

**Determinants of Online ticket purchase Behavior:
An Empirical study of Ethiopian Airlines**

**In Partial Fulfillment of the Requirement for the Award of
Master of Arts Degree in Marketing Management**

By

Mary Legesse (GSE0838/06)

Department of Marketing Management School of Commerce Addis
Ababa University

June, 2016

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Mulugeta G/Medhin (PhD)

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MA Thesis

By: Mary Legesse

Approved by Board of Examiners

Chairman, Department

Signature

Advisor

Signature

Internal Examiner

Signature

External Examiner

Signature

LETTER OF CERTIFICATION

This is to certify that Mary Legesse carried out this research on the topic entitled “Determinants of Online ticket purchase Behavior: An Empirical study of Ethiopian Airlines” This work is original in nature and is suitable for submission for the award of the Master of Arts Degree in Marketing Management.

Mulugeta G/Medhin (Ph. D.)

(Advisor)

Statement of Declaration

I, Mary Legesse, declare that this Master research project entitled – Determinants of Online ticket purchase Behavior: An Empirical study of Ethiopian Airlines is submitted in partial fulfillment of the requirements for the degree of Master of Arts in Marketing Management at the School of Commerce, Addis Ababa University. This project contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this project is my own work.

Declared by

Mary Legesse June, 2016

Student

Signature

Date

DEDICATION

I would like to dedicate this paper to my husband, Ejigu Beyene and my children, Naomi, Deborah and Michael.

ABSTRACT

The objective of this research paper is to identify the determinants of Online ticket purchase Behavior in Ethiopian Airlines .To achieve the objective, a structured questionnaire was developed. The questionnaire that had a five- point Likert scale: from strongly disagree to strongly agree was administered to systematically selected 384 passengers at Addis Ababa Bole International Airport. Data were analyzed quantitatively and qualitatively. For quantitative analysis: descriptive statistics - Frequency, mean and standard deviation and inferential statistics - correlation, regression and ANOVA were used.In the study, perceived ease of use, perceived usefulness, perceived convenience and perceived trust were analyzed to see their impact on online ticket purchase Behavior of Ethiopian Airlines passengers. The research findings clearly indicated that the customers' online ticket purchase behavior is significantly affected by perceived trust, perceived usefulness and perceived ease of use .According to the study , the effect of convenience on online ticket purchase is not significant . Moreover it showed that Ethiopian Airlines' passengers have trust on the airline's website and considerit useful and easy to use .Therefore the researcher suggested that the airline should work more on the weak areas that need to be taken care in order for Ethiopian to increase the number of online ticket booking passengers. Lastly, a further research would benefit the industry if done by addressing the limitation of this study, i.e., by increasing the sample size and including other airlines passengers as well.

Key words: *Online ticket purchase behavior, Ethiopian Airlines, perceived trust, perceived usefulness, perceived ease of use and perceived convenience.*

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ABBREVIATIONS AND ACRONYMS

BI: Behavior Intention

DOI- Diffusion of Innovations Theory

E-Commerce –Electronic Commerce

ET – Ethiopian Airlines

GDS – Global Distribution System

IATA – International Air Transportation Association

ICTs-Information Communication Technologies

IS-Information Science

IT-Information Technology

N: Population

PC: Perceived Convenience

PEOU: Perceived Ease of Use

PT: Perceived Trust

PU: Perceived Usefulness

SN: Subjective Norm

TAM: Technology Acceptance Model

TPA: Theory of Planned Action

TPB: Theory of Planned Behavior

TRA: Theory of Reasoned Action

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CHAPTER ONE

INTRODUCTION

This chapter introduces the reader to the study of the determinants of online ticket purchase behavior. It goes on to look at the Background to the study, Background of Ethiopian Airlines, statement of the problem, research questions, objectives of the study, definition of terms, significance of the study, Scope of the study and Organization of the research report.

1.1 Background of the Study

Information Communication Technologies (ICTs) have revolutionized the entire business world-commerce is bringing new developments to the global travel industry. These developments have impacted both consumer and industry behaviors in the area of air travel (Morrison,Tylor& Morrison ,1999). The emergence of the Internet in the mid-1990s as well as the development of Intranets and Extranets forced airlines to refocus their strategy on technological innovations in order to enhance their competitiveness as well as to communicate directly with their prospective customers and it has increased the availability of information about prices and products, enabling customers to identify the best deal or at least to improve their bargaining position with vendors both online and in traditional channels (Morrison et al 1999).

Distribution accounts for about 17% of airlines' total operating costs and ranks as the third largest cost for an airline after labor and fuel (IATA, 2000).Airlines can utilize many distribution channels to sell their tickets to the customers. They can sell directly through their sales offices; call centers; own website and to corporates. The indirect channels which are opened to them are traditional travel agents; online travel agents such as Travelocity, Expedia, Priceline.com, last minute.com; online travel portals such as Orbitz in the US, Opodo in

Europe, and Asia portal; tour operators and consolidators. A large proportion, as much as three quarters of airline tickets are sold through conventional travel agents. While travel agents are still airlines main channel of distribution, it is the most expensive method of ticket distribution (Alamdari, 2002).

Airlines are challenged by the increase in competition in addition to the increasing cost of operation and the huge investment required. These competitions are increasing the cost of attracting new customers. In addition to the mentioned reasons, volatility, legal regulations restricting operations, and disadvantage of increased cost structure with high fixed costs (Delfmann, 2005; shaw, 2007). Competition in international passenger airline is becoming a bottleneck for companies to achieve sustainable profitability as stated in their strategic plan.

The Internet provides a potentially low-cost channel for retail distribution that can reach customers 24 hours a day, anyplace in the world. In addition, as customer interaction shifts to electronic channels, detailed data can be collected to improve targeted advertising and sales efforts as well as to reduce other operational costs (McGuire, 1974).

On the customer side, at a fundamental level, consumer motivation to shop is best explained by motivation theory, which contends that cognitive or affective motives seek individual gratification and satisfaction (McGuire, 1974). In the online context, the most compelling motivation became the convenience to shop 24/7 from the luxury of one's home (Swaminthan, Lepkowska-White, & Rao, 1999). In the travel context, where many components may make up for the travel experience, this combination of convenience, immediacy and rich information is highly effective.

Website characteristics and purchase intentions are better explained under the framework of the Technology Adoption Model (Davis, 1989; Davis, Bagozzi, & Warshaw, 1989). Lee, Park, and Ahn (2001) expanded on the original TAM model and introduced an e-com adoption model that included perceived ease of

use, perceived usefulness, perceived risk with products/ services, and perceived risk in the context of online transaction. An easy to use travel website would imply aspects such as navigability, efficiency, consistency and compatibility (Morrison et al., 1999). Another aspect of the website that relates to perceived ease of use is the information, features and functionality available on the site.

Online service encounter satisfaction was higher when information content at the web site was deeper (Shankar, Smith, &Rangaswamy, 2000). Perceived usefulness of a website can also be gauged by the website's ability to attract existing customers and provide services such as redemption of rewards or miles points (Shankar et al., 2000). Results show that loyalty to the service provider is higher when the service is chosen online than offline (Shankar et al., 2000).

1.2 Background of the Company

Ethiopian Airlines is the fastest growing Airline in Africa. Ethiopian has become one of the continent's leading carriers, unrivalled in efficiency and operational success. Ethiopian commands the lion share of the pan-African passenger and cargo network operating the youngest and most modern fleet to more than 93 international destinations across five continents. Ethiopian fleet includes ultra-modern and environmentally friendly aircraft such as the Boeing 787, Boeing 777-300ER, Boeing 777-200LR, Boeing 777-200 Freighter, Bombardier Q-400 double cabin with an average fleet age of five years (Ethiopian Fact sheet, 2016)

Ethiopian is currently implementing a 15-year strategic plan called Vision 2025 that will see it become the leading aviation group in Africa with seven business centers: Ethiopian Domestic and Regional Airline; Ethiopian International Passenger Airline; Ethiopian Cargo; Ethiopian MRO; Ethiopian Aviation Academy; Ethiopian In-flight Catering Services; and Ethiopian Ground Service.

Ethiopian is a multi-award winning airline registering an average growth of 25% in the past seven years(Ethiopian Fact Sheet, 2016).

The website of Ethiopian Airlines (www.ethiopianairlines.com) was launched in 2002 with the aim of serving as information and booking portal for customers. Then implemented online booking in February 2004.Later in the year 2006, Saber Company installed new software for Ethiopian e-ticketing system. The Saber sonic web has better features of online booking and ticketing facilities and it is still being used by the airline(Ethiopian fact sheet, 2014).

Currently the site hosts customized pages for different locations. Customers are directed to specific country page by way of requesting their location and then opening the specific country page that corresponds to the country of their choice. While the functionalities available in different country pages are similar, contents such as advertisements and special fares displayed in home pages differ according to the country.

After a decade of using online booking;however, the investigation of the Ethiopian annual performance report 2014/15 revealed that only 10% of the total ticket booking was made through online on Company's website. Although Ethiopian offers a 5% discount on every ticket booked online, enough customers are not using the website to purchase their tickets.

1.3 Statement of the problem

The homogeneous nature of the airlines business makes product differentiation very difficult and costly and hence creates very strong competitive pressure in the airlines business (Buhalis, 2004).Thisstiff competition in an airline industry forced many airlines to have strategies which address minimizing their distribution costs and retain their customers by providing efficient service which excel their competitors (Buhalis, 2004).

Online booking has become an important element in the structure of air ticket distribution (Klein, 2002). Empirical evidences reveal that online booking helps to improve service quality, lowerprices, reduce search costs and increase search depth (Zhanget al.2007)

However,limited work has been conducted on what determines online ticket purchase behavior. Thisstudy, therefore, was intended to bridge the gap through investigation of the determinants of online ticket purchase behavior of Ethiopian Airlines.

1.4 Research Questions

The research addressesthe followingquestions;

- What are the determinants of online ticket purchase behavior?
- How perceived ease of use affect online ticket purchase behavior?
- How perceived usefulness affect onlineticket purchase behavior?
- What is the contribution of perceived convenience to online ticket purchase behavior?
- How perceived trust of consumers influence online ticket purchase behavior?

1.5 Objectives of the Study

1.5.1 General Objective

The main objective of the study was to analyze the determinants of online ticket purchase behavior and the way these affect the choice of purchase air tickets online.

1.5.2 Specific Objectives

The specific objectives of the study were:

- To examine the effect of perceived ease of use on choice of online ticket purchase behavior
- To examine the effect of perceived usefulness on choice of online ticket purchase behavior
- To determine the influence of perceived convenience on choice of online ticket purchase behavior
- To investigate the effect of perception trust on choice of online ticket purchase behavior

1.6 Significance of the Study

The researcher believe that, the findings of this study will help to provide information about the performance of online ticket booking at Ethiopian Airlines and also help the company to identify the constraints that affect customers not to purchase air tickets online. Moreover the study adds value for the company to provide better online booking service by focusing on the limitations. Last but not least, it motivates other researchers to conduct further studies on e-commerce practices of Airline industry

1.7 Scope of the Study

This study limited only to the analysis of the four online ticket purchase determinants in the context of Ethiopian Airlines .The study conducted the survey on Ethiopian Airlines International passengers that used Addis Ababa International Airport as a departure, arrival or transit point in the month of April 2016.

