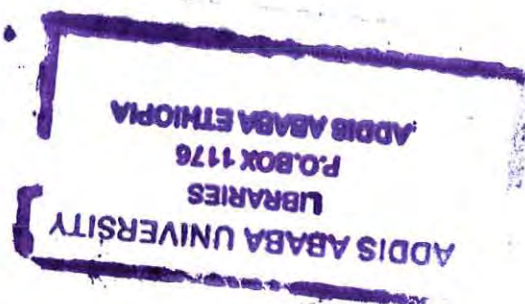


ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

FACTORS AFFECTING E-MARKETING PRACTICE:
THE ETHIOPIAN AIRLINES E-TICKETING
PERSPECTIVE

BY:
ESSAYAS TAYE



JUNE 2010
ADDIS ABABA

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PERSPECTIVE**

**A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR MASTERS OF
ARTS DEGREE IN MARKETING MANAGEMENT EDUCATION**

**BY:
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ADDIS ABABA**

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES
DEPARTMENT OF BUSINESS EDUCATION

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ACRONYMS

- EAL – Ethiopian Airlines
- ETC – Ethiopian Telecommunication Corporation
- GDS – Global Distribution System
- IATA – International Air Transport Association
- SITA – Specialist in air transport communication and IT solutions
- SPSS – Statistical Package for Social Sciences

ABSTRACT

The purpose of this study was primarily to analyze the factors affecting e-marketing practice at Ethiopian Airlines (EAL) in e-ticketing perspective. With the advent of new internet and related technologies, new business opportunities have been created for business firms entailing new ways to conduct business. Therefore, by believing that e-ticketing contributes to the competitiveness of EAL in the globalization era, while providing ease to the passengers to obtain their tickets online, the study was designed to assess the contribution of e-ticketing to the success of EAL. To this end, descriptive survey method was employed. Questionnaires and semi-structured interviews were among the data collection tools. The sources of data include, 200 passengers were contacted to obtain their experiences and factors affecting buying e-tickets. Additionally, 3 personnel/staff of the EAL from marketing department were interviewed. Judgmental sampling technique was employed to select the EAL flight routes and convenience sampling techniques were used to select the passenger respondents, whereas purposive sampling was employed to select the personnel of the EAL. The collected data were analyzed using percentage, mean-scores, standard deviation, correlation and regression analyses. The major findings include: Only 19.5% of the respondent passengers gained benefits from using the company's website; factors affecting e-ticketing practice at EAL from the highest to lowest: Security, Trust, Perceived Usefulness, Infrastructure, Ease of Use and Behavioral Control; respondent passengers perceived that the infrastructure facilities of the EAL were inadequate for practicing e-ticketing; most of the domestic customers didn't use e-ticketing at the EAL; and finally, the most important benefits of practicing e-ticketing system were identified as flexibility in usage, fraud and theft prevention, cost-saving from paper ticket stock and easier processing of financial data. Based on these findings, conclusions were drawn and some feasible recommendations are forwarded.

Keywords: *e-Marketing, e-Ticketing, Ethiopian Airlines, Service Marketing.*

Chapter One

Introduction

1.1 Background of the Study

Now-a-days, the marketing activities are changing faster and faster in terms of size and speed with the advent of internet technology. Cognizant of this fact, changing the types of products and service that can be sold, *pari passu*, alters the market for products and services in terms of place and time. Against this backdrop, within a relatively short time frame, the internet and World Wide Web have moved from a theoretical concept to an established part of our daily lifestyle (Groucutt & Griseri, 2004).

Internet has had a far greater impact on changing marketing in particular and business activities in general. That is not only the way in which products and services can be marketed that has changed, but new products and services are being developed. Therefore, its change has seen a significant shift in the balance of power between businesses and consumers. Today's effective marketing is performed via a two-way communication channel. Thus, online marketing communications are moving toward interactions between individual recipients and consumers rather than being directed from a marketing organization to masses of consumers (Owen and Humphrey, 2009).

One can safely say that electronic net-works will allow people to transcend the barriers of time and distance and take advantage of global markets and business opportunities soon. To this effect, the transaction conducted between the two parties can be facilitated by electronics media. Traditional marketing applied on this electronic technology is called e-marketing (Judy et al., 2000).

It is a well established fact that e-marketing has many different uses for different organizations. According to Watson et. al, (2002), E-marketing entails utilizing existing and emerging communication and data networks to impart personalized and uninterrupted communication between the firm and its customers and to provide value above traditional networks. However, to

implement e-marketing in the company has its own challenges and disadvantages, such as financial constraint and issues related to human resources, among others.

It is an axiom that the Airlines industry is among the industries that use e-marketing very widely in their day-to-day activities. E-marketing contributes a lot to the expansion of the Airlines industries marketing distribution channels and impacting customer and business market behavior (Sheth and Sharma, 2005). Cognizant of this fact, many Airlines firms have started developing their marketing activities using this technology particularly the e-ticketing or electronics ticketing. According to IATA's (www.IATA.org) report, the United Airlines was the first airline to issue electronic tickets in 1994 and the British Midland Airways for the first time started internet booking airlines in 1996.

Considering the colossal role of this technology on the overall performance of their activities and following the experiences of the aforementioned Companies, many other European, American and developing countries' airlines also adopted e-ticketing. This has become an additional source of market distribution through increasing service efficiency and saving costs. Certain global organizations like IATA regulate airlines service activities and transaction by stipulating rules and standards for which each member should strictly follow. And hence, one of the operating standards for a given organization to provide quality service has become the introduction of e-ticketing. In line with this, every IATA's member Airlines has changed the issuance of paper tickets and replaced them by e-ticket (www.IATA.org).

An e-ticketing model allows authorized travel agents to transmit ticketing information directly to the airline's database, enabling passengers to check-in and board the flight without showing a paper ticket. It substitutes the paper-based flight coupons by an electronic ticket image that is stored in the airline's database (Xie and Shugan, 2001). With an e-ticket, details of the passengers' journey are stored in an airline database, and are retrieved using a unique lookup code. This means that there is no need to issue a physical ticket to the passenger; instead the code can be delivered via the Internet or over the phone. This e-ticketing practice is also implemented at the EAL as it is a member of the IATA.

