

**Factors Influencing Passenger’s Attitude and Adoption Intention of  
Mobile Taxi Booking Applications in Colombo District**

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# Declaration

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# Abstract

Mobile Booking apps have been applied to different service in recently. Specially shopping, financial services, airline booking tec. And in recently taxi services have used taxi booking app. The Mobile Taxi Booking app has improved the level of taxi service in terms of shorter time for passengers to order their taxies and confirm the trip via taxi driver. This Mobile Taxi Booking (MTB) app enable passengers to view taxi availability in their particular location using GPS. Not only that further passengers able to review their drivers and review their details before confirming the taxi.

However currently there is an issue on effectiveness of the Mobile Taxi Booking app and intention to adoption by all the societies. Therefore there is a need to study about Mobile Taxi Booking (MTB) adoption by the passengers. Therefore the objective of this study is to address the MTB adoption intention by using Technology Acceptance Model (TAM). Here the customer adoption perception assed by using Perceived ease of use, usefulness, self-efficiency, credibility and the Risk. The study was conducted in the Colombo district. 400 passenger were selected adopting Random probability sampling and use semi-structure questionnaire as the tool with Likert scale questions.

According to the findings, it was identified that there is a positive significant relationship among passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived credibility. Usefulness, ease of use and self-efficiency. And it was confirmed that there is negative relationship among passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceive risk. The findings confirmed that all the five factors will contribute to the adoption of MTB apps.

**Key words**: ***Mobile Taxi booking app (MTB), Technology Acceptance Model (TDM), Passenger attitudes***

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# Chapter One

## Introduction

### 1.1 Introduction

### 

Taxis play a significant role in providing personalized service in the urban transportation system in Sri Lanka. One of the challenges of operating an efficient taxi service is the mismatch between the taxi supply and passenger demand. This makes it difficult for passengers to be picked up on time, and vacant taxis must waste lots of cruising time searching for customers, which worsens existing traffic congestion and air pollution problems. To deal with the above dilemma, taxi booking systems have been developed in cities as a bridge to connect customers and taxis. Besides the conventional telephone booking fashion, recently innovative online mobile booking techniques have already been introduced into the taxi market. As an impressively growing taxi market, these new taxi booking systems have experienced rapid development in Sri Lanka. At present, there are at least approximately two hundred thousand taxi service orders generated daily through the top three mobile booking apps in Sri Lanka's major city Colombo. These emerging booking systems indeed bring significant changes to the taxi market, and almost all of them are claiming that they have a great effect in promoting the travel experience of passengers and reducing empty taxi cruising time. More and more taxi drivers and customers are using various telephone/online booking programs.

In a developing country such as Sri Lanka, rapid economic and land use growth increase the need for livable living and workplace. Primarily, taxis are positioned to provide a door-to-door service as a mode of choice for city center trips at Colombo region. Further, the taxi in. dusty supports others mobility requirements, including as a viable transport option outside rail and bus operational hours. Passenger getting a taxi is not easy, passenger need to be concern on their safety, reach their destination on time and negotiation on fares.

Online Taxi Apps had a disruptive revolution all around the world including Sri Lanka. Currently Sri Lanka and people experiencing different taxi booking apps like urber, pickme, dropme, cangaroo cabs etc. People started heavily using online taxi apps replacing conventional ways of arranging personal transportation services. This study attempted to investigate the factors affecting the adoption of online taxi apps in Sri Lanka, hence utilized the Theory of Planned Behavior to examine the above research context. The implications of this research study are to be very helpful for online taxi booking apps including uber and pickme to optimize their service and operational excellence

### 1.2 Problem Statement

In recent years, along with social and economic development in urban areas, the number of motor vehicles has increased rapidly in Sri Lanka. The taxi industry has developed rapidly because of the inconsistency of travel demands and insufficient supply of mass transit. Taxis have become one of the most important transport modes for Colombo district residents and tourists due to their comfort and convenience. The taxi has become the major component of the integrated transport system in Colombo and is playing an important role in people’s daily life, yet we know little about consumer behavior and attitudes on selection a taxi via taxi booking app.

Though there many taxi booking apps most of the consumer used book taxies via only selected booking app. And only urban area community is widely use these apps and book taxies. Though Sri Lanka carried huge taxi booking community, there is less study on booking app usage behaviour and adoption. Therefore this study was carried out to find the answer why different population levels in different areas use different types of taxi booking apps with various potentials

### Purpose of the Study

The organized cab service providers have increased in the recent years. There is stringent competition among various operators like pickme, cangaroo cabs, Yellow cabs, Urber, dropme etc. Sometimes factors like accessibility, reliability and transparency are primary factors which have attracted customers towards branded cab services (Vaithianathan & Bolar, 2013). The customer feedback in cab services industry is very important for attaining success in the competitive car rental industry. Upadhyaya (2013) had explained how Meri Cab Company had collected feedback from its customers and enhanced its service quality for sustaining in the business. In this regard it necessary to understand the consumer behavior towards is very important to formulate business strategies in Sri Lanka taxi services. Therefore this study helps the marketing managers in car services industry and academicians to gain insights about consumer behavior towards cab services.

### 1.4 Objectives of the Study

### The major objective of this study is,

### To identify the effect of perceived usefulness, perceived ease of use, perceived self-efficacy, perceived creditability and perceived risk on passengers' attitude towards booking Mobile taxi booking apps adoption in Sri Lanka.

### Specific objectives

### To identify the nature of the relationship between passengers' attitude towards MTB apps adoption and their Intention to adopt will also analyze.

### To suggest solutions to help technology vendors to develop better marketing strategies and to gain competitive advantage

### Research Questions

Q1: What is the effect of perceived usefulness, perceived ease of use, perceived self-efficacy, perceived creditability and perceived risk on passengers' attitude towards booking Mobile taxi booking apps adoption in Sri Lanka?

Q2: What is the nature of the relationship between passengers' attitude towards MTB apps adoption and their Intention to adopt will also analyze?

Q3: What are the suggestions to help technology vendors to develop better marketing strategies and to gain competitive advantage?

### 1.6 Research Methodology

Technology Acceptance Model (TAM) was used as the research design. TAM is model used as this is an important model to identify the user’s behaviour intentions in adopting computers and mobile technologies. The independent variable is the attitudes of the consumers the and the dependent variable is the effectiveness of the mobile booking app. This is a field study because no factors have been controlled in this research. Stratified random sampling was used to select areas in the Colombo district and Random sampling technique was used to select the study subjects. A sample respondent was selected using Taro method.

Where: n = size of the sample, N = total population of selected areas, e = accepted margin of error in the estimates,

Both primary and secondary sources were used for data collection. For Secondary source data was collected from articles, journals, websites and case studies. Previously validated questionnaire was used as a primary source of data collection. Questionnaire contains close-ended questions which were used for collecting data from the respondents. Most of the questions were consisted with Yes/No questions and Five Point Liker type scale questions. The data was collected by semi-structured face to face interviews while protecting their confidentiality. SPSS software was used to data analysis and different statistical tests were applied such as; frequency analysis, descriptive analysis and regression analysis. To present the overall picture of the variables Bar chart and Pie Charts were used for graphical representation of the data.

### 1.7 Limitations of the Study

This study has only selected group of people in Colombo district. The behaviour of the other taxi booking app usage consumers in different districts were not considered in the study. Since a convenience sample was used, the findings cannot be generalized and therefore would be low in external validity. According to the nature of this investigation, results of findings may be specific only to the Colombo district community and may not be generalized to the other business units within the similar business units outside of the booking apps of taxies.

### 1.8 Chapter Framework

Chapter one provides an overview of the relationship between factors affects for the consumer behaviour with the mobile taxi booking apps, the aims and objectives, the significance of the study, as well as the limitations and benefits of the study. It provides brief insight into the research study. Chapter two provides definitions of the most important concepts, such as perceived usefulness, perceived ease of use, perceived risk, perceived self-efficiency, perceived credibility etc. This chapter provides an insight into these concepts by focusing on previous research in this area and presents reviewed literature relevant to this study. Chapter three describes the research design utilized. Specifically, the chapter describes the sample of the study, the measuring instrument used, the procedure followed to gather the data, the hypotheses and the statistical techniques used to analyse the data.

Chapter four reports on the results of the empirical analysis. The chapter proceeds with an analysis of the descriptive statistics on the variables under consideration. To facilitate ease in conducting the empirical analyses, the results of the descriptive analyses are presented first, followed by the inferential statistical analysis. Chapter five describes the results of the study in greater detail and where appropriate, existing literature is integrated into the discussion. The limitations of the study and the implications for future research are addressed and the chapter six concludes with recommendations. This chapter reflected on the aims and objectives, the hypotheses, the limitations as well as benefits of the study. It also provides a brief overview of the literature. The following chapter provides some insights into the concepts that have an impact on consumer attitudes towards the Mobile Taxi booking app. Focus will be placed on previous research in this area, and reviewed literature relevant to this study will be presented.

### 1.9 Chapter Summary

Currently there is an impressively growing taxi market and consumers in Sri Lanka. At present, there are at least approximately two hundred thousand taxi service orders generated daily through the top three mobile booking apps in Sri Lanka's major city Colombo. These emerging booking systems indeed bring significant changes to the taxi market, and almost all of them are claiming that they have a great effect in promoting the travel experience of passengers and reducing empty taxi cruising time. So to identify the different attitudes towards mobile booking adoption the Technology Acceptance Model (TAM) was both primary and secondary sources were used for data collection. For Secondary source data was collected from articles, journals, websites and case studies. Previously validated questionnaire was used as a primary source of data collection.