1.8 Definition of Terms

Online Ticket purchase behavior:-refers to the tendency of customers to purchase their air tickets online

International Network:-refers to travels on the international route of the airline

1.9 Organization of the Research Report

The research study is organized in five chapters. Chapter one contains background of the study, background of the organization ,statement of the problem, basic research questions, objectives of the study,significance of the study, scope of the study and definition of terms.Chapter two contains theoretical framework, empirical literature review and conceptual frame of the study. Underchapter three,the researcher describes methodology of the research including different tools of sampling, samplingdesign employed in the study and methods of data collection and analysis used in the research.In chapter four summarization of the results and interpretation / discussion of findings are made. The final chapter comprises summary of findings, conclusions and possible recommendations of the study and also suggests directions for future research.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter reviewed the existing literature on factors influencing user behavior in regards to adoption of Technology services and as well as some of the relevant research models used in IS/IT research. In addition, the researcher discussed issues on the airline industry and defined relevant concepts. Finally this chapter formed a conceptual model in order to enhance the researcher's understanding on the topic and provide answers to the research questions

2.1 Theoretical Review

2.1.1 Theories of Technology Adoption

User adoption of technology has been an important field of study for several years. The adoption of the technology is concerned with contextual, cognitive and emotional issues (Straub, 2009), .Slowlkowski and jarratt (2007) assert that most sociological studies have analyzed the acquisition of technology by concentrating on how potential users of such technology are affected. In 1989, Davis argued that previous studies of technology adoption theories took for granted the fact that, for the utility maximizing customer, the latest technology ultimately replaces older technology. Kim(2009) suggests that marketing research should concentrate on how innovative technology is perceived by customers in addition to how their responses to technology may change with time and experience .Generally, the literature on acquisition of technology suggests a multidimensional process in which the user is concerned with a wide range of conditions (Pries-Heje,Venable& Bnker,2010).

2.1.1.1 Diffusion of Innovation Theory

Diffusion of Innovations Theory (DOI) is concerned with studying how, why and at what rate, the spread of technologies (inventions) occurs between different cultures and countries. First published by Everett Rogers in 1962, it is based on 508 diffusion studies, where diffusion is described as “the process in which an innovation is communicated through certain channels, over time, amongst the members of a social system” (Rogers, 2003). Moreover, the adoption of a technology process is a mental process that passes through the individual, from the time of hearing about the innovation, to knowledge of the innovation, which ends up being the final stage of the adoption (Rogers, 1995).

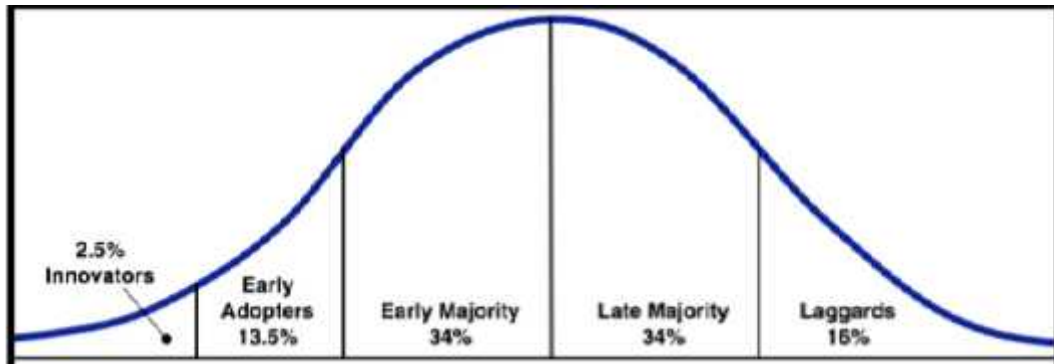
Innovation, communication channels, time and a social system are the basics that might affect the spread of a new idea (Rogers, 1995). The initial element is an innovation, which may be described as practice and an idea that can be recognized as new by a person. A communication channel is the second element and this refers to the concept of messages being passed among people (Rogers, 1995), whereas time refers to the innovation assessment period, which may be the length of time necessary to account for the process of an innovation decision. Finally, as Rajagopalan, Hillison, Calantone and Sambamurthy (2010) note, a social system may be described as the context in which a common difficulty is addressed, in order to achieve a purpose.

I. The Users of Technology Categories

Humans vary when it comes to adopting technology and can be divided into a range of categories that differ according to the extent that a person will go to in order to adopt and embrace ideas. Using the time factor for the diffusion, adopters divide into categories based on their location on the diffusion curve. Rogers (2003) classifies the users of technology into five categories: innovators, early adopters, the early majority, the late majority and laggards. The adoption rate relates to the speed that others can perceive the innovation; those who are

part of the social system accept this rate. The slope of the curve depends on the type of innovation (optional, authoritative, or even collective), the channel of communication (interpersonal/ mass media/social media) and the nature of the context (standard of the network and interconnection).

Figure 1: The users of Technology categories



Source: Rogers (2003)

II. Lead Users and Early Adopters

Lead users or innovators are technology enthusiasts who aggressively follow technical products and solutions and often seek out solutions in automation and technology, even before they are formally launched (Trott, 2008). In the case of travel and tourism, innovators are those who seek to automate processes that take place within their on-going business. Early adopters follow these users and they are not simply enthusiastic about technology; rather, they have insights into matching emerging technology with strategic opportunities (Costigan& Gold, 2007). Innovators have the ability to implement their knowledge and deal with the levels of uncertainty that are related to innovation. Early adopters play an essential role in generating ideas in the social environment and are seen as the gatekeepers when the new ideas occur. This category consists of the greatest opinion leaders to whom potential adopters can go, if they need information or advice regarding the new ideas; they are role models in the social system and can influence the mass when

they adopt the innovations (Rogers, 1995, 2003). In the travel sector, innovators may utilize advanced travel technology, such as travel websites and smart phone travel applications, before it becomes more widely used to search for travel information and purchase holidays online. Whereas early adopters may follow the lead of the innovators and adopt advanced technology after serious consideration.

Kolb (2006) illustrates this when he argues that innovators will always attempt to adopt a new idea or practice. This may be evident in destination choice, as innovators are more likely to visit a new destination and, along with early adopters, make judicious choices when deciding to visit a destination. However, innovators and early adopters are considered to be only a small proportion of the potential tourist market (McCabe, 2010).

III. The Early Majority, Late Majority and Laggards

The next target users are the early majority and the late majority. In mapping these groups directly on to travel services, the early majority consumers are those who are comfortable incorporating new technology within their operations. They are driven by a sense of pragmatism (Daniel, 2008). Although these consumers are low risk-takers, they represent the overwhelming majority of any typical target segment that a technical solution aims to serve. In the travel market, the early majority (34%) are those who utilize advanced travel technology, such as travel websites and smart phone travel applications, because of information received about them from friends and relatives. Similarly, with regard to destination, (Kolb, 2006) establishes that early majority tourists will start visiting a destination once the early adopters have visited. The early majority is considered to be a large number of people who pay attention to promotional messages in order to reduce the risks attached to vacation time and spending money on the unknown. Thereafter, these destinations become established as well known, popular tourist destinations and the late majority start visiting them.

The difference between the early and the late majority consumer is that the latter tend to wait for technical solutions in travel services to an established standard before they buy such solutions from established providers (McCabe, 2010). For example, in the travel market, once the early majority start using advanced travel technology, e.g. travel websites and smart phone travel applications, these technologies become established and well known. In this case, the late majority prefer to wait until someone they trust has used the advanced travel technology that they are interested in. Thus, late majority users benefit from lower costs of development and find more support available when adopting a new process (Bridgeland&Zahavi, 2008). The late majority do not take any risks when deciding to visit a destination, and may not rely solely on promotional messages and advertisements; they may only trust the opinion of someone they know who has previously visited a particular destination. Conversely, by this time the innovators and early adopters are no longer interested in these destinations and will have progressed to visiting new ones (McCabe, 2010).

Finally, laggards are the most skeptical of new technology and are highly risk-averse. As a result, they often tend to rely on technology that is one generation older than contemporary technical solutions and practice (Butje, 2005). In the travel sector, laggards (16%) are those who rely on traditional travel agency services – some may be part of an older generation that is accustomed to using local travel agencies, rather than contemporary online travel services. Laggards typically use traditional travel services year after year, as they trust the repetition and find it comforting. Furthermore, laggards are even less likely to risk attempting a new destination, because they view adopting a new experience as inconvenient rather than interesting. Laggards are typically more likely to travel to the same destination more frequently (Kolb, 2006).

2.1.1.2 Diffusion of an Innovation Process

Five stages have been identified as representing the diffusion of innovation process.

Knowledge: When an individual or a decision -making team find out about an innovation they seek to comprehend how everything works. This consists of awareness- knowledge; or looking for confirmation that an innovation is already in place. In relation to travel, consumers might be aware of advanced technology, e.g. using smart phones that provide online travel activities and get some idea of how these applications function. It also involves principles-knowledge, which underlies how things occur. While adoption of innovation may occur without principle -knowledge ,but there exists the risk of not properly exploiting a new idea; if someone misses the knowledge prior to the adoption it can lead to refusal or even interruption (McGrath & Zell,2001; Rogers, 2003).The principles-knowledge is also educational (Martins,Pereira&Vicentea ,2009).

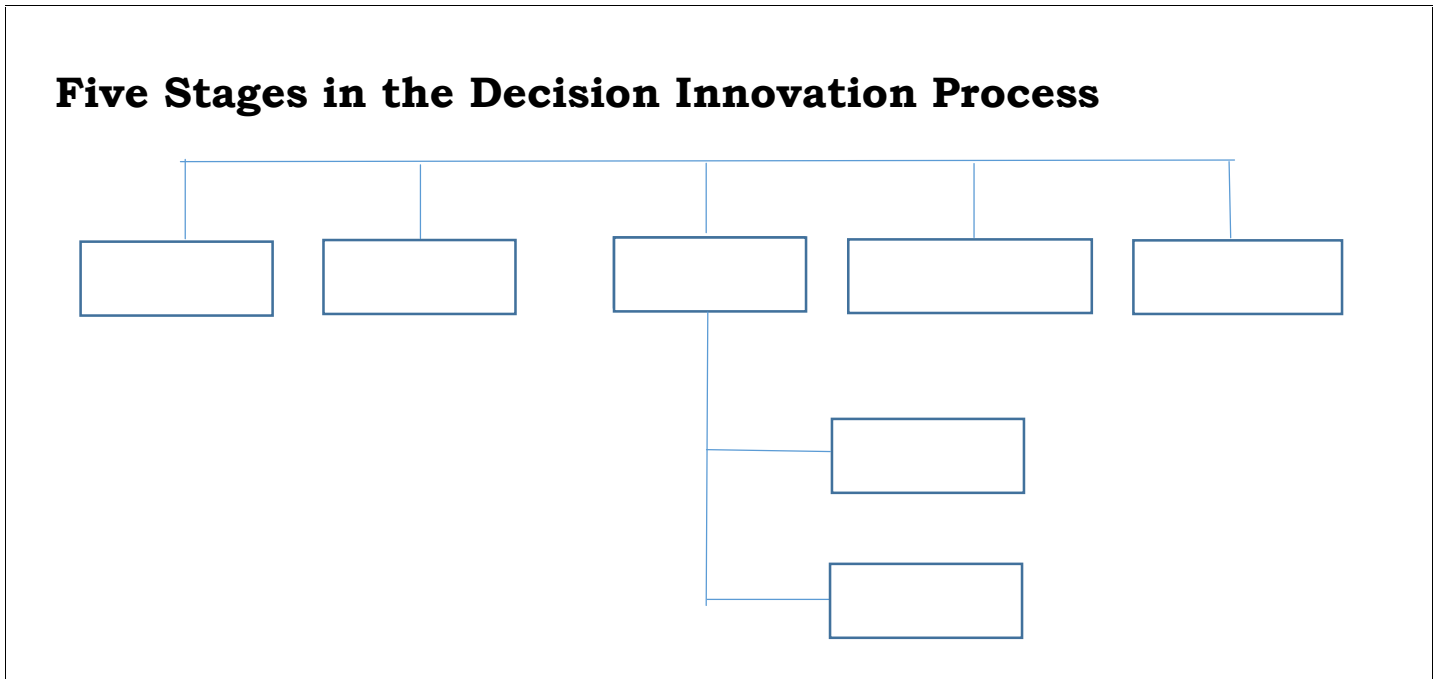
Persuasion: This occurs when the person adopts a positive position towards the innovation and looks for information in order to make decisions, translate messages, etc. People may even hunt for information from peers, in order to reduce the uncertainty of others. In some cases a person's attitude is important and may drive a person to adopt or refuse a particular innovation (Rogers, 2003).

