**RESEARCH PROPOSAL**

**Factors Influencing Passengers' Attitude and Adoption Intention of**

**Mobile Taxi Booking Applications in Colombo District**

**B.Sc. (Hons) in Logistics and Transportation**

**CINEC Campus and University Grants Commission Sri-Lanka**

**Submitted by**

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# 1. INTRODUCTION

It is widely acknowledged that the emergence of smartphone technology providing extraordinary changes to virtually every aspect of societies worldwide. It is spreading at work and at home, in education, health care and entertainment and in many other areas. The major characteristics in the smartphone technologies such as mobility and broad reach have created five value-added attributes that break the barriers of geography and time. The five value-added attributes are ubiquity, convenience, instant connectivity, personalization and localization of product and services (Ram. er et al., 2013). With these value-added attributes of the smartphone technology, mobile applications (apps) are rapidly growing ever since Apple Inc. first introduced the iPhone in 2007. The mobile apps are end-user software created for mobile device operating systems which extend the capabilities of the mobile device. The mobile apps typically operated by the four mobile operating system, including the Apple App Store, Google Play, Windows Phone Store and BlackBerry App World. The mobile apps usually either made available at a minimal fee or free of charge.

In a developing country such as Srilanka, 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 District. 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. 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. A structured online questionnaire was used to collect data and employed multiple linear regressions for hypothesis testing. Subjective norms and perceived behavioral control were found to be positively influencing the usage intention of online taxi booking apps among Sri Lankans. 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.

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**1.1 RESEARCH OBJECTIVES**

This study aimed to identify the factors affecting passengers' attitude towards MTO apps adoption. More specifically, by adopting Technology Acceptance Model (TAM), the purpose of the study was to ascertain the effect of perceived usefulness, perceived ease of use, perceived self-efficacy, perceived creditability and perceived risk on passengers' attitude towards MTO apps adoption in Srilanka. Further, the relationship between passengers' attitude towards MTO apps adoption and their Intention to adopt will also analyze. This research provides information to taxi drivers in the industry about how passengers perceive MTO apps adoption and what are the factors affecting their intention to adopt MTO apps. By identifying factors affecting passengers' attitude towards MTO apps use, taxi drivers may improve passengers' service and relationship to attract more passengers and to best utilize MTO apps to enhance their competitive position in the taxi service in. dusty. Further, the findings of the study will help technology vendors to develop better marketing strategies and to gain competitive advantage

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## 1.2 RESEARCH QUESTION

**QUESTION 01:**

* What are the major factors influencing the Passengers' Attitude and Adoption Intention of

Mobile Taxi Booking Applications in Colombo District.

**QUESTION 02:**

* What is the relationship between those factors and how to calculate it?

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## 1.3 SIGNIFICANCE OF THE RESEARCH

After conducting this research, the main objective of this study aimed to identify the factors affecting passengers' attitude towards MTO apps adoption. More specifically, by adopting Technology Acceptance Model (TAM), the purpose of the study was to ascertain the effect of perceived usefulness, perceived ease of use, perceived self-efficacy, perceived creditability and perceived risk on passengers' attitude towards MTO apps adoption in Srilanka major factors will be determined by handling multiple criteria that will enable considering a number of both qualitative and quantitative factors when assessing the towards MTO apps adoption in Srilanka.

## 1.4 DESCRIPTION OF DATA

The main sources for the required data for this research are,

### Primary Data

* Primary data will be collected using a questionnaire. The respondents to this questionnaire are users of Mobile Taxi Booking Applications in Colombo District.

### Secondary Data

* This research depends on the previous studies conducted on Factors Influencing Passengers' Attitude and Adoption Intention of Mobile Taxi Booking Applications, published researches, papers, documents and other related literature.

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# 2. LITERATURE REVIEW

A review of literature on technology adoption and diffusion of innovation indicates that there is a rich stream of empirical and theoretical work has been conducted (Jeyaraj et al., 2006). Past studies indicated that over the last 20 years, quite a rich but also diverse body of theoretical and empirical work has been conducted on the adoption and diffusion of innovations. Different theories have been formulated to examine the adoption and acceptance of new technologies in various industries. According to Fichman (1992), researchers usually consider two different aspects of adoption: the characteristics of a given technology and the consequences for adoption and diffusion process and the locus of adoption, i.e., adoption on an individual or an organizational level. Individual adoption studies typically deal with an individual's behavioral intention to adopt an innovation or actual adoption behavior. In the early 2010s, some of the popular areas studied were on adoption and/ or usage of different types of mobile apps such as mobile banking, mobile entertainment, mobile commerce and many others. In line with the objective of this research, the following sub-section discuss on one of the more popular models used on the study of individual innovation adoption, the Technology Acceptance Model (TAM) by Davis (1989).

