to replacement	Likert scale	[Safia Anjum1,2020]
Previous Experiences	• Satisfaction • Same technology • Familiarity • Willingness	Likert scale	[Dhanika Perera,2021] [Antinoja,2019] [Halaweh,2017]
Return/Refund policy	• Flexible • Whole refund	Likert scale	[Gomaa Agag,2017]

	• Clear • Instant refund		
Related laws on online fraud	• Support • Awareness • Transparency • Impression of security	Likert scale	[Safia Anjum1,2020] [Sidek,2013]
Reputation of merchants	• Size • Trust • Offline presence • Familiarity	Likert scale	[Dhanika Perera,2021] [Antinoja,2019]
Switching intention	• Recommend others • Future switch • Completely switch • Partially switch	Likert scale	[Purwandari ,2022]

Table 1 Operationalization table

3.4 Summary

This chapter provided the methodology through which the research study is conducted, where its approach, design, conceptual model and techniques were elaborated.

4) Data Analysis and Discussion

This chapter starts with the stages of statistical and quantitative data analysis with preliminary data analysis. Findings and outcomes of the research are included in the chapter.

4.1 Introduction

The analysis process began after all the data was collected. Several interconnected procedures are performed during the data analysis stage to summarize and rearrange the data. Even though various modes of analysis are possible, a powerful analysis of Partial Least Square Path Modeling (PLS-SEM) was used to conduct this research, which is ideal for structured questioner analysis. Furthermore, it has discussed preliminary analysis in order to check the quality of the data and to clean the garbage of data that was collected for the research. In this chapter, the statistical results are presented graphically and tabularly, with detailed descriptions.

4.2 Collected Questionnaires

This study's target group was the people who are using e-commerce sites to buy food and beverages in Sri Lankan context. The questioner was distributed online google form mode to the targeted group across Sri Lanka, and only 159 responses were collected because according to Cohen table(cohen,1992) minimum sample size was determined as 150.

4.3 Data Presentation

The data which is collected by structured online questioner is presented in this section. All the collected data from the people who are doing online shopping in order to buy food and beverage for their needs have been presented in this section under two (02) categories as follows

- Personal information
- Research information

4.4 Data Presentation for Personal Information

The primary data is collected through online structured questioner from people who are doing online shopping in order to buy food and beverage via food and beverage e-commerce sector around Sri Lanka. From the responses that were received from online questionnaire, all responses were recommended and acceptable for preliminary and further analysis since it has no missing values. The collected data is going to be presented by using frequency distribution. The data are collected on the following personal information as age group, Gender, civil status, educational level, monthly

income, Job status, District. Here is the overview of the table that represents the collected data which has no missing values on it.

Statistics

		Age Group	Gender	Civil Status	Education Level	District	Monthly Income	Job Status
N	Valid	158	158	158	158	158	158	158
	Missing	0	0	0	0	0	0	0

Table 2 Demographic table

4.4.1 Distribution of Age Group

Age Group

	N	%
<20 years	4	2.5%
21-30 years	141	89.2%
31-40 years	9	5.7%
41-50 years	4	2.5%

Table 3 Age group

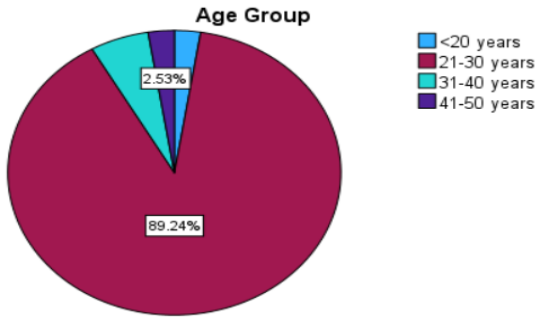

Figure 3 Age group

According to Table and Figure, it shows the age distribution of 158 respondents. Among the four age categories, the respondents are coming under Less than 20 years, 21-30 years, 31-40 years and 41-50 years which respectively shows the percentage of the participants as 2.5 %, 89.2%, 5.7% and 2.5 %. In this Data set majority of the participants belongs to age group 21-30 years which is accounting for 89.2% and also minority of the participants are from age group 41-50 years that is accounting for 2.5% of overall participants.

4.4.2 Distribution of Gender

Gender

	N	%
Female	38	24.1%
Male	120	75.9%

Table 4 Gender

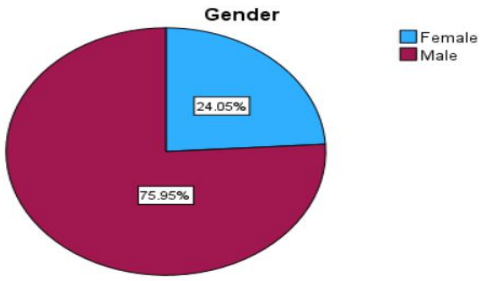

Figure 4 Gender

The gender distribution of the 158 participants of online food and beverage e-commerce site is shown in Table and Graph. They were divided into two groups: males and females. Female respondents make up 24.1 percent of the total, while male respondents make up 75.9 percent of the total. According to this data representation it shows majority of the participants of the survey is males and minority participants are males respectively which is accounting for 120 male participants and 38 female participants. So it seems that more male participants are doing online shopping rather than girls in food and beverage sector that is what this differentiation among both genders activeness of participation of the research survey reflect in the distribution of Gender.

4.4.3 Distribution of Civil Status

Civil Status

	N	%
Married	25	15.8%
Unmarried	133	84.2%

Table 5 Civil status

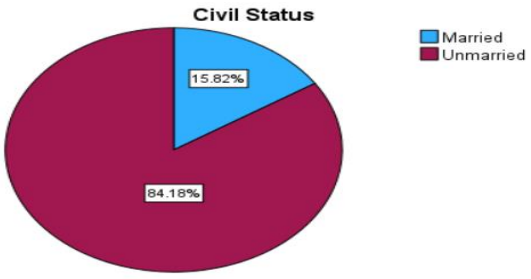

Figure 5 Civil status

According to Table and figure above, it refers to the civil status distribution of the 158 respondents who participated in the survey. They were categorized as married and unmarried. Among the two categorized groups, 15.8% respondents are married, and the remaining 84.2% respondents are unmarried. These results show majority of the people participated in this survey are unmarried individuals which accounts for 133

participants on the other hand married participants are only 25 people out of 158 participants.

4.4.4 Distribution of Education Level

Education Level

	N	%
Advance Level	16	10.1%
Diploma	10	6.3%
Graduate	57	36.1%
Ordinary Level	2	1.3%
Postgraduate	9	5.7%
undergraduate	1	0.6%
Undergraduate	63	39.9%

Table 6 Education level

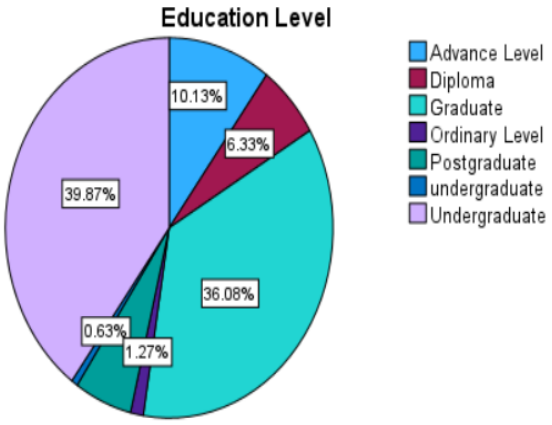

Figure 6 Education level

According to the table and pie chart above given, the representation of the participants of the online research survey has been categorized under six different categories such as Advance Level, Diploma, Graduate, Ordinary Level, Postgraduate and undergraduate which respectively shows the percentages of each category as 10.1%, 6.3%, 36.1%, 1.3%, 5.7% and 40.5%. As per this frequency distribution majority of the participants are coming from undergraduate group which accounts 64 participants out of overall 158 participants whereas minority of the participants comes under postgraduate category which accounts for 10 participants out of 158 overall participants of the survey. And also, the second majority are from graduate people that accounts 57 participants. So it literally means majority of the people who are doing online transaction for food and beverage are people who are doing higher studies which has been reflected from this data distribution of education level.

4.4.5 Distribution of average monthly income

Monthly Income

	N	%
<50,000 LKR	53	33.5%
>100,000 LKR	18	11.4%
50,000 - 100,000 LKR	34	21.5%
No Income	53	33.5%

Table 7 Monthly income

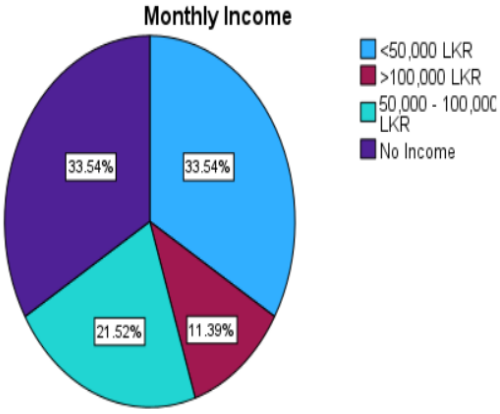

Figure 7 Monthly income

According to the table and pie chart above mentioned, it refers to the data distribution of average monthly income of the overall participants of the survey. Here monthly income of the participants is categorized into four groups such as less than 50,000 LKR, more than 100,000 LKR, 50,000 – 100,000 LKR and No Income which respectively shows 33.5%, 11.4%, 21.5% and 33.5% as their frequencies. As mentioned here, majority of the participants incomes come under less than 50,000 LKR and No income both of which are 53 participants and showing same frequencies whereas minority of the participants incomes comes under more than 100,000 LKR which accounts for 18 participants out of 158 overall participants which literally means mostly people who are students who have no income and people who are having less income are seen as active buyers of food and beverages from food and beverage e-commerce sector.

4.4.6 Distribution of job status

Job Status

	N	%
Still student	80	50.6%
Not working yet	8	5.1%
Job holder	70	44.3%

Table 8 Job status

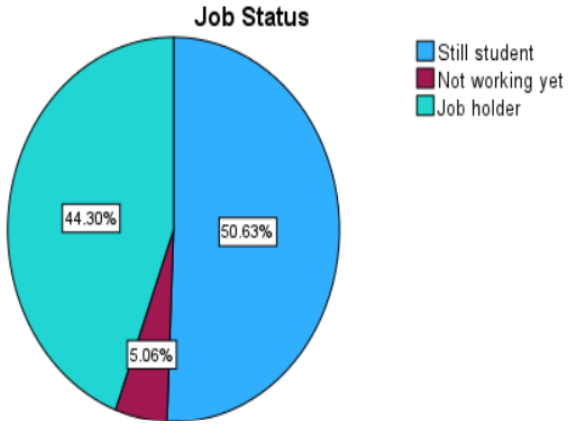

Figure 8 Job status

According to the table and pie chart given above, that refers the job status of the participants of the online research that have been categorized into three groups such as still student, job holders and people who are not working yet which respectively accounts 50.6%, 44.3% and 5.1% of overall participants. Here the majority of the participants come under the student category while a minority of participants comes under people who are not working yet category which respectively accounts 80 and 8 participants of total. So literally this distribution shows that most of the people who are buying food and beverage via e-commerce sites are job holders and students which altogether capture 94.9% of overall participants.

4.4.7 Distribution of districts

District

	N	%
Ampara	21	13.3%
Anuradhapura	4	2.5%
Batticaloa	6	3.8%
Colombo	29	18.4%
Galle	6	3.8%
Gampaha	18	11.4%
Hambantota	1	0.6%
Jaffna	11	7.0%
Kalutara	4	2.5%
Kandy	6	3.8%
Kegalle	4	2.5%
Kilinochchi	1	0.6%
Kurunegala	4	2.5%
Matale	1	0.6%
Matara	4	2.5%
Nuwara Eliya	4	2.5%
Puttalam	5	3.2%
Ratnapura	3	1.9%
Trincomalee	6	3.8%
Vavuniya	20	12.7%

Table 9 District

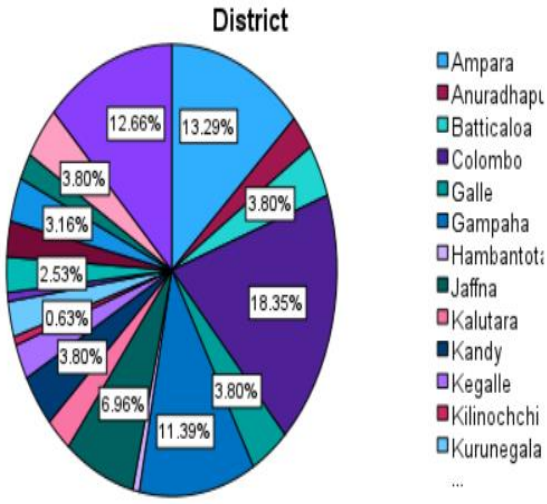

Figure 9 District

According to the table and pie chart shown above, it refers to the districts of participants from where they are currently living. So as per the data distribution of the participants districts which is categorized into 25 districts in Sri Lanka but this survey got only 20 districts participants data such as Ampara, Anuradhapura, Batticaloa, Colombo, Galle, Gampaha, Hambantota, Jaffna, Kalutara, Kandy, Kegalle, Kilinochchi, Kurunegala, Matale, Matara, Nuwara Eliya, Puttalam, Rathnapura, Trincomalee and Vavuniya respectively percentage of the participants of this districts are 13.3%, 2.5%, 3.8%, 18.4%,11.4%, 0.6%, 7.0%, 2.5%, 3.8%, 2.5%, 0.6%, 2.5%, 0.6%, 2.5%, 2.5%, 3.2%, 1.9%, 3.8% and 12.7% of overall participants. Here a minority of participants are from Hambantota, Kilinochchi and Matale. Furthermore, the majority of the participants are from Colombo district which accounts for 29 participants out of overall participants. So literally this distribution shows the people who are living in the urban areas mostly adopted to online food and beverage shopping.