The EAL is a commercial airline, which was founded in 1946 with an inaugural flight to Cairo in a war surplus air plane. Currently, the EAL serves 56 international and 16 domestic destinations

in the transport of passengers and cargo. In addition, more than half of its international destinations are in Africa (Ethiopian Airlines: Companies profile, 2010). Moreover, during the 2007-08 fiscal year, the company generated an annual revenue of 9.2 billion ETB which was 34% higher than that of the previous year. (Ethiopian Airlines: Annual Report, 2007-08).

The EAL started e-marketing in 2002 in pursuant to the agreement with Amadeus. This Company made a system distribution for airline to implement booking on the web but later it was changed. Later in the year 2006, Saber Company installed a new software for EAL 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 Airlines: Selamta Magazine, 2007).

As it has been mentioned earlier, the EAL is a member of the IATA, and hence, it is governed by the rules and regulations of this international organization. To this end, the EAL implemented e-ticketing as of February 2006. However, the EAL is at the bottom of the list of member countries in implementing e-ticketing. A cursory investigation of the EAL annual performance report 2007/08 reveals that only few passengers were using e-ticketing in the Company's website by themselves due to a confluence of factors. A research that helps weed out the factors that are contributing to the poor performance of e-ticketing has not yet conducted in Ethiopia. Therefore, the purpose of the study is to identify factors affecting e-marketing practice at the EAL e-ticketing perspective.

1.2 Statement of the Problem

In the airlines industry e-marketing contributes a lot to expanding the industries marketing distribution channels. In the same token, at the global market e-marketing has been practising and is growing at a dramatic pace. In addition, it has significantly changing customer and business market behaviour. E-marketing is based on the use of information technology (IT). Specially, 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. Against this backdrop, the EAL is expected to shift its focus towards understanding the factors that affect the utilization of e-marketing, specifically in the e-ticketing perspective to exist in the market and to get better profit.

Research conducted by Davis (1993) and Venkatesh (2000) depicted that on-line buying has

impact on consumers' perception in terms of usefulness, easy of use, perceived risk, trust and convince. Another research by Tan (2005) indicated that e-marketing is highly influenced by the level of infrastructure a given Airlines has. Similarly, (Joseph, 2005) found that transaction security, especially for credit card transactions, and protection of customer data are as important as website and network security. However, those researchers didn't come across research conducted by Ethiopians on e-marketing. Hence, the researcher believes that this research study would contribute to filling the existing research gap. To this end, the following basic research questions were set:-

1. What factors are highly affecting e-marketing practices associated to e-ticketing?
2. How do passengers perceive about buying e-tickets through EAL website?
3. What are the benefits of practicing e-marketing at the EAL?

1.3 Objectives of the study

The main objective of the study was to identify factors affecting e-marketing practice at the EAL e-ticketing perspective in Addis Ababa offices.

The specific objectives of the study were:

1. To identify factors affecting e-marketing practices related to e-ticketing in the case of EAL;
2. To examine how passengers perceive about e-ticketing service of EAL;
3. To explore the benefits of e-marketing at EAL.

1.4 Significance of the study

This study is believed to have the following significance. It would:-

- Provide valuable information for the decision makers in order to plan or to modify e-marketing at EAL;
- Help the company to identify its problems and to take corrective measures;
- Help the employees of EAL to actively engage themselves in promoting the development of e-ticketing as well as e-marketing;

- Enhance the researcher theoretical and practical knowledge towards e-marketing;
- Motivate other researchers to perform study on the so far untouched areas of e-marketing.

1.5 Scope of the study

The objective of this research was to analyze factors affecting e-marketing at the EAL e-ticketing perspectives. The outcomes of this research are believed to address needs of customers, industries and other stakeholders in the field. However, it would be quite difficult to assess all e-marketing activities in the EAL. Considering some constraints such as time limitation and financial setbacks as well as to make the study more manageable, the researcher was forced to delimit the scope of the study only to the EAL e-ticketing system at Addis Ababa. Moreover, the passengers conducted were also only from the flights in the month of March 2010 at EAL based on time line of the research.

1.6 Limitations of the study

There is no iota of doubt that any research requires sufficient time, up-to-date information, reference materials, finance, and the like, the researcher also encountered some of these challenges to carry out this research. Especially, this study was carried out along the passengers' flight time. Thus, the time would be very short to fill the questionnaire. In addition, as the company started online sales recently, the researcher faced problems of getting full information on the matter. Moreover, lack of adequate secondary sources such as published manuals, online database sources and adequate library service were some of the major limitations. However, the researcher tried its best to manage those problems and was able to produce this research report in its present format.

1.7 Organization of the Study

This research paper is divided into five chapters. The first chapter deals with the background, statement of the problem, objectives of the study, significance of the study, scope of the study, limitation of the study and definition of key terms. Chapter two provides overview of related literature. Chapter three describes research methodology there had been used in this research. Chapter four presents data analysis and presentation. The last chapter present the summary of findings, conclusion and recommendations.

1.8 Operational Definition of Terms

Factor: A cause or determiner that influences the practice of e-marketing

Marketing: as the process by which companies create value for customers and build strong customer relationship in order to capture value from customer return.

E-marketing: The result of information technology applied to traditional marketing.

E-ticketing: is a paperless electronic document used for ticketing passengers, particularly in the commercial airline industry.

Perception: is defined as the process by which an individual selects, organizes, and interprets stimuli into a meaningful and coherent picture of the world.

Credit Card: The card that can be used by the cardholder to make purchases or obtain cash advances using a line of credit extended by the financial institution that issued the card.

Debit Card: An electronic card issued by a bank which allows bank clients access to their account to withdraw cash or pay for goods and services.

Chapter Two

Literature Review

2.1 E-marketing: An Overview

E-marketing can be viewed as a new modern business practice associated with buying and selling goods, services, information and ideas via the Internet and other electronic means. Available sources reveal that definitions of electronic marketing vary according to each author's point of view, background and specialization. Smith and Chaffey (2005) define e-marketing as achieving marketing objectives through applying digital technologies. While Strauss and Frost (2001) define e-marketing as: The use of electronic data and applications for planning and executing the conception, distribution and pricing of ideas, goods and services to create exchanges that satisfy individual and organizational goals. The above reviews define e-marketing in different ways. Consequently, it seems that the concept of e-marketing is based on the traditional definition of marketing as integrated with the electronic media.