Decision Making: At this stage an individual decides whether to reject or adopt the new technology (Di Benedetto, 2010); most individuals use the innovation to a limited extent before actually deciding to accept/refuse it. A refusal can occur during any phase of the decision-making process (Rogers, 1995). Rogers classifies the rejection into two types: active rejection occurs after the individual has used the innovation for a trial period whereas passive rejection, which is also referred to as non-adoption, occurs when an individual is not concerned with adopting the innovation in any way whatsoever.

Implementation: This occurs when a person puts the innovation into practice on a trial basis, which modifies the innovation (McGrath & Zell, 2001). Due to factors such as technical support during the commencement of an innovation, the idea is capable of being re-projected. Re-inventions offer benefits for the adopters, such as flexibility, which can decrease the amount of errors and stimulate innovations in varying environments. A person (decision-maker) may actively assist in the process of diffusion (Rogers, 1995).

Confirmation: During the confirmation phase, the person strengthens their commitment to the adoption. However, dissonance can be linked to the new idea. If a decision is taken to adopt the new idea, some risks may be involved that lead to conflict. At times, there may be discontinuance, or even a refusal of the entire idea, despite the initial adoption (Rogers, 2003). Similarly, Nutley et al. (2002) argue that “passage through the stages of the adoption process are influenced by prior conditions, such as previous practice and innovativeness, and also mediated by characteristics of the decision-making unit, the perceived characteristics of the innovation, the communication channels involved, and the role of change agents and opinion leaders in promoting an innovation”.

Figure 2: Diffusion of an innovation process



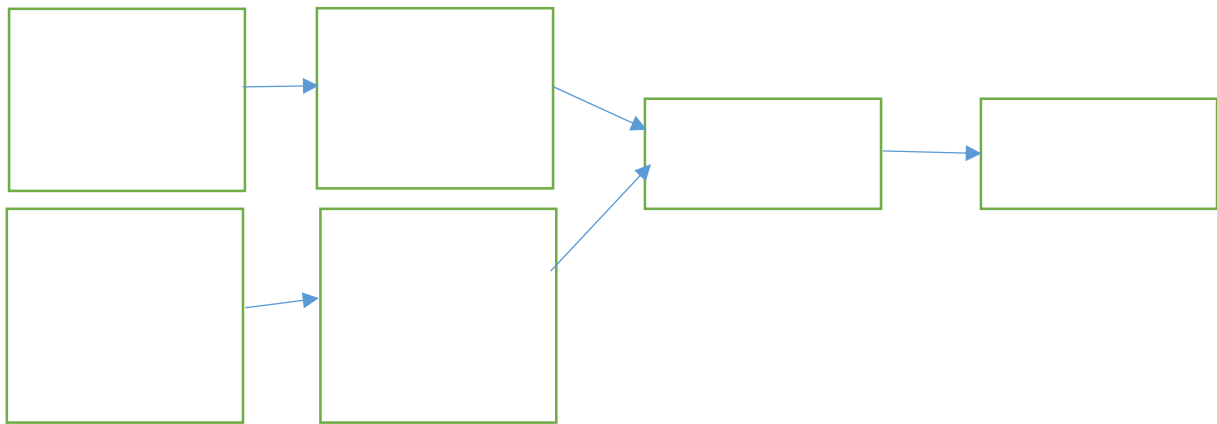
Source: Rogers (2003)

2.1.1.3 Theory of Reasoned Action

Theory of reasoned action (TRA) is a widely studied model from social psychology which is concerned with the determinants of consciously intended behaviors (Ajzen and Fishbein 1980; Fishbein and Ajzen 1975). According to TRA, a person's performance of a specified behavior is determined by his or her behavioral intention (BI) to perform the behavior, and BI is jointly determined by the person's attitude (A) and subjective norm (SN) concerning the behavior in question (Figure 3), with relative weights typically estimated by regression:

$$BI=A+SN$$

Figure 3: Theory of Reasoned Action (TRA)



Source: Fishbein and Ajzen(1975)

BI is a measure of the strength of one's intention to perform a specific behavior (Fishbein and Ajzen, 1975). A is defined as an individual's positive or negative feelings (evaluative affect) about performing the target behavior (Fishbein and Ajzen, 1975). Subjective norm refers to "the person's perception that most people who are important to him think he should or should not perform the behavior in question "(Fishbein and Ajzen, 1975)

According to TRA, a person's attitude toward a behavior is determined by his or her salient beliefs (bi) about consequences of performing the behavior multiplied by the evaluation (ei) of those consequences:

$$A = \sum bi ei$$

Beliefs (bi) are defined as the individual's subjective probability that performing the target behavior will result in consequence i .The evaluation term (ei) refers to "an implicit evaluation response" to the consequence (Fishbein and Ajzen, 1975). Equation (2) represents information processing view of attitude formation and change which posits that external stimuli influence attitude formation and change which posits that external stimuli influence attitudes

only indirectly through changes in the person's belief structure (Ajzen and Fishbein, 1980).

TRA theorizes that an individual's subjective norm (SN) is determined by a multiplicative function of his or her normative beliefs (nb_i), i.e., perceived expectations of specific referent individuals or groups, and his or her motivation to comply (mci) with this expectations (Fishbein and Ajzen, 1975):

$$SN = \sum nb_i mci$$

TRA is a general model, and, as such, it does not specify the beliefs that are operative for a particular behavior. Researchers using TRA must first identify the beliefs that are salient for subjects regarding the behavior under investigation. (Fishbein and Ajzen, 1975) suggest eliciting five to nine salient beliefs using free response interviews with representative members of the subject population .

A particular helpful aspect of TRA is its assertion that any other factors that influence behavior do so only indirectly by influencing A, SN or their relative weights . Thus, variables such as system design characteristics , user characteristics (including cognitive style and other personality variables), task characteristics , nature of the development or implementation process, political influences , organizational structure and so on would fall into this category , which Fishbein and Ajzen (Fishbein and Ajzen, 1975) refer to as "external variables" . This implies that TRA mediates the impact of uncontrolled environmental variables and controllable interventions on user behavior .

2.1.1.4 Technology Acceptance Model

With growing technology needs in the 1970's and increasing failures of system adoption in organizations, predicting system use became an area of interest for many researchers. However most of the studies carried out failed to produce

reliable measures that could explain system acceptance or rejection (Davis, 1989). In 1985, Fred Davis proposed the Technology Acceptance Model (TAM) in his doctoral thesis at the MIT Sloan School of Management (Davis, 1985). Davis's technology acceptance model (Davis, 1989; Davis, Bagozzi & Warshaw, 1989) is the most widely applied model of users' acceptance and usage of technology (Venkatesh, 2000).

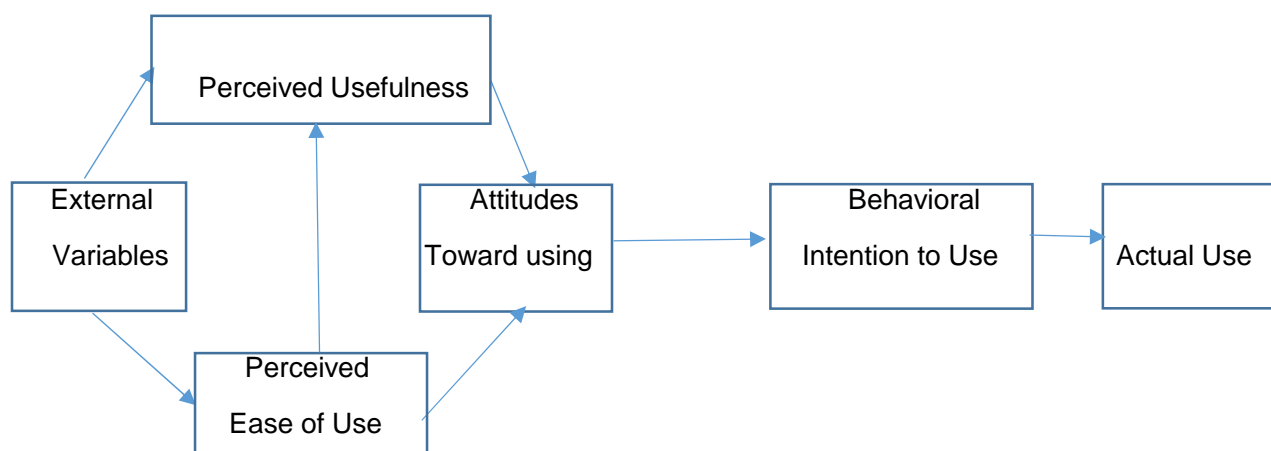
The goal of TAM is to provide an explanation of the determinants of computer acceptance in general, capable of explaining user behavior across a broad range of end-user computing technologies and user populations, while at the same time being both parsimonious and theoretically justified. A key purpose of TAM, therefore is to provide a basis for tracing the impact of external factors on internal beliefs, attitudes and intentions. TAM was formulated in an attempt to achieve these goals by identifying a small number of fundamental variables suggested by previous research dealing with cognitive and affective determinants of computer acceptance, and using TRA as a theoretical backdrop of modeling the theoretical relationships among these variables. (Fred, Richard & Paul, 1989)

TAM is one of the well-known models related to technology acceptance and use. TAM has proven to be a theoretical model in helping to explain and predict user behavior of information technology (Legris, Ingham, & Collette, 2003). TAM is considered an influential extension of theory of reasoned action (TRA), according to Ajzen and Fishbein (1980). Davis (1989) and Davis, Bagozzi, and Warshaw (1989) proposed TAM to explain why a user accepts or rejects information technology by adapting TRA. TAM provides a basis with which one traces how external variables influence belief, attitude, and intention to use. Two cognitive beliefs are posited by TAM: Perceived usefulness and Perceived ease of use.

According to TAM, one's actual use of a technology system is influenced directly or indirectly by the user's behavioral intentions, attitude, perceived

usefulness of the system, and perceived ease of the system. TAM also proposes that external factors affect intention and actual use through mediated effects on perceived usefulness and perceived ease of use. (Davis, 1989). External variables typically included system characteristics, user training, user participation in design, and the nature of the implementation process (Venkatesh & Davis, 1996)

Figure 4: Technology Acceptance Model (TAM)



Source: Davis (1989) User acceptance of Computer Technology

Davis (1985) concluded that people tend to use or not to use a system to the extent that they believe it will help them perform their job better (perceived usefulness), and also that the efforts required to use a system can directly affect system usage behavior (perceived ease of use). More formally, Davis (1985) defined perceived usefulness and perceived ease of use as follows:

Perceived usefulness: The degree to which an individual believes that using a particular system would enhance his or her job performance.

Perceived ease of use: The degree to which an individual believes that using a particular system would be free of physical and mental effort.

The TAM suggests that attitude would be a direct predictor of the intention to use technology, which in turn would predict the actual usage of the technology.

Davis and Venkatesh (1996) however, suggest that attitude would not play a significant role but rather that perceived ease of use and perceived usefulness would determine the intention to use a technology.

Venkatesh (2000) adds that the TAM is a good model but that it does not help understand and explain the acceptance of a technology in a way that promotes the development of a strategy having a real impact on the usability and acceptance of the technology. He therefore proposed a modified model. To the TAM, he added determinants to perceived ease of use, that is, four personal anchoring factors (computer self-efficacy, perception of external control, anxiety towards computers, and computer playfulness) and two adjustment-based factors that develop with experience (perceived enjoyment and objective usefulness). These anchors represent general beliefs about computers and their use. Furthermore, they would seem to play a critical role in the formation of the perceived ease of use of a new system and would be independent of the latter.

I. Technology Acceptance Model II

Venkatesh and Davis (2000) introduce the Technology Acceptance Theory II model, which synthesizes the earlier hard work and reflects a demand for the amplification of the model. Technology Acceptance theory II defines variables such as perceived usefulness, perceived ease of use, subjective norm, image, job relevance, output quality, result demonstrability, experience and voluntariness. Subjective norm refers to the impact of social environment on behavior intention. Image is concerned with the extent to which the use of innovation can enhance social status. Job relevance is a persons' understanding of how the system is associated with his /her job. Output quality denotes how well a person thinks that the system performs its tasks. Result demonstrability is concrete results from the innovation. Finally, voluntariness refers to the extent to which people can adopt the innovation, without seeing it as compulsory.