# Chapter Two

## Literature Review

### 2.1 Technology and Taxi Industry

Mobility is an essential need for an individual therefore the demand for transport service especially for private car and three wheelers has been increased in this modern society. In recent years, trendamous changes has undergone in taxi industry especially in Sri Lanka. Emergence of mobile transportation app-based has increased the demand on ride services such new entrants like Uber, Pickme , Drop me etc. services have revamped in the taxi industry which increase competition among local taxi industry and public transportation (Premananthini, 2016).As a modern consumer, they become wiser whereas not only emphasis on high quality but looking high professional in transportation services. Due to high motorization rate, heavy traffic congestions, parking problems, and inadequate public transport infrastructure led to increase the demand for private cars (Hewson, 2003). And also in big cities for moving around becomes exceedingly convenient to depend on public transport and rented cars due to heavy traffic and few parking places. In recent years, mobile app-base taxi services have become well established. This pattern allows people to take benefit of comfortable ride rather than using personal vehicles and security troubles. Mobile app-based taxi services have become a right choice as the efficient service is available all the time (Dongue, 2014).

The global market of smartphones has become increasingly diverse due to sophisticated mobile applications i.e. apps. These apps are pieces of software installed onto personal phones to attain the services like entertainment, communication, transportation, shopping, mapping etc. There are a number of mobile apps-based taxi services offering their services to connect smartphone users seeking taxi services in their locality. These smart apps operate in a manner: locate passengers, drop them to their destinations and according to fare structure based on time and distance collect money from passengers. Mobile app-based taxis have potential for positive impacts on urban transportation and can reduce the dependence on the private motor vehicle use (Crawford, 2007). According to Ingham (2014) in big metropolitan cities of Pakistan, like Karachi, Lahore, Faisalabad, Rawalpindi and even in capital city Islamabad, due to the presence of low level of public transport services, people prefer private vehicles either cars or motorcycle. To cope these issues, online taxi services like Careem and Uber have emerged in Pakistani taxi market. According to Kim (2012) mobile apps have made it much easier for passengers to avail taxi service with multiple choices. The providers of online taxi services continuously update their technology to match their customer needs and to rival in the competitive marketplace. Once a ride is secured through a mobile app of Uber , Kangaroo, ride me ect the details of driver (name & picture) and car information (model, number and color) is displayed on customers’ mobile screen to track through global positioning system (GPS) (Beyaraj et al., 2015)

### 2.2 Customer satisfaction

According to customer satisfaction is a most important concern for all those organizations that wishes to create and keep a fair competitive advantage. Caruana (2002) explained that difference exist in the dimensions of customers’ perceived services and expectations. Hussain et al. (2015) concluded that the service quality may assume various aspects: physical quality, interactive quality and corporate image quality. Zeithmal et al (2002) described service quality as both pre- and post-service aspects. Most of the time taxi companies focuses on mobile app-based taxi services, so physical quality relates to the tangible aspects of service e.g. car condition. Interactive quality is concerned to the level of two-way flow that occurs between service provider and customer. Corporate quality is connected to the image or perception of service Provider Company. Rabiul Islam et al. (2014) concluded that reliability of services as well as waiting time seems to be the most important cause of customer satisfaction. There is a connection between customer satisfaction and perception and intention to use the mobile app. Horsu & Yeboah (2015) proved that high quality service by mobile booking app services can increase customer satisfaction and intention. Service quality, comfort, reliability, safety, price affordability and app's usefulness, ease of use and credibility influence the taxi passenger satisfaction. Similarly Imran R. (2014) concluded that shared taxis are satisfied with cost, ease of payment and travel time. Ross (2015) during a study conducted in Washington suggested that service quality includes vehicle condition, drive attitude, wait time for taxi arrival and taxi app effectiveness. Customers have also been influenced with convenience of accessibility, ease of online taxi booking, convenience of drop off at destination and adequate travel time for a journey.

### 2.3 Case Background on Uber -The pioneers in taxi booking app

The idea of Uber started in 2008 by Travis Kalanick and Garrett Camp after they struggled to get a taxi in France. They came up with the idea “tap a button and get a ride”. It was founded in March 2009 with it’s headquarter in San Francisco, California, USA. Uber operates a mobile “app” that allows customers to submit a taxi request through their smart phone (uber.com). Uber is operating in over 60 countries and 500 cities in the world. In 2012, Uber was launched in London. Traditionally, taxi cabs are strongly regulated because of safety concerns. Uber was not under any obligation to adhere to these regulations because they were not in breach of regulations and adapted their own (Ingham, 2014). Uber as a new entrant in the industry according to Porter’s Five Forces on analysing the industry, realize there was a gap in the taxi industry, so they implemented technologic and engineering innovations to gain efficiency and reduce costs (Porter,1985). Arguably, it can be said that Uber’s innovation is based on technological convergence; the idea that over time, technological capacities will lean towards a simple device from many other devices and isolating some devices along the way. see (Cameron, Proudman and Redding 2005). In London, black cabs and other taxi companies felt threatened because Uber is cheaper and most times the quicker way to move from one side of London to another (Bathurst 2014).

Uber’s main aim is to make their services more attractive to customers than the competition (Tiku 2014). It can be argued that for a business to thrive, innovation should be ongoing and transforming incrementally. Arguably in the industry where Uber operates, technology can be seen as the biggest disruptor and the use of smart phones by customers makes it very easy. The dynamic pricing by Uber is a key driver for growth which differentiates it from competitors. Uber claims to charge 30% less than other taxis which leads to the build up their customer base and can be seen as an innovative technique to gain share (Harvard Business Review, 2013). Examining what innovation is about, a precise definition is “the successful exploitation of new ideas” (Swann 2009). This represents two main attributes of

Innovation which are the creation of new ideas and their commercial exploitation. Uber is the combination of two existing apps which GPS function and mobile apps from any typical smart phone from customers, prompting a situation where they can request a car in a short space of time wherever they are (Cohen and Kietzmann, 2014).

The growth of Uber has undoubtedly created way for shared economy based on experiences and preferences above ownership. Researchers and academics spent time critically analysing the industry about the change to see whether it is disruptive technology or just innovation. According to one researcher, he argues that Uber’s model was just upgrading an existing system by making it much more efficient (Christensen, 2013). According to the Doblin Group Framework, there are ten types of innovation. Uber can be pin-pointed specifically to the “process” category of innovation. It can be argued that this “process” is where Uber gained competitive advantage by successfully exploiting existing technology by making it much easier, smoother and into one single seamless transaction for customers (Cramer and Krueger, 2016; Malhotra and Van Alstyne, 2014).

However, Christensen’s idea was opposed by Alex Moazed who is the CEO of Applico, a platform innovation company in San Francisco California. He argues that Christensen’s theory of “disruptive” should either originate from low-end market and move upwards to higher value market or it has to establish a “new market foothold” meaning the creation of new market where none existed (Christensen, 2015). Christensen (2015) claimed that Uber did not achieve any of these. On his part, Alex Moazed argues that he was wrong on both counts as Uber clearly started from a low end market foothold (Moazed 2016). Low-end market foothold is when businesses try to provide for their profitable and demanding customers improved services and products. He further cited some other examples of disruptive innovation by Christensen and said it is unfair to apply these restrictions to get rid of Uber. According to Moazed (2016), Uber was a low-end disruption given the fact that this industry was strictly regulated with special operator license. Special operator licence in a yellow badge attached to the taxis, which allows drivers to work as “cabbie” (theknowledgetaxi.co.uk). In contrast, Uber allows anyone with a car to drive customers around for money with no certification or knowledge required and there is no restriction to the choice of vehicles. Hence this change in the industry may be considered disruptive.

Further arguments in support of Christensen are that it is still a taxi service. The primary purpose to book the service and what the service does has not been disrupted by Uber. Accessibility and the online booking process has been improved by Uber in terms of choice of vehicle and waiting time but not the basic parameters of the industry which is the service rendered. Much has been said about the changes in the industry as to its innovation driven by technology in different reviews i.e. “a case study by Dong et al (2014) in Tufts University about Uber driving change in transportation”. However, customer’s perception which can be defined as the way the product is viewed based on customer’s impression and conclusion and can derive from factors like price and experience (themanager.org), can be argued was a key driver for change and this can be identified as a gap in researches because much attention was not given to the area of discussion. This can be highlighted to be very important to this research as it is lacking in other researches.

### 2.4 Consumer Perception and Consumer Attitudes

Consumer perception is very relevant because their behaviour becomes more hybrid. The economic climate causes them to become price sensitive and at the same time wants quality and value money. Nowadays, it is difficult to differentiate product or service by conventional categories like usefulness, effectiveness quality and price. Strong relationships between customers and brand could likely demonstrate an outstanding opportunity to gain competitive advantage. The aim behind consumer’s perception is to clarify what satisfies them most in this industry. If a customer is satisfied, it means the service met the expectation (Michelli 2008).

#### 2.4.1 Attitude in Consumer Behaviour

It can be argued that social behaviour is facilitated by consumer attitudes hence the need to examine the functional theories of attitudes (Solomon et al., 2016). Attitude is an enduring general judgment or predisposed state of mind of people (including oneself) about advertisements, objects or issues (see

Perloff, 2010). According to Katz (1960), there are four functional theories of attitudes namely:

1. Utilitarian Function, which deals with fundamental principle of reward and punishment means we evolve our attitude in the direction of whether it provides pleasure or pain. An example goes for the taxi booking system, you develop a positive attitude towards the system you like.(Solomon et al., 2016)

2. Value expressive function convey the consumer’s important value or concepts. Consumers form product attitude not just for product objective but what the product frame them to be as a person. The attitude of Value Expressive is very important for the analysis of lifestyle because it creates a social identity. An example can “what kind of people uses the cab?”.

3. Ego-defensive function is created to protect from internal feelings and external threats mostly caused by insecurity. An example of this type of attitude can be seen on products like deodorant as its function is stressed on reducing the awful and embarrassing consequence of underarm odour.