On the other hand e-marketing uses the Internet as a platform for allowing firms to adapt to the needs of customers, reduces transaction costs, and allows customers to move from time-based and location-based behaviors toward non-temporal and non-locational behaviors (Watson et al. 2002). It explains that e-marketing may result in more effective performance such as better quality, greater customer satisfaction, and better corporate decision-making.

The real value of e-market is that it allows a company to provide customers with a range of actual benefits including convenience, information, and interactivity, while technology leadership in service firms is a significant variable that enhances organizational knowledge and improves overall service quality in the eyes of the customer (Ghosh, 1998) cited in Yang (2006). Furthermore, the above researchers show that the ability to customize is one of the key benefits of implementing e-market into service delivery.

As stated above, Internet-based e-market provides organizations with a powerful means to interact with its customers on one-to-one basis and make direct and personalized contact with each customer and a personal feeling to be interface. Therefore, all the above literature attempted to

explain and underscore the need for any business organization to perform on e-marketing to stay and excel in the market.

2.1.1 E-marketing in Airlines industry

The emergence of the internet in the mid-1990s as well as the development of Intranet and Extranets forced airlines to refocus their strategy on technological innovations in order to enhance their competitiveness (Buhalis, 2004). Therefore, this seems the driving force behind the Airlines industry to identify the internet as a major opportunity to tackle distribution costs and re-engineer the structure of the industry.

According to Yang (2001), Airlines were the earliest practitioners of e-market and airline ticket sales now consists the largest portion of all product sales made online. It shows that online sales bring greater benefits to airlines than to any other industry. Besides, using ICT tools made the industry re-engineer itself as it introduces a number of ICT-enabled innovations such as electronic/paperless tickets, transparent and clear pricing led by proactive and retroactive yield management.

Airline industry is one of the most competitive industries within the economic environment. Within industry's boundaries actors have more or less recently and with significantly different patterns of action undertaken efforts to achieve an integration of the internet platform and its applications (Porter, 1980). It also works on strategic advantage framework for the effects of electronic commerce and its potential for competitive advantage in airline industry as shown below.

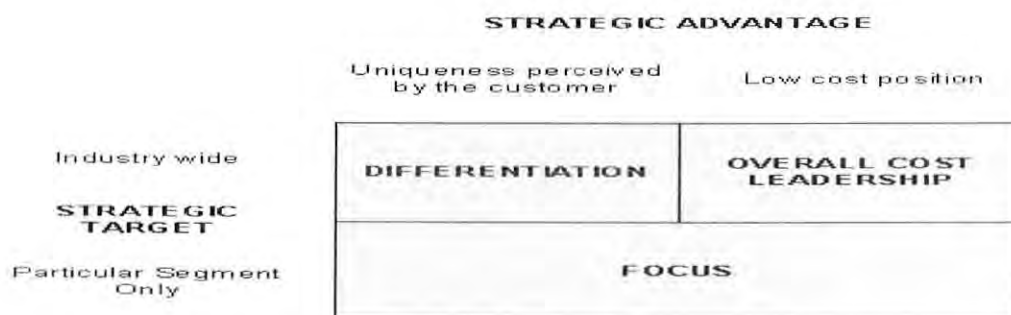


Figure 1: Strategic Advantage

Source: Competitive Advantage (Porter, 1980)

Overall Cost Leadership: Airline can generate significant cost savings by sending tickets, newsletters, quotes, and other documents via Internet, rather than by post or facsimile. Airline can use Web site to publish - in a cost-effective way - public domain documents such as annual reports, product brochures, vacant positions, contact details and other important Airline information.

Differentiation: E-ticketing seems to be a 'win-win' solution for the airline business. It offers the airline the chance to make considerable savings in both trade terms as well as in invoicing and internal accountancy procedures. Moreover, it helps fight the downward profit spiral that has affected the industry for years. Secondly, it is very attractive to customers, who may benefit from a service offer both technologically advanced and of high intrinsic value.

Focus: Organizations can make use of the focus strategy by focusing on a specific niche in the market and offering specialized products for that niche. Competitive advantage can be achieved only in the company's target segments by employing the focus strategy.

Generally, this review suggests that e-marketing in an airlines industry is useful for the customer as well as the industry. It is also the same as other services in that it is cost effective and easy to use.

2.1.2 Potential and challenges of e-marketing

According to Basu and Muylle (2007), e-business has dramatically been changing how companies' business processes are implemented and has also enhanced industry's structure and shifted the balance of power between corporations and their suppliers and customers. According to these researchers, companies in every industry have had to evaluate the opportunity and threat presented by e-business. Indeed, e-marketing is derived from e-business or one component of e-business. Therefore, the above review states that e-business is directly applied on e-marketing activities of the airlines industry and also the opportunities and threats that come along with while applying e-marketing in a given company.

One of the opportunities of e-marketing could be seen by applying modern electronics technology over the traditional system. Electronics media play a pivotal role in getting those opportunities/benefits. Soon electronic net works will allow people to transcend the barriers of time and distance as well as take advantage of global markets and business opportunities that are

not even imaginable today, opening up a new world of economic possibility and progress (Jaing et al, 2002).

Joseph (2005), listed some benefits of e-marketing as follows:

Global Reach: - It can offer you instant international reach and indeed, online networks have created an instant global community. It also erases the time and distance barriers that get in the way of conducting business transactions with customers in other countries.

Lower Cost: - It can save money and help stretch marketing budget. That is electronic versions of catalogues, brochures, and specification sheets do not have to be printed, packaged, stored, or shipped.

Save time: - It can save time and cut steps from the marketing process. Marketers no longer have to wait for one of their sales representatives to give them the desired information.

Information rich and interactive: - It can be information rich and interactive. It appeals to information hungry buyers and analytical buyers. It allows buyers and current customers to search and locate the information they need quickly.