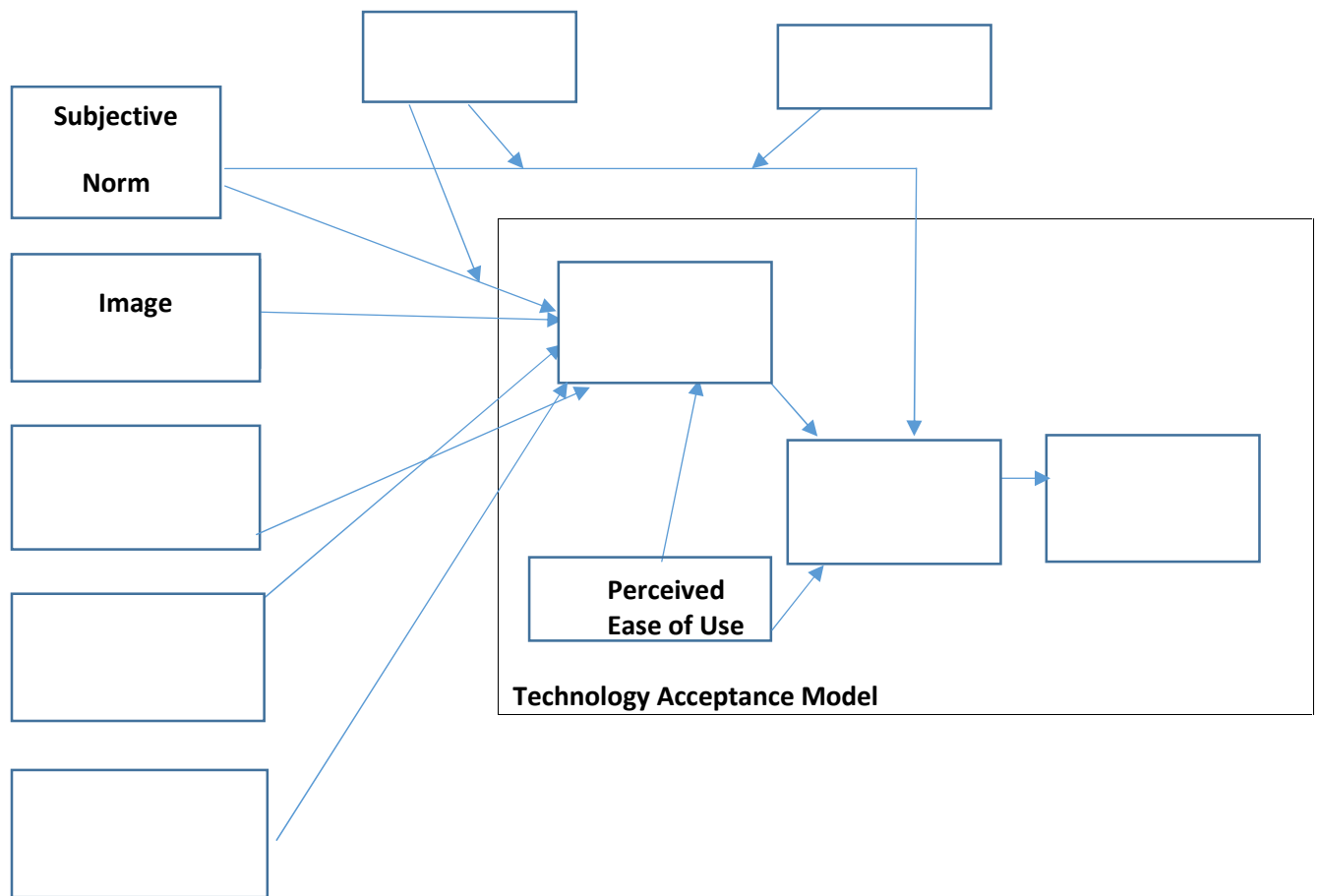


Figure 5: The technology Acceptance Theory II

Source: Venkatesh, V. & Davis, F.D. (2000)

II. The technology Acceptance Theory III

The technology Acceptance Theory III model, established by Venkatesh and Bala (2008), brings in additional variables such as experience, computer self-efficacy, perceptions of external control, computer anxiety and computer playfulness, perceived enjoyment and objective usability. Perceived enjoyment is concerned with an individual's pleasure with a system's usage, regardless of the performance outcomes.

2.1.1.5. Theory of Planned Behavior (TPB)

The TPB links behavior and beliefs and incorporates perceived behavioral control (PBC); it is considered to be one of the most predictive theories of persuasion (Ajzen, & Fishbein, 2006). The theory states that attitude, as related to behavior, subjective norms, and PBC, has an influence on behavioral intention and behavior. Nevertheless, due to the limitations of the TRA, Ajzen (1985) suggests planned behavior theory.

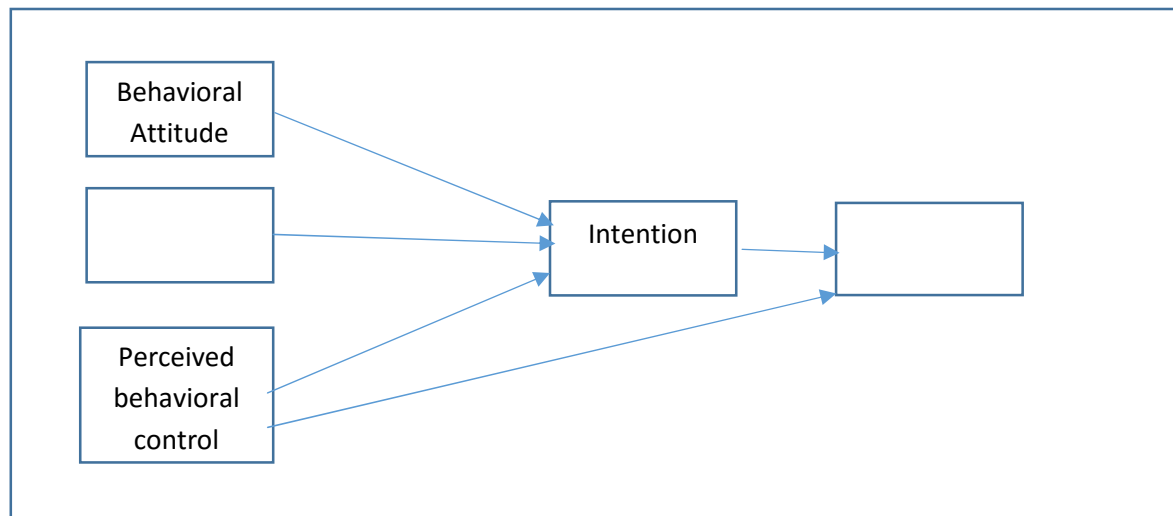


Figure 6: Theory of Planned Behavior

Source: Ajzen (1991) the theory of planned behavior

2.1.2 E-Commerce

In the emerging global economy, e-commerce and e-business has increasingly become a necessary component of business strategy and a strong catalyst for economic development. The integration of information and communications technology (ICT) in business has revolutionized relationships within organizations and those between and among organizations and individuals. Specifically, the use of ICT in business has enhanced productivity, encouraged greater customer participation, and enabled mass customization, besides reducing costs (Andam, 2003).

Electronic commerce refers generally to all forms of transaction relating to commercial activities, involving both organization and individuals that are based up on the processing and transmission of digitized data, including text, sound, and visual images. It also refers to the effects that the electronic exchange of commercial information may have on the institutions and processes that support and govern commercial activities (Diwan et al, 2000).

Electronic commerce or e-commerce refers to a wide range of online business activities for products and services (Andam, 2003). It also pertains to any form of business transaction in which the parties interact electronically rather than by physical exchanges or direct physical contact. E- Commerce is usually associated with buying and selling over the Internet, or conducting any transaction involving the transfer of ownership or rights to use goods or services through a computer-mediated network. Though popular, this definition is not comprehensive enough to capture recent developments in this new and revolutionary business phenomenon. A more complete definition is: E-commerce is the use of electronic communications and digital information processing technology in business transactions to create, transform, and redefine relationships for value creation between or among organizations, and between organizations and individuals (Andam, 2003).

2.1.2.1 Types of E-Commerce

According to Andam (2003) the major different types of e-commerce are: business-to-business (B2B); business-to-consumer (B2C); business-to-government (B2G); consumer-to-consumer (C2C); and mobile commerce (m-commerce).

B2B e-commerce: B2B e-commerce is simply defined as e-commerce between companies. This is the type of e-commerce that deals with relationships between and among businesses. About 80% of e-commerce is of this type, and

most experts predict that B2B ecommerce will continue to grow faster than the B2C segment.

B2C e-commerce: Business-to-consumer e-commerce, or commerce between companies and consumers, involves customers gathering information; purchasing physical goods (i.e., tangibles such as books or consumer products) or information goods (or goods of electronic material or digitized content, such as software, or e-books); and, for information goods, receiving products over an electronic network. B2C e-commerce reduces transactions costs (particularly search costs) by increasing consumer access to information and allowing consumers to find the most competitive price for a product or service. B2C e-commerce also reduces market entry barriers since the cost of putting up and maintaining a Web site is much cheaper than installing a —brick-and-mortar structure for a firm.

B2G e-commerce: Business-to-government e-commerce or B2G is generally defined as commerce between companies and the public sector. It refers to the use of the Internet for public procurement, licensing procedures, and other government-related operations. This kind of e-commerce has two features: first, the public sector assumes a pilot/leading role in establishing e-commerce; and second, it is assumed that the public sector has the greatest need for making its procurement system more effective.

C2C e-commerce: Consumer-to-consumer e-commerce or C2C is simply commerce between private individuals or consumers. This type of e-commerce is characterized by the growth of electronic marketplaces and online auctions, particularly in vertical industries where firms/businesses can bid for what they want from among multiple suppliers. It perhaps has the greatest potential for developing new markets.

2.1.4. Information Technology and Airline Industry

New era of information technology brought multiple advantages to the mankind. In particular, the Internet allowed us to search for goods in stores

right from our apartments and find best offers in several clicks. More and more people all over the world prefer to shop online and order all kinds of products on different websites. Apart from consumer goods sales and e-tailing, online travelling sector has been booming in recent years and the number of users booking their vacations on the Web has been steadily growing. Historically, air tickets sales represented a big part of the travel industry and their share is even more significant when talking about online travelling (Egor, 2014).

According to the forecast of International Air Transport Association (IATA), the annual number of airline passengers worldwide will reach 3.6 billion in 2018, which makes it approximately 9 million people holding an air ticket and boarding a plane every day all over the world. Over the last few years, digital environment has significantly shaped the relationship between primary ticket sellers, i.e. airlines, intermediaries (e.g. travel agencies or other ticket resellers) and their customers – air passengers. One of the consequences of that process is that online electronic ticket booking started dominating as the main channel of shopping for flights in the end of the 2000s (Chao et al., 2009). To say more, that process of transition towards e-ticketing is being fueled by the convenience, time saving and cost efficiency of paperless air tickets. Those travelers, who are too busy to purchase flight tickets via phone, in physical ticket offices or over the counter, benefit from online bookings in the first place (Chao et al., 2009). Such shift emphasizes the importance of the Internet for the future of travel and air ticket industries, especially in developing countries.

2.2 Empirical Review

2.2.1 Online travel booking

Amaro and Duarte (2012) point out in their review that, similar to the case of purchasing of physical goods, such antecedents as personal and channel characteristics have been studied in a travel shopping context. In this regard attitudes towards online travel booking, determinants of the decision process for purchasing travel on the Web and the relationship between those variables were scrutinized. In their work Hongxia Peng and his co-authors systematize existing findings in online travel shopping and group them in accordance with 3 aggregated stages of consumer behavior model (Peng, Xu & Chen, 2013).