4. Knowledge function is formed because of the need causing someone wants to know about a product. Consumers usually form an attitude when there is a new product. This can be because of curiosity of searching for a better alternative (Solomon et al, 2016).

Researchers believed that attitude is made up of three components namely, attitude, behaviour and cognition .Affect is about the feeling of the consumer towards an attitude object, behaviour involves the consumer’s intention to act regarding an attitude object whilst cognition is the consumer’s belief towards an attitude object (Solomon et al, 2016). According to Solomon et al., (2016) this model emphasized that knowing, feeling and doing are interrelated because the attitudes of consumers towards a product cannot be judged simply by identifying their beliefs about the product. Consumers differ in their allegiance to an attitude, and the level of commitment is affiliated to their level of involvement with the attitude product. Consumers have the tendency to consider brands that generates strong positive attitudes (Priester et al., 2004).

A consumer’s general assessment about a product sometimes interpreted the bulk of their attitude towards it. An example to assess customer attitude towards a product can be a simple question like “How do you feel about?”. However, attitudes sometimes can be complex as the service or product can be made up of several attributes or qualities (Solomon et al., 2016). Sometimes consumer’s decision to proceed with their attitude is influenced by other factors like whether buying the product will be approved by friends and family. For this reason, academics developed attitude models that deals with different elements that will hopefully work together to influence consumer’s assessment of products or services.

Multi-attribute attitude model has been very famous amongst marketers. It states that an attitude towards a brand or product can be anticipated by recognizing these specific beliefs and joining them to get a measure of the consumer’s overall attitude (Perner, n.d; Veloutsou et al., 2004). There are three elements of the multi-attribute model which are the quality of the product or service that the consumer considers when evaluating, an example in the case of the taxi industry can be the price. Secondly, are the beliefs which are the cognitions about the product or service? This is what the consumer perceived about the brand. An example in the taxi industry can be argued that black cabs are quick because they can use the bus lane and the diverse knowledge about the city. Thirdly, the important weights which are the qualities of the product or service that the consumer priorities. This will vary between consumers as certain attributes will be important than others.

The attitude of consumers as discussed earlier on can be influenced by different factors for example friends and family approval. Seng and Ping (2016) cited Ajzen and Fishbein (1977) on the Fishbein extended model that examined the theory of reasoned action which means recognizing the potential of other people in the decision-making process. Consumer behaviour can be influenced by social pressure as most of their behaviour are not made in isolation. Sometimes consumers think of what others will like them to do, to be more important than their own preference.

### 2.5 Innovation and Consumer Decision Making

Examining what innovation is about, a precise definition is “the successful exploitation of new ideas” (Swann, 2009). Innovation is based on the findings of new technological evolution or a combination of existing and new technologies or the use of new knowledge gained by the company (Orth et al., 2009). Product innovation deals with the existing market for the products that exists, distinguishing through characteristics and tasks that are not provided (Rainey, 2006).

Knowing the needs and wants of consumers, and designing new product pattern which cannot be found increases loyalty towards the brand product which increases demand for the product. Targeting customer’s needs and wants and providing new opportunities to use the new resources will create the intention to purchase (decide, plan and intend) which is a consumer decision process (Seng and Ping,2016). Innovation can be linked to the uniqueness of the product or service. Consumer’s urge for the uniqueness can be defined as the individual’s chase for differentness compared to others that is attained through procurement, utilisation and disposition of consumer goods, for the reasons of development and building up of one’s personal and social identity (Seng and Ping, 2016). There are two main attributes of innovation which are the creation of new ideas and their commercial exploitation.

An example of Uber is the combination of two existing apps which GPS function and mobile apps from any typical smart phone from customers, prompting a situation where they can request a car in a short space of time wherever they are (see for example, Cohen and Kietzmann, 2014). Consumers vary greatly in their readiness to try new product or services according to the Technical Adoption Model (TAM).

Early adopters lead by respect especially opinion leaders in their communities as they adopt new ideas carefully. The rate of adoption of product varies, some products catch on almost the day they were produced like the iPhone and others take long to gain acceptance. This can be due to the ongoing cost, risk and uncertainty and social acknowledgement.

Consumers with adequate knowledge of the technology available and the technological needs of the society should guide the community through the innovation adoption process. (Wenger, White and Smith, 2010). Rayna and Striukova (2009) suggested that the recognized market segment has paramount significance towards crossing the chasm because adoption in this segment can promote adoption in other segments (Rayna and Struikova, 2009). This leads consumer to a decision-making process which can be defined as a response to problem (Solomon et al, 2016). Consumer needs range from physiological to self-actualisation as per Maslow Hierarchy of Needs Theory (1943). Purchasing decisions vary because some purchases are important than others hence the effort consumers put in will differ as well and this cause consumers to make snap judgements relying on very small information whilst on the contrary, some decision-making process is

robust. Amusingly, consumers nowadays face a very big problem by having too many choices, which can be described as consumer hyper-choice. This is a scenario where the increased number of options ready, forces consumers to repeat choices that drains their psychological knowhow and minimize the ability to make smart decisions (Mick et al., 2005).

The decision-making process of consumers have five stages which are need recognition, information search, evaluation of alternatives, purchase decisions and post purchase behaviour. This process starts by the buyer recognising a need which the consumer will then search about the need in terms of product. The different products or services will be evaluated before purchase decision is made. The consumer will determine whether they are satisfied or dissatisfied with the product which is known as post purchase behaviour. There is very similar method in the adoption of new product for consumers. They go through the awareness stage which is becoming aware of the product but lacks information, they become interested which causes them to seek information, they evaluate whether to try the product, then the trial process to improve their estimation of its value before finally chooses whether to utilize the new product (Kotler et al., 2013).

There are four types of buying behaviour which are complex buying behaviour, variety seeking buying behaviour, dissonance reducing buying behaviour and habitual buying behaviour. Complex and Dissonance buying behaviour requires high involvement from the consumer. Consumers may spend weeks or months agonizing over an important purchase like buying a house. This can be argued is because of the amount involve and it might be a long-time decision or a perceived risk and on the other hand it is highly self-expressive or there is very little difference between the products (Kotler et al., 2013). Habitual buying behaviour are choices that consumers make with very minimal effort or low consumer involvement. Some purchase decisions come as a routine and consumers only realize when

they look at their shopping basket. These shopping are done without any control and are seen more like a habit. Variety seeking buying behaviour has low consumer involvement but great recognizable brand difference. In cases like this, consumer change a lot after consumption as in the case of cookies.

**Consumers tend to buy and evaluate later.**

As far as consumer decision-making processes are concerned, there are three types namely Cognitive, Habitual and Affective. The Cognitive decision process is based on information processing aspect where consumers carefully digest as much viable information with their knowledge about the product, examining all the positives and negatives about each alternative and come to an acceptable decision. This kind of thought is relevant to financial venture that needs attention to detail especially product or services that will impact the consumer’s quality of life (Lynch et al., 2010). There are other actions that differ from what the rational models predicted like purchase momentum which is the increase of consumer’s initial impulse purchases that causes them to buy more. As much

* Need Recognition (Stage 1)
* Evaluation (Stage 3)
* Purchase (Stage 4)
* Post-purchase Evaluation (Stage 5)
* Information Search (Stage 2)

as it seems like an unconscious effort, research proved it to be efficient in most cases (Gladwell, 2005). Affective decision process is influence by consumer’s emotional response to product and services. A study looked at writing an angry letter to a guesthouse after receiving a poor service which caused pain in paying that bill. It argues that the instant emotion experienced that moment could affect consumer behaviour (Rick et al., 2008). There are two types of affect which are positive for product or services that consumers have good feelings for and negative effect for product and services that consumers have primitive emotion of disgust. However, one German study, it argues that making a choice under conditions of high product variety, consumers might avoid and evade the choice process by choosing an avoidant option as consumers might be disabled when faced with too many options (Huber et al., 2010). Consumer attitude is very relevant because their behaviour becomes hybrid. They become price sensitive and want value for money as their attitude is relied on trust and perceived benefits (Michelli, 2008). Trust is very essential to build up relationship with consumer behaviour because behaviour and attitudes are incongruent and sometimes contradictory (Young et al., 2014). Attitudes can become favorable or unfavorable valuation as reflected by the customer (Kotler and Armstrong, 2016). Evidence has shown

that there are changes in booking of private car hire services in the UK. This can be due to consumer perception which can be defined as the way product is viewed based on the customer’s impression and conclusion which can be influenced by factors like experience and price (Recklies, 2015). Nonetheless, it can be argued that attitude is self-motivated because it has the tendency to change if the customer’s circumstances changes. There is a possibility that their needs and choices may be affected hence the customer experience is connected to their perception. Customers evaluate the service quality they received against their expectation to compare their intuition (Dodds, 2003). This means if the expected satisfaction is reached, expectations were met but on the other hand, if it is not, it means it lacks efficiency (Alam and Yasmin, 2010). This strength of technology is increasingly boosting the use of smart phones using different applications in which one of them is for booking private hire cars (Graham, 2015). According to the different theories, the quality of products and services influence consumer greatly as value for money is key.

# Chapter Three

## Methodology

### 3.1 Introduction

This chapter describes the research strategy, sampling procedure, conceptual procedure, variable definitions, data collection and data analysis methods utilized to implement this study. Specifically, the chapter describes the sample methods, sample size, sampling techniques and the measuring instrument, procedure followed to gather the data, statistical methods used to analyses the data and the method hypothesis test.