Lower barriers to entry: - It can lower barriers to entry and offer equal opportunity for access. When you are doing business online, distinctions related to the ethnic background or gender or even the size of businesses do not seem to matter as much.

24-Hour Marketing: - Using a website, customers can find out about the organizations products and services even if the office is closed.

Personalization: - If the customer database is linked to the company's website, then whenever someone visits the site, it can greet them with targeted offers. The more they buy from the company, the more it can refine the customer profile and market effectively to them.

Better Conversion Rate: - If you have got a website, then your customers are only ever a few clicks away from completing a purchase.

The above review indicates the benefits of practicing e-marketing by the organization as well as the customers. Applying e-marketing is relatively easy to use in comparison to the traditional system, with one-to-one marketing, better conversation rate and trustworthy. However, this benefit will be achieved when companies are equipped with better infrastructure and security.

All in all, practicing e-marketing in an industry can yield profit, easily meet the company's objectives with a relatively lower cost and short period of time. Hence, the aforementioned benefits can easily be seen in a given organization's activities by using e-marketing in one way or the other. Though, there are lots of opportunities in practicing e-marketing, there are also many disadvantages and challenges for various reasons.

According to Windrum and Berranger (2003) citing Gilmore et. al., (2007) one of the disadvantages of e-marketing is associated with financial constraints as many organizations are highly selective in using e-marketing and web site design. An organization requires high financial investment to practicing e-marketing and needs to see the real tangible advantages coming out.

Human resource issue is also another challenge. This usually leads to outstretched staff workloads which usually result in work being prioritized and inevitably other activities being seen as more important than web site development or e-marketing. Similarly, many small and medium scale enterprises are reluctant in this regard mainly due to lack of specialized skills or know-how of marketing on the web (Chapman et al., 2000).

Moreover, the generalist nature of managers and employees within an organization results in limited knowledge about how various computer technologies could contribute to an overall e-marketing strategy (Jeffcoate et al., 2002). This in turn shows the impact of the ability of managers and employees whether to practice or not. This could be the case before implementing any computer technology or software needs training. However, the system is difficult to operate and less user-friendly and has become a challenge to practice.

The author (ibid) further stated that many under developed countries' organizations often become frustrated by their dependence on external service providers. This is due to the fact that many developing countries' companies purchase software from external sources. This also creates many problems. There are also other problems which have become a bottleneck for companies, among others, inadequate infrastructures, resistance to change and negative customer perceptions as well as implementation and maintenance, inter alia.

2.2 E-ticketing

2.2.1 Concept of e-ticket

In the airlines industry there are two types of tickets, namely the paper ticket and the electronic ticket, also known as ticket-less travel. Paper tickets are so named because the flight coupons (the pieces of paper that contain the exact flight information and are labeled as flight coupons) are in paper form. With an electronic ticket, this information is held within the airline's reservation system, and is indicated as electronic tickets when you check in. The passenger traveling on an electronic ticket is given a copy of the itinerary and the contract of carriage.

What is e-ticket?

There are probably a hundred or more different ways that question can be answered: According to McCuhbrey (1999), an e-ticket is simply a record of a reservation made using a valid credit card number stored in the computer database of the airlines company. That is, one can buy e-tickets from the companies' website. However, e-tickets use not only credit card payment but also other form of payment such as cash and check. Generally, e-tickets combine the issue and delivery of ticket into a single operation (www.travelandtourism.com, 2005) cited in Sulaiman, et. al., (2008). Thus, e-tickets simplify the business process. Kruelle, et. al., (2006) also define e-ticketing as a method for documenting sale, tracking usage and accounting for a passenger's transportation without requiring the issue of paper value documents. It may also be used for easily retrieve the data instead of referring paper documents. James et. al., (2007) defines e-ticket by relating it with finance, that is, e-ticketing is defined as a contractual and monetary relationship between the transport operators and the provision of a service linked to the monetary value of the ticket.

E-ticketing, the new way of issuing and delivering tickets, is becoming prevalent and employed in many airline companies with a view to reducing the costs that goes to printing tickets. In India, for instance, it is projected that the e-ticketing will result in 10 to 15 million USD saving (Kruelle, et. al., 2006). While e-ticketing creates cost savings for the airlines companies, travelers get their benefits in terms of convenience. The travelers do not need to carry a paper ticket, which means that the tension of misplacing a ticket is eliminated. Besides, the passengers are allowed to check-in online over the web, see what choice of seats is available on the screen, and make the appropriate choice accordingly (Sulaiman, et. al., 2008).

An e-ticket saves airlines cost because the companies do not have to spend money and postage issuing paper tickets. An e-ticket is also more reliable, since the traveler need not depend on the mail to receive his ticket, or on a ticketing clerk at the airport, who may not know a ticket was to be held for the traveler at the counter. An e-ticket is also cheaper than a paper ticket. U.S. airlines routinely charge about 20 USD to issue a paper ticket (Kaminsky, 2003).

Generally, e-tickets, now offered by many major airlines, allow traveling without a paper ticket by eliminating the worry of leaving tickets behind. An e-ticket confirms your airline ticket purchase without requiring a paper record; the only record of an e-ticket sale is in electronic form in the airline's computer system and also this e-ticketing model allows authorized travel agents to transmit ticketing information directly to the airline's database, enabling passengers to check-in and board the flight without showing a paper ticket. Moreover, it saves costs and is convenient to carry. In fact, many airlines no longer issue paper tickets. To this effect, IATA has announced that as of June 1, 2008, its member airlines will no longer issue any paper tickets.

History of e-tickets

Nowadays, the majority of air passengers buy e-tickets, however, this has taken a long time to reach at this point. In the history of airlines, e-ticketing service dates no more than 17 years. IATA governs all members of this Association by setting rules, procedures and guidelines by conducting research. IATA's (www.IATA.org) reiterate the history of e-ticketing as follows:

- United Airlines was the first airline to issue electronic tickets, back in 1994. Although some sources say the Atlanta-based bargain carrier ValueJet was the first to issue in 1993. Following the terrorist attacks of Sept. 11, 2001, the United States government applied new restrictions on the purchase and use of e-tickets in the United States. The Transportation Security Agency recommends e-ticket passengers contact airlines before their flight to find out what documentation they need to claim their ticket and boarding pass.
- A decade later however, only 20% of all airline tickets were electronic. The industry was missing out on an opportunity to save 3 billion USD a year. Aside from the substantial cost savings, electronic tickets are also more convenient for passengers – they would no

longer have to worry about losing tickets and changes to itineraries could be made more easily.