4.5 Data presentation for research information

The primary data was collected via a structured online questionnaire which had forty research questions containing one indicator for each research question. This research questions were scaled between 1 to 5 Likert scale questions. The independent variables such as health consciousness (HC), transaction inconvenience(TI), economic benefit(EB), social influence(SI), control over buying process(COBP), return and refund policy(RRP), related laws on online fraud(RLOP), previous experiences(PE), the moderating variable reputation of merchants(ROM) and the dependent variable switching behavior(SB) have been counted as a research information using various four indicators for each variables that mentioned above.

4.5.1 Preliminary data analysis

Preliminary data analysis is steps which are prior to data analysis to examine and summarize data to gain insights into its quality, structure, and key characteristics. It involves a series of activities. Those are checking for missing or invalid data values, identifying outliers and removing it or identifying anomalies of the data that has been collected.

The main purpose of doing preliminary data analysis is to identify any issues or detect patterns that may affect the accuracy or reliability of the data that has been collected via survey, and to prepare the data for more detailed further analysis.

Overall, preliminary data analysis is crucial pre step in any data analysis research project, as it helps to make sure that the data is appropriate for the further analysis.

Here are the four main techniques that were tested to check the quality of data and clean the garbage of data in this study.

- Straight line error test
- Cook’s distance test
- Skewness and kurtosis test
- Harmon’s single factor test

Descriptive Statistics

	N	Range	Minimum	Maximum	Sum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
HC_1	158	4	1	5	379	2.40	.081	1.015	1.031
HC_2	158	4	1	5	377	2.39	.081	1.014	1.028
HC_3	158	4	1	5	387	2.45	.081	1.019	1.039
HC_4	158	4	1	5	380	2.41	.076	.951	.905
TI_1	158	4	1	5	367	2.32	.073	.919	.844
TI_2	158	4	1	5	363	2.30	.073	.914	.835
TI_3	158	4	1	5	398	2.52	.077	.969	.939
TI_4	158	4	1	5	404	2.56	.080	1.000	1.000
EB_1	158	4	1	5	351	2.22	.066	.834	.696
EB_2	158	4	1	5	373	2.36	.071	.890	.793
EB_3	158	4	1	5	335	2.12	.069	.870	.756
EB_4	158	4	1	5	407	2.58	.070	.876	.768
SI_1	158	4	1	5	373	2.36	.067	.846	.716
SI_2	158	4	1	5	404	2.56	.064	.810	.656
SI_3	158	4	1	5	419	2.65	.070	.881	.776
SI_4	158	4	1	5	483	3.06	.084	1.054	1.111
COBP_1	158	4	1	5	349	2.21	.066	.830	.689
COBP_2	158	4	1	5	362	2.29	.070	.884	.781
COBP_3	158	4	1	5	371	2.35	.071	.895	.802
COBP_4	158	4	1	5	374	2.37	.071	.898	.807
PE_1	158	4	1	5	425	2.69	.072	.902	.814
PE_2	158	4	1	5	436	2.76	.070	.885	.783
PE_3	158	4	1	5	388	2.46	.067	.842	.708
PE_4	158	4	1	5	358	2.27	.061	.769	.591
RRP_1	158	3	1	4	383	2.42	.064	.808	.653
RRP_2	158	4	1	5	400	2.53	.066	.827	.684
RRP_3	158	4	1	5	403	2.55	.069	.864	.746
RRP_4	158	4	1	5	385	2.44	.061	.761	.579
RLOF_1	158	4	1	5	408	2.58	.064	.808	.652
RLOF_2	158	3	1	4	414	2.62	.061	.762	.581
RLOF_3	158	4	1	5	420	2.66	.072	.901	.812
RLOF_4	158	4	1	5	431	2.73	.075	.949	.900
ROM_1	158	4	1	5	372	2.35	.068	.860	.740
ROM_2	158	4	1	5	379	2.40	.074	.930	.865
ROM_3	158	4	1	5	371	2.35	.064	.805	.649
ROM_4	158	4	1	5	363	2.30	.065	.818	.669
SB_1	158	4	1	5	408	2.58	.073	.911	.831
SB_2	158	4	1	5	429	2.72	.079	.991	.982
SB_3	158	4	1	5	408	2.58	.074	.925	.856
SB_4	158	4	1	5	393	2.49	.068	.850	.723
Valid N (listwise)	158								

Table 10 Descriptive statistics

According to this table which shows the descriptive statistics of all research variables data that was tested in this research. Here this descriptive statistic contains column of range, minimum value, maximum value, sum of the values, standard deviation, mean, variance and standard error of158 collected data with no missing values.

4.5.1.1 Straight line error test

In surveys, "straight line error" denotes response pattern where the respondent consistently selects the same response option without properly considering each item on the survey. It is considered to be "straight-lining" or "acquiescence bias.". Straight line error can cause biased survey responses that do not accurately shows the opinions or attitudes of the participants. Researchers can also identify and take consideration for straight line error by analyzing response patterns and removing respondents who shows continuous straight-line responses from their analyses. For that this research has used SPSS software to identify and to remove straight line errors using the statistical variance of each data where if variance is zero it means that data has straight line error, so such kind of data were removed and cleaned from this data to strengthen the quality of data.

SB_4	District	MonthlyIncome	JobStatus	VARIANCE	var
2	Jaffna	<50,000 LKR	3	.00	
3	Kegalle	50,000 - 100,000 LKR	3	.00	
2	Batticaloa	<50,000 LKR	3	.00	
1	Galle	<50,000 LKR	3	.00	
2	Kalutara	50,000 - 100,000 LKR	1	.00	
2	Vavuniya	50,000 - 100,000 LKR	3	.00	
3	Kandy	<50,000 LKR	1	.00	
2	Colombo	<50,000 LKR	1	.00	
1	Vavuniya	<50,000 LKR	3	.00	
3	Vavuniya	No Income	2	.00	
2	Trincomalee	No Income	1	.00	
2	Ampara	No Income	1	.00	
2	Trincomalee	50,000 - 100,000 LKR	1	.02	
2	Puttalam	<50,000 LKR	3	.02	
2	Batticaloa	No Income	1	.05	
3	Ampara	50,000 - 100,000 LKR	3	.07	
3	Vavuniya	<50,000 LKR	3	.10	
1	Hambantota	No Income	2	.11	
2	Nuwara Eliya	<50,000 LKR	1	.12	

Table 11 Straight line error

According to this figure, this questionnaire had twelve straight line data which was removed from the data set and further analysis was conducted.

4.5.1.2 Cook’s distance

The Cook's distance test is generally followed to detect extreme outliers, influential observations and leverage points in a regression model. The test is to calculate Cook’s distance value for each observation in the data set and influential observations where the large Cook's distances are likely considered to be problematic.

Cook's distance value is calculated via the residuals, leverage, and influence of each observation in the data set. Residuals denotes the differences between the predicted and actual values of the dependent variable, whereas leverage measures how much an observation is to differ from the average value of the independent variables in data set. Influence of observations refers as to how much an observation affects the regression coefficients.

Overall, the Cook's distance test is a useful mechanism to identify influential observations and to detect potential problems with a regression model. It could help researchers to make more accurate and reliable predictions due to removing problematic observations and adjusting the model to account for their effects.

So here cook’s distance test was conducted using SPSS software to identify extreme outliers as mentioned above but, in this data, set all variables cook’s distance value was between zero to one that means there are no any extreme outliers in the data set that exceeds the cook’s distance point one.

Here is the cook’s distance test for each indictor of dependent variable switching behavior SB_1, SB_2, SB_3 and SB_4 with respect to other independent and moderating variables. So here all cook’s distance value is under one. Therefore, it has no extreme outliers.

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.02	4.20	2.58	.627	158
Std. Predicted Value	-2.489	2.583	.000	1.000	158
Standard Error of Predicted Value	.103	.608	.349	.106	158
Adjusted Predicted Value	1.02	4.48	2.58	.696	158
Residual	-1.668	1.956	.000	.661	158
Std. Residual	-2.215	2.598	.000	.878	158
Stud. Residual	-2.592	3.079	.001	1.045	158
Deleted Residual	-2.756	2.748	.002	.955	158
Stud. Deleted Residual	-2.656	3.194	.002	1.056	158
Mahal. Distance	1.923	101.248	35.772	19.663	158
Cook's Distance	.000	.203	.014	.030	158
Centered Leverage Value	.012	.645	.228	.125	158

a. Dependent Variable: SB_1

Table 12 Cooks distance - SB_1

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.93	4.39	2.72	.706	158
Std. Predicted Value	-2.537	2.374	.000	1.000	158
Standard Error of Predicted Value	.108	.640	.367	.111	158
Adjusted Predicted Value	.79	4.57	2.69	.749	158
Residual	-2.604	2.051	.000	.696	158
Std. Residual	-3.286	2.588	.000	.878	158
Stud. Residual	-3.844	3.238	.014	1.034	158
Deleted Residual	-3.565	3.211	.028	.977	158
Stud. Deleted Residual	-4.086	3.374	.014	1.050	158
Mahal. Distance	1.923	101.248	35.772	19.663	158
Cook's Distance	.000	.160	.012	.025	158
Centered Leverage Value	.012	.645	.228	.125	158

a. Dependent Variable: SB_2

Table 13 Cooks distance - SB_2

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.00	4.27	2.58	.667	158
Std. Predicted Value	-2.378	2.525	.000	1.000	158
Standard Error of Predicted Value	.100	.589	.338	.103	158
Adjusted Predicted Value	.99	5.13	2.59	.718	158
Residual	-1.841	1.739	.000	.641	158
Std. Residual	-2.520	2.381	.000	.878	158
Stud. Residual	-3.288	2.853	-.005	1.053	158
Deleted Residual	-3.133	2.768	-.010	.941	158
Stud. Deleted Residual	-3.432	2.942	-.005	1.065	158
Mahal. Distance	1.923	101.248	35.772	19.663	158
Cook's Distance	.000	.220	.015	.033	158
Centered Leverage Value	.012	.645	.228	.125	158

a. Dependent Variable: SB_3

Table 15 Cooks distance - SB_3

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.19	4.71	2.49	.646	158
Std. Predicted Value	-2.016	3.445	.000	1.000	158
Standard Error of Predicted Value	.086	.508	.292	.088	158
Adjusted Predicted Value	1.23	4.97	2.50	.663	158
Residual	-1.560	1.420	.000	.553	158
Std. Residual	-2.477	2.254	.000	.878	158
Stud. Residual	-2.914	2.826	-.007	1.042	158
Deleted Residual	-2.160	2.232	-.010	.793	158
Stud. Deleted Residual	-3.010	2.912	-.006	1.053	158
Mahal. Distance	1.923	101.248	35.772	19.663	158
Cook's Distance	.000	.123	.013	.025	158
Centered Leverage Value	.012	.645	.228	.125	158

a. Dependent Variable: SB_4

Table 14 Cooks distance - SB_4

4.5.1.3 Skewness and Kurtosis

Skewness and kurtosis values are statistical mechanisms which is used to describe the shape of a distribution of data.

Skewness is a value that measure the degree of asymmetry of a distribution. It denotes the extent to which the distribution is skewed it means if it is the left or right skewness. A distribution is considered to be left skewed if it has a long tail on the left side and the bulk of the data can be seen on the right side. A distribution is seen as right skewed if it has a long tail on the right side and the bulk of the data can be found on the left side. A symmetric distribution is said that it skewness value is zero.

Kurtosis, on the other hand, is a value that measure the degree of peakedness or flatness of a distribution. A distribution with high kurtosis means it has sharper peak and heavier tails, whereas a distribution with low kurtosis means it has flatter peak and lighter tails.

In this primary research data set skewness and kurtosis test was applied to check the normality of the data set collected for the research according to the research papers hair et al (2010) and bryne (2010) skewness range is between -2 to 2 and for kurtosis range is -7 to 7.