### 3.2 Research Philosophy

Description about the philosophical choices done in the research is called research philosophy. This is based on the principles used to gain the knowledge related on the study. There two main methods used in the research philosophy. That is positivism and interpretivism (Wilson 2014). The positivism mentioned that the natural science techniques and methods can be adapted to the social research. The interpretivism argues that the techniques of the natural science can’t be applied to the social studies (Bryman 2012). The is another method called pragmatism where it is used in most in mix methods. Another paradigm is pragmatism which is mostly used for mixed method research. This paradigm emphasis techniques and methods are true not according their ability. In this research, its attention was given to the identify the relationship between passengers attitudes towards adoption to Mobile Taxi booking apps. Since the variables are quantifiable the methods of natural science have been used. Such as descriptive statistics, Pearson correlation, validity and reliability test etc. However, as this study is based on both quantitative and qualitative results the research is based on the pragmatism philosophy.

### 3.2 Research Approach

Inductive and deductive are the two types of research approached that are available in the research approach. Deductive approach is analyzed the data based on the collective data and identifies whether the objective can be met or not in the study. This is also known as “ Top-Down” method where a basic concept or a theory is tested(Bryman and Bell 2011). Inductive method is used to develop a principle or a concept. First it do specific observations and then find the patter of the study. This is also known as “Bottom-Down” method (Tashakkori and Teddlie 2010). This research test the relationship between factors affecting for the customer adoption intention to the MTB app. This research first of all collect the observation form the taxi booking consumers and then identifies the relationship of those variables resulted to the different attitudes. After that it develop a concept based on the hypothesis test. Therefore, this study is based on the deductive research approach

### 3.3 Research Strategy

Research strategy is the basement of a research. It will select the method of data collection and provide the knowledge to the research process. Research strategy is selected according to the research approach. There are various types of research strategies such as,

* Experiments
* Case Study
* Survey
* Action research (Pickard 2012).

This study is using the survey research strategy in order to collect data from the consumers in Colombo area who are using taxi booking apps. And then analyzed the data and deduced the relationships among the variables.

### 3.4 Research Design

Quantitative, qualitative and mix methods are the main three types of research methods that it has. Qualitative research design is mainly based on the qualitative data whereas the Quantitative design is based on the numerical and measurable or quantifiable data. Among these two methods quantitative methods are highly reliable and less bias than the qualitative method and also it is a fast design (Denzin and Lincoln 2011). However, in the quantitative design it is unable to understand the perception and attitudes of the research respondents. TAM research design is adopting both qualitative and quantitative methods where it is hybrid of these two methods. (Ritchie, et al. 2012). This research is based on both quantitative and qualitative data to achieve its objectives. Therefore, this study has implemented mix research design to identify the factors that affects for the consumer attitudes.

### 3.5 Research Purpose

In a research, purpose of the research is classed into three major types. That are explanatory, descriptive and exploratory methods. Exploratory is implemented when there is lack of research literatures and studies. Explanatory research method is used to identify the variables in order to test the existing principle and theories. Descriptive research is conducted to describe the current situation of the study (Bryman2012). This study is an explanatory study which identify the relationship between passengers attitudes towards adoption to Mobile Taxi booking apps

### 3.6 Research Method

In a research method, there are two types of data. One is primary data and the other one is secondary data. Secondary data is based on the existing literature like journal articles, industry reports, academic handbooks etc. Primary data is the novel data collected as a result of an experiment and survey. (Reason and Bradbury 2013).

This study adopted both primary and secondary data to collect information. Literature from academic books, research articles and industry report was used as secondary data. Whereas primary data was collected from a survey questionnaire.

#### 3.6.1. Questionnaire Survey: Quantitative Data

Questionnaire survey is the one of the most useful method in the researches to collect quantitative data. Questionnaire will allow to collect large number of useful data within a less time framework. Therefore, this method is highly cost effective. (Hennink, Hutter, and Bailey 2010). This study is implemented a closed-ended questionnaire where the questions are based on the 5-point Likert scale.

#### 3.6.2 Qualitative Data: Individual Interview

Most of the qualitative data can be collected via individual interviews or group interviews. Group interviews are less time consuming; however, it only allows to gain the information which are affected as a group. However, the individual interviews are more time consuming rather than group interview. But the individual interviews allow to collect considerable data which is helpful for the research (Peters, et al. 2013). This study has implemented a face to face individual interview method with taxi booking consumers in Colombo district .The interview questionnaire was semi-structured questionnaire.

### 3.7 Data Analysis

Data analysis techniques differ according to the qualitative and quantitative data. The purpose of data analysis is to find a result or giving a value to the collected data (Levy and Lemeshow, 2013). This study has analyzed its data by descriptive statistics along with adopting correlation and regression analysis by SPSS statistical software.

### 3.8 Sample Techniques

Sampling techniques are used to select a target group from a population to conduct the survey. And these sampling techniques are mainly categorized as probability sampling and non-probability sampling. Probability sampling are more reliable than a non-probability sampling (Myers 2013).

Where: n = size of the sample, N = total population of selected areas, e = accepted margin of error in the estimates,

The total population of the Colombo District is 2,309,809 (Census and Statistic Department, 2016) and e=0.05. According to the analysis the sample size is 400. DS divisions of the Colombo District were identified using convenient sampling method.

|  |  |
| --- | --- |
| DS divisions | Number of Consumers |
| Colombo | 80 |
| Rathmalana | 80 |
| Homagama | 80 |
| Dehiwala | 80 |
| Padukka | 80 |

### 3.9 Conceptual Frame work

This study has adopted the following framework to conduct the research about the

Figure 3.1:Conceptual Frame Work of the Study

|  |  |
| --- | --- |
| **X variable –(Consumer Attitudes )** | **Y variable** |
| Perceived usefulness | Passengers’ intention to  use mobile taxi booking  apps |
| Perceived ease of use |
| Perceived risk |
| Perceived self-efficiency |
| Perceived credibility |

### 3.11 Research Hypotheses

Following are the variables and hypotheses which are testing throughout the research.

**Hypothesis 1**

H0 1- There is no significant relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived usefulness

H1 1 – There is a significant relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived usefulness

**Hypothesis 2**

H0 2- There is no significant relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived ease of use

H1 2 – There is a significant relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived ease of use

**Hypothesis 3**

H0 3- There is no significant relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived risk

H1 3 – There is a significant relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived risk

**Hypothesis 4**

H0 4 – There is no significant relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived self –efficiency.

H1 4 – There is a significant relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived self –efficiency.

**Hypothesis 5**

H0 5- There is no significant relationship between passenger's attitudes and Mobile taxi booking apps adoption and attitudes on perceived credibility.

H1 5 -There is a significant relationship between passenger's attitudes and Mobile taxi booking apps adoption and attitudes on perceived credibility.

**Hypothesis 6**

H0 6- There is no significant relationship between passenger's attitudes and Mobile taxi booking apps adoption and intention to adopt it.

H1 6- There is a significant relationship between passenger's attitudes and Mobile taxi booking apps adoption and intention to adopt it.

### 3.12 Ethical Consideration

Firstly, this study obtained consent from the passengers before taking part in the study. Secondly, all the interviews were informed about the purpose and nature of the current study. The participants were informed about their right to convey their perception and withdraw from the study. The participants were assured that their information will be kept confidential and will not be disclosed to third parties without the consent of the passengers.

### 3.13 Chapter Summary

This study has conceptualized the attitudes of the consumers that caused for the adoption towards the Mobile Taxi Booking app. Researcher has identified five variables causing affecting the potential decisions. Six hypotheses were developed for each of above independent variables. This conceptual model was operationalized and questionnaire was developed for getting feedback from passengers. Reliability and validity tests were conducted using SPSS 17 package to ensure the quality of the findings. Next chapter analyses the findings of this research.

# Chapter Four

## Data Presentation and Data Analysis

### 4.1 Chapter Introduction

This chapter represents the research findings and analysis referring to the specific objectives of the study. Here the collected primary data is qualitatively and quantitatively analyzed to gain the conclusion. Finally, a data set was validated and run by SPSS 7 software. Data was tested with factory analysis, Pearson Correlation and P-value analysis. Also, the primary objectives of this study which are analyzed in the literature review and the main objectives of the study were achieved through analyzing the questionnaire results in the primary data analysis. The survey was conducted for 400 passengers who used taxies for their day today life. The respondents were given 14 questions with sub questions per each to identify their perception and attitudes about the usage of Taxi booking app. The respondents answer the all the questions and they have provided the detailed information to each question. As a result of it analysis is providing more accurate information.

### 4.2 Analysis of General Information on Sample respondents

#### 4.2.1 Gender analysis

Figure 4.1: Gender analysis

According to the data analysis in figure 4.1, 39% of the passengers are males . And 61 % of the passengers were female. The analysis emphasis majority of the female are favorable in using taxies for their day today transportation.

#### 4.2.2 Age analysis

Figure 4.2: Age analysis

In the sample, 45% respondents are between 18-25 years. According to the figure 4.2, 22% of passengers are lies between 26-35 years. 19% of the sample is consisting with passengers whose age more than 45 years. And only 14% of the sample is consisting with passengers who are between 36-45 years.

#### 4.2.3 Marital Status

Figure 4.3: Marital Status

Out of the sample, 55% of the passengers are married and 44% are single. There is 1% of the divorce passengers in the sample of this study.

#### 4.2.4. Educational Qualification

Figure 4.4: Educational Qualification

According to the figure 4.4, 47% of the sample respondents are having diploma level qualification. Only 30% have done their studies up to Advanced Level qualification. Only 24% of the passengers in the research has carried out the studies up to degree level. In the sample there are no passengers who have done their studies only up to Ordinary Level or below that.

**4.2.5 Monthly Income analysis**

Figure 4.5: Monthly Income Analysis

Majority of the sample passengers (50%) are earning 30,500 to 45,500 LKR as monthly salalry.21% and 20% of passengers are earning 45,501 to 55,500 and 55,501 to 65,500 LKR respectively. 7% of the sample passengers are earning 65,501 to 75,500 monthly income. Only 2% of the passengers in the research sample are earning monthly income which is more than 75,501 LKR.