- In June 2004, IATA set an industry target of 100% e-ticket in four years. At the time, many believed this was an unrealistic goal. Evolving standards, uncertainty about the return on investment and skepticism about the customer acceptance of paper in parts of the world were some of the reasons why e-ticketing hadn't taken off.
- It took only four years to reach 100% e-ticketing. On 1 June 2008, the industry moved to 100% electronic ticketing. Together, IATA and airlines, travel agents, airports, system providers, and GDS have moved an entire industry from the paper age into the full electronic era.

In the history of Airlines industry, e-ticketing system has just few years of experience. IATA makes a decision to implement e-ticketing by all member countries. The rationale behind is that by implementing e-ticket, an Airlines company can get more benefits than applying traditional system. Besides, it contributes in simplifying the business.

2.2.2 Advantages and disadvantages of e-ticketing

An e-ticket offers many advantages for both travelers and airlines, including security, flexibility, cost and convenience. At the same time, it also provides the standard assurances of the traditional paper ticket, such as seating choice, travel time options and other flexibilities. However, there is also disadvantages and challenges while applying e-tickets in an organization.

Advantages

According to SITA (2005), there are a number of advantages of e-ticketing, among these, it reduces document distribution costs, eliminates paper-ticket fraud, enhances passenger check-in options, stops revenue leakage through automation of check-in and ticket change control, eliminates lost/stolen tickets, and eliminates the need for pre-paid tickets, inter alia.

Similarly, Galileo Pakistan mentioned the benefits of e-tickets. According to the Company's website (www.galileo.com) e-ticketing provides the following benefits:

- Cost Savings - Reduce the costs associated with printing and mailing tickets to your ticket buyers. Eliminate or reduce the need for ticket stock, envelopes and postage.
- Labor Savings - Reduce the labor associated with printing and mailing tickets. Cut down on the effort required to retrieve tickets for Will Call pick up orders.
- Safe and Secure - E-Tickets are safe and secure. Barcode validation eliminates the possibility of counterfeit and duplicate tickets.
- Actual Attendance Reporting - Find out how many of your e-ticket patrons attended your event and when they arrived.
- Instant Delivery - Customers can print their electronic tickets immediately after they purchase them. This makes e-tickets ideal for the last minute gift or the last minute decision.
- Additional Information - E-Tickets provide space for additional useful information such as street maps, driving directions, and other information your customers may need to know.
- Advertising - E-Tickets provide unique advertising capabilities. Increase your organization's revenues by offering advertising space on your web ticket.

The above benefits mentioned by Galileo Pakistan website could be seen by any companies that perform e-ticket. However, those benefits may not be achieved in all companies. This is due to the fact that these benefits depend on some factors such as the features of web-page, the infrastructure facility of the company, consumer/user awareness, among others.

IATA also summarized some benefits of e-ticketing as follows:

- Lower costs: industry savings of up to USD 4.9 billion annually
- Faster service: a reduced cycle time of an average of 24 hours
- Greater reliability and accuracy: one-time electronic data entry at point of origin
- Better visibility: electronic documentations allows for online track and trace functionality.

As mentioned above, e-ticket has advantages for both travellers and airlines including security, flexibility, cost saving and convenience. Moreover, it provides the standard assurances of the traditional paper ticket, such as seating choice, travel time options and other flexibilities. Besides,

e-tickets are processed in a more timely way thereby saving labor hours and cutting down traveller's frustration. To this effect, airlines can more easily track down passengers to inform them of itinerary adjustments, cancellations and other last-minute changes.

An e-ticket can be purchased directly from an airline's website, from a travel site or from a travel agent. However, reservation information should always be printed out and available, since computers can get crashed and the traveler may need to show the information to a security agent. With an e-ticket, a traveler can feel a bit more secure about the status of his/her flight.

Disadvantages

Though e-ticket plays a pivotal role in the airlines industry, there are some limitations and their own disadvantages. According to Crosby (2007), e-tickets have the following disadvantages:

- A computer crash could cause a passenger's reservation and other information to simply vanish.
- With its much-improved efficiency, e-ticketing also could make some jobs, such as those at travel agencies and airline reservations desks, obsolete thereby aggravating unemployment.
- With world conflicts and security a constant issue, some experts argue e-tickets and the procedures associated with purchasing and using them make it harder to detect risks.
- Although e-tickets can be more flexible under some circumstances, their holders can be at a disadvantage to paper ticket holders in the event when last-minute cancellation forces them to transfer to another airline.

The above review attempted to explain the negative aspects of e-ticketing practice on organizations and customers.

2.3 E-ticketing at Ethiopian airlines (EAL)

The EAL started using e-ticketing by outsourcing the application software to the Sabre soft airline solutions Company. The EAL used to apply SITA's software for the last 20 years. Though this system was supported by passenger management system, it was not integrated with e-booking. Therefore, EAL incorporated e-booking in 2002 in pursuant to the agreement made with Amadeus Airlines Solution Company to use Amadeus engine (Ethiopian airlines Selameta Magazine, 2007).

However, this software had many limitations, for instance, it was not compatible with other softwares and less user friendly as well as there were maintenance and updating shortfalls. Moreover, the EAL's dissolved its agreement with SITA at the end of 2006 (ibid). The EAL manager entered an agreement with Sabre soft airlines solution and started e-ticketing system since 2006.

According to EAL Sales and service procedures manual (2002), EAL gives e-ticketing service in three ways:

1. Computerized Paper printed ticket sales
2. Fully manual paper ticket, and
3. E-ticket

In pursuant to the rules of IATA, the EAL had stopped issuing paper-tickets and started issuing e-tickets at the end of 2008. However, paper tickets are still being issued in few domestic destinations due to inadequate infrastructure and other facilities.