In the first group findings related to information search behavior are revealed. The importance of online travel search is also emphasized by Conyette (2012), whose conceptual framework identifies search and planning behavior as a significant predictor of further booking behavior. In particular, the framework states that online travel booking intention is determined not only by attitudes towards the Internet and online searching or functional, innovation and other needs of travelers (Vogt and Fesenmaier, 1998), but also by beliefs about travel websites and travel agents (Conyette, 2012).

The second group of findings summarized by Peng et al. (2013) presents the determinants of online travel booking behavior in a purchase stage. They state that online booking intention rests upon the characteristics of the website such as usefulness, convenience and security, characteristics of online vendors, especially their reputation and prices, and personal characteristics of consumer himself, including age, gender, educational background and Internet experience. (Peng et al., 2013). The last part of the described review deals with customers' loyalty formation after booking.

2.2.2 Online air tickets purchase behavior

According to the review of Amaro and Duarte (2012), even though the studies related to online travel industry are numerous, academic papers focusing on specific travel product categories, and in particular air tickets, are less abundant in quantity.

Beldona, Morrison & O'leary (2005) distinguish between high and low complexity travel products and states that online shopping motivations of these two categories are distinctively different. In a classification based on complexity air tickets belong to low complexity travel products, have more tangible parameters and thus are easier to evaluate (Beldona et al., 2005). Importantly, online booking motivations of this type of products are driven by transactional objectives and customers' desire to derive greater value. So accordingly, such purchases are associated with lower price and effective rewards programs (Beldona et al., 2005).

The research conducted by Sam and Tahir (2009) examines website quality factors as antecedents of online purchase intention of air tickets. The findings reveal that website design, usability and information quality along with trust and empathy can give additional advantage to airlines, air ticket sellers or service providers and trigger customers online purchase intention (Sam and Tahir, 2009). The notion of empathy implies personalization and individualized attention to the customer. It intertwines with the dimension of trust and altogether enhances the value and therefore strengthens buyers' intention to purchase. Additionally, it is proposed that trust and empathy play a mediating role between website characteristics and final purchase intention (Sam and Tahir, 2009).

Similar approach was chosen by Bukhari, Ghoneim, Dennis & Jamioom (2013), who added to the above mentioned factors several other constructs such as system quality, airline reputation and price perception.

Kim, Kim & Leong (2005) and Kim et al. (2009) focus on one of the factors influencing travelers' behavior in purchasing airline tickets on the Internet –

perceived risk. At first, the correlation between different dimensions of risk was established and their impact on customers' willingness to buy air tickets online was analyzed (Kim et al., 2005). Later it was discovered that in overall risk of air ticket purchase security dimension is the most important. In addition it was found out that taking into consideration web vendor's reputation and recommendations from personal network are preferred as risk-reduction strategies when buying air tickets online (Kim et al., 2009).

A more practical approach was undertaken by Toh, Dekay& Raven (2012). The surveys were conducted in order to examine passengers' perception of online air ticket sales as well as factors affecting their actual behavior when making choices and buying air tickets on the Web. Firstly, the role of the Internet as a dominating channel to search flights and favorable attitude of passengers towards online travel agents were acknowledged (Toh et al., 2012). Secondly, it was reported that, logically, leisure travelers are more likely to book air tickets on the web than business travelers, who most of the time rely on corporate travel planners (Toh et al., 2012). Expectedly, lower fares were revealed to be one of the main motives driving passengers' behavior. That is why due to the convenience of the Internet for comparing flights on the basis of price ticket buyers opt for online ticket sales channels. Interestingly, women were found out to be much more aggressive low price seekers rather than men (Toh et al. 2012).

2.3 Conceptual Framework and Hypothesis

Based on the Empirical review, this research tried to combine the factors seen as hindrance to the online ticket purchase behavior by Ethiopian airlines customers such as, perceived usefulness, perceived ease of use, perceived convenience and perceived trust. Fig:7 below presents the conceptual frame work of the study.

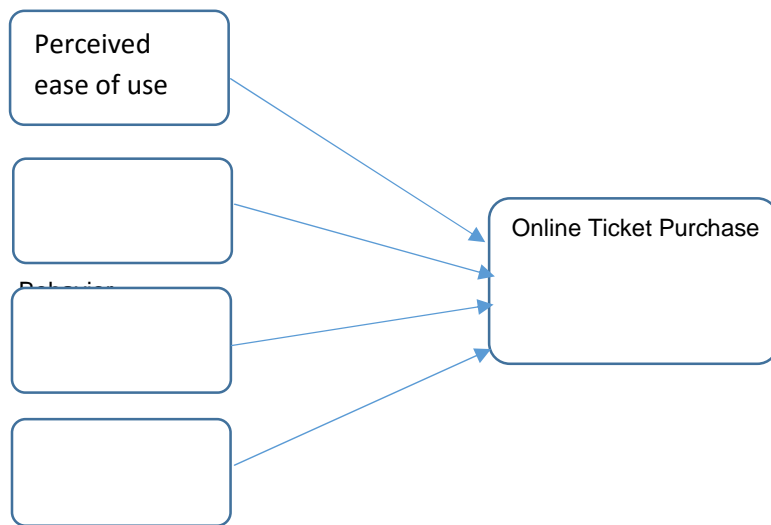


Fig: 7 Conceptual frame work

In line with the above mentioned research frame work the following hypothesis are formulated. The hypothesis tried to identify the relationship between online ticket purchase behavior and the determinants.

H1- There is a significant positive relationship between perceived ease of use and online ticket purchase behavior.

H2- There is a significant positive relationship between perceived usefulness and online ticket purchase behavior

H3- There is a significant positive relationship between perceived convenience and online ticket purchase behavior

H4- There is a significant positive relationship between perceived trust and online ticket purchase behavior

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

The methodology adopted in this study provided a design that empirically addresses the identified research problem and recaps how the study results can be replicated, generalized and employed in prediction for effective decision making. The methodology adopted described the population, sampling procedure, instrumentation and data collection approach used. It allowed for description of the influence of the determinants on online ticket purchase behavior.

3.1 Research Design

According to Kothari (2004), descriptive research sets out to describe and to interpret what it is. It aims to depict the state of affairs as it exists and to describe some aspect of a phenomenon, i.e., the status of a given phenomenon. It can help to understand a topic and lead to causal analysis. This research tried to identify what factors are preferred by travelers to purchase their flight online on the Airline's website and the reasons behind that. Hence the features of this study really match with descriptive research; descriptive research was the appropriate method of design. Besides, the study used explanatory research to examine the online ticket purchase behavior determinants.

Survey studies ask large numbers of people questions about their behaviors, attitudes, and opinions. "Survey studies are appropriate to ask people what they say, think and do" (Kothari, 2004), some surveys merely describe what people say, think and do. Other survey studies attempt to find relationships between the characteristics of the respondents and their reported behaviors and opinions. Since, the purpose of the research was to identify the factors that affect the choice of purchase air tickets online through the Airline's website, survey study was practical for this study. Moreover, because the number of population is very large, survey study suited for this thesis.

3.2 Population and Sampling Techniques

The target population of this study was passengers of Ethiopian airlines international network that used Addis Ababa Bole International Airport as their origin/departure or transit station. Addis Ababa International Airport, as an international travel hub, has about 95 daily scheduled flights to depart each day. Since Addis Ababa airport is a hub for Ethiopian Airlines operation, it has a good pool of different passengers from different areas of the world with diverse cultural background and interest. Therefore the population of the study is believed to be the reflection of Ethiopian Airlines international passengers as a whole.

Systematic sampling is a statistical method involving the selection of elements from an ordered sampling frame. It is a type of probability sampling method in which sample members from a larger population are selected according to a random starting point and a fixed, periodic interval (Cochran, 1977).

During night times and early in the morning, Ethiopian airlines flight schedule is tight and enough number of passengers are transited, arrived or departed in the Airport. To avoid bias and got enough mix of passengers from different classes, a modified version of systematic sampling which is time interval method was used for the study. The questionnaire was systematically distributed to international passenger routes at Addis Ababa International Airport in every two minutes. All of the sample respondents are online consumers and they are familiar with online shopping channel.

3.3 Sample Size

It would be ideal to take large sample to have a strong and sound conclusion. In airline industry, the number of passengers in the hub of an operator like Ethiopian Airline is too many. And it becomes necessary to limit the sample size based on available time and resource. Passengers using Addis AbabaBole International Airport also have minimum time to fill a questionnaire.

Thus the total sample size was 384 which were calculated as follows:

$$n = \frac{Z^2 * P * (1-P)}{e^2}$$

Where n = sample size

Z = confidence level

Z = 95%

e = confidence interval

P = 0.5

P = the largest possible proportion

e = 5% = 0.05

According to Krejcie and Morgan,(Krejcie& Morgan, 1970) confidence level is 95% so that Z will be 1.96. For maximum variability, p and 1-p will be 0.5.

384 Questionnaires were administered face to face for those passengers at Addis Ababa Bole international Airport departure, arrival and transit areas within the three weeks' time. Out of the total sample, 328 responses were secured with a response rate of 85.4%.

3.4 Data Collection Approach

3.4.1 Source of Data

The sources of data used in this research was comprised of both primary and secondary data. According to Malhotra (2005), primary data are originated by the researcher for the specific purpose of addressing the problem at hand. Even if obtaining can be expensive and time consuming, primary data, being the most significant was gathered through structured questionnaires.

Secondary data are data that are collected for some purpose other than the problem at hand (Malhotra, 2005). Secondary data are usually collected from journals, existing reports and statistics by government agencies and authorities. The secondary data for this particular study were collected from different published and unpublished sources. Some of these are marketing journals, company manuals, company and industry reports and research carried out by different university scholars. These data help to create better comprehension for the title study. As a general rule stated by Malhotra (2005), “examination of available secondary data is a prerequisite to the collection of primary data. Start with secondary data and proceed to primary data only when the secondary data sources have been exhausted or yield managerial returns.” Thus, this study employed both primary and secondary data.

3.4.2 Instruments of Data Collection

Questionnaire survey technique was used to collect data and the questions were self-constructed questions. The questionnaire employs the typical form of fixed-response alternative questions that require the respondent to select from a predetermined set of answers to every question. According to Malhotra and Birks (2003), this survey approach is the most common method of primary data collection in marketing research and the advantages are simple administration and data consistency.

The questionnaire employed the Likert scaling technique. It is a widely used rating scale which requires the respondents to indicate a degree of agreement or disagreement with each of a series of statements or questions (Albaum, 1997). This rating scale is easy to construct and administer and respondents readily understand how to use the scale (Malhotra and Birks, 2003).

The 5 points Likert scale used in this study was odd numbered; balanced (the number of favorable and unfavorable categories is equal). The balanced state helps to obtain an objective data; has non-forced choices “Neutral” to improve the accuracy of the data as proposed by (Hasnich, 1992).

The questionnaire contained two sections; Section one has questions on demography (age, gender, educational background, reason for travel ,class of travel and channel for air ticket purchase) and section two included questions that would support the research questions which were the effect of perceived ease of use, perceived usefulness, perceived convenience and perceived trust on online ticket purchase behavior and the answers were “strongly agree”, “agree”, “disagree”, “strongly disagree” and “neutral”. Since most of the travelers speak English, The questionnaire was developed in English language.

3.5 Methods of Data Analysis

The data collected were analyzed using SPSS version 20 with descriptive statistics: Frequency, mean and standard deviation and inferential statistics: correlation, regression and ANOVA

$$\mathbf{y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + e}$$

Where:

y = Online ticket purchase behavior

b₁ = beta weigh or regression coefficient of perceived ease of use

x₁= Perceived Ease of use

b₂ = beta weigh or regression coefficient of perceived usefulness

x₂ = Perceived Usefulness

b₃ = beta weigh or regression coefficient of perceived convenience

x₃ = Perceived Convenience

b₄ = beta weigh or regression coefficient of perceived trust

x₄ = Perceived Trust

3.6 Reliability and Validity

3.6.1 Reliability

In this study reliability of the primary data is very important because the study mainly depend upon the respondents' opinion. According to Saunders, et al. (2007), reliability refers to the extent to which data collection techniques or analysis procedures will yield consistent findings. Furthermore, reliable observations yield the same results on other occasions and by other observers. It must also be apparent how the raw data was interpreted.