#### 4.2.6 Taxi Booking App Usage

Figure 4.6: Taxi booking app usage pattern

According to the sample data analysis it emphasis that 72% are using online taxi booking app to facilitate their transportation mode. Rest of the 29% is not using app to book a taxi, they are use general method of hiring taxi while they are in the way.

#### 4.2.7 Taxi Booking App Usage Years

Figure 4.7: Year of usage the Taxi Booking App

Majority of the sample, that is 55% of the passengers have started to use a taxi booking app very recently.38% of them have been using the taxi booking app from 1-3 years. Only 7% of the respondents are using taxi booking app from 3-5 years. There are no one who is using a taxi booking app more than 5 years.

#### 4.2.8 Taxi Booking App Types

Figure 4.8: Taxi booking app types

According to the figure 4.8, 45% of the passenger are using Pick me and 39% are using Uber as the taxi booking app. 6% of the respondents are using Drop me and other taxi booking apps . Only 3% of the passengers are using Kangaroo cabs as their taxi provider.

### 4.3 Variable responds analysis of the questionnaire

#### 4.3.1 Perceived ease of use

Following questions were used to analysis the variable of the perceived ease of use

* Mobile taxi app is not confuse me during booking
* Mobile taxi booking (MTB) app is easy to understand
* MTB is easy to use
* MTB cumbersome to use

Figure 4.9: Respondents Perception Analysis on Perceived ease of use

According to the questionnaire 133 and 51 out of 286 passengers who are using taxi booking app agree and strongly agree respectively on that the mobile taxi booking app is not confuse them during booking. Whereas 202 respondents agree that that mobile taxi booking (MTB) app is easy to understand. However constant to that 89 respondents mentioned that MTB is not easy to use. 117 passenger’s neutral to the question that describe that MTB cumbersome to use. But 98 of the respondents mentioned that they agree with the statement which describe that MTB is cumbersome to us.

#### 4.3.2. Perceived usefulness

Perceived usefulness was measured using following variable which was available in the questionnaire

* Mobile Taxi app save my time
* MTB enables me to reach my destination very quickly
* MTB helps to online payment
* MTB is very convenient than calling to taxi center

Majority of the sample (249) agree on the statement that method where the Mobile Taxi app save their time. 202 of the respondents agree on that the MTB enables them to reach their destination very quickly. 98 of the respondents agree that the taxi booking app facilitate the online payment. Whereas 62 of the respondents method that are not provided with the online payment facility. 248 of the sample passengers agree and strongly agree on the statement that MTB is very convenient than calling to taxi center.

Figure 4.10: Respondents Perception Analysis on Perceived Usefulness

#### 4.3.3. Perceived Self efficiency

Perceived self-efficiency measured using following questions in the questionaries’

* Can use the mobile app if there is only manual as reference
* Can use the mobile app if someone has tried it before myself
* Can use the mobile app if someone help when I got stuck
* Can use the mobile app if someone help me to get start
* Can use the mobile app and technology if someone teach how to do it first?

Figure 4.11: Respondents Perception Analysis on Perceived Self Efficiency

According to the data analysis 184 passengers agreed on the two statements on that the taxi booking app can use if there is only manual as reference and can use the mobile app if someone has tried it before themselves. That means the most of the respondents are looking for guideline before they are using the booking app. However 125 disagree with the statement that is on that they need the help from other person when they get stuck with the app. That is why they are requiring a mobile app user guidelines. 258 agree that if someone help them at first to operate with technically they don’t need help after that.

#### 4.3.3. Perceived Credibility

Perceived Credibility assessed by using following sub questions.

* Using the MTB will not disclose my personal information in the mobile phone
* Using the MTB will caused to hack my personal information
* Using MTB will track my personal trips and will harm for my privacy
* Mobile taxi booking app is safe to use than other mobile app

Figure 4.12: Respondents Perception Analysis on Perceived Credibility

In this 117 passengers kept neutral on the statement that describe where the taxi booking app will not disclose their personal information. Because that they are not sure whether the taxi booking app really disclose their information or not. And majority of the sample, that is 248 passengers are in uncertainty on hacking their information while they are using the app. 62 passengers out 286 mentioned that it is not safe to sue taxi booking app rather that other mobile app as it is also tracking our location via GPS.

#### 4.3.5 Perceived Risk

Perceived risk was assessed using following sub questions in the research questionnaire.

* I'm afraid of disclosing of my private information through MTB
* I'm afraid to use MTB as it is collecting too any information from me
* I'm afraid of use MTB as the MTB owners will miss use my personal information
* I'm afraid of my personal information during a transaction for MTB via online

Figure 4.13: Respondents Perception Analysis on Perceived Risk

Majority of the sample are afraid on disclosing their personal information via mobile taxi booking app. And 184 respondents also agree and mentioned that the mobile apps are taking so many personal information which can be threat for them after using it. And 133 respondents mentioned that they are afraid on doing online transaction due to the security issue.

### 4.4 Statistical Analysis

### 4.4.1 Data Validity and Reliability Testing

The data set was test under validity and the reliability test in the SPSS software after improving the data into it. Validity of the data set confirms its’ studies conceptualization and the operationalization. The reliability of a data set ensures the consistency of the data set which helps to measure the variables. If the research variables exceed the 0.7 of the Cronbach’s Alpha test, then the data set assumed to be reliable.

Table 4.1: Validity test results

|  |  |  |  |
| --- | --- | --- | --- |
|  | | | |
|  | | N | % |
| Cases | Valid | 286 | 99.0 |
| Excludeda | 3 | 1.0 |
| Total | 289 | 100.0 |
| Table 4.2: Reliability Statistics   |  |  | | --- | --- | |  | | | Cronbach's Alpha | N of Items | | 0.902 | 26 | | | | |

The table 4.1 and 4.2 ensure that the 31 questions which was raised in the questionnaires survey is valid by 99% and the Cronbach’s alpha value is 0.904 for the data set. And this means that the data set is consisting with high consistency and these values will assure that this data set is better enough to use for the further analysis.

#### 4.4.2 Factory analysis

The reliability test confirmed that the 26 sub questions in the questionnaire are reliable and can be accepted for the study. As there are 26 sub questions, by analysing the factor analysis it can be confirmed whether the all questions are using for the hypothesis test or not. If the factor value is larger than 0.7, then that factor will consider for further correlation analysis out of several variables

Table 4.3 Factor analysis for perceived ease of use

|  |  |
| --- | --- |
|  | |
|  | Component |
| 1 |
| Mobile taxi app is not confuse me during booking | 0.440 |
| Mobile taxi booking (MTB) app is easy to understand | 0.321 |
| MTB is easy to use | 0.789 |
| MTB cumbersome to use | 0.760 |

According to the factor analysis the statements, MTB is easy to use and MTB cumbersome to use has 0.789 and 0.760 values respectively and that is higher than 0.7. So those factors were used for correlation analysis out of perceived ease of use.

Table 4.4 Factor analysis for perceived usefulness

|  |  |
| --- | --- |
|  | |
|  | Component |
| 1 |
| Mobile Taxi app save my time | 1.000 |
| MTB enables me to reach my destination very quickly | 1.000 |
| MTB helps to online payment | -0.030 |
| MTB is very convenient than calling to taxi center | 1.000 |

According to the factor analysis the statements ,Mobile taxi app is save my time, Mobile taxi booking (MTB) app is enables to reach me and MTB is very convenient hat calling taxi center is having 1.000 value and that is higher than 0.7. So those factors were used for correlation analysis out of perceived ease of use.

Table 4.5 Factor analysis for perceived self-efficiency

|  |  |
| --- | --- |
|  | |
|  | Component |
| 1 |
| Can use the mobile app if there is only manual as reference | 0.994 |
| Can use the mobile app if someone has tried it before myself | 0.994 |
| Can use the mobile app if someone help when I got stuck | -0.128 |
| Can use the mobile app if someone help me to get start | 0.994 |
| Can use the mobile app and technology if someone teach how to do it first | 0.315 |
|  | |
|  | |

According to the factor analysis the statements , “Can use the mobile app if there is only manual as reference, Can use the mobile app if someone has tried it before myself and Can use the mobile app if someone help me to get start” has factor value of 0.994 value and that is higher than 0.7. So those factors were used for correlation analysis out of perceived self-efficiency.

Table 4.6 Factor analysis for perceived credibility

|  |  |  |
| --- | --- | --- |
|  | | |
|  | Component | |
| 1 | |
| Using the MTB will not disclose my personal information in the mobile phone | 0.991 |  |
| Using the MTB will caused to hack my personal information | 0.019 |
| Using MTB will track my personal trips and will harm for my privacy | 0.270 |
| Mobile taxi booking app is safe to use than other mobile app | 0.991 |

According to the factor analysis the statements , using the MTB will not disclose my personal information in the mobile phone and Mobile taxi booking app is safe to use than other mobile app has factor value of 0.991 value and that is higher than 0.7. So those factors were used for correlation analysis out of perceived credibility.

Table 4.7 Factor analysis for perceived Risk

|  |  |
| --- | --- |
|  | |
|  | Component |
| 1 |
| I'm afraid of disclosing of my private information through MTB | 0.315 |
| I'm afraid to use MTB as it is collecting too any information from me | 0.995 |
| I'm afraid of use MTB as the MTB owners will miss use my personal information | 0.995 |
| I'm afraid of my personal information during a transaction for MTB via online | 0.995 |
|  | |
|  | |

According to the factor analysis the statements in the Table 4.7, “I'm afraid to use MTB as it is collecting too any information from me, I'm afraid of use MTB as the MTB owners will miss use my personal information and I'm afraid of my personal information during a transaction for MTB via online” has factor value of 0.995 value and that is higher than 0.7. So those factors were used for correlation analysis out of perceived credibility.