According to EAL website (www.ethiopianairlines.com/en/travel/eticket), EAL has intended to practicing e-ticketing to meet the following objectives/benefits: -

To the Customer, E-ticketing will:

- Eliminate loss of tickets
- Make re-issue and refund easier
- Enable the passenger to simply rebook from a flight of one airline to a service operated by another without having a paper ticket.

- Enables the passenger to check-in his/her final destination without the need for a paper ticket.

To travel agents (EAL), E-ticketing will:

- Improve productivity
- Cut delivery cost
- Provide real-time information about coupon status

All in all, e-ticketing system enables the EAL to provide efficient services to its customers and eliminate costs associated with paper ticketing and get real-time information about coupon status.

E-tickets will be issued for all bookings made online at www.ethiopianairlines.com. On a successful purchase the system will generate an electronic ticket and a printable itinerary receipt will be displayed. The itinerary receipt is used as confirmation of travel. It is possible to receive an e-mail with the status of the booking. It is also possible to print the confirmation shown on the screen or print the e-mail. Then, what a passenger has to do is walk in to the airport and check-in with his/her valid photo identification and printed itinerary receipt. The passenger boarding pass will be issued against the itinerary receipt.

2.3.1 Buying e-ticket on EAL E-ticketing system

Passenger buying e-ticket directly over the web

It is the passenger it self that would access the company's website by paying online using different kinds of credit card or booking online by paying in cash at the EAL ticket office to get the services. It is believed that this would help to save passengers' time and cost. Based on the EAL website (FAQ), (www.ethiopianairlines.com/en/info/faq) explains e-ticketing process as follows:

EAL web sales engine allows booking one way and return in 5 simple steps with features such as interactive calendar, low fare option, flexible schedule options etc. The reservation has to be made online at www.ethiopianairlines.com at least 48 hours before departure. On purchase, the system will generate your itinerary receipt which is confirmation for your confirmed reservation and e-ticket issuance and display the same on the screen. You will need to print the page and produce it along with valid photo identification in order to enter the airport and for check-in. Also, an email will be sent to the passengers email address which

can also be printed and used to enter the airport and for check-in. Then, Go directly to the check-in counter. Your boarding pass will be issued against this itinerary receipt and the valid identification.

Process of issuance of e-ticket with credit card (by customer)

Passengers, who make their booking online (by using website), may be asked to submit their details at the time of booking and/or buying e-ticket. However, a booking and buying e-tickets purpose, a person is expected to pass through the steps as: 1) Request, 2) Select flight, 3) Shopping cart, 4) Reservation, and 5) Confirmation of the booking.

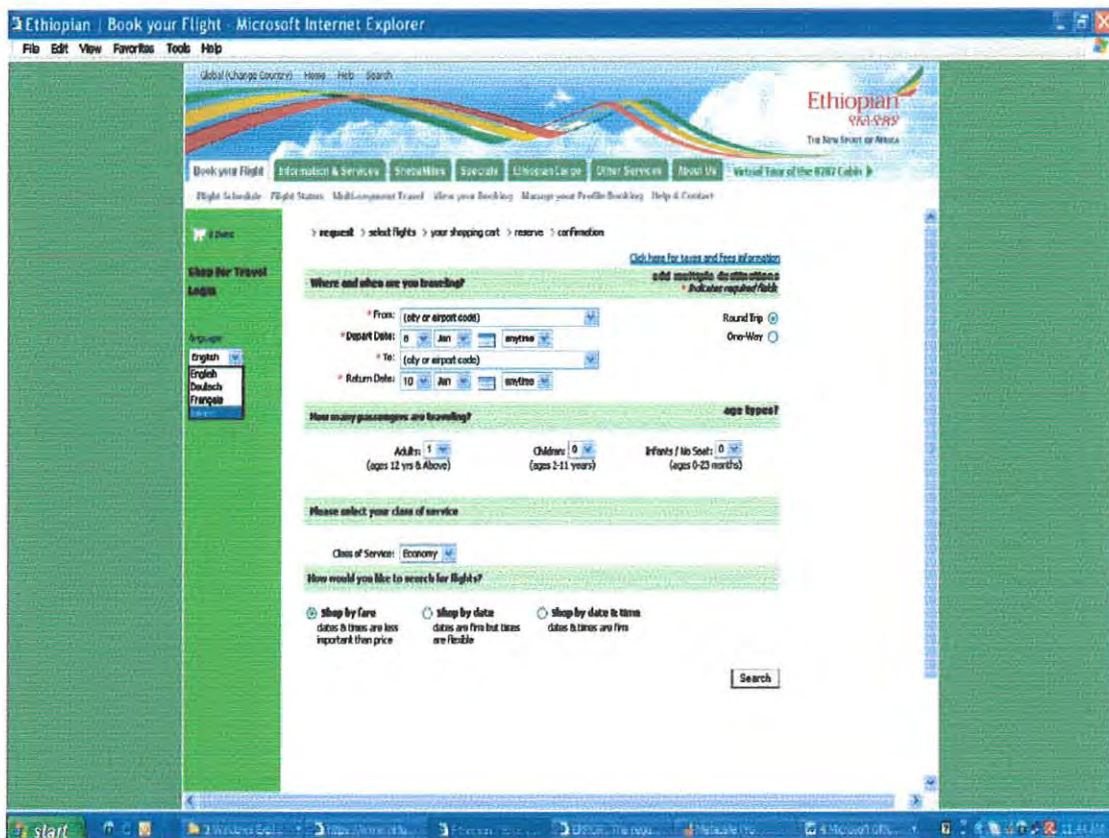


Figure 2: Ethiopian Airlines online booking webpage

Source: www.ethiopianairlines.com

The above figure 2 shows purchase of e-ticket in the company's website seems too user-friendly, easy to use and an attractive interface. However, the figure also shows that the software incorporates only four languages (English, Deutsch, France and Italian) and Amharic language is not included. This may create problems to understand the website for Ethiopian customers who do

not know those languages. As a result, it may create lack of confidence in the mind of customers. There are also many rules that the customer is expected to read before processing payment. Moreover, there are five steps that may prolong the process. Specially, in times of low internet connections, customers may take more time to process.

Passenger buying e-ticket through EAL agent

The customer will hold the reservation after going through the booking stages and by clicking on log-in or continue as guest button.