Statistics

		TI_2	TI_3	TI_4	EB_1	EB_2	EB_3	EB_4
N	Valid	158	158	158	158	158	158	158
	Missing	0	0	0	0	0	0	0
Skewness		.490	.584	.364	.497	.648	.823	.484
Std. Error of Skewness		.193	.193	.193	.193	.193	.193	.193
Kurtosis		-.043	-.107	-.510	.179	.385	.811	.210
Std. Error of Kurtosis		.384	.384	.384	.384	.384	.384	.384

Statistics

		SI_1	SI_2	SI_3	SI_4	COBP_1	COBP_2	COBP_3
N	Valid	158	158	158	158	158	158	158
	Missing	0	0	0	0	0	0	0
Skewness		.574	.250	.405	-.082	.608	.514	.709
Std. Error of Skewness		.193	.193	.193	.193	.193	.193	.193
Kurtosis		.048	-.180	-.270	-.771	.367	.158	.663
Std. Error of Kurtosis		.384	.384	.384	.384	.384	.384	.384

Statistics

		ROM_2	ROM_3	ROM_4	SB_1	SB_2	SB_3	SB_4
N	Valid	158	158	158	158	158	158	158
	Missing	0	0	0	0	0	0	0
Skewness		.372	.395	.249	.468	.201	.342	.323
Std. Error of Skewness		.193	.193	.193	.193	.193	.193	.193
Kurtosis		-.078	.528	-.028	-.062	-.550	-.110	.037
Std. Error of Kurtosis		.384	.384	.384	.384	.384	.384	.384

Statistics

		COBP_4	PE_1	PE_2	PE_3	PE_4	RRP_1	RRP_2
N	Valid	158	158	158	158	158	158	158
	Missing	0	0	0	0	0	0	0
Skewness		.540	.234	.045	.336	.695	.176	.240
Std. Error of Skewness		.193	.193	.193	.193	.193	.193	.193
Kurtosis		.250	-.374	-.232	-.181	.798	-.412	-.219
Std. Error of Kurtosis		.384	.384	.384	.384	.384	.384	.384

Statistics

		RRP_3	RRP_4	RLOF_1	RLOF_2	RLOF_3	RLOF_4	ROM_1
N	Valid	158	158	158	158	158	158	158
	Missing	0	0	0	0	0	0	0
Skewness		.232	.305	.170	.154	.256	.208	.583
Std. Error of Skewness		.193	.193	.193	.193	.193	.193	.193
Kurtosis		-.413	.240	-.180	-.473	-.068	-.122	.575
Std. Error of Kurtosis		.384	.384	.384	.384	.384	.384	.384

Statistics

		Age Group	HC_1	HC_2	HC_3	HC_4	TI_1
N	Valid	158	158	158	158	158	158
	Missing	0	0	0	0	0	0
Skewness			.686	.686	.578	.726	.410
Std. Error of Skewness			.193	.193	.193	.193	.193
Kurtosis			.048	.232	-.111	.327	-.377
Std. Error of Kurtosis			.384	.384	.384	.384	.384

Table 16 Skewness and kurtosis

According to test conducted for the dataset of this research all variables kurtosis and skewness value were between -2 to 2 and -7 to 7. So, it achieved normal distribution.

4.5.1.4 Harman's single factor test

Common method bias (CMB) denotes potential threat to the validity of research findings that emerges when the same method, instrument or source is used to measure multiple constructs in a study. CMB happens when the method, instrument or source used to measure the constructs is shown as significant contributor to the relationship among the constructs, rather than the constructs themselves.

CMB can cause inflated correlations, biased parameter estimates, and inaccurate model fit statistics, which can later affect the validity of the research findings. Therefore, it is important to conduct CMB analysis to identify and to control CMB in research studies.

So here Harman's single factor test was used to test the common method bias of the data set that we were collected. According to this test which says the squared loadings of variance value less than 50% means that our data set has no common method bias but vice versa it is considered to have common method bias which means the squared loadings of the variance value exceeds the 50% in Harman's single factor test.

In this test Harman's single factor squared loadings of the variance value is less than 50%. Therefore, it has no common method bias analysis in the data set being studied in the research.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.913	32.282	32.282	12.256	30.641	30.641
2	2.705	6.761	39.043			
3	2.501	6.253	45.296			
4	2.192	5.481	50.776			
5	1.964	4.909	55.686			
6	1.855	4.637	60.323			
7	1.317	3.292	63.615			
8	1.091	2.729	66.343			
9	1.038	2.595	68.938			
10	.968	2.419	71.357			
11	.881	2.202	73.559			
12	.799	1.998	75.558			
13	.787	1.968	77.526			
14	.673	1.682	79.207			
15	.631	1.577	80.784			
16	.589	1.473	82.257			
17	.554	1.386	83.643			
18	.553	1.383	85.026			
19	.503	1.258	86.283			
20	.486	1.214	87.498			
21	.465	1.163	88.660			
22	.433	1.081	89.742			
23	.412	1.030	90.772			
24	.390	.976	91.748			
25	.375	.938	92.685			
26	.317	.793	93.478			
27	.294	.734	94.212			
28	.275	.687	94.899			
29	.268	.670	95.569			
30	.236	.591	96.160			

Table 17 Harmans single factor test

4.6 Data analysis using PLS-SEM

Partial Least Squares Structural Equation Modeling (PLS-SEM) is one of statistical methods that is used to analyze the relationships not only between latent variables but also to measure it with observed variables in a data set. It is a second-generation multivariate statistical technique that enables researchers to examine complex and complicated relationships among variables between both observed and unobserved and also to test theoretical models used in a study. The PLS-SEM mechanism is used to

assess the reliability and validity of measurement instruments or observed variables and also to identify the strength and direction of relationships between variables.

PLS-SEM can be seen as different from traditional structural equation modeling (SEM) because it is focusing on the prediction of the observed variables rather than the underlying latent variables. PLS-SEM can be used as non-parametric method, which denotes that it is not necessary to have the data to follow a normal distribution or to be normally distributed. This makes this mechanism a powerful method for analyzing data which is not normally distributed also it is best method when sample sizes are relatively small.

In this research study the tool called Smart-PLS 4 software was used to do further analysis to derive the insights from hypothesis that this study made. For that, there were two step process steps conducted using Smart-PLS 4 in order to do PLS-SEM statistical tests. Those two steps process is as follows.

- Evaluation of measurement model.
- Evaluation of Structural model.

4.6.1 Evaluation of measurement model

The evaluation of the measurement model in PLS-SEM is necessary to ensure the reliability and validity of the variables. There are several criteria that can be follwed to evaluate the measurement model in PLS-SEM.

In this PLS-SEM measurement model, there are two types of models.

1. Reflective measurement model:

    - Reflective measure dictates that all indicator items are caused by same construct which means they stem from the same construct.
    - The characteristics of the measurement models are as follows.
        - ✓ Indicators are highly correlated with each other.
        - ✓ Individual items can be interchangeable.
        - ✓ Any single item can generally be left out without changing the meaning of the construct.

2. Formative measurement model

    - Unlike a reflective measurement model, which assumes that the indicators are caused by a latent construct, a formative model assumes that the construct is caused by the indicators. In other words, in a formative model, the observed variables or indicators are defining the construct rather than reflecting it.
    - Characteristics of the formative measurement model
        - ✓ Formative indicators are not interchangeable.
        - ✓ Each indicator for a formative construct captures a specific aspect of a of the construct's domain.
        - ✓ Taken jointly, the items ultimately determine the meaning of the construct, which implies that omitting an indicator potentially alters the nature of the construct.

Since this research has used all indicators as reflective indicators which takes the approach of reflective measurement model. To evaluate the reflective measurement model using PLS-SEM there are three types of validity and reliability tests conducted for the developed research model. Those three types of PLS-SEM tests are as follows.

- Internal Consistency reliability test
- Convergent validity test
- Discriminant validity test

To continue with further analysis, a reflective model of the research variables was created as shown below.

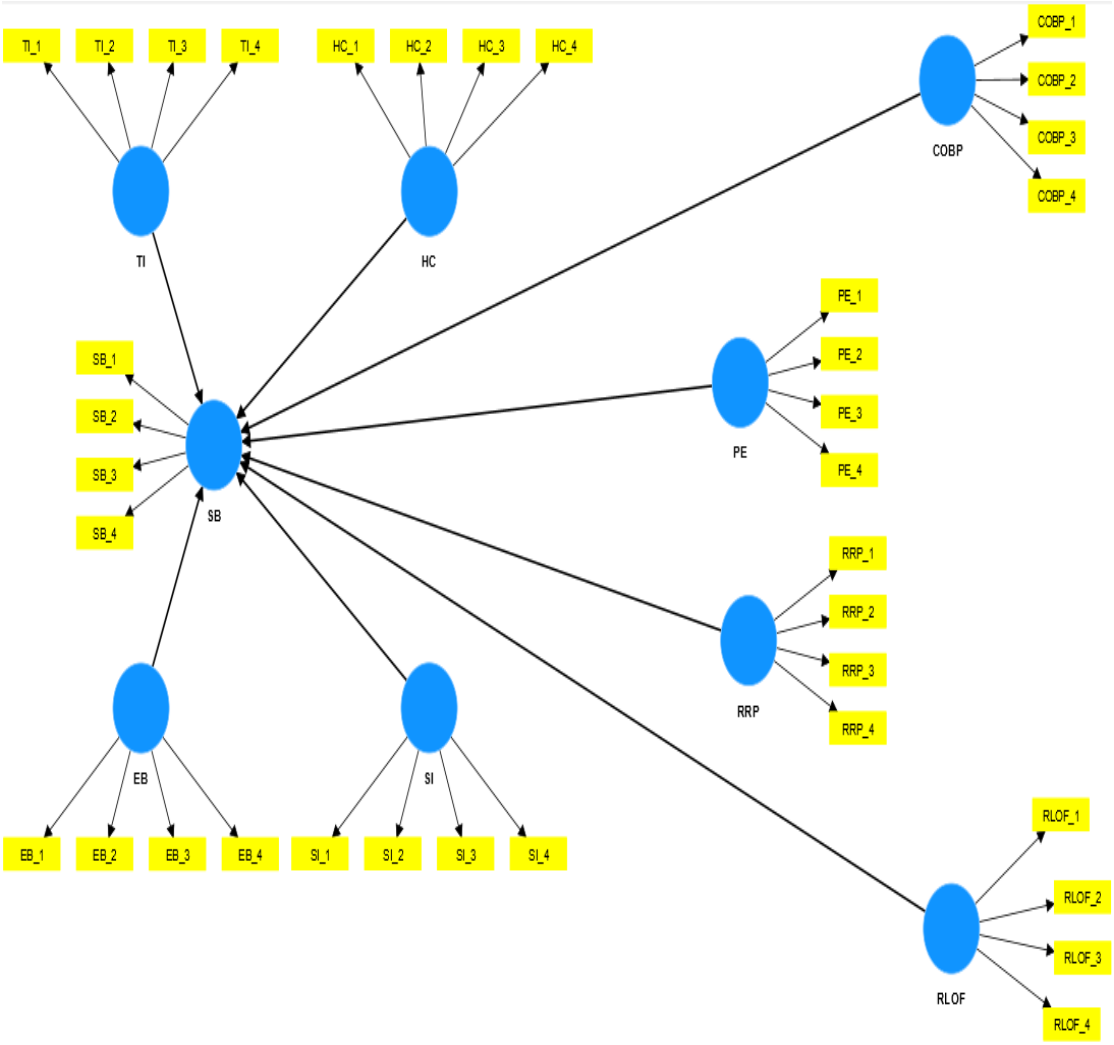

Figure 10 Measurement model

4.6.1.1 Internal Consistency reliability test

Internal consistency reliability is a statistical method that can be used to evaluate the consistency or stability of a measurement instrument, such as a questionnaire or test. It assesses and shows how well the items within the instrument are measuring the same construct or concept. Moreover Charter(2003) noted that the internal consistency coefficient indicates how close the respondents' obtained score would come to the true score if we had a perfect measurement instrument.

There are several methods to estimate internal consistency reliability but the main two methods that are used by Smart-PLS 4 are as follows.

- Cronbach's alpha value assessment:

The accepted value of Cronbach's alpha is 0.7; however, values above 0.6 are also accepted (Griethuijsen et al., 2015; Taber, 2018).

- Composite reliability of the constructs assessments:

  The higher the composite reliability, the higher the level of reliability. According to Hair et al. (2014), it is acceptable if composite reliability values are between 0.60 and 0.70.

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
COBP	0.778	0.825	0.837	0.576
EB	0.780	0.784	0.859	0.606
HC	0.949	0.951	0.963	0.868
PE	0.743	0.790	0.835	0.560
RLOF	0.847	0.849	0.898	0.687
RRP	0.857	0.859	0.904	0.702
SB	0.733	0.754	0.832	0.556
SI	0.772	0.795	0.855	0.600
TI	0.774	0.782	0.855	0.595

Table 18 Internal consistency reliability results

According to the table above shown the variables COBP, EB, HC, PE, RLOF, RRP, SB, SI and TI respectively represent the Cronbach's alpha values 0.778, 0.780, 0.949, 0.743, 0.847, 0.857, 0.733, 0.772 and 0.774. Considering the values mentioned, this research achieved composite reliability test since all Cronbach's values are greater than 0.7. Furthermore Composite reliability (rho_c) values 0.837, 0.859, 0.963, 0.835, 0.898, 0.904, 0.832, 0.855 and o.855 respectively represents variables COBP, EB, HC, PE, RLOF, RRP, SB, SI and TI where all values are shown as greater than 0.7. So in this perspective itself, this research has passed the internal consistency reliability test. It literarily means our data is 100% achieved the reliability and all measurement indicators are well measured with the questionnaire.