Reliability of a scale is often assessed by test-retest reliability or by internal consistency (Zikmund, Babin,Carr&Griffin, 2010). The first indicator, the test-retest, is assessed by administering the same scale of measure to the same respondents on two various occasions, and computing the correlation between the two scores obtained (Zikmund et al., 2010). The second indicator, the internal consistency, is the degree to which the items constituting the scale are all measuring the same underlying attribute (Zikmund et al., 2010).

Thus, This research used the most popular test of inter-item consistency reliability that is the Cronbach's coefficient alpha. The coefficient of internal consistency provides an estimate of the reliability of measurement and is based on the assumption that items measuring the same construct should correlate (Kimberline and Winterstein, 2008). Reliabilities less than 0.6 are considered to be poor, those in the 0.7 range, acceptable, and those over 0.8 good. The closer the reliability coefficient gets to 1.0, the better. The alpha of a scale should be greater than .700 for items to be used together as a scale. Therefore minimum 0.700 coefficient alpha values accepted to finalize the item reliability Alkhattabi (2014) cited Sekaran (2000).

As per shown in Table 1,all dimensions have appropriate reliability.

Table 1: Instrument Reliability Test

Determinants	Number of Items	Cronbach's Alpha
--------------	-----------------	------------------

Perceived Ease of use	7	0.888
Perceived usefulness	6	0.905
Perceived convenience	7	0.841
Perceived Trust	9	0.719
Online ticket purchase behavior	4	0.844
Over all reliability	33	0.941

Source: Own Survey,2016

3.6.2 Validity

According to Kumar (2005), validity is the ability of an instrument to measure what it is designed to measure. He also states that validity refers to the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration. There are two forms of validity tests that are frequently mentioned in the research literatures: external and internal validity. The external validity of research findings is the data's ability to be generalized across persons, settings, and times; while internal validity confirms the ability of a research instrument to measure what it is purposed to measure (Cooper & Schindler, 2008).

Thus, a number of different steps were taken to confirm the validity of the study. Such as; different literatures were thoroughly examine to ensure the content and construct validity of the questionnaire, questionnaire has been pre tested by the respondent before distributing the entire sample to the respondent. A pilot test has been made from 30 respondents. Moreover,the data was collected from a reliable source, from Ethiopian airlines international passengers who have experienced the online ticket booking service.

3.7 Ethical considerations

In order to keep the confidentiality of the data given by respondents, the respondents were not required to write their name and assured that their responses will be treated in strict confidentiality. The purpose of the study was disclosed in the introductory part of the questionnaire. Furthermore, the researcher tried to avoid misleading or deceptive statements in the questionnaire. Lastly, the questionnaires were distributed only to voluntary participants.

CHAPTER FOUR

DATA PERSENTATION AND ANALYSIS

This chapter is dedicated to describe the major findings and analysis of the sample population based on the data gathered from the respondents of Ethiopian Airlines international passengers. The determinants of online ticket purchase behavior analysis of the sample data was gathered through structured questionnaires and the questionnaires were distributed to 384 international passengers at Bole International Airport departure, arrival and transit lounges in three weeks' time .Only 344 questionnaires were filled and returned back to the researcher. Of these, 16 were discarded due to invalid or incomplete data entries. Thus, the samples comprising of a total of 328 respondents were used for analysis with 85.4% response rate. As a 30% response rate is considered acceptable (Sekaran, 2003), the response rate of 85.4 % for this study was very good. The data obtained from the respondents were summarized using frequency distribution by using SPSS version 20. The summarized data was analyzed. Finally, interpretations were made to demonstrate the effect of perceived ease of use, perceived usefulness, perceived convenience and perceived trust on online ticket purchase behavior.

4.1 Demographic Characteristics of the Respondents

As shown in Table 2, out of the surveyed passengers, 68.6% were male whereas 31.4% were female

Table 2: Gender of Respondents

	Frequency	Percent
male	225	68.6
female	103	31.4
Total	328	100.0

Source: Own Survey, 2016

As shown in Table 3, Among 328 total numbers of respondents the highest majority of respondents were between the age group of 18-30 that is 95 respondents which was 29% of the total. The second and third highest

respondents were between the age group of 51-60 and 41-50 that are 83(25.3%) and 72(22%) respectively. On the contrary only 9 (2.7%) of the respondents are above the age group of 61 years. Therefore, it indicates that majority of young and middle aged people tend to purchase air tickets online.

Table 3: Age of Respondents

	Frequency	Percent
18-30	95	29.0
31-40	69	21.0
41-50	72	22.0
51-60	83	25.3
above 61 Years	9	2.7
Total	328	100.0

Source: Own Survey, 2016

In terms of educational level, Table 4, only 10.7% of the passengers were high school graduates and below, whereas 89.3% of the passengers were above high school (i.e., undergraduate, post graduates and PhD holders). This implies that majority of online air ticket purchase participants are people with higher educational background.

Table 4: Educational Level Statistics

	Frequency	Percent
Elementary education	3	.9
High School	32	9.8
Diploma	38	11.6
Degree	87	26.5
Graduate degree	122	37.2
PHD	46	14.0
Total	328	100.0

Source: Own Survey,2016

As shown in Table 5, 55.2% of the passengers were travelling for business, whereas 31.4% of the passengers were travelling for Tourism/ leisure.34

passengers (10.4 %) were traveling for Relatives /Friends Visit , the rest 3% of passengers were travelling for other reasons (i.e. conference , training , pilgrimage ,etc.)

Table 5: Reason for today’s travel

	Frequency	Percent
Business	181	55.2
Tourism /Leisure	103	31.4
Relatives /friends Visit	34	10.4
Others (Specify)	10	3.0
Total	328	100.0

Source: Own Survey, 2016

In relation of class of travel, table 6, 56.4% passengers were travelling in economy class and 43.6 % were travelling in Business. This finding indicated that the respondents’ class of service that they were travelling slightly weights towards Economy class.

Table 6: Class of travel

	Frequency	Percent
Business/cloud nine	143	43.6
Economy	185	56.4
Total	328	100.0

Source: Own Survey, 2016

Regarding how passengers plan to book their travel ticket, the finding indicated that majority of the respondents 141 (43%) preferred to book directly from ET’s website. Whereas 79(24.1%) and 50(15.20%) of them preferred to book through searching engines and referral sites respectively .the remaining 17.7 % passengers selected travel agencies and on offices as their booking channels. Therefore, it is possible to say that passengers who are aware of the online booking service are willing to book online.

Table 7: How to book travel tickets

	Frequency	Percent
directly from ET 's website	141	43.0
through searching engines	79	24.1
through referral sites	50	15.2
travel agent	40	12.2
direct office	18	5.5
Total	328	100.0

Source: Own Survey, 2016

4.2 Quantitative Analysis: Descriptive Statistics

4.2.1 Perceived Ease of use

As it is shown in Table 8, the survey shows that passengers of Ethiopian have rated perceived ease of use as high. Learning to purchase air tickets online is easy on Ethiopian website had a highest mean value of 4.04 with significant standard deviation of .947 value. In fact, purchasing air tickets online is clear and interesting are rated higher, whereas online ticket purchase requires little effort and overall easiness of online ticket purchase are rated moderate. Generally the result indicated that respondents do regard the website easy.

Table 8: Elements of Perceived Ease of use

	N	Mean	Std. Deviation
Learning to purchase air tickets online	328	4.04	.947

would be easy for me			
Purchasing air tickets online is clear	328	3.95	.852
Purchasing air tickets online is interesting	328	3.85	.897
I would find it easy to complete the online booking transaction	328	3.82	.971
The Website uses simple and clear language	328	3.82	.971
Online ticket purchase requires little effort from me	328	3.71	1.045
Over all I find online ticket purchase easy on Ethiopian Airlines website	328	3.73	.903
Valid N (listwise)	328	3.83	

Source: Own Survey,2016

4.2.2 Perceived Usefulness

The findings shown in table 9, indicated that online ticket purchase is less time consuming than other ticketing options and it is faster than visiting the airlines ticket office & travel agency with mean of 3.98 & 3.97 and with significant standard deviations of .981 & 1.016 respectively. Online ticket purchase is more accessible than other ticketing options also had a mean of 3.89 with significant standard deviation. Over all online ticket purchase usefulness was also reported as of great influence on the air travel needs shown by a mean of 3.95

Table 9: Elements of Perceived usefulness

	N	Mean	Std. Deviation
--	---	------	----------------

Using Ethiopian Airlines website enables me to perform air ticket purchase transaction quickly	328	3.61	1.002
Online ticket purchase is less time consuming than other ticketing options	328	3.98	.981
Booking ticket purchase is faster than visiting the airlines ticket office and travel agency	328	3.97	1.016
Online ticket purchase is more accessible than other ticketing options	328	3.89	.943
Online ticket purchase improves my effectiveness in purchasing air ticket	328	3.81	.828
Over all I find online ticket purchase useful for my air travel needs	328	3.95	.877
Valid N (listwise)	328	3.86	

Source: Own Survey,2016

4.2.3. Perceived Convenience

As it is shown in Table 10, the survey shows that passengers of Ethiopian had rated their perception about online ticket purchase convenience above average. In fact questions like Online ticket purchase allows air ticket purchase anytime and anywhere were rated higher (3.95 & 3.91) respectively , whereas availability of convenient toll-free numbers and webpages for customers for clarification of problems and availability of qualified support staffs 24/7(including holidays and non-working hours) were rated lower(3.31 &3.22) respectively .

Table 10: Elements of Perceived Convenience

	N	Mean	Std. Deviation
Online ticket purchase allows me to do my air ticket purchase anywhere	328	3.91	.981
Online ticket purchase allows me to do my air ticket purchase anytime	328	3.95	.961
Online ticket purchase gives me convenience in purchasing my air ticket	328	3.86	.911
Online ticket purchase will make it easier for me financially to purchase my air ticket	328	3.63	1.038
There are convenient toll-free numbers and webpages for customers for clarification of problems	328	3.31	.993
There are qualified support staffs 24/7(including holidays and non-working hours	328	3.22	.906
The airline's online ticket sales accepts many international debit and credit cards	328	3.52	.986
Valid N (listwise)	328	3.62	

Source: Own Survey,2016

4.2.4. Perceived Trust

As shown in table 11, respondents feeling of trust (security, privacy and risk) about the website were rated high. Specifically, the airline's concern for the privacy and security of transactions of its booking website users, the passengers' confidence that the airline will not use personal information for other purposes and passengers' confidence that the private information that were provided on the web site will be secure were rated higher, whereas risk issue like online ticket purchase would not involve more financial risk (i.e. fraud, hard to refund) when compared with more traditional ways of booking was rated moderate .

Table 11: Elements of Perceived Trust

	N	Mean	Std. Deviation
The website present enough online security for users	328	3.92	.675
I feel safe and secure when I am transacting ticket purchase	328	3.89	.740
I am confident that the private information that I provide on the web site will be secure	328	3.99	.750
Overall, the Online booking site is a safe place to send out sensitive information	328	3.97	.814
I am confident that the airline will not use my personal information for other purposes without my authorization	328	4.02	.721
I think the airline shows concern for the privacy and security of transactions of its booking website users	328	4.03	.714
I think the online booking site only collect personal data that are necessary for the activity	328	3.98	.746
I feel the risk associated with purchase air ticket online is low	328	3.84	.915
Online ticket purchase would not involve more financial risk (i.e. fraud, hard to refund) when compared with more traditional ways of booking	328	3.50	1.125
Valid N (listwise)	328	3.90	

Source: Own Survey, 2016

4.2.5. Online ticket purchase behavior

Table 12 clearly indicated that the data collected under online ticket purchase behavior is skewed towards agree. Passengers' preference to purchase air ticket via online and intention to purchase air ticket via online in the future rated 3.93 and 3.92 mean value respectively. The statement regarding passengers' expectation that their online ticket purchase behavior will increase in the future rated with the highest mean value of 3.94. This indicates that respondents are interested to increase their online ticket purchase behavior from Ethiopian Airlines website.