Process of issuance of e-ticket (by agent)

The followings steps are shows how to work Ticket issuance with CREDIT CARD form of payment in the saber software

Step 1: Book the passenger;

Step 2: Price the passenger's itinerary and retain price in the booking;

Step 3: Initiate the ticketing mask by clicking on the "Issue Ticket" box from the ticketing screen;

Step 4: Select "CREDIT CARD" from the form of payment dropdown list and click on OK. Then the system will asks you for the credit card details;

Step 5: Enter the credit card number and expiry date and click on the "APPROVAL" box to get auto authorization from the system. Then the system will populate the approval box with the approval code obtained from the credit card company.

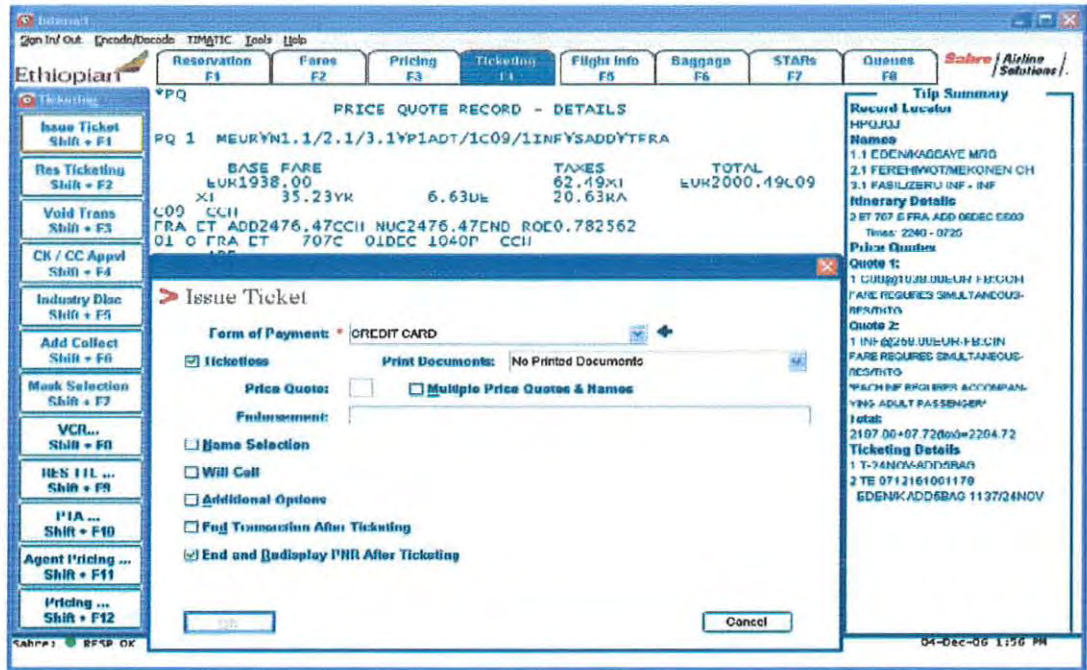


Figure 3: Issue Ticket interface in the saber software

Source: EAL-saber software Training Manual (2006)

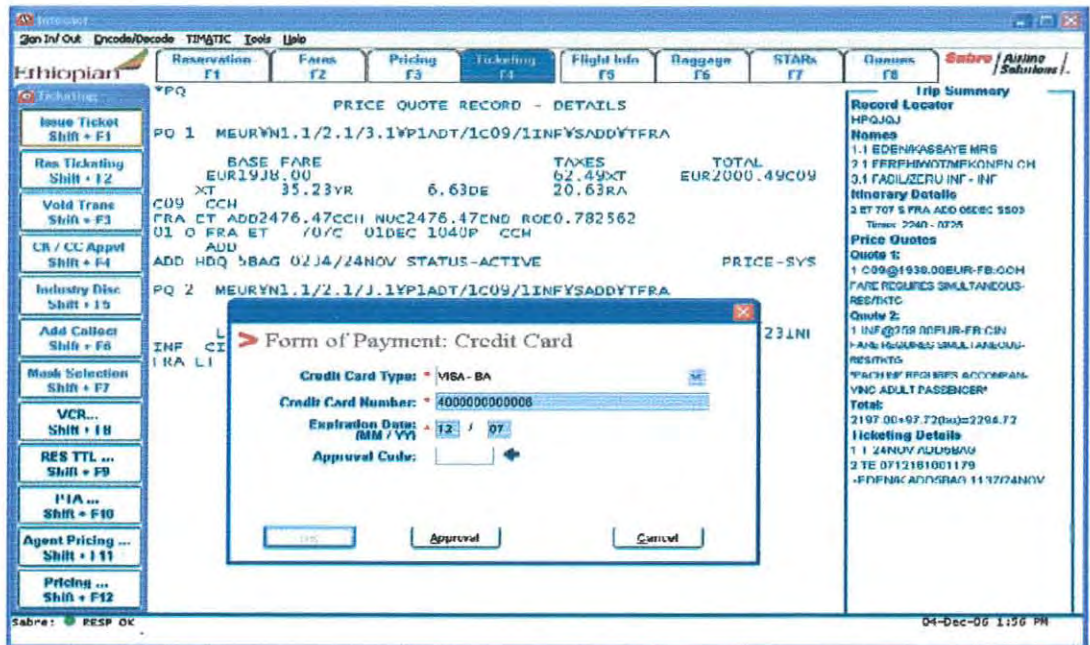


Figure 4: Form of Payment interface in the saber software

Source: EAL-saber software Training Manual (2006)

Ticket issuance with PTA (Pre-paid Ticket advice) as form of payment (This is when there is a PTA stored in the PNR (Passenger Name Recorder/ Booking reference/ Record locator)) and the agents wants to issue ticket against that PTA)

Step 1: Retrieve the passenger’s booking and check on the PTA information stored in the PNR

Step 2: Make sure that the fare paid for the PTA is correct

Step 3: Initiate the ticketing mask by clicking on the “ Issue Ticket” box from the ticketing screen

Step 4: Select “PREPAID TICKET” from the form of payment dropdown list and click on OK. Then a screen to enter the form of payment by which the PTA was originally paid will pop-up.