4.6.1.2 Convergent validity test

Convergent validity is a crucial aspect of Partial Least Squares Structural Equation Modeling (PLS-SEM). It shows the extent to which different measures or indicators of the same construct converge or agree with each other. In other words, it assesses whether the multiple indicators used to measure a construct are measuring the same thing.

According to literature, the convergent validity of the constructs refers to the extent to which a measurement item correlates positively with alternative measurement items of the same construct (Churchil,1979) it can be simply defined that how closely a given scale is related to other indicators of same construct.

This convergent validity can be evaluated by two tests as mentioned below:

- Outer loading of the indicators assessments.

  Hair et al (2014) suggested that researchers remove the items having outer loadings between 0.40 and 0.70 if deleting the items leads to an increase in composite reliability and average variance extracted (AVE). Researchers must eliminate the items from the construct if the items have outer loadings of less than 0.40 (Hair et al., 2011).

  Higher outer loadings on a construct indicates that associated indicators have much in common, which is captured by the construct.

- Average variance extracted assessments.

  The minimum acceptable value of AVE is 0.50 because an AVE of 0.50 or higher means that the construct explains more than half of the variance of its items. If AVE is less than 0.50, it means that, on average, more errors remain in the items than the variance explained by the construct (Hair et al., 2014).

	COBP	EB	HC	PE	RLOF	RRP	SB	SI	TI
COBP_1	0.428								
COBP_2	0.782								
COBP_3	0.921								
COBP_4	0.814								
EB_1		0.856							
EB_2		0.81							
EB_3		0.755							
EB_4		0.681							
HC_1			0.896						
HC_2			0.957						
HC_3			0.936						
HC_4			0.936						
PE_1				0.722					
PE_2				0.816					
PE_3				0.803					
PE_4				0.64					
RLOF_1					0.754				
RLOF_2					0.873				
RLOF_3					0.839				
RLOF_4					0.846				
RRP_1						0.761			
RRP_2						0.881			
RRP_3						0.846			
RRP_4						0.858			
SB_1							0.757		
SB_2							0.804		
SB_3							0.791		
SB_4							0.616		
SI_1								0.748	
SI_2								0.85	
SI_3								0.847	
SI_4								0.632	
TI_1									0.742
TI_2									0.794
TI_3									0.77
TI_4									0.78

Table 19 Outer loadings value

According to the table shown above all indicators shows the value between 0.4 – 0.7 and more than 0.7 and also according to the research paper (Hair et al, 2011&2014) above mentioned the indicators which have outer loadings between 0.4-0.7 were under consideration of removal but as per the table below mentioned which shows AVE value of the each constructs to be greater than 0.5 as well as both Cronbach alpha and

composite reliability also represents all values to be greater than 0.7. So, there is no need to remove any indicators from this reflective model.

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
COBP	0.778	0.825	0.837	0.576
EB	0.780	0.784	0.859	0.606
HC	0.949	0.951	0.963	0.868
PE	0.743	0.790	0.835	0.560
RLOF	0.847	0.849	0.898	0.687
RRP	0.857	0.859	0.904	0.702
SB	0.733	0.754	0.832	0.556
SI	0.772	0.795	0.855	0.600
TI	0.774	0.782	0.855	0.595

Table 20 AVE values

The table above shows the Average Variance Extracted (AVE) values for the test of convergent validity where the values 0.576, 0.606, 0.868, 0.560, 0.687, 0.702, 0.556, 0.600 and 0.595 respectively represents COBP, EB, HC, PE, RLOF, RRP, SB, SI and TI which shows all values to be greater than to be 0.5. Therefore, this test has achieved convergent validity which means all indicators of same constructs positively correlated each other on the other hand it shows the data has validity.

4.6.1.3 Discriminant validity test

Discriminant validity is a important aspect of structural equation modeling (SEM) and refers to the degree to which a construct is different from other constructs that it should theoretically be distinct from other variables in the model. In other words, it assesses whether a construct is unique and not simply a variation of another construct.

On the other words Discriminant validity is the extent to which a construct is truly distinct from other constructs by empirical standards Thus, establishing discriminant validity implies that a construct is unique and captures phenomena not represented by other constructs in the model.

Discriminant validity can be evaluated by three tests as follows.

- Cross – loadings assessments

This approach involves examining the standardized factor loadings for each indicator. Discriminant validity is supported when the factor loadings for a particular indicator are higher for its respective construct than for other constructs.

On the other words it refers correlation with other constructs, the associated construct should be greater than other loading.

- Fornell-Larker criterion assessments

  This approach involves comparing the square root of the average variance extracted (AVE) for each construct to the correlation between the constructs. Discriminant validity is supported when the AVE for a construct is higher than its correlation with other constructs.

- Hetetroit-Monotrait Ratio (HTMT) assessments

  This approach involves comparing the correlation between constructs to the average correlation between indicators of each construct. Discriminant validity is supported when the HTMT value is below the threshold of 0.85. But the acceptable levels of discriminant validity (< 0.90) as suggested by Henseler et al. (2015).

According to the table below shown, it shows cross-loadings of each indicator where factor loadings of all indicators are greater for the respective constructs for the particular indicators which shows in the perspective of the cross-loading method divergent validity was achieved that means no construct highly correlated with another construct.

	COBP	EB	HC	PE	RLOF	RRP	SB	SI	TI
COBP_1	0.428	0.228	0.006	0.24	0.05	-0.021	-0.005	0.06	0.125
COBP_2	0.782	0.299	0.242	0.326	0.274	0.221	0.167	0.169	0.042
COBP_3	0.921	0.269	0.227	0.304	0.366	0.4	0.258	0.173	0.125
COBP_4	0.814	0.307	0.141	0.273	0.285	0.342	0.215	0.175	0.273
EB_1	0.275	0.856	0.362	0.254	0.352	0.311	0.392	0.44	0.447
EB_2	0.251	0.81	0.322	0.361	0.381	0.336	0.312	0.413	0.395
EB_3	0.256	0.755	0.349	0.22	0.277	0.406	0.346	0.331	0.517
EB_4	0.272	0.681	0.405	0.401	0.442	0.262	0.354	0.503	0.375
HC_1	0.177	0.417	0.896	0.359	0.445	0.487	0.492	0.439	0.367
HC_2	0.244	0.432	0.957	0.332	0.45	0.47	0.519	0.448	0.32
HC_3	0.23	0.42	0.936	0.323	0.424	0.49	0.484	0.418	0.361
HC_4	0.238	0.462	0.936	0.313	0.396	0.473	0.466	0.388	0.336
PE_1	0.289	0.283	0.203	0.722	0.331	0.231	0.141	0.196	0.184
PE_2	0.388	0.193	0.265	0.816	0.339	0.29	0.264	0.325	0.273
PE_3	0.158	0.443	0.297	0.803	0.35	0.362	0.262	0.413	0.435
PE_4	0.231	0.259	0.309	0.64	0.189	0.261	0.146	0.188	0.257
RLOF_1	0.195	0.387	0.396	0.283	0.754	0.548	0.481	0.515	0.404
RLOF_2	0.354	0.463	0.371	0.383	0.873	0.591	0.42	0.539	0.355
RLOF_3	0.411	0.376	0.391	0.41	0.839	0.494	0.509	0.477	0.276
RLOF_4	0.265	0.318	0.362	0.278	0.846	0.488	0.426	0.48	0.187
RRP_1	0.367	0.357	0.332	0.338	0.506	0.761	0.417	0.33	0.4
RRP_2	0.299	0.339	0.439	0.328	0.559	0.881	0.435	0.291	0.458
RRP_3	0.261	0.324	0.492	0.322	0.525	0.846	0.431	0.385	0.396
RRP_4	0.395	0.392	0.458	0.319	0.553	0.858	0.455	0.36	0.378
SB_1	0.249	0.387	0.431	0.176	0.433	0.391	0.757	0.5	0.306
SB_2	0.304	0.395	0.519	0.356	0.456	0.465	0.804	0.44	0.314
SB_3	0.151	0.285	0.337	0.223	0.446	0.418	0.791	0.55	0.336
SB_4	0.007	0.279	0.238	0.05	0.316	0.235	0.616	0.416	0.284
SI_1	0.141	0.444	0.252	0.146	0.34	0.277	0.44	0.748	0.254
SI_2	0.094	0.467	0.355	0.311	0.487	0.24	0.507	0.85	0.272
SI_3	0.208	0.433	0.432	0.346	0.572	0.424	0.588	0.847	0.393
SI_4	0.188	0.341	0.354	0.445	0.46	0.306	0.414	0.632	0.225
TI_1	0.174	0.435	0.284	0.265	0.226	0.369	0.272	0.262	0.742
TI_2	0.119	0.473	0.297	0.28	0.213	0.325	0.363	0.327	0.794
TI_3	0.144	0.414	0.252	0.324	0.351	0.379	0.29	0.281	0.77
TI_4	0.128	0.403	0.308	0.369	0.363	0.436	0.337	0.288	0.78

Table 21 Cross-loading values

As per the table below shown, it represents the Fornell-Larker criterion assessments where all diagonal values of constructs which is square root of AVE value are greater than respective column and row values of other constructs. So, it literarily means the divergent validity in the case of this test has been passed which shows how different

constructs have low correlation with each other in order to differentiate the meaning of each variable one another.

Discriminant validity - Fornell-Larcker criterion

Zoom (102%) Copy to Excel

	COBP	EB	HC	PE	RLOF	RRP	SB	SI	TI
COBP	0.759								
EB	0.340	0.778							
HC	0.239	0.465	0.932						
PE	0.351	0.394	0.357	0.749					
RLOF	0.372	0.467	0.461	0.411	0.829				
RRP	0.395	0.422	0.515	0.390	0.640	0.838			
SB	0.260	0.455	0.527	0.289	0.559	0.519	0.746		
SI	0.204	0.545	0.455	0.401	0.608	0.408	0.637	0.774	
TI	0.180	0.559	0.371	0.402	0.372	0.487	0.414	0.377	0.772

Table 22 Fornell - Larker values

As per the table given below, it refers Hetetroit-Monotrait Ratio (HTMT) assessments the values represent HTMT test for all constructs should be less than 0.85 or 0.9 but in this research all constructs HTMT threshold value is less than 0.85 then it simply says the divergent validity between other constructs of the study has been achieved which means it is said that different constructs has less correlation with each other.

Discriminant validity - Heterotrait-monotrait ratio (HTMT) - Matrix

Zoom (1

	COBP	EB	HC	PE	RLOF	RRP	SB	SI	TI
COBP									
EB	0.458								
HC	0.241	0.539							
PE	0.488	0.519	0.425						
RLOF	0.396	0.575	0.511	0.504					
RRP	0.412	0.519	0.571	0.478	0.752				
SB	0.299	0.594	0.612	0.387	0.696	0.638			
SI	0.260	0.703	0.527	0.517	0.745	0.498	0.843		
TI	0.243	0.718	0.432	0.504	0.457	0.601	0.545	0.476	

Table 23 HTMT values

So, the data has passed all three divergent validities in order to show the validity of the data that was collected in the research.

4.6.2 Evaluation of Structural model

In Partial Least Squares Structural Equation Modeling (PLS-SEM), the structural model or inner model one of the aspects which is a statistical model that denotes the relationships between the latent variables in the data. The structural model contains set of equations that relate the latent variables to each other, and it is mostly used to test hypotheses about the relationships between these variables.

In PLS-SEM, the structural model is usually seen as a path diagram, which is a graphical representation of the relationships between the latent variables or unobserved variables. Each latent variable is represented by a circle, and the arrows between the circles indicate the direction of the relationships between the variables.

The structural model in PLS-SEM has main purpose to test hypotheses about the relationships between the latent variables. These hypotheses can be formulated related to prior theory or previous research, or they can be sometimes exploratory in nature. The structural model in PLS-SEM is estimated by PLS regression, which is a type of multivariate regression analysis model that was designed to handle situations where there are more predictors compared to observations.

After estimating the structural model using PLS-SEM, the strength and significance of the relationships between the latent variables can be assessed. This involves tasks like assessing the magnitude and statistical significance of the path coefficients, which denotes the strength and direction of the relationships between the latent variables. The overall goodness-of-fit of the structural model of our research concept model can also be evaluated using various measures, such as the R-squared value, the Q-squared value, and the standardized root mean square residual (SRMR).

4.6.2.1 Path coefficients

Path coefficients are an necessary output of Partial Least Squares Structural Equation Modeling (PLS-SEM), which is a statistical method that is used to analyze the relationships between latent variables.

In PLS-SEM, the path coefficients show the strength and direction of the relationships between the latent variables or unobserved constructs in the model. Specifically, they

indicate the degree of change in the dependent variable that can be attributed to a unit change in the independent variable.