**Technology acceptance model**: In this study of individual adoption on MTO apps, TAM is used because it is an important model to explain. users' behavioral intentions in adopting computer technology after it was published in Management Science by Davis (1989). TAM was derived from the Theory of Reasoned Action (Ajzen, 1991) to explain and predict computer usage behavior. The TAM identifies various variables (Fig. 1) which in. fluence users to accept or reject computer technology (Davis, 1989):

• Perceived Usefulness (PU) was defined as "the degree to which a person believes that using a particular system would enhance his or her job performance

• Perceived ease of use (PEOU), in contrast, refers to "the degree to which a person believes that using a particular system would be free of effort" (Davis, 1 989)

• Actual System Usage is influenced by users' behavioral intention to use which is in turn influenced by users' attitude toward using

• Attitude toward use is directly affected by PU and PEO

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# 3. METHODOLOGY

**Primary Data**

Primary data will be collected using a questionnaire. The respondents to this questionnaire are users of Mobile Taxi Booking Applications in Colombo District. A questionnaire survey was conducted in Malabe area especially major shopping malls and major shopping districts regardless of their demographic and geographic factors. These locations are chosen to conduct survey due to the well-populated area and convenient to gathering data. The questionnaire was distributed to respondents who own a smartphone and have an experience and ability of using mobile apps.

**Secondary Data**

This research depends on the previous studies conducted on Factors Influencing Passengers' Attitude and Adoption Intention of Mobile Taxi Booking Applications, published researches, papers, documents and other related literature.

A convenience sampling is chose as it can generate a large number of question nnaires more swiftly and economically. The larger number of respondents, the more accurate data generated. Quantitative questionnaires for this research is develop based on the related prior studies

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# 4. TIME PLAN FOR THE RESEARCH

Table 4.01: Time plan of the research

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Activity Description** | **July-02** | **July-10** | **Jul-28** | **Aug-Sept.** | **Nov-Dec.** |
| Preparation and submission of the research proposal |  |  |  |  |  |
| proposal presentation |  |  |  |  |  |
| Questionnaire preparation |  |  |  |  |  |
| Data collection |  |  |  |  |  |
| Data entry |  |  |  |  |  |
| Data cleaning |  |  |  |  |  |
| Data Analysis |  |  |  |  |  |
| Finalizing the research |  |  |  |  |  |

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# 5. REFERENCES

Agarwal, R. and J. Prasad, 2000. A field study of the adoption of software process innovations by information systems professionals. IEEE. Trans. Eng. Manage., 47: 295-308.

Jeyaraj, A., S.W. Rollman and M.C. Lacity, 2006. A review of the predictors, linkages and biases in IT innovation adoption research. J. Inform. Technol., 21: 1-23.

Fichman, R.G., 1992. Information technology diffusion: A review of empirical research. Proceedings of the Thirteenth International Conference on Information Systems, Dec. 1992, Dallas, Texas, United States, pp: 195-206

Davis, F.D., 1989. Perceived usefulness, perceived ease of use and user acceptance of information technology. MIS. Quart., 13: 31 9-340.

Ajzen, I., 1991. The theory of planned behavior. Organiz. Behay. Hum. Decis. Process., 50: 179-211.

Bandura, A., 1986. Social Foundations of Thought and Action: A Social Cognitive Theory. Prentice Hall, Englewood Cliffs, NJ., USA., ISBN-13: 978-0138156145, Pages: 617.

Chen, L.D. and J. Tan, 2004. Technology adaptation in E-commerce: Key determinants of virtual stores acceptance. Eur. Manage. J., 22: 7 4-86.

Davis, F.D., R.P. Bagozzi and P.R. Warshaw, 1992. Extrinsic and intrinsic motivation to use computers in the workplace) . J. Appl. Soc. Psychol., 22: 1111-1132.

Cho, Y.C. and J. Agrusa, 2006. Assessing use acceptance and satisfaction toward online travel agencies. Inf. Technol. Tourism, 8: 179-1 95.

. Kim, K. and B. Prabhakar, 2000. Initial trust, perceived risk and the adoption of internet banking. Proceedings of the 21st International Conference on Information Systems, December 10-13, 2000, Brisbane, Queensland, Australia, pp: 537-543.

Kwon, H.S. and L. Chidambaram, 2000. A test of the technology acceptance model: The case of cellular telephone adoption. Proceedings of the 33rd Annual Hawaii International Conference on System Sciences, January 4-7, 2000, IEEE, Japan, ISBN: 0-7695-0493-0, pp: 1-7.

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