Table4.8 Factor analysis for Attitudes towards mobile app

|  |  |
| --- | --- |
|  | |
|  | Component |
| 1 |
| Using a MTB is one of the best solution for my transportation | 0.737 |
| I like using the MTB as I like to experience the new technology | 0.786 |
|  | |
|  | |

The factor analysis for attitudes towards mobile app has a value more than 0.7. Therefore both statements used for the correlation analysis. Those statements are “using a MTB is one of the best solutions for my transportation and I like using the MRB as I like to experience the new technology”.

Table 4.9 Factor analysis for Intention to adapt to taxi app

|  |  |
| --- | --- |
|  | |
|  | Component |
| 1 |
| There is a higher intention to use MTB app | 0.996 |
| I think I should use the MTB app | -0.172 |
| I plan to use this MTB app | 0.896 |
|  | |
|  | |

According to the factor analysis only the two questions are approved for the correlation analysis as those have factor value larger than 0.7. Those are “There is a higher intention to use MTB and I plan to use this MRB app”.

#### 4.4.3 Correlation Analysis

##### 4.4.3.1 Perceived ease of use

**Hypothesis 1**

**H1 – There is a significant positive relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived usefulness**

Table 4.10: Hypothesis Test for Perceived ease of use

|  |  |  |  |
| --- | --- | --- | --- |
|  | | The is a higher intention to use MTB app | I plan to use this MTB app |
| MTB is easy to use | Pearson Correlation | 0.896\*\* | 0.321\*\* |
| Sig. (2-tailed) | 0.000 | 0.038 |
| N | 286 | 286 |
| MTB cumbersome to use | Pearson Correlation | 0.718\*\* | 0.418\*\* |
| Sig. (2-tailed)0 | 0.000 | 0.431 |
| N | 286 | 286 |

According to the correlation analysis in the table 4.10, it shows that there is a significant relationship with MTB is easy to use and intention to use mobile app. That has a correlation value of 0.896 which is higher than 0.5. And the P values of the “MTB is ease use and intention to use mobile app is lower than 0.05 according to the test values. Therefore, the null hypothesis of the study is rejected. And it confirms that the alternate hypothesis is true which was made by the study. And the analysis confirms that there is a relationship with taxi booking app ease use and usage intention. And this have the positive relationship with the variables. That means more easiness to use higher the intention to use the mobile taxi booking app.

##### 4.4.3.2 Perceived usefulness

**Hypothesis 2**

**H2 – There is a significant positive relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived ease of use**

Table 4.11: Hypothesis Test for Perceived usefulness

|  |  |  |  |
| --- | --- | --- | --- |
|  | | The is a higher intention to use MTB app | I plan to use this MTB app |
| Mobile Taxi app save my time | Pearson Correlation | 0.920 | 0.220 |
| Sig. (2-tailed) | 0.000 | 0.098 |
| N | 286 | 286 |
| MTB enables me to reach my destination very quickly | Pearson Correlation | 0.020 | 0.137 |
| Sig. (2-tailed) | 0.741 | 0.301 |
| N | 286 | 286 |
| MTB is very convenient than calling to taxi center | Pearson Correlation | 0.720 | 0.035 |
| Sig. (2-tailed) | 0.000 | 0.141 |
| N | 286 | 286 |

According to the analysis, saving time is having a Pearson correlation vale of 0.920 and degree of convenience has 0.720 value. Both values are larger than 0.5. And therefore both of the questions have relationship with intention of usage the mobile taxi booking app. And this relationship is positive. The P value of both statements are lower than 0.05. And therefore the research hypothesis is accepted. And it confirms that there is a significant positive relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived ease of use. This emphasis that higher the usefulness of the app higher the intention to use that mobile taxi booking app. Therefore the null hypothesis is rejected.

##### 4.4.3.3. Perceived Self Efficiency

**Hypothesis 4**

**H4 – There is a significant positive relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived self –efficiency**

Table 4.12: Hypothesis Test for Perceived Self efficiency

|  |  |  |  |
| --- | --- | --- | --- |
|  | | The is a higher intention to use MTB app | I plan to use this MTB app |
| Can use the mobile app if there is only manual as reference | Pearson Correlation | 0.755 | 0.087 |
| Sig. (2-tailed) | 0.000 | 0.140 |
| N | 286 | 286 |
| Can use the mobile app if someone help me to get start | Pearson Correlation | 0.887 | 0.087 |
| Sig. (2-tailed) | 0.000 | 0.140 |
| N | 286 | 286 |

According to the analysis, availability of user guidelines or a manual is having a Pearson correlation vale of 0.755 and degree of help by someone has 0.887 value. Both values are larger than 0.5. And therefore both of the questions have relationship with intention of usage the mobile taxi booking app. And this relationship is positive. The P value of both statements are lower than 0.05. And therefore the research hypothesis is accepted.There is a significant positive relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived self –efficiency. That means the higher the self-efficiency higher the intention to use the mobile taxi booking apps by passengers. Therefore as the final result the null hypothesis is rejected

##### 4.4.3.4 Perceived Credibility

**Hypothesis 5**

**H5-There is a significant positive relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived credibility.**

Table 4.13: Hypothesis Test for Perceived Credibility

|  |  |  |  |
| --- | --- | --- | --- |
|  | | The is a higher intention to use MTB app | I plan to use this MTB app |
| Using the MTB will not disclose my personal information in the mobile phone | Pearson Correlation | 0.887 | 0.082 |
| Sig. (2-tailed) | 0.000 | 0.040 |
| N | 286 | 286 |
| Mobile taxi booking app is safe to use than other mobile app | Pearson Correlation | 0.784 | 0.187 |
| Sig. (2-tailed) | 0.000 | 0.320 |
| N | 286 | 286 |

According to the analysis, not disclosing the personal information is having a Pearson correlation vale of 0.887 and safety options that other mobile app has 0.784 value. Both values are larger than 0.5. And therefore both of the questions have relationship with intention of usage the mobile taxi booking app. And this relationship is positive. The P value of both statements are lower than 0.05. And therefore the research hypothesis is accepted.There is a significant positive relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived credibility. That means higher credibility higher the intention to use the mobile app. Therefore the null hypothesis is rejected.

##### 4.4.3.5 Perceived Risk

**Hypothesis 3**

**H3 – There is a significant negative relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived risk**

Table 4.14: Hypothesis Test for Perceived Risk

|  |  |  |  |
| --- | --- | --- | --- |
|  | | The is a higher intention to use MTB app | I plan to use this MTB app |
| I'm afraid to use MTB as it is collecting too any information from me | Pearson Correlation | -0.887 | -0.196 |
| Sig. (2-tailed) | 0.000 | 0.141 |
| N | 286 | 286 |
| I'm afraid of use MTB as the MTB owners will miss use my personal information | Pearson Correlation | -0.187 | -0.254 |
| Sig. (2-tailed) | 0.140 | 0.096 |
| N | 286 | 286 |
| I'm afraid of my personal information during a transaction for MTB via online | Pearson Correlation | -0.430 | -0.357 |
| Sig. (2-tailed) | 0.080 | 0.266 |
| N | 286 | 286 |

According to the analysis, collecting too many personal information is having a Pearson correlation vale of (-0.887). This value is larger than 0.5. And therefore this question has relationship with intention of usage the mobile taxi booking app. And this relationship is a negative relationship. The P value of this statement is lower than 0.05. And therefore the research hypothesis is accepted.It confirms thatthere is a significant negative relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived risk. That means higher risk lower the intention to use the mobile app. Therefore the null hypothesis is rejected.

##### 4.4.3.6 Passengers attitudes

**Hypothesis 6**

**There is a significant positive relationship between passenger's attitudes and Mobile taxi booking apps adoption and their intention to adopt it**

Table 4.15: Hypothesis Test for Passenger

|  |  |  |  |
| --- | --- | --- | --- |
|  | | The is a higher intention to use MTB app | I plan to use this MTB app |
| Using a MTB is one of the best solution for my transportation | Pearson Correlation | 0.854 | 0.182 |
| Sig. (2-tailed) | 0.000 | 0.140 |
| N | 286 | 286 |
| I like using the MTB as I like to experience the new technology | Pearson Correlation | 0.611 | 0.087 |
| Sig. (2-tailed) | 0.000 | 0.140 |
| N | 286 | 286 |

According to the analysis, best solution transportation statement is having a Pearson correlation vale of 0.854 and experiencing a new technology has 0.611 values. Both values are larger than 0.5. And therefore both of the questions have relationship with intention of usage the mobile taxi booking app. And this relationship is positive. The P value of both statements are lower than 0.05. And therefore the research hypothesis is accepted.There is a significant positive relationship between passenger's attitudes and Mobile taxi booking apps adoption and their intention to adopt it. That means higher adoption higher the intention to use; the mobile app. Therefore the null hypothesis is rejected.

### 4.5 Chapter summary

The chapter elaborates about the data analysis of the research topic in which study has gathered data through the questionnaire to a sample of 400 passengers who are using taxies as transportation method. Also, an overview to the relation of questions in certain sections of the questionnaire has also been explained. The SPSS software used to reveal the significance and the relationship among the variables identified in the study. According to the findings, it has come to a conclusion that the hypothesis H1, H2, H3, H4 ,H5 and H6 show a strong relationship between the variables. Further, this indicates that independent variables as perceived usefulness, perceived ease of use, self-efficiency credibility and risk in the study.