Path coefficients are also used to calculate the variance explained (R-squared) for each latent variable in the model. They might be positive, negative or zero, indicating a positive, negative or null effect respectively.

The path coefficients are estimated by the PLS-SEM algorithm and are typically presented in the form of a path diagram, which is a visual representation of the model that shows the direction and strength of the relationships between the latent variables. The path coefficients are usually shown as arrows connecting the latent variables, with the coefficient value written on the arrow to indicate its strength.

Relationship	Path Coefficient
COBP -> SB	0.046
EB -> SB	-0.021
HC -> SB	0.193
PE -> SB	-0.121
RLOF -> SB	0.11
RRP -> SB	0.148
SI -> SB	0.431
TI -> SB	0.12

Table 24 Path coefficient values

The table shown above shows the path coefficient of each relationship between independent and dependent variable. The path coefficient values 0.046, -0.021, 0.193, -0.121, 0.11, 0.148, 0.431 and 0.12 respectively shows relationship COBP -> SB, EB -> SB, HC -> SB, PE -> SB, RLOF -> SB, RRP -> SB, SI -> SB and TI -> SB. Among those relationships EB -> SB and PE -> SB shows the negative relationship while rest of the relationships show the positive relationships with dependent variable.

The model diagram below visually shows the path coefficients between relationships between dependent and independent variables.

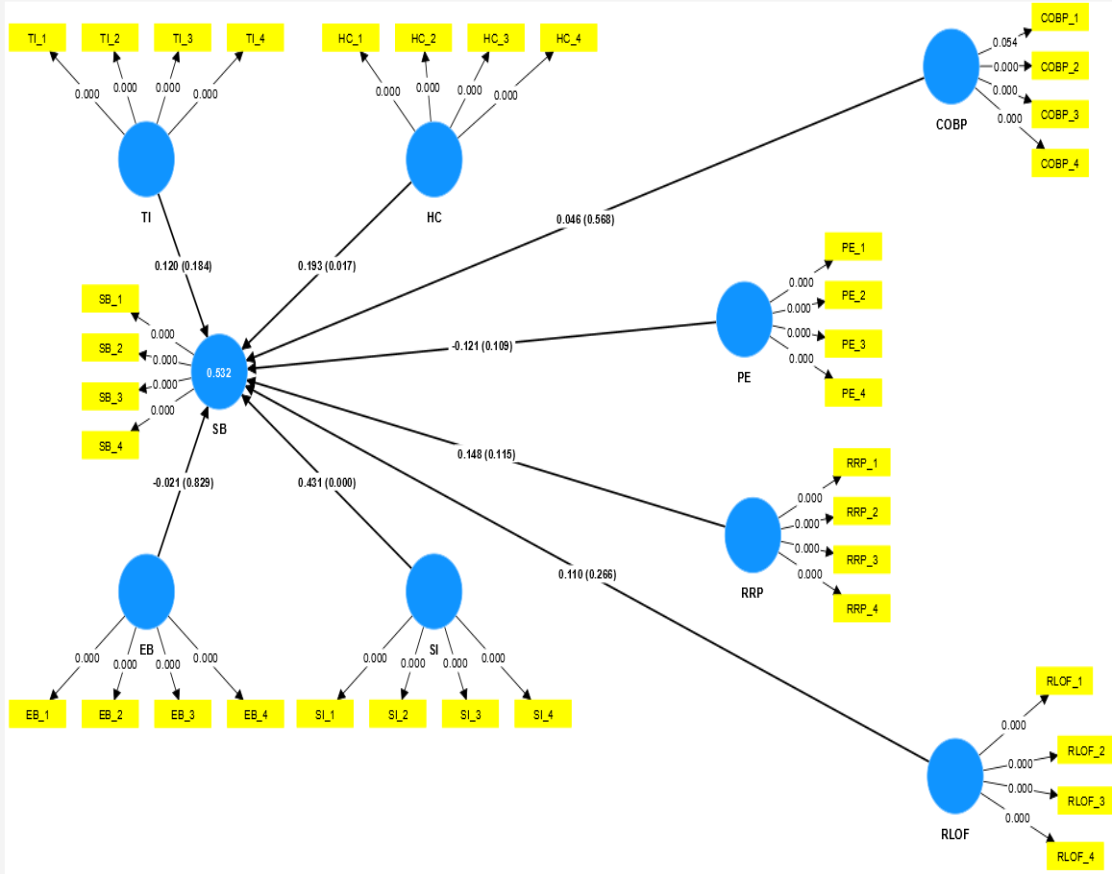

Figure 11 Path model

4.6.2.2 Significant of path coefficient

The significance of path coefficients in PLS-SEM is typically assessed using bootstrapping methods rather than traditional statistical tests like t-tests or chi-square tests. It literarily means which coefficient is significant in the research study to assesses the hypothesis of the model.

Bootstrapping is a resampling mechanism that involves repeatedly sampling the data with replacement from the original dataset, estimating the model parameters each time, and calculating the distribution of the parameter which estimates across the resampled datasets. This approach allows for the calculation of confidence intervals of the path coefficients, which can be used to assess their significance effect in each relationship.

The size of path coefficients in PLS-SEM is also related to the scale of the variables which was involved in the model, and the interpretation of the coefficients may also depend on the context of the study and the nature of the variables used in the study.

Overall, path coefficients are a fundamental mechanism of PLS-SEM, since they allow researchers to identify the strength and direction of the relationships between variables and to test hypotheses about the underlying relationships in the data. The significance of these coefficients can be assessed via bootstrapping methods, and their size can provide insight as to the magnitude of the effects of the variables each other.

Relationship	Path coefficient	P values
COBP -> SB	0.046	0.568
EB -> SB	-0.021	0.829
HC -> SB	0.193	0.017
PE -> SB	-0.121	0.109
RLOF -> SB	0.11	0.266
RRP -> SB	0.148	0.115
SI -> SB	0.431	0
TI -> SB	0.12	0.184

Table 25 Significance of path coefficient

According to the table shown above the significant values of each relationship 0.568, 0.829, 0.017, 0.109, 0.266, 0.115, 0.000 and 0.184 respectively show COBP -> SB, EB -> SB, HC -> SB, PE -> SB, RLOF -> SB, RRP -> SB, SI -> SB and TI -> SB. Where HC -> SB and SI -> SB have achieved significant status because the p-values of those relationships are less than 0.05 which was the taken significant level according to the Cohen table (1992). Even though COBP -> SB, RLOF -> SB, RRP -> SB, SI -> SB and TI -> SB show the positive relationship, those relationships are not significant because the p-values of those relationships are showing as higher than taken significant value 0.05.

4.6.2.3 Predictive relevance (Q^2)

In Partial Least Squares Structural Equation Modeling (PLS-SEM), predictive relevance denotes the ability of the model to accurately predict outcomes or dependent variables based on the predictor or independent variables. It is a measure of the model's ability to explain the variance in the dependent variable by overall constructs.

The predictive relevance of a PLS-SEM model can be estimated through various metrics, such as the R-squared value, cross-validated predictive ability (Q2). Q2 is a value that measures how well the model can predict new observations, and it is typically calculated using a cross-validation procedure.

Overall, assessing the predictive relevance of a PLS-SEM model is crucial to ensure that the model can accurately predict outcomes and provide useful analysis results for decision-making. It also helps to identify areas where the model has to improve or to make further refinement.

Q-square values above zero indicate that values are well reconstructed and that the model has predictive relevance.

	Q^2predict	RMSE	MAE
SB	0.432	0.766	0.592

Table 26 Predictive relevance

The table shows dependent variable switching behaviors predictive relevance (Q^2) is 0.432 which is greater than 0. Then it is assumed that this research model has predictive relevance as well as it is well reconstructed.

4.6.2.4 F^2 effect size

The f square effect size is a mechanism to measure the effect size of the independent variables on the dependent variable in Partial Least Squares Structural Equation Modeling (PLS-SEM). Specifically, it is measuring the proportion of the variance in the dependent variable that is explained by the independent variables in the model.

The f square effect size is calculated using the following formula:

f2 = R2 / (1 - R2)

where R2 is the R-squared value of the dependent variable in the model. The f square effect size can range between 0 and infinity. The higher values indicate a stronger effect of the independent variables on the dependent variable.

In PLS-SEM, the f square effect size is commonly used to estimate the practical significance of the independent variables in the model, beyond their statistical significance. It helps to answer the question of whether the effect of the independent variables on the dependent variable is large enough to be meaningful in the study.

Generally, an f square effect size of 0.02 is considered small, 0.15 is considered medium, and 0.35 is considered large (Cohen, 1988). However, the interpretation of the f square effect size may depend on the specific research context and the magnitude of the effect size in relation to the research question.

	F square effect size
COBP -> SB	0.003
EB -> SB	0
HC -> SB	0.05
PE -> SB	0.021
RLOF -> SB	0.011
RRP -> SB	0.021
SI -> SB	0.204
TI -> SB	0.018

Table 27 Effect size

As per the table above represents the extent to which a removal of each independent variable would effect on R square value of dependent variable. Which is shown here in the column called F square effect size. Here COBP, EB, HC, PE, RLOF, RRP, SI and TI respectively show 0.003, 0, 0.05, 0.021, 0.011, 0.021, 0.204 and 0.018 effect on dependent variable switching behavior (SB).

As mentioned above in (Cohen, 1988), effect size greater than and equal to 0.02 is considered as small effect, and the effect size greater than and equal to 0.15 says medium effect as well as effect size greater than equal to 0.35 says large effect so here COBP, EB, RLOF and TI shows no effect since its effect size is lesser than 0.02 while HC, PE and RRP shows the small effect since its effect size is greater than 0.02 where

as SI shows medium effect on SB because it shows greater than 0.15 effect size which is 0.204

4.6.2.5 R square value

Partial Least Squares Structural Equation Modeling (PLS-SEM), R-squared (R^2) is used to measure the proportion of variance explained by the latent constructs (or endogenous variables) in the model.

In summary, while traditional SEM uses R^2 to measure the proportion of variance explained by the latent constructs, PLS-SEM uses Q^2, which is a cross-validated measure of predictive accuracy which was discussed above part called predictive relevance.

Hair et al. (2011) & Hair et al. (2013) suggested in scholarly research that focuses on marketing issues, R2 values of 0.75, 0.50, or 0.25 for endogenous latent variables can, as a rough rule of thumb, be respectively described as substantial, moderate or weak.

Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
0.532	0.571	0.052	10.288	0

Table 28 R squared value.

According to the table shown here the R square value of this model is 0.532 which means 53.2% of the variance of the dependent variable is explained by all other independent variables in the model. According to the research paper Hair et al. (2011) & Hair et al. (2013) above mentioned this model has moderately explained the change in dependent variable switching behavior.

4.6.2.6 Hypothesis testing between independent and dependent variables.

Hypothesis 01: Transaction Inconvenience has influence on switching intention.

	Path coefficient	95% CI	t-value	p-value
TI -> SB	**0.12**	**[-0.079, 0.270]**	**1.328**	**0.184**

Table 29 Hypothesis 01

According to this table, it refers that p-value (0.184) is greater than significant value (0.05) while the t-value (1.328) is lower than 1.96. considering the confidence interval of 95% that values fall between -0.079 and 0.270 where there is a zero between these values so it is concluded that the taken hypothesis has failed. Furthermore, the path coefficient of the relationship shows 0.12. Although the variable TI positively impacts the SB according to the path coefficient, the path coefficient is shown as not significant relationship. So, it is concluded that the factor TI has no significant influence on SB.

Hypothesis 02: Health Consciousness has influence on switching intention.

	Path coefficient	95% CI	t-value	p-value
HC -> SB	**0.193**	**[0.016, 0.332]**	**2.396**	**0.017**

Table 30 Hypothesis 02

According to this table, it refers that p-value (0.017) is lower than significant value (0.05) while the t-value (2.396) is greater than 1.96. considering the confidence interval of 95% that values fall between 0.016 and 0.332 where there is no zero between these values, so it is concluded that the taken hypothesis has passed. Furthermore, the path coefficient of the relationship shows 0.193. So, the variable HC positively impacts the SB according to the path coefficient and also the path coefficient is shown as significant relationship. So, it is concluded that the factor HC has positive significant influence on SB.

Hypothesis 03: Economic benefit has influence on switching intention.

	Path coefficient	95% CI	t-value	p-value
EB -> SB	**-0.021**	**[-0.188, 0.195]**	**0.216**	**0.829**

Table 31 Hypothesis 03

According to this table, it refers that p-value (0.829) is greater than significant value (0.05) while the t-value (0.216) is lower than 1.96. considering the confidence interval of 95% that values fall between -0.188 and 0.195 where there is zero between these values, so it is concluded that the taken hypothesis has failed. Furthermore, the path coefficient of the relationship shows -0.021. So, the variable EB negatively impacts the SB according to the path coefficient and also the path coefficient is shown as not significant relationship. So, it is concluded that the factor EB has no significant influence on SB.

Hypothesis 04: Social influence has influence on switching intention.