Table 12: Elements of Online ticket purchase behavior

	N	Mean	Std. Deviation
I used to purchase my air ticket via online	328	3.51	1.173
I intend to purchase my air ticket via online in the future	328	3.92	.935
I prefer to purchase my air ticket via online	328	3.93	.912
I expect that my online ticketpurchase behavior will increase in the future	328	3.94	1.030
Valid N (listwise)	328	3.82	

Source: Own Survey, 2016

4.3 Test of Assumptions

4.3.1 Linear Relationship

Online ticket purchase behavior is assumed to be linearly related with the four determinants of online ticket purchase behavior; meaning the dependent variable online ticket purchase behavior is assumed to be impacted with changes in perceived ease of use ,perceived usefulness, perceived convenience and perceived trust (the independent variables). The scatter plot figure(Appendixb) show that there is linear relationship between the variables.

4.3.2 Normality test

A common rule of thumb test for normality is to get skewness value <2 and kurtosis value <6 when data is normally distributed (Mardia, 1970). Thus normality analysis for the 5 variables was conducted. As table 13 shows all variables have skewness value less than 2 and kurtosis value less than 6. That means the data is normally distribute

Table 13:Skewness and Kurtosis of variables

Construct	Skewness	Kurtosis
Perceived Ease of use	-.459	.518
Perceived Usefulness	-.591	.270
Perceived Convenience	.050	-.411
Perceived Trust	.145	-.325
Online ticket purchase behavior	-.784	.862

Source: Own Survey,2016

4.3.3 Multicollinearity

One should check for the problem of multicollinearity which is present if there are high correlations between some of the independent variables. The study checks this with the Variance Inflation Factor (VIF) which calculates the influence of correlations among independent variables on the precision of regression estimates. The VIF factor should not exceed 10, and should ideally be close to one (Cohen 1988). Table 14 shows there is no multicollinearity exist.

Tolerance is an indicator of how much of the variability of the specified independent variable is not explained by the other independent variables. If this value is very small (less than 0.10), it indicates that the multiple correlation with other variables is high, suggesting the possibility of multicollinearity (Cohen 1988). This also confirms the absence of multicollinearity among the variables.

Table 14: Multicollinearity

Multicollinearity	
Model	Collinearity Statistics

	Tolerance	VIF
Perceived Ease of Use	.469	2.132
Perceived Usefulness	.361	2.768
Perceived Convenience	.439	2.276
Perceived Trust	.760	1.316

Source: Own Survey, 2016

4.4 Quantitative Analysis: Inferential Statistics

4.4.1 Correlation Analysis

The correlation matrix with the dependent and independent variables allows the researcher to assess the strength of the association between the variables of interest. The correlation matrix for the Overall sample is provided below.

Table 15: Correlation between Online ticket Purchase behavior and its determinants

		Ease of use	Usefulness	Convenience	trust	purchase
Ease of use	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	328				
Usefulness	Pearson Correlation	.706**	1			
	Sig. (2-tailed)	.000				
	N	328	328			
Convenience	Pearson Correlation	.629**	.723**	1		
	Sig. (2-tailed)	.000	.000			
	N	328	328	328		
Trust	Pearson Correlation	.401**	.461**	.438**	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	328	328	328	328	
Purchase	Pearson Correlation	.592**	.661**	.480**	.520**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	328	328	328	328	328

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Own Survey, 2016

To determine the existence and level of association, the researcher used bivariate correlation. Pearson's correlation coefficient falls between -1.0 and

+1.0, indicates the strength and direction of association between the two variables (Field, 2005). The Pearson's correlation coefficient (r) was used to conduct the correlation analysis to find the level and direction of the relationships between the dimensions of online ticket purchase behavior and the four online ticket purchase determinants. The classification of the correlation coefficient (r) is as follows: 0.1 – 0.29 is weak; 0.3 – 0.49 is moderate; and > 0.5 is strong (Field, 2005). The bivariate correlation of a two-tailed test confirm the presence of statistically significant difference at probability level $p < 0.01$ i.e. assuming 99% confidence interval on statistical analysis. Hence all the dimensions have a positive relationships to online ticket purchase behavior which is significant even at the $p < 0.01$ level.

Perceived usefulness has the highest correlation of ($r=0.661$), followed by Perceived Ease of use ($r=0.592$), Perceived trust ($r=0.520$) and perceived convenience ($r=0.480$). That means, all the service quality indicators have positive correlation effect upon online ticket purchase behavior though their degree of effect vary.

Moreover, the intercorrelations between online ticket purchase determinants also show a positive and significant relationship. The highest intercorrelation exists between Perceived usefulness and perceived convenience ($r=0.723$) followed by the intercorrelation between perceived usefulness and perceived ease of use ($r=0.706$)

4.4.2 Regression Analysis

The researcher tested the four hypothesis set out to be tested at the beginning based on the regression analysis. The researcher believes that the airline can use the result of the regression analysis for future decision making via identifying which determinants of online ticket purchase behavior got the highest effect on online ticket purchase behavior.

Table 16: Model Summary

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.723 ^a	.523	.517	.60903

Source: Own Survey, 2016

a. Predictors: (Constant), Perceived Ease of Use, Perceived Usefulness , Perceived Convenience & Perceived Trust

b. Dependent Variable: Online ticket purchase behavior

The result of regression analysis on the independent variables (Perceived Ease of Use, Perceived usefulness, Perceived Convenience & Perceived Trust) on the dependent variable (Online ticket purchase behavior) indicates existence of positive and statistically significant effect on online ticket purchase behavior. The model summary table R-Square value is 0.523 which means that 52.30% of the online ticket purchase behavior was explained by the variation of the four online ticket purchase determinants.

Table 17: ANOVA

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	131.562	4	32.890	88.673	.000 ^b
	Residual	119.807	323	.371		
	Total	251.369	327			

Source: Own Survey,2016

a. Dependent Variable: Online ticket purchase behavior

b. Predictors: (Constant), Perceived Ease of Use, Perceived Usefulness , Perceived Convenience & Perceived Trust

The ANOVA tells us whether the model, overall, results in a significantly good degree of prediction of the outcome variable.(Field, 2005) . Since the significance result on the ANOVA table is 0.000 which is $p < 0.05$, the regression analysis proved the presence of a good degree of Prediction. The

contribution of each dimension can be seen from the results of multiple regressions in the coefficient table.

Table 18: Coefficients

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1(Constant)	-.762	.303		-2.513	.012
Percieved ease of use	.289	.069	.236	4.214	.000
Percieved usefulness	.512	.072	.454	7.101	.000
Perceived convenience	-.144	.073	-.113	-1.959	.051
Percieved Trust	.517	.086	.265	6.023	.000

Source: Own Survey,2016

a. Dependent Variable: Online ticket purchase behavior

The beta value on the coefficient table indicates level of effect each dimension has on the dependent variable online ticket purchase behavior. The highest beta level is for Perceived Trust of $\beta = 0.517$ and $p < 0.010$. This means that the more the passengers trust the online booking service of the airline the more customers become online booking users. Hence, if assumed other things being constant and perceived trust increased by one unit, it increases online ticket purchase behavior by 0.517. This accepts the hypothesis that perceived trust positively affects online ticket purchase behavior (Hypothesis 4).

Similarly, this paper finds a significant connection between Perceived usefulness and online ticket purchase behavior with $\beta = 0.512$ and $p < 0.010$. Which means that when other things are constant if perceived usefulness increased by one unit, online ticket purchase behavior increases by 0.512. This accepts hypothesis 2 that perceived usefulness positively affects online ticket purchase behavior.

According to the results of the study, perceived ease of use has positive relationship with online ticket purchase behavior with $\beta = 0.289$ and $p < 0.010$. That means that when other things are constant if perceived ease of use increased by one unit, online ticket purchase behavior increase by 0.289. Therefore, these results of the study validate Hypothesis 1.

Regarding the relationship between perceived convenience and online ticket purchase behavior, The results of the study shows no significant connection between perceived convenience and online ticket purchase behavior with $\beta = -0.144$ and $p > 0.050$. Based on this result, Hypothesis 3 failed to be accepted and the study did not find significant connection between perceived convenience with online ticket purchase behavior.

4.4.3 Summary of Hypothesis Result

There were four major hypothesis constructed in this study to answer the research questions. The following table briefly showed the summary of the overall outcome of the research hypothesis.

Table 19: Summary of results of the Research Hypothesis

Hypothesis	Result	Reason
H1: There is a significant positive relationship between perceived ease of use and online ticket Purchase behavior	H1:Accepted	$\beta = 0.512, p < 0.05$
H2: There is a significant positive relationship between perceived usefulness and online ticket purchase behavior	H2:Accepted	$\beta = 0.289, p < 0.05$
H3:There is a significant positive relationship between perceived convenience and online ticket purchase behavior	H3:Failed to accept	$\beta = -0.144, p > 0.05$
H4: There is a significant positive relationship between perceived trust and online ticket purchase behavior	H4:Accepted	$\beta = 0.517, p < 0.05$

Source: Own Survey, 2016

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Based on the outputs this chapter provides summarize findings, make conclusive remarks and formulates recommendations.

5.1 Summary of Findings

The frequency statistics shows that majority of the respondents were male (68.6%) and most of the respondents were in the age group between 18 and 30 (29%) moreover, they are graduated with first degree and above. Besides, the majority of respondents were travelling for business reason (55.2%). With regards to the travel class of the respondents, economy class takes the lion share (56.40%) and Business class travelers were (43.6%).

Furthermore respondents were asked what service outlet they used to purchase their air ticket and majority of the respondents used the airline's website to purchase their tickets (43%) followed by through searching engines 24.1% and 15.2% purchased through referral sites.17.7% of respondents used Airline's own ticket offices and travel agencies to purchase their tickets .

Passengers of Ethiopian airlines prefer the online booking channel mainly due to trust, usefulness and website ease of use respectively. With regards to Ethiopian airlines website ease of use most of the respondents indicated that learning to purchase air tickets online is easy. Furthermore they also said that purchasing air tickets online is clear and easy.

In relation to consumers' perception of the website usefulness majority of them said that onlineticket purchase is less time consuming and also faster than visiting the airlines ticket office & travel agency. They also revealed that online ticket purchase is more accessible than other ticketing options.

With respect to perceived convenience towards Ethiopian airlines website, target respondents reveled that ticket purchase allowed them to do air ticket

purchase anytime and anywhere .On the contrary they indicated limitation on availability of convenient toll-free numbers and webpages for customers for clarification of problems and availability of qualified support staffs 24/7(including holidays and non-working hours).However, the correlation coefficient between perceived convenience and online ticket purchase behavior indicated that there is no correlation between them.

With regards to online consumers trust towards Ethiopian airlines website, majority of the respondents believe that the website is trustworthy, risk free and reliable. However some respondents consider online ticket purchase involves more financial risk (i.e. fraud, hard to refund) when compared with more traditional ways of booking.

Finally target respondents indicate that they are interested to increase their online ticket purchase behavior from Ethiopian Airlines website.

5.2 Conclusion

The objective of this study was to find out about determinants of online ticket purchase behavior. Theoretically, the outcome of this research provides empirical evidence about the determinants of online ticket purchase behavior: perceived ease of use, perceived usefulness, and perceived trust .Therefore, this study adds value to the literature by empirically linking a list of determinants to the dependent variable.

This study tried to validate that, perceived ease of use, perceived usefulness, perceived convenience and perceived trust have an effect on online ticket purchase behavior of Ethiopian Airlines passengers.

The findings indicated that perceived trust has the highest mean score (3.90), followed by perceived usefulness (3.86), and perceived ease of use (3.83). Since

all the mean results showed room for improvement, the airline should work more to improve all dimensions.

Moreover, the result of multiple regression indicates no significant connection between perceived convenience and online ticket purchase behavior since p-value is not less than 0.05. Therefore, based on the study the factors that have greater impact on online air ticket purchase behavior are Perceived Trust, Perceived usefulness and Perceived ease of use. These findings showed similar results with the research conducted by Samand Tahir (2009) and Kim et al (2005).