# Chapter Five

## Conclusion and Recommendation

### Introduction to Chapter Five

This chapter provides the possible recommendations and suggestions for the intention use of Mobile Taxi Booking App in the transportation filed. It address the problem justification, comprehensive conclusion and direction for future studies. The main research problems addressed by the researcher are “What is the intention of passengers who are suing taxies towards use mobile taxi booking apps, What factors affects passengers intention to use taxi booking apps and How those factors affects for passengers intention to use mobile taxi booking app. Also, relevant literature has been found in addressing this research problem and providing for suggestions. According to the findings it was identified perceived usefulness, ease of use, self-efficiency, credibility will increase the intention to use mobile taxi booking app and risk will reduce the intention to use mobile app.

### Conclusion

#### 5.2.1 Conclusion of Demographic Information

According to the data analysis 39% of the passengers are males. And 61 % of the passengers were female. The analysis emphasis majority of the female are favorable in using taxies for their day today transportation. In the sample, 45% respondents are between 18-25 years. According to the final data analysis 22% of passengers are lies between 26-35 years. 19% of the sample is consisting with passengers whose age more than 45 years. And only 14% of the sample is consisting with passengers who are between 36-45 years. Out of the sample, 55% of the passengers are married and 44% are single. There is 1% of the divorce passengers in the sample of this study.47% of the sample respondents are having diploma level qualification. Only 30% have done their studies up to Advanced Level qualification. Only 245 of the passengers in the research has carried out the studies up to degree level. In the sample there are no passengers who have done their studies only up to Ordinary Level or below that.

Majority of the sample passengers (50%) are earning 30,500 to 45,500 LKR as monthly salalry.21% and 20% of passengers are earning 45,501 to 55,500 and 55,501 to 65,500 LKR respectively. 7% of the sample passengers are earning 65,501 to 75,500 monthly income. Only 2% of the passengers in the research sample are earning monthly income which is more than 75,501 LKR. According to the sample data analysis it emphasis that 72% are using online taxi booking app to facilitate their transportation mode. Rest of the 29% is not using app to book a taxi, they are use general method of hiring taxi while they are in the way. Majority of the sample, that is 55% of the passengers have started to use a taxi booking app very recently.38% of them have been using the taxi booking app from 1-3 years. Only 7% of the respondents are using taxi booking app from 3-5 years. There are no one who is using a taxi booking app more than 5 years.45% of the passenger are using Pick me and 39% are using Uber as the taxi booking app. 16% of the respondents are using Drop me and other taxi booking apps . Only 3% of the passengers are using Kangaroo cabs as their taxi provider.

Following questions were used to analysis the variable of the perceived ease of use

* Mobile taxi app is not confuse me during booking
* Mobile taxi booking (MTB) app is easy to understand
* MTB is easy to use
* MTB cumbersome to use

According to the questionnaire 133 and 51 out of 286 passengers who are using taxi booking app agree and strongly agree respectively on that the mobile taxi booking app is not confuse them during booking. Whereas 202 respondents agree that that mobile taxi booking (MTB) app is easy to understand. However constant to that 89 respondents mentioned that MTB is not easy to use. 117 passenger’s neutral to the question that describe that MTB cumbersome to use. But 98 of the respondents mentioned that they agree with the statement which describe that MTB is cumbersome to us. Perceived usefulness was measured using following variable which was available in the questionnaire

* Mobile Taxi app save my time
* MTB enables me to reach my destination very quickly
* MTB helps to online payment
* MTB is very convenient than calling to taxi center

Majority of the sample (249) agree on the statement that method where the Mobile Taxi app save their time. 202 of the respondents agree on that the MTB enables them to reach their destination very quickly. 98 of the respondents agree that the taxi booking app facilitate the online payment. Whereas 62 of the respondents method that the y are not provided with the online payment facility. 248 of the sample passengers agree and strongly agree on the statement that MTB is very convenient than calling to taxi center. Perceived self-efficiency measured using following questions in the questionnaires.

* Can use the mobile app if there is only manual as reference
* Can use the mobile app if someone has tried it before myself
* Can use the mobile app if someone help when I got stuck
* Can use the mobile app if someone help me to get start
* Can use the mobile app and technology if someone teach how to do it first?

According to the data analysis 184 passengers agreed on the two statements on that the taxi booking app can use if there is only manual as reference and can use the mobile app if someone has tried it before themselves. That means the most of the respondents are looking for guideline before they are using the booking app. However 125 disagree with the statement that is on that they need the help from other person when they get stuck with the app. That is why they are requiring a mobile app user guidelines. 258 agree that if someone help them at first to operate with technically they don’t need help after that. Perceived Credibility assessed by using following sub questions.

* Using the MTB will not disclose my personal information in the mobile phone
* Using the MTB will caused to hack my personal information
* Using MTB will track my personal trips and will harm for my privacy
* Mobile taxi booking app is safe to use than other mobile app

In this 117 passengers kept neutral on the statement that describe where the taxi booking app will not disclose their personal information. Because that they are not sure whether the taxi booking app really disclose their information or not. And majority of the sample, that is 248 passengers are in uncertainty on hacking their information while they are using the app. 62 passengers out 286 mentioned that it is not safe to sue taxi booking app rather that other mobile app as it is also tracking our location via GPS. Perceived risk was assessed using following sub questions in the research questionnaire.

* I'm afraid of disclosing of my private information through MTB
* I'm afraid to use MTB as it is collecting too any information from me
* I'm afraid of use MTB as the MTB owners will miss use my personal information
* I'm afraid of my personal information during a transaction for MTB via online

Majority of the sample are afraid on disclosing their personal information via mobile taxi booking app. And 184 respondents also agree and mentioned that the mobile apps are taking so many personal information which can be threat for them after using it. And 133 respondents mentioned that they are afraid on doing online transaction due to the security issue.

#### 5.2.2 Conclusion of the Statistical analysis

The data set was test under validity and the reliability test in the SPSS software after improving the data into it. Validity of the data set confirms its’ studies conceptualization and the operationalization. The reliability of a data set ensures the consistency of the data set which helps to measure the variables. If the research variables exceed the 0.7 of the Cronbach’s Alpha test, then the data set assumed to be reliable. 26 questions which was raised in the questionnaires survey is valid by 99% and the Cronbach’s alpha value is 0.904 for the data set. And this means that the data set is consisting with high consistency and these values will assure that this data set is better enough to use for the further analysis. The reliability test confirmed that the 26 sub questions in the questionnaire are reliable and can be accepted for the study. As there are 26 sub questions, by analysing the factor analysis it can be confirmed whether the all questions are using for the hypothesis test or not. If the factor value is larger than 0.7, then that factor will consider for further correlation analysis out of several variables

According to the factor analysis the statements in ease of use , MTB is easy to use and MTB cumbersome to use has 0.789 and 0.760 values respectively and that is higher than 0.7. So those factors were used for correlation analysis out of perceived ease of use. According to the factor analysis the statements in usefulness ,Mobile taxi app is not confuse me during booking, Mobile taxi booking (MTB) app is easy to understand and MTB cumbersome to use has 1.000 value and that is higher than 0.7. So those factors were used for correlation analysis out of perceived ease of use. According to the factor analysis the statements in self-efficiency , “Can use the mobile app if there is only manual as reference, Can use the mobile app if someone has tried it before myself and Can use the mobile app if someone help me to get start” has factor value of 0.994 value and that is higher than 0.7. So those factors were used for correlation analysis out of perceived self-efficiency. According to the factor analysis the statements in credibility , using the MTB will not disclose my personal information in the mobile phone and Mobile taxi booking app is safe to use than other mobile app has factor value of 0.991 value and that is higher than 0.7. So those factors were used for correlation analysis out of perceived credibility.

According to the factor analysis the statements in Risk, “I'm afraid to use MTB as it is collecting too any information from me, I'm afraid of use MTB as the MTB owners will miss use my personal information and I'm afraid of my personal information during a transaction for MTB via online” has factor value of 0.995 value and that is higher than 0.7. So those factors were used for correlation analysis out of perceived credibility.

The factor analysis for attitudes towards mobile app has a value more than 0.7. Therefore both statements used for the correlation analysis. That statements are “usin a MTB is one of the best solution for my transportation and I like using the MRB as I like to experience the new technology”.

According to the factor analysis only the two questions are approved for the correlation analysis as those have factor value larger than 0.7. Those are “There is a higher intention to use MTB and I plan to use this MTB app”.

According to the correlation analysis in the table 4.10, it shows that there is a significant relationship with MTB is easy to use and intention to use mobile app. That has a correlation value of 0.896 which is higher than 0.5. And the P values of the “MTB is ease use and intention to use mobile app is lower than 0.05 according to the test values. Therefore, the null hypothesis of the study is rejected. And it confirms that the alternate hypothesis is true which was made by the study. And the analysis confirms that there is a relationship with taxi booking app ease use and usage intention. And this has the positive relationship with the variables. That means more easiness to use higher the intention to use the mobile taxi booking app.

According to the analysis, saving time is having a Pearson correlation vale of 0.920 and degree of convenience has 0.720 values. Both values are larger than 0.5. And therefore both of the questions have relationship with intention of usage the mobile taxi booking app. And this relationship is positive. The P value of both statements are lower than 0.05. And therefore the research hypothesis is accepted. And it confirms that there is a significant positive relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived ease of use. This emphasis that higher the usefulness of the app higher the intention to use that mobile taxi booking app. Therefore the null hypothesis is rejected.