	Path coefficient	95% CI	t-value	p-value
SI -> SB	**0.431**	**[0.245, 0.614]**	**4.564**	**0.000**

Table 32 Hypothesis 04

According to this table, it refers that p-value (0.000) is lower than significant value (0.05) while the t-value (4.564) is greater than 1.96. considering the confidence interval of 95% that values fall between 0.245 and 0.614 where there is no zero between these values, so it is concluded that the taken hypothesis has passed. Furthermore, the path coefficient of the relationship shows 0.431. So, the variable SI positively impacts the SB according to the path coefficient and also the path coefficient is shown as significant relationship. So, it is concluded that the factor SI has positive significant influence on SB.

Hypothesis 05: Control over buying process has influence on switching intention.

	Path coefficient	95% CI	t-value	p-value
COBP -> SB	**0.046**	**[-0.108, 0.203]**	**0.571**	**0.568**

Table 33 Hypothesis 04

According to this table, it refers that p-value (0.568) is greater than significant value (0.05) while the t-value (0.571) is lower than 1.96. considering the confidence interval of 95% that values fall between -0.108 and 0.203 where there is a zero between these values, so it is concluded that the taken hypothesis has failed. Furthermore, the path coefficient of the relationship shows 0.046. Although the variable COBP positively impacts the SB according to the path coefficient, the path coefficient is shown as not significant relationship. So, it is concluded that the factor COBP has no significant influence on SB.

Hypothesis 06: Previous experience has influence on switching intention.

	Path coefficient	95% CI	t-value	p-value
PE -> SB	**-0.121**	**[-0.233, 0.065]**	**1.602**	**0.109**

Table 34 Hypothesis 06

According to this table, it refers that p-value (0.109) is greater than significant value (0.05) while the t-value (1.602) is lower than 1.96. considering the confidence interval

of 95% that values fall between -0.233 and 0.065 where there is zero between these values, so it is concluded that the taken hypothesis has failed. Furthermore, the path coefficient of the relationship shows -0.021. So, the variable PE negatively impacts the SB according to the path coefficient and also the path coefficient is shown as not significant relationship. So, it is concluded that the factor PE has no significant influence on SB.

Hypothesis 07: Return/Refund policies have influence on switching intention.

	Path coefficient	95% CI	t-value	p-value
RRP -> SB	**0.148**	**[-0.033, 0.332]**	**1.577**	**0.115**

Table 35 Hypothesis 07

According to this table, it refers that p-value (0.115) is greater than significant value (0.05) while the t-value (1.577) is lower than 1.96. considering the confidence interval of 95% that values fall between -0.033 and 0.332 where there is a zero between these values, so it is concluded that the taken hypothesis has failed. Furthermore, the path coefficient of the relationship shows 0.148. Although the variable RRP positively impacts the SB according to the path coefficient, the path coefficient is shown as not significant relationship. So, it is concluded that the factor RRP has no significant influence on SB.

Hypothesis 08: Related laws on online fraud have influence on switching intention.

	Path coefficient	95% CI	t-value	p-value
RLOF -> SB	**0.110**	**[-0.093, 0.295]**	**1.112**	**0.266**

Table 36 Hypothesis 08

According to this table, it refers that p-value (0.266) is greater than significant value (0.05) while the t-value (1.112) is lower than 1.96. considering the confidence interval of 95% that values fall between -0.093 and 0.295 where there is a zero between these values, so it is concluded that the taken hypothesis has failed. Furthermore, the path coefficient of the relationship shows 0.110. Although the variable RLOF positively impacts the SB according to the path coefficient, the path coefficient is shown as not significant relationship. So, it is concluded that the factor RLOF has no significant influence on SB.

4.6.2.7 Hypothesis testing for moderating variables.

Hypothesis 09: Reputation of merchant has moderating effect between previous experience and switching intention.

	Path coefficient	95% CI	t-value	p-value
ROM x PE -> SB	**0.006**	**[-0.177, 0.125]**	**0.080**	**0.936**

Table 37 Hypothesis 09

According to this table, it refers that p-value (0.936) is greater than significant value (0.05) while the t-value (0.080) is lower than 1.96. considering the confidence interval of 95% that values fall between -0.177 and 0.125 where there is a zero between these values, so it is concluded that the taken hypothesis has failed. Furthermore, the path coefficient of the relationship shows 0.006. Although the variable ROM positively impacts the relationship between PE and SB according to the path coefficient, the path coefficient is shown as not significant relationship. So, it is concluded that the factor ROM has no significant moderating influence between the relationship PE and SB.

Hypothesis 10: Reputation of merchant has moderating effect between Refund/Return policies and switching intention.

	Path coefficient	95% CI	t-value	p-value
ROM x RRP -> SB	**-0.003**	**[-0.104, 0.156]**	**0.038**	**0.969**

Table 38 Hypothesis 10

According to this table, it refers that p-value (0.969) is greater than significant value (0.05) while the t-value (0.038) is lower than 1.96. considering the confidence interval of 95% that values fall between -0.104 and 0.156 where there is a zero between these values, so it is concluded that the taken hypothesis has failed. Furthermore, the path coefficient of the relationship shows -0.003 which shows the variable ROM negatively impacts the relationship between RRP and SB according to the path coefficient. Accordingly, the path coefficient is shown as not significant relationship. So, it is concluded that the factor ROM has no significant influence on the relationship between ROM and SB.

4.7 Discussion of the study

This study has aimed to discuss the variation on consumer perception on switching intention from cash on delivery to e-payment services during the post pandemic period with the objective of identifying and analyzing factors that attract and hinder consumers whenever they migrate from cash on delivery usage to e-payment service. To achieve those objectives the theory called push-pull-mooring was framed and some influential factors had been identified throughout the literature review where some factors had been derived from Transaction cost theory, UTAUT theory and health belief model. The framework based on push-pull-mooring theory was constructed with 8 dependent variable, 1 moderate variable and 1 dependent variable out of which ten hypothesis were generated and analyzed as mentioned above.

Out of those ten hypothesis two hypothesis showed the significant influence on dependent variable while remaining hypothesis were failed to become significant. Here is the critical evaluation of each hypothesis below with support of past literature review.

4.7.1 Push factors

Based on the theory push-pull-mooring above mentioned. Here two factors called health consciousness(HC) and transaction inconvenience was used as push factors. It means the factors that influence people to leave the existing system, or it can be called drawbacks of existing system. These two factors were tested using hypothesis H1 and H2. As per the analysis H1(TI-SB) has failed to achieve significant and H2(TI-SB) has achieved significant. There fore the factor health consciousness is considered to be a one of push factor that has significant effect on Switching behavior while TI has positive effect on switching behavior but it was not reflected as significant influence on switching behavior.

Here is the explanation of failed hypothesis H1 and passed hypothesis H2 as follows.

4.7.1.1 Transaction inconvenience has no significant influence on switching behavior.

Using this hypothesis characteristics of transaction cost theory such as saving time, saving energy, trustworthy and comfortable were examined. In this study transactional

inconvenience had similar results of previous research [Purwandari, 2022] which says since the respondents of questionnaire was mostly housewives, which could reflect that transactional inconvenience has no significant influence on switching behavior. In this current study, the data respondents are mostly people who are job holders who earns more than average of normal Sri Lankan. So in this research it can be concluded that those people never see transactional inconvenience which is effort and cost that we put whenever using the COD method as a one of barriers for them to switch towards e-payment service.

According to the one of previous research [Thao An Tran,2022], transactional inconvenience is shown as barrier for cash on delivery whereas due to the perceived ease of use and usefulness of the e-payment services that make consumers dissatisfy on cash on delivery whereas this study on the other hand shows transaction inconvenience in using cash on delivery to be not a reason for switching to e-payment services which shows the respondents did not consider transactional inconvenience as one of drawbacks of cash on delivery even though it has been proved to be a drawbacks of COD in other research papers as mentioned above.

Another research paper [Dhanika Perera,2021] in Sri Lanka says that one of reason for choosing e-payment service is to transaction inconvenience in cash on delivery but that research was conducted among limited 60 people with qualitative method, while this study has conducted among more than 150 people with qualitative method. So it is concluded that not everyone feel transaction inconvenience to be a barrier when they made cash on delivery transaction.

4.7.1.2 Health consciousness has significant influence on switching behavior.

Using this hypothesis seriousness, perceived barriers, vulnerability, self-efficacy, perceived benefits based on health belief model characteristics such as perceived susceptibility and perceived severity [Rosenstock,1996] were examined via this study. This factor was taken into study to check whether users perception on their health and pandemic risk has any influence on switching intention. As per this study health consciousness has shown significant effect on switching behavior while the same study [Purwandari, 2022] and [Jegerson,2022] conducted in foreign says that health

consciousness is not significant effect on switching intention which means people in that region are not considering health consciousness as one of barriers in the cash on delivery but this current study shows significant positive influence in determining to migrate cash on delivery to e-payment services. So, it is concluded that respondents in this study are more aware and care about their health when adopting or switching to new technology.

The studies [Coskun,2022], [Tsai-Ling Liu,2022] and [Mustiko Aji,2020] shows that health consciousness and pandemic risk/effect has still significant relationship in determining switching intention despite post pandemic period. So it is concluded that health consciousness is to be a continually effecting trending factor in determining switching intention to cash on delivery to e-payment services moder days even in the post pandemic period.

4.7.2 Pull factors.

In accordance with the push-pull-mooring factors, two variables were identified as pull factors in the study such as economic benefit and social influence those of which were tested using hypothesis H3 and H4 where hypothesis H3 has failed while hypothesis H4 has been passed. So based on those two results economic benefit has no significant effect on switching behavior, but social influence has significant influence on switching intention. Therefore it can be concluded that social influence is considered to be one of significant pull factors while economic benefit has failed to become one of significant pull factor in this study.

4.7.2.1 Economic benefit has no significant effect on switching behavior.

As per the study [Purwandari, 2022], economic benefit shows a significant and positive effect on switching behavior while In this study the same factor economic benefit shows not significant impact on switching intention. According to study [Purwandari, 2022], discount, bonus, cheapness and rebates were examined which means the respondents of this past studies think switching to e-commerce would bring them a benefit which could be seen as pulling factor of e-payment service but our current study has identified the economical benefits are not a significant factor that attract people to use e-payment service so it can be concluded that sometimes offers and promos given by food and

beverage e-commerce sector might not satisfy the consumers because offers and generally motivate people [Dhanika Perera,2021] but here offers and promos did not show such motive in switching to e-payment services.

A Sri Lankan research paper [Dhanika Perera,2021] shows that special offers through credit and debit card through a selected merchant could motive people to adopt to e-payment services but this past research was conducted among limited respondents nearly 60 users opinions with qualitative method. Considering our current research which was conducted among more than 150 respondents with quantitative method and here economic benefit such as special offers and promos shows no significant effect on switching intention. So, it is concluded that not all people feel that special offers as a motive factor to switch to e-payment, but it would determine some people's motives only by switching intention.

4.7.2.2 Social influence has a significant effect on switching behavior.

Social influences refer to the pressure from society on the adoption of technology or innovation (Lu et al., 2005; Yang et al., 2011). In this study the image is part of social influences. Moore and Benbasat (1996) explained image as the degree to which the use of an innovation is perceived to enhance one's image or status in one's social system. Furthermore, some research papers says users tend to perform more online transactions, which promotes their adoption positively. depending on their social position and the recommendations they receive from their relatives [Coskun,2022].

As those papers above said, this study examined the social influence factor where image, influence of close one such as friends, relatives and colleagues were examined and results were shown that social influence has significant amount of influence on switching behavior whereas research papers [Purwandari, 2022], [jain,2022], [Jegerson,2022] refers the same findings as our finding shows, so it is concluded that social influence seems to be a still one of strong factor in determining switching intention of users from cash on delivery to e-payment services.

In the analysis it is the only one factor that shows large path coefficient and effect size on dependent variable it shows that out of the other variable social influence play a major role in determining once switching behavior.

4.7.3 Mooring factor

Based on the push-pull-mooring theory, mooring factors shows the factors that inhibiting or influencing the dependent variable. Here control over buying process, return and refund policy, previous experience, related laws on online fraud were used as mooring factor to check whether there is any mooring effect on switching intention but all factors have shown that it is not significant enough to determine switching intention. Furthermore, among this mooring factors, there was a moderating variable used to identify the moderation effect where reputation of merchant was used as moderating variable to check the moderation between mooring factor previous experience and switching behavior as well as mooring factor return and refund policy and switching behavior. In these two-moderation effects, both of them showed the not significant moderation effect on the relationship among return and refund policy, previous experience and switching behavior. To test those mooring factors hypothesis and moderating factors hypothesis, hypothesis H5, H6, H7, H8, H9 and H10 were generated and tested.

The tested hypothesis H5, H6, H7, H8, H9 and H10 are discussed as follows.