Hence, as the study shows, when increasing online booking number as a goal in an airline; focusing on passengers' perceived trust on the airline's website is an appropriate starting point, followed by Perceived usefulness and Perceived ease of use of passengers about the website.

5.3 Recommendations

In light of the above summary of findings and conclusions, below are recommendations for the airline to enhance the number of online bookings

-) Customers having doubt on trust issues of the website should be a priority concern. The website should have enough online security. The airline should make sure that the website booking service does not involve any kind of risk
-) The feeling of customers that the risk associated with purchase air ticket online is high should be dealt that they should be encouraged to purchase air ticket online and reassured
-) The airline should make sure that its website enables customers to perform air ticket purchase transaction quickly. Otherwise, customers will be forced to navigate to other options

-) The airline should make sure that online ticket purchase improves customers' effectiveness in purchasing air tickets. This is because online ticket purchase can be quite stressful, confusing and may cause the customer to cancel the booking process.
-) The airline should make sure that the website provides detailed information which is necessary and helpful. This kind of information would make the ticket purchase process effortless and attractive.

5.4 Direction for future Research

The limitations of the study were only the analysis of the four online ticket purchase determinants were studied , a small sample size of 384 passengers and only from Ethiopian Airlines International flights, other airlines passengers were not surveyed.

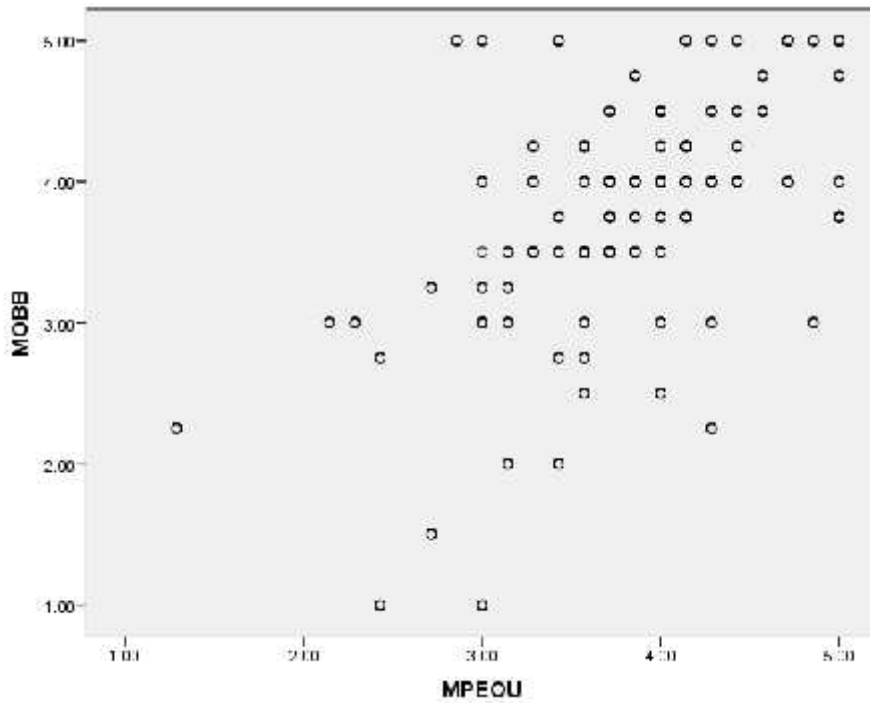
Hence making generalization to the industry level might be questionable. Further study on same by addressing the limitations of the study might give better insight to the subject under study.

Appendex-A

Appendex-B

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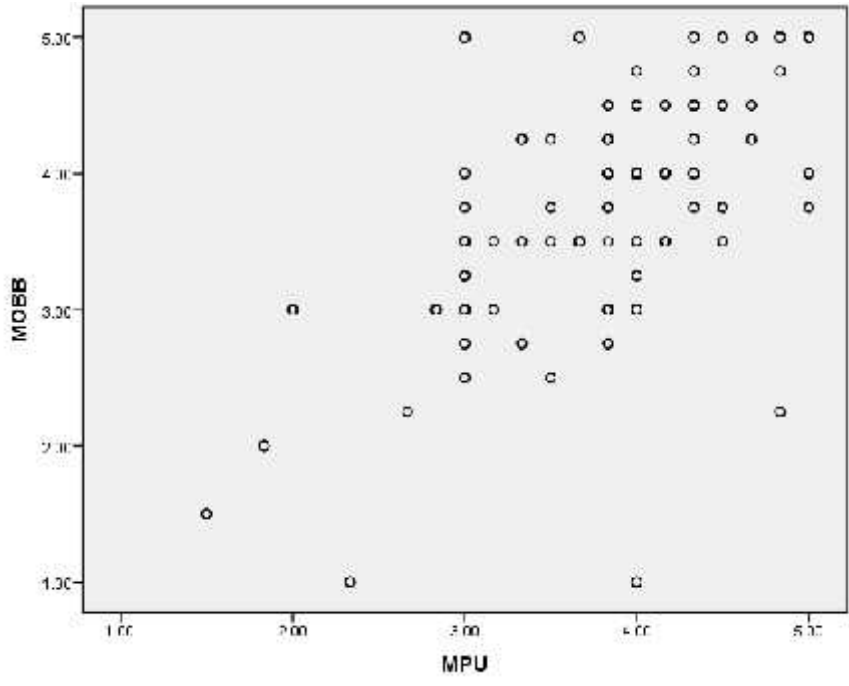
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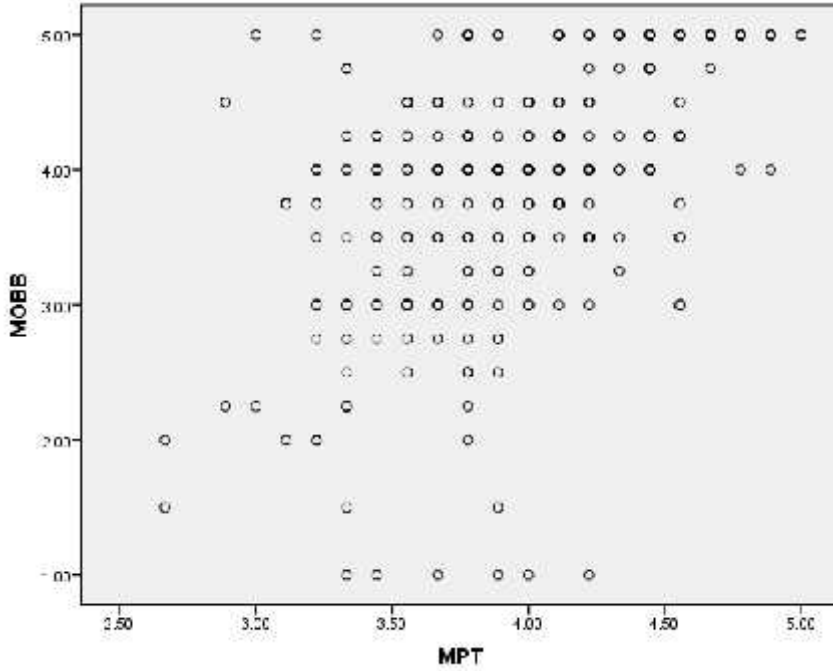
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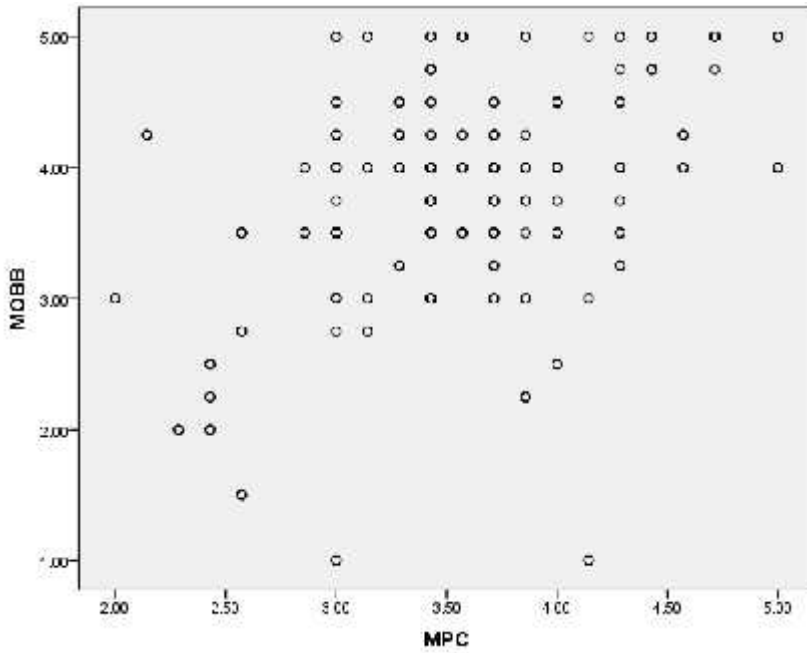
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DESCRIPTIVES VARIABLES=MPEOU MPU MPC MPT MOBB
 /STATISTICS=MEAN STDDEV MIN MAX KURTOSIS SKEWNESS.



1. By specifying the origin /destination
2. By specifying the airline domain name

3. other option (Specify) _____

Part II:-

Please indicate the extent to which you agree/disagree with the following statements about Ethiopian Airlines Online booking Service.

Strongly Disagree carries the least weigh of 1 while Strongly Agree carries the highest weight of 5. Please put v mark accordingly.

Online ticket purchase preference determinants	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Perceived ease of use					
1.Learning to purchase air tickets online would be easy for me					
2.Purchasing air tickets online is clear					
3.Purchasing air tickets online is interesting					
4. I would find it easy to complete the online ticket purchase transaction					
5.The Website uses simple and clear language					
6.Online ticket purchase requires little effort from me					
7. Over all I find online ticket purchase easy on Ethiopian Airlines website					
	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Perceived usefulness					
1. Using Ethiopian Airlines website enables me to perform air ticket purchase transaction quickly					
2. Online ticket purchase transaction is less time consuming than other ticketing options					
3. Online ticket purchase transaction is faster than visiting the airlines ticket office and travel agency					

4. Online ticket purchase is more accessible than other ticketing options					
5. Online ticket purchase improves my effectiveness in purchasing air ticket.					
6. Over all I find onlineticket purchase useful for my air travel needs					
	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Perceived convenience					
1.Online ticket purchase allows me to do my air ticket purchase anywhere					
2.Online ticket purchase allows me to do my air ticket purchase anytime					
3. Onlineticket purchase gives me convenience in purchasing my air ticket					
4. Onlineticket purchase will make it easier for me financially to book my air ticket					
5.There are convenient toll-free numbers and webpages for customers for clarification of problems					
6.There are qualified support staffs 24/7(including holidays and non-working hours					
7. The airline's online ticket sales accepts many international debit and credit cards					
	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Perceived trust -Security/privacy /risk					
1.The website present enough online security for users					
2.I feel safe and secure when I am transacting ticket purchase					
3. I am confident that the private information that I provide on the web site will be secure					
4. Overall, the Online booking site is a safe place to send out sensitive information					

5. I am confident that the airline will use my personal information for other purposes without my authorization					
6. I think the airline shows concern for the privacy and security of transactions of its booking website users					
7. I think the online booking site only collect personal data that are necessary for the activity.					
8. I feel the risk associated with purchase air ticket online is low.					
9. Online ticket purchase would involve more financial risk (i.e. fraud, hard to refund) when compared with more traditional ways of booking.					

Part III:- Online ticket purchase behavior

The following statements are related to your behavior about using Ethiopian Airline website for online ticket purchase. You can select any number between 1 (strongly disagree) and 5 (strongly agree):

	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Online ticket purchase behavior					
1. I used to purchase my air ticket via online					
2. I intend to purchase my air ticket via online in the future.					
3. I prefer to purchase my air ticket via online					
4. I expect that my online ticket purchase behavior will increase in the future					

Thank You!!

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