According to the analysis, availability of user guidelines or a manual is having a Pearson correlation vale of 0.755 and degree of help by someone has 0.887 values. Both values are larger than 0.5. And therefore both of the questions have relationship with intention of usage the mobile taxi booking app. And this relationship is positive. The P value of both statements are lower than 0.05. And therefore the research hypothesis is accepted.There is a significant positive relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived self –efficiency. That means the higher the self-efficiency higher the intention to use the mobile taxi booking apps by passengers. Therefore as the final result the null hypothesis is rejected

According to the analysis, not disclosing the personal information is having a Pearson correlation vale of 0.887 and safety options that other mobile app has 0.784 values. Both values are larger than 0.5. And therefore both of the questions have relationship with intention of usage the mobile taxi booking app. And this relationship is positive. The P value of both statements are lower than 0.05. And therefore the research hypothesis is accepted.There is a significant positive relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived credibility. That means higher credibility higher the intention to use the mobile app. Therefore the null hypothesis is rejected.

According to the analysis, collecting too many personal information is having a Pearson correlation vale of (-0.887). This value is larger than 0.5. And therefore this question has relationship with intention of usage the mobile taxi booking app. And this relationship is a negative relationship. The P value of this statement is lower than 0.05. And therefore the research hypothesis is accepted.It confirms thatthere is a significant negative relationship between passenger's attitudes and Mobile taxi booking apps adoption and their attitudes about perceived risk. That means higher risk lower the intention to use the mobile app. Therefore the null hypothesis is rejected. According to the analysis, best solution transportation statement is having a Pearson correlation vale of 0.854 and experiencing a new technology has 0.611 values. Both values are larger than 0.5. And therefore both of the questions have relationship with intention of usage the mobile taxi booking app. And this relationship is positive. The P value of both statements are lower than 0.05. And therefore the research hypothesis is accepted.There is a significant positive relationship between passenger's attitudes and Mobile taxi booking apps adoption and their intention to adopt it. That means higher adoption higher the intention to use; the mobile app. Therefore the null hypothesis is rejected.

### Recommendations

According to Billingsley (2013), developers should set appropriate and effective ways to measure mobile taxi app performance because means of measuring onsite performance may not be effective. Customers or the passengers should communicate with their taxi drivers about how they feel about those apps’s performance and why that caused not to changed and make a conscious effort to demonstrate self-efficiency. However, mobile taxi booking benefited from increased information sharing with their engineers and increased help with maintaining performance of the mobile booking of taxies (Lautsch, Kossek, & Eaton (2009).Harrington and Ruppel's (1999) study also revealed the need for a new developing and management styles to implement effectively mobile taxi booking , which requires enhanced customers communication and interaction. They also stressed the important role of trust, security, and culture in the implementation of virtual work arrangements. Offstein, Morwick, and Koskinen (2010) determined from their study ease of use and low risk is the most important factor in a successful mobile booking app program and managers of mobile taxi booking app must adopt a convenient style commensurate with the nature of mobile app.. This entails exhibiting a trusting and results-oriented work style in which product ivity is measured based on sussessfulness of the app rather than number of complaints by the customers. Finally, Kowalski and Swanson (2005) found successful implementation of mobile taxi booking apps requires a multi-faceted approach.

The authors explicated these factors are not isolated but work symbiotically to enhance the customer intention in usage of mobile taxi booking environment. Participants in Brown's (2013) study discussed every factor noted by Kowalski & Swanson (2005) except culture. However, the federal government has a reputation for red tape and ineffectiveness (Billingsley, 2013).

### 5.4 Suggestions for Further Research

Although this study based on TAM model there may other potential determinants other than the perceived usefulness, ease of use, self-efficiency, credibility and risk in the TAM model. To assess the adoption to the Mobile Taxi Booking App usage. Hens the future research should consider about the possibility of other constraints. This was carried out only by considering the perception of the passengers who are using the taxi booking app. However this was not analyse the perception of developers and taxi drivers who work in the companies who provide taxi booking app facilities. So that future research on that will provide more actual results on adoption to Mobile Taxi Booking apps.

### 5.5 Summary of chapter Five

In this research, the study has clearly shown the collected data in chapter 04 and some of them have been interpreted in chapter 04 itself. Furthermore, study describes the recommendation taken from different literature for future implementation.

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## Appendix I

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **- QUESTIONNAIRE –** | | | | | | | | | | | | | |  |
|  |
| **Factors Influencing Passenger's Attitude and Adoption Intention of Mobile Taxi Booking Applications in Colombo District.** | | | | | | | | | | | | | |  |
|  |
| **Dear Sir/Madam The Questionnaire is designed to identify factors influencing passenger's attitude and adoption intention of mobile taxi booking applications in Colombo District. In partially, fulfillment of the requirement of Bachelor of Science in Logistics & Transportation.  Individual responds are unspecified and data will be held in self- reliance and will not be release under any circumstances.  Thank You, Chamodh Sheylanka.** | | | | | | | | | | | | | |  |
| Please Tick (√) the Appropriate Box | |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Part 01 - Personal Information** | |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 01) | Gender | : | Male |  |  | Female |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 02) | Age category | : | 18 - 25 Years |  |  | 26 - 35 Years |  |  |  |  |  |  |  |  |
|  |  |  | 36 - 45 years |  |  | Above 45 Years |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 03) | Marital Status | : | Married |  |  | Single |  |  |  |  |  |  |  |  |
|  |  |  | Divorced |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04) | Educational Level | : | Below O/L |  |  | O/L |  |  |  |  |  |  |  |  |
|  |  |  | A/L |  |  | Degree |  |  |  |  |  |  |  |  |
|  |  |  | Diploma |  |  | Other |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 05) | Monthly Average Income | : | LKR 30,500 | to |  | LKR 45,500 |  |  |  |  |  |  |  |  |
|  |  |  | LKR 45,501 | to |  | LKR 55,500 |  |  |  |  |  |  |  |  |
|  |  |  | LKR 55,501 | to |  | LKR 65,500 |  |  |  |  |  |  |  |  |
|  |  |  | LKR 65,501 | to |  | LKR 75,500 |  |  |  |  |  |  |  |  |
|  |  |  | More than LKR 75,500 | |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 06) | Do you use taxi booking app | : | Yes |  |  | No |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 07) | How long you have been using taxi booking app | : | Below 1 year |  |  | 1 - 3 years |  |  |  |  |  |  |  |  |
|  |  |  | 3 - 5 years |  |  | More than 5 years |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 08) | What is taxi booking app you are using | : | Pick me |  |  | Uber |  |  |  |  |  |  |  |  |
|  |  |  | Kangaroo cabs |  |  | RIDE - Taxi.lk |  |  |  |  |  |  |  |  |
|  |  |  | Drop me |  |  | Other |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Other explain |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Part 02 - Likert Scale** | |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Please refer the statements mentioned under Column 1 and indicate the level of presence of each of the following working condition with respect to your place of employment. | | | | | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Column 1 | | | | | | | | | Column 2 | | | | |  |
|  |  |  |  |  |  |  |  |  | 1 - Strongly Disagree | 2 - Disagree | 3 - Neutral | 4 - Agree | 5 - Strongly Agree |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **09 ) Perceived ease of use** | |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.1 | Mobile taxi app is not confuse me during booking |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.2 | Mobile taxi booking (MTB) app is easy to understand |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.3 | MTB is easy to use |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.4 | MTB cumbersome to use |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **10 ) Perceived usefulness** | |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10.1 | Mobile Taxi app save my time |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10.2 | MTB enables me to reach my destination very quickly |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10.3 | MTB helps to online payment |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10.4 | MTB is very convenient than calling to taxi center |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **11 ) Perceived Self efficiency** | |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11.1 | Can use the mobile app if there is only manual as reference | |  |  |  |  |  |  |  |  |  |  |  |  |
| 11.2 | Can use the mobile app if someone has tried it before myself | | |  |  |  |  |  |  |  |  |  |  |  |
| 11.3 | Can use the mobile app if someone help when I got stuck |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11.4 | Can use the mobile app if someone help me to get start |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11.5 | Can use the mobile app and technology if someone teach how to do it first | | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **12 )Perceived Credibility** | |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12.1 | Using the MTB will not disclose my personal information in the mobile phone | | | |  |  |  |  |  |  |  |  |  |  |
| 12.2 | Using the MTB will caused to hack my personal inrfomation | |  |  |  |  |  |  |  |  |  |  |  |  |
| 12.3 | Using MTB will track my peronal trips and will harm for my privacy | | |  |  |  |  |  |  |  |  |  |  |  |
| 12.4 | Mobile taxi booking app is safe to use than other mobile app | | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **13) Perceived Risk** | | | | | | | | | | | | | |  |
| 13.1 | I'm afraid of disclosing of my private information through MTB | | |  |  |  |  |  |  |  |  |  |  |  |
| 13.2 | I'm afraid to use MTB as it is collecting too any information from me | | |  |  |  |  |  |  |  |  |  |  |  |
| 13.3 | I'm afraid of use MTB as the MTB owners will miss use my personal information | | | |  |  |  |  |  |  |  |  |  |  |
| 13.4 | I'm afraid of my personal information during a transaction for MTB via online | | | |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **14 )Attitudes towards mobile taxi app** | |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14.1 | Using a MTB is one of the best solution for my transportation | | |  |  |  |  |  |  |  |  |  |  |  |
| 14.2 | I like using the MTB as I like to experience the new technology | | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **15) Intention to adopt to taxi app** | | | | | | | | | | | | | |  |
| 15.1 | The is a higher intention to use MTB app |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15.2 | I think I should use the MTB app |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15.3 | I plan to use this MTB app |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **14 )** | **Please state below if there are any additional comments** |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| \*\*Thank you for participating in this questionnaire\*\* | | | | | | | | | | | | | | |
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| **I appreciate the time you have spent on completing this questionnaire. For additional information about the survey, please do not hesitate to contact me.** | | | | | | | | | | | | | | |
| **Chamodh Sheylanka** | |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Department of Logistics and Transport** | |  |  |  |  |  |  |  |  |  |  |  |  |  |
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