4.7.3.1 Control over the buying process has no significant influence on switching intention.

This study to test the influence of control over buying process examined decision making power, fear of fake product, wrong delivery and chance to replacement characteristics but this hypothesis did not show significant effect on switching intention whereas control over the buying process were observed to be the key role players instigating Pakistani customers to use COD[Safia Anjum,2020] because Pakistani e-market is yet evolving and most of the retailers are new startups which have not established brand loyalty among customers[Safia Anjum,2020], Customers have serious fear of fake and low-quality product while placing an order online (Chiejina & Olamide, 2014).Therefore, they prefer to check the product quality before paying for it[Safia Anjum,2020], COD offers a human interaction as suppliers have to communicate with the customer over phone before sending the product, which gives an opportunity to get their concerns addressed (Chiejina & Olamide, 2014; Halaweh,2017)[Safia,Anjum], COD reduces the possibility of low-quality product,

wrong delivery, or no delivery at all (Chiejina &Olamide, 2014; Jana, 2017)[Safia anjum,2020], COD also offers a chance of product replacement if the purchase is not in good condition. Therefore, customers perceive more control over the buying process as they have to pay for the product after checking the product physically. Also, more details of the customers are on record when they use e-payment methods for purchases. This information can be used at any time to track customers' particulars and preferences (Halaweh,2018). Customers perceive more control over the buying process in case of COD as there are fewer chances of tracking personal information for future advertisements, COD was noticed to be a choice of highly educated people as well, who were expected to have technical knowledge as well as access to other possible payment options. This observation indicated that Pakistani customers have reservations against sharing their financial information over e-commerce platforms (Chiejina & Olamide, 2014; Halaweh, 2017; Hamid,2014; Li et al., 2007), The absence of strict cyber laws and the high frequency of online scams increase the sense of insecurity among Pakistani customers (Institute of Business Administration, Karachi, 2015; Sarfaraz, 2018; H. Usman,2018) and Online consumers have higher risk taking tendencies compare to others. Those consumers who considered privacy and security more are lesser purchasers from online (Kwaek et al., 2002; Miyazaki & Fernandez, 2001). Educated consumers are more demanding and control over purchasing process and also, they are the decision makers from start to completion of online purchase (Rao et al., 1998). Due to the reasons above mentioned, control over buying process is considered by Pakistani people as one of main factor when switching to new technologies.

While according to our study people think that control over buying process is not the reason to use cash on delivery method so it literarily did not affect the switching to e-payment service as well but some research papers [Parasuraman (2000); Yi et al. (2003); Liljander (2006); Lin & Hsieh (2007); Walczuch et al. (2007); Lam et al. (2008)] have discussed about optimistic view of e-payment, which says new technology offers people increased control, flexibility, and efficiency in their lives. As per our findings as well people of Sri Lanka might think new e-payment technology as one of increased controllable technology by themselves rather than cash on delivery. It could affect the relationship between control over buying process and switching behavior that it became insignificant.

4.7.3.2 Previous experience has no significant influence on switching intention.

In this study previous experience was evaluated using similar technology already used, trust, satisfaction and negative experience. When considering the past studies [Dhanika Perera,2021], it shows due to the past experiences people refuse to switch e-payment services because an exchange relationship on e-commerce can only be established through trust (Salam, Iyer, Palvia & Singh, 2005), since there is no personal contact with any company representatives, the consumer has to create their perceptions of the merchant only through experience. This requires a long-term commitment from the company to achieve a state where the consumer experience is always good (Salam et al., 2005). When considering our study, it totally says the previous experience of the person has no significant impact towards switching to e-payment services because perceive ease of use could be the reason for not requiring the previous experience as per the study [vankatesh,2003] and ,if an e-payment method is too complicated to set up, it might be abandoned before it has even been tested by the potential consumer since an easier e-payment method will replace it[Antinoja,2019] which shows again perceive ease of use will not require any previous experience to switch to new technology. And also according to the Walczuch et al. (2007) study, a person with high optimism and innovativeness and little discomfort and insecurity was more likely to use a new technology which shows previous experience is not needed to use one technology so it might be the reason for not significant relationship between previous experience and switching intention.

And also Contrary to the stereotypes that elderly are difficult to adapt to new technology, several recent studies show that baby boomers and X generation are quite experienced in Internet usage, they do not feel the technology anxiety (Magsamen-Conrad and Dillon 2020) while in our study most of the participants are generation Z who are more exposure to new technology and internet usage compared to baby boomers and X generation. So, it could be the reason they do not care of previous experience to switch e-payment services.

4.7.3.3 Return/Refund policies have no significant influence on switching intention.

To check the hypothesis of influence of return/refund policy on switching behavior, there were several things checked such as clear return/refund policy, user friendly return/refund policy, whole refund policy and instant refund policy. [Hossain,2020] has categorized e-payment services pros and cons which includes return and refund facilities of each payment service according to that some payment method has cons as inconvenient return/refund policy, [Ching and Hayashi (2010)] says consumer perceptions is based on eleven attributes: comfortable, fast, convenience, easy to use, preferred by stores, safe,taken right away, helps budgeting, for small amounts, control, and easy to get refund[Ching and Hayashi (2010)] which means return/refund policy of a organization could effect consumer perception. Most buyers hope to receive some kind of compensation and a clear return policy for any service failure they may experience. [Agag,2017] which says how far a consumer focuses on return and refund policy during the online transaction. online service provider to return the buyer to a state of satisfaction (Sparks and McColl-Kennedy 2001). [Candia,2022] which says refund increases trust, refund policy is a key consumer confidence booster in e-commerce. return policy affected consumer trust and performing online transactions [manish jah,2014] those studies implies how return and refund policy of a organization influence on consumer trust and satisfaction.

Furthermore, as per other studies, customers might need a more generous return policy even if no serious mistake was made on the seller's side. [Ting,2016], Websites that allow customers to return the ordered products within a specified period of time are perceived as more trustworthy to the customers (Keeney, 1999), According to a survey (Back, 2013), many participants were dissatisfied with exchange and refund processes, unstandardized product quality and insufficient after-services, strict return policies will increase consumer dissatisfaction and decrease the purchases of an organization (Tsai & Huang, 2007).. These studies also clearly mention how return and refund policies are influencing consumer satisfaction in a transaction.

Even though many studies have shown return and refund policies are crucial part in deciding consumer perception. In our study return/ refund policies did not show any significant influence on consumer perception of switching behavior. So it can be

concluded that return/refund policy won be an influential factor to determine switching from cash on deliver to e-payment services because the reason might be this study mostly discussed about food and beverage e-commerce sector but mostly return and refund policy would be more influential factors between cross border e-commerce transactions.

4.7.3.4 Related laws on online fraud have no significant influence on switching intention.

This study has focused on support, awareness, transparency and impression of security to test hypothesis. According to the past studies some studies denotes laws related to online fraud are determining consumer perceptions, Accordingly the absence of strict cyber laws and the high frequency of online scams increase the sense of insecurity among Pakistani customers (Institute of Business Administration, Karachi, 2015; Sarfaraz, 2018; H. Usman,2018), relevant laws and policies since it stresses the importance of trust in e-payment systems. [Kulawardena,2021], Lack of law on data protection and financial consumer protection [Abdella,2022] has been pointed out as threat to consumers, the security on e-payments was perceived higher on Swedish websites. Popular reasons for this were that Swedish e-commerce is acting under Swedish governmental law, which increases the impression of security and protection to the consumers[Antinoja,2019] and There are privacy laws in several countries that limit usage of personal information by banks, authorities and other parties, including online businesses and payment systems, like European privacy acts or similar directives, e.g. European Commission Data Protection Directive[Abrazhevich,2004] which implies that laws related online fraud should be more important factor that should be considered and consumer should be aware of , but in our study return and refund policy did not shows any significant impact when people decide to switching e-payment services. So, it is concluded that people are not aware of that or not yet publicly known about laws because laws and regulations related to e-payment transactions such as ICT and cybercrime were not yet transparent and not widely known to the public at large. Furthermore, they claimed that enforcing those laws and regulations was not yet being addressed successfully[sidek,2015].

4.7.3.5 Reputation of merchant has no significant moderating effect between previous experience and switching intention.

According to the research paper [Dhanika Perera,2021] If consumer 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 where reputation of merchant has determined dependent variable to adopt e-payment services . In this study even if previous experience has positive effect between each other there is no significant moderate effect of reputation of merchants between previous experience and switching behavior it concluded that users will not see the reputation of merchants if they have bad experience on e-transaction with any e-commerce site.

4.7.3.6 Reputation of merchant has no significant moderating effect between Refund/Return policies and switching intention.

(Chau et al., 2007). Järvenpää, Tractinsky, and Vitale (2002) concluded in their consumer trust research with e-bookstores and travel websites that the perceptions of the size and reputation of the merchant are important to consumer trust. This finding could be interpreted to the e-payments in a way that the merchant's reputation and size could possibly have an effect on the e-payment decision and also The size and reputation of both the e-commerce and the e-payment provider seemed to play a role in the perception of security as well as the social factor that most people are accustomed to shopping online which increases the social acceptance as well[Antinoja,2019]. Furthermore, platform reputation can also directly affect the user's satisfaction and continued use [Chen,2020] and another research paper says first interaction of a customer with that website. Therefore, electronic word-of-mouth may play an important role in developing initial trust (Kim et al., 2004) because the reputation of an unknown web vendor may spread via electronic word-of- mouth. [Mukhopadhyay,2014] and also [Ghouri,2018] a buyer should consult other buyer to check reputation of seller, a seller with good reputation must not involve in fraudulent activities and a buyer having a good experience with a bad reputed seller must be able to undergo further transactions. The research above mentioned clearly states how reputation of merchants affects consumer trust, satisfaction and adoption behavior. Accordingly, our research also shows the positive effect of reputation of merchant on switching behavior but it did not

significantly moderate the relationship between return/refund policy and switching behavior. So it can be concluded that people will not consider reputation of merchant if there is no clear return/refund policy.

4.8 Summary

This chapter presents the results of a questionnaire related to the e-consumers who are doing online shopping in order to buy food and beverages. SPSS Statistical Analysis and PLS-SEM with SmartPLS-04 is used in analyzing and presenting the results. The results include preliminary analysis, measurement model tests and path analysis for testing and validate hypothesis.

5) Conclusion and future work

This chapter provides an overall conclusion regarding the outcomes of this study. This chapter critically evaluates research work and discusses limitations of the research. This includes further research opportunities.

5.1 Conclusion and limitation

This research identified the influential factors that affect switching intention from cash on delivery to e-payment services among consumers. Accordingly, this study categorized the factors based on push-pull-mooring framework using systematic literature review where health consciousness and transactional inconvenience was categorized as push factors, where after analysis showed that health consciousness had significant influence on switching behavior while transactional inconvenience had insignificant impact. So, it was concluded that health consciousness played a major role as a push factor to decide the switching behavior of consumers from cash on delivery. This factor played a major role in all countries after pandemic. So, the same factor affected Sri Lankan food and beverage e-commerce sectors as well. This factor was taken from health belief model that showed the health belief model used in this study has clearly explained consumers health perception on behalf of switching behaviors.

Another push factor was transactional inconvenience which was derived from transaction cost theory which says effort and cost put to switch from one system to another but this study showed transactional inconvenience had no significant influence on switching behavior but previous studies had shown transactional inconvenience was one of drawback in cash on delivery that led consumers to adopt e-payment services but this study concluded transactional inconvenience was not a influential factor when someone using food and beverage e-commerce sector and also it was not considered as push factor when switching to e-payment services in the context of food and beverage e-commerce sector because there might be other factors such as average monthly income, type of generation, tech knowledge and fear of online theft could be a reason for not seeing transactional inconvenience as one of drawbacks of cash on delivery.

In the pull factor two factors such as economic benefit and social influence were identified where finally economic benefit was concluded as not a influential factor to determine switching to e-payment. There were several studies where economic benefit such as promo, discounts and special offers were identified as factors influencing switching to e-payment service but this study contradicted to those studies because there might be a dissatisfaction among consumers of offers given by food and beverage sector or there might be another variable like online security against fraud which could make

them to fear or not to take any offers from online. Moreover, in this study economic benefit was not identified as pull factor.

On the other hand, social influence had high effect on switching behavior compared to all other variables. Similar influences were also seen in several past studies. This social influence has been increased as one of factor after pandemic because most of the family members and close one could have recommended e-payment system to others to avoid unnecessary viral infection because in this conceptual model only health consciousness and social influence showed high effect on switching behavior. So there might be a relationship between these two variables to influence the total conceptual framework created for the research. While social influence was concluded as pull factor that attract consumer towards e-payment services.

In the mooring factor four factors such as control over buying process, return and refund policy, previous experience and related laws on online fraud were identified and tested where all factors failed to achieve significant while the moderating variable reputation of merchant also failed to achieve significant. Considering of control over buying process, this study concluded that control over buying process did not affect the switching intention from cash on delivery to e-payment service. According to previous literature due to the fear of fake, wrong delivery and tracking of privacy people think cash on delivery would be controlled by themselves but our study did not show that cash on delivery can be easily controllable to consumers. So it was concluded that people might think that even new technologies are more flexible and controllable similar to cash on deliver because some research paper showed people who has optimistic and innovative behavior will not think that e-payment or new technologies can not be controlled by them.

Another mooring factor, previous experience showed that it had no effect on switching from cash on delivery to e-payment services but many research papers showed that people who are more experience with one technology easily adopt and trust on it but here findings shows the previous experience is concluded as insignificant factor to determine switching intention but according to some research paper it says that perceive usefulness and ease of use factors of a new technology could affect the previous experience because no need to have think about experience if a technology is easy to learn, use and adopt. So those factors could be hidden reason for not requiring previous

experience as one of influential factors and also it was concluded that a person who is eager to follow innovativeness also might be one of reason for not seeing previous experience as one of reason.

The third mooring factor that this research paper considered was return and refund policy which focused clear return and refund policy, user friendly return policy and satisfaction to evaluate the factor. According to many previous literature return and refund policy was seen as factor that influence consumer trust and satisfaction on e-commerce and e-payment but this research was concluded that return and refund policy has no significant effect in determining switching to e-payment. The reasons might because this research was conducted only for food and beverage sector but mostly return and refund policies are considered as one of influential factor in cross border e-commerce transactions which is concluded in this factor.

Also there was another mooring factor which is related laws on online fraud which was not significant enough to consider as mooring factor since it had no significant effect on switching intention but there was a several studies which showed that mostly people who educated are mostly considering those factors but even though respondents of this studies are more educated they did not consider related laws on online fraud as one of influential factors when switching to e-payment service. So according to some papers it was concluded that the cyber laws related to those online frauds are still not known publicly as a one of important factor.

This study has used one moderating variable which is reputation of merchant between the relationship refund/return policy and switching behavior and previous experience and switching behavior that two relationship were not moderated by reputation of merchant. There fore it concluded that even though there is a well reputed seller people would focus on return and refund policy and also even if the seller is a well reputed one people would consider their previous experience whenever switching to e-payment services.

This research also has some limitation like sample size and sampling technique because the sample size was not proportioned to population while nonprobability convenient sample was used due to the time constraint and also this research was not conducted

under particular generation wise or demographic wise because of that some insights could change for particular generation.

5.2 Future works

This research was only conducted to food and beverage sector, but it can be extended to other sectors as well such as banking and other e-commerce sectors. Furthermore, future studies are suggested to consider income, education background, generation and age as moderating variables because there is high chance for more clear insights from particular demographic group wise. Moreover, future research on people's optimistic and discomfort viewpoint on e-payment technologies should be searched because it was concluded that those factors might affect some of relationships here as a control variable. Further research is suggested to search about continuance intention of using e-payment systems because this research have showed some variable that affect during the pandemic time still remained unchanged, so it is necessary to check the people's continuance intention to use e-payment service. Furthermore future research should focused on cyber laws and people's awareness about that because this research some findings shows people don't consider cyber laws as one of factor to switch e-payment services. Finally future research is suggested to find people's satisfaction on offers, promo and discounts given by food and beverage e-commerce sector since those factors were ignored by people when switching to e-payment services.

5.3 Summary

This chapter consists of conclusions generated from quantitative data analysis, limitations of the research and guidance for future research.

References

1. Karunarathna, N., 2021. Critical factors influencing online consumer preference towards cash on delivery method in Sri Lanka. *Journal of Research in Emerging Markets*, *3*(1), pp.66-80.
2. Kulathunga, D. and Ekanayake, K., 2019. Antecedents to Adoption of Electronic Payment system in Sri Lanka. *Scientific Research Journal*, pp.30-37.
3. Madawala, S. and Shanika, S., 2021. Fear of Online Identity Theft on Online Purchase Intention in a Sri Lankan Ccontext: Mediating role of Trust in E-payment Systems.
4. Nimansa, A.T. and Kuruwitaarachchi, N., 2021. A Study on Finding the Factors, Hindering the use of digital wallets among youth in Developing Countries. *Global Journal of Computer Science and Technology*.
5. Perera, D. and Galdolage, B.S., 2021. Exploring motivating and hindering factors for consumer adoption to online purchase and payments in Sri Lanka. *International Journal of Social Science and Technology*, *6*(03).
6. Adirinekso, G. P., & Assa, A. F. (2021). Is There Any Customer Switching the Intention from Traveloka PayLater to Traveloka PayLater Card? A Preliminary Investigation on Worker in Jakarta. Proceedings of the Ninth International Conference on Entrepreneurship and Business Management (ICEBM 2020), 174, 570–577,. doi:10.2991/aebmr.k.210507.084.
7. Hsieh, P. J. (2021). Understanding medical consumers' intentions to switch from cash payment to medical mobile payment: A perspective of technology migration. Technological Forecasting and Social Change, 173(May), 121074. doi:10.1016/j.techfore.2021.121074.
8. Handarkho, Y. D., & Harjoseputro, Y. (2020). Intention to adopt mobile payment in physical stores: Individual switching behavior perspective based on Push–Pull–Mooring (PPM) theory. Journal of Enterprise Information Management, 33(2), 285–308. doi:10.1108/JEIM-06-2019-0179.
9. Lu, H. P., & Wung, Y. S. (2021). Applying transaction cost theory and push-pull-mooring model to investigate mobile payment switching behaviors with well-established traditional financial infrastructure. Journal of Theoretical and

Applied Electronic Commerce Research, 16(2), 1–21. doi:10.4067/S0718-18762021000200102.

10. Aji, H. M., Berakon, I., & Md Husin, M. (2020). COVID-19 and e-wallet usage intention: A multigroup analysis between Indonesia and Malaysia. Cogent Business and Management, 7(1). doi:10.1080/23311975.2020.1804181
11. JHA, M., Punia, D.K. and Rao, D., 2014. An empirical study on factors influencing consumers' trust in e-commerce. *way*, *4*(3).
12. Sidek, N., 2015. Determinants of electronic payment adoption in Malaysia: the stakeholders' perspectives.
13. Perera, D. and Galdolage, B.S., 2021. Exploring motivating and hindering factors for consumer adoption to online purchase and payments in Sri Lanka. *International Journal of Social Science and Technology*, *6*(03).
14. Ghouri, M.W.A., Hussain, M.A., Kanwal, T., Afzal, B. and Rasheed, M., 2018. Influence of E-Commerce on Business Growth in Pakistan: An Approach to Analyze Privacy, Threats and Consumer Trust in Business. *International Journal of Computer Science Issues (IJCSI)*, *15*(2), pp.27-35.
15. Agag, G., 2019. E-commerce ethics and its impact on buyer repurchase intentions and loyalty: An empirical study of small and medium Egyptian businesses. *Journal of Business Ethics*, *154*(2), pp.389-410.
16. Junadi[a], S., 2015. A model of factors influencing consumer's intention to use e-payment system in Indonesia. *Procedia Computer Science*, *59*, pp.214-220.
17. Purwandari, B., Suriazdin, S.A., Hidayanto, A.N., Setiawan, S., Phusavat, K. and Maulida, M., 2022. Factors Affecting Switching Intention from Cash on Delivery to E-Payment Services in C2C E-Commerce Transactions: COVID-19, Transaction, and Technology Perspectives. *Emerging Science Journal*, *6*(Special Issue), pp.136-150.
18. Fu, H., Huang, Y. and Wei, X., 2007. Development of China C2C E-commerce from the perspective of goods delivery. In *Integration and Innovation Orient to E-Society Volume 1* (pp. 179-186). Springer, Boston, MA.
19. Mu, H.L. and Lee, Y.C., 2022. Will proximity mobile payments substitute traditional payments? Examining factors influencing customers' switching intention during the COVID-19 pandemic. *International Journal of Bank Marketing*.

20. Achor, P.N. and Robert, A., 2013. Shifting policy paradigm from cash-based economy to cashless economy: The Nigeria experience. *Afro-Asian Journal of Social Sciences*, *4*(4), pp.1-16.
21. Adirinekso, G.P. and Assa, A.F., 2021, May. Is There Any Customer Switching the Intention from Traveloka PayLater to Traveloka PayLater Card? A Preliminary Investigation on Worker in Jakarta. In *Ninth International Conference on Entrepreneurship and Business Management (ICEBM 2020)* (pp. 570-577). Atlantis Press.
22. Loh, X.M., Lee, V.H., Tan, G.W.H., Ooi, K.B. and Dwivedi, Y.K., 2020. Switching from cash to mobile payment: what's the hold-up?. *Internet Research*.
23. Kuo, R.Z., 2020. Why do people switch mobile payment service platforms? An empirical study in Taiwan. *Technology in Society*, *62*, p.101312.
24. Hsieh, P.J., 2021. Understanding medical consumers' intentions to switch from cash payment to medical mobile payment: A perspective of technology migration. *Technological Forecasting and Social Change*, *173*, p.121074.
25. Yu, S.Y. and Chen, D.C., 2022. Consumers' Switching from Cash to Mobile Payment under the Fear of COVID-19 in Taiwan. *Sustainability*, *14*(14), p.8489.

Appendix

Personal information related questions

1. Age Group

<20 years	21-30 years	31-40 years	41-50 years	>50 years

2. Gender
   Male: ☐ Female: ☐

3. Civil Status
   Married: ☐ Unmarried: ☐

4. Education Level

Postgraduate	Graduate	Diploma	Advance Level	Ordinary Level

5. Job status

Job holder	Still student	Not working yet

6. Monthly income

<50000	50000-100000	>100000	No income

7. District : for example colombo

8. How often do you use online shopping to buy food/beverages?

Always	Occasionally	Rarely

9. How often do you use cash on delivery method while buying foods/beverages online?

Always	Occasionally	Rarely

10. How often do you use e-payment method while buying foods/beverages online?

Always	Occasionally	Rarely

Research related questions

Push Factors

A. Health Consciousness	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I switched COD to e-payment because I knew it was preventive action against pandemic/viral infection					
2. I switched COD to e-payment because I knew pandemic/viral infection was a health threat to family					
3. I switched COD to e-payment because I wanted to protect me from severe viral infection during the pandemic					
4. I switched COD to e-payment because I wanted to be safe from vulnerable health risk of pandemic/viral infection.					
B. Transaction Inconvenience	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
5. I feel inconvenience using COD services because I have to prepare the right amount of money to pay					
6. I feel inconvenience using COD services because often delivery people don't provide changes					
7. I feel inconvenience using COD services because I have to wait at home till the arrival of delivery person to pay money					
8. I feel inconvenience using COD services because I can't make order anytime from anywhere.					

Pull Factors

C. Economic Benefit	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
9. The attractive offers of bonus points influence me to switch to e-payment services					
10. The existence of the promo influenced me to switch from COD to e-payment services					
11. I enjoy the benefits of discounts, bonus points offered by e-payment services					
12. I think the administration fee for the e-payment service is cheaper					
D. Social Influence	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**

13. Many of people I know use e-payment services more often					
14. Many of people I know recommend me to use e-payment services					
15. The people closest to me feel that use of e-payment is reliable, so I use e-payment services					
16. I think using e-payment service improve my social status/image.					

Mooring Factors

E. Control Over Buying Process	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
17. I feel afraid of using e-payment services due to the wrong delivery of the product/low-quality/fake product					
18. I use COD because I can pay money after checking the product					
19. I use COD because there is high chance for product replacement before paying.					
20. I feel as if I have decision making power of total purchasing than seller when using COD.					
F. Previous Experiences	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
21. I hesitate to switch to e-payment services due to my past experience with it.					
22. My satisfaction on e-payment services decrease due to the previous experience with it					
23. I feel convenience to switch to e-payment service because I have already got the same experience before.					
24. I am being aware of using e-payment services due to the previous experience					
G. Return/Refund Policy	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
25. I switch to e-payment because I know e-commerce website has defined clear return/refund policy for any service failure with compensation					
26. I switch to e-payment because I know e-commerce site has customer friendly return/refund policy					

27. I use e-payment because of the chances of instant return/refund policy after cancellation of the order					
28. I use e-payment because easy refund/return policy increase my satisfaction on e-commerce site					
H. Related Laws on online fraud	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
29. I am well aware of laws related to online frauds, so I feel free to switch to e-payment services					
30. I believe laws related to online fraud support me, so I feel free to switch to e-payment services					
31. I feel secure to switch to e-payment services because government laws regarding cyber-crime gives me positive impression on security					
32. I switch to e-payment services because I know government laws related to online frauds are strong preventive measures against cyber-crimes.					
I. Reputation Of Merchants	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
33. I feel free to use e-payment services only if the e-commerce site is large platform.					
34. I feel free to use e-payment services only if the e-commerce seller is familiar to many people					
35. I switch to e-payment because I know reputed e-commerce sellers will be always in offline presence to help customers during the transaction problems.					
36. Feedbacks of others increase trust on reputed e-commerce seller, so I switch to e-payment services					

Switching Behavior

J. Switching Intention	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
37. I partially switched to e-payment service before pandemic					
38. I completely switched to e-payment during the pandemic					

39. In future I intend to completely switch from COD to e-payment services during the e-commerce transactions					
40. I would recommend others to switch from COD to e-payment services when conducting e-commerce transactions					