Step 5: Select the FOP (form of payment) and enter the passenger ID. Then click on OK.

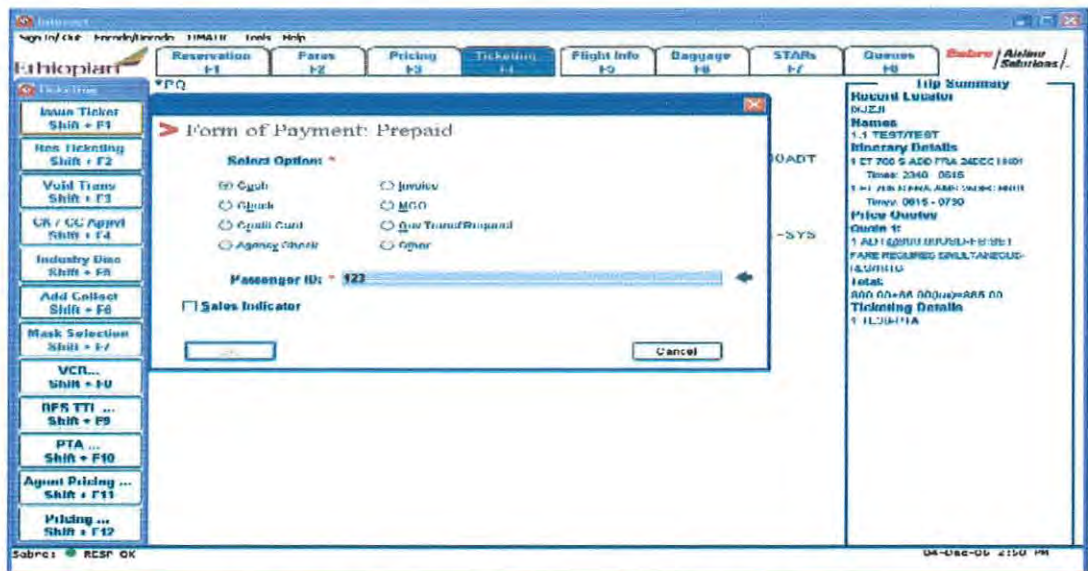


Figure 5: Form of Payment Prepaid interface in the saber software

Source: EAL in the saber software Training Manual (2006)

The above review shows that the system is more user friendly, in other words, agents are expected to click only in the left side, using few command thereby saving time for both the customer and

employee. Moreover, it seems that it doesn't need highly sophisticated technical and managerial skills. However, it works properly only when the network is stable and fast. On top of that some customers may fear to give for EAL agent (employee) their credit card to feed credit card number on the screen.

2.3.2 Credit/Debit Card Restrictions

According to EAL distribution department gives advice for passengers on there web site (<http://www.ethiopianairlines.com/en/booking/creditcardrestriction>) that states as:-

Please be advised that third party payment with credit/debit cards through the internet is not allowed for individuals other than the card holder, unless the card holder is traveling with the person that he/she has paid for. Card holders are required to bring the credit card used at the time of online booking along with their travel documents on the date of departure as it is required for verification.

The EAL uses saber system that can handle many kinds of credit/debit card, although currently the EAL e-ticket system accepts credit/debit cards only when they are branded as Visa, MasterCard or American Express. The reason is that the EAL has entered into agreements with these companies only. This also shows that the EAL has limited capacity to use all features of the software in a bid to satisfying customers' needs.

In EAL online credit card payment available in all destination, except an origin point: Abuja, Accra, Bamako, Dakar, Douala, Juba, Khartoum, Lagos, Lome, and N'djamena. Thus, passengers are required to purchase their ticket at the nearest Ethiopian city ticket office after completing booking online (www.ethiopianairlines.com/en/info/faq).

Regarding, online e-ticketing services, the following is stated in EAL website:

EAL charge credit card after booking online as follows, that is once you have confirmed your booking online, we will immediately debit your credit. This applies even if you decide to change your travel plans right after. Please contact the nearest EAL office should you like to rearrange your travel plans or would like to seek a refund. Please note that refund and/or cancellation charges may apply according to applicable fare conditions.

In general, the EAL saber software can accommodate many kinds of credit card facilities. Moreover, the Company's web site guides customers on how to use and which credit card are acceptable in the airlines. However, the limited number of acceptable credit cards in the airlines

may create discomfort on the part of customers. Besides, on-line credit card payment restrictions on some African nations might affect customers' trust on the EAL on-line payment system.

2.4 Factors affecting e-ticketing practicing

It is a well established fact that individual user's preferences and beliefs impact on the performance or practice of almost every system. This review examines factors that influence the choices of consumers and organizations while deciding to use on-line system to purchase/sale tickets.

Among the different influencing factors the following eight factors have been used more often than others in relation to ICT technology based system or e-ticket system based on different research models, reviews and objectives of the research. Perceived risk, perceived usefulness, ease to use, infrastructures, security, trust, behavioural control and subjective norm are the most popular factors employed to explain on-line consumer practice.

2.4.1 Perceived risk

The study of perceived risk has a long history in the marketing literature. Researchers generally agree that perceived risk is a combination of the perception of the likelihood that something will go wrong and the perception of the seriousness of the consequences. According to Grazioli and Jarvenpaa (2000), a perceived risk refers to a consumer's perceptions of uncertainty and adverse consequences of buying from the web.

Another review explains that consumer behavior involves risk in the sense that any action of a consumer will produce consequence which he/she can't anticipate with anything appreciating certainty, and some of which are likely to be unpleasant (Stone and Gronhaug, 1993). When consumers intend to buy a product or a service, they often hesitate to make the final decision because they can't be sure that all of their buying goals will be accomplished with the purchase (Roselius, 1971).

In addition to those, Miyazaki and Fernandez (2001) proposed that the rate of purchasing products online is negatively related to the perceived risk of conducting online purchase. They also suggested that higher level of internet experience may lead to lower risk perceptions regarding online shopping and fewer specific concerns regarding system security and online retailer fraud

yet more concerns regarding online privacy. Therefore, perceived risk at least partially mediates the impact of internet experience on online purchase behavior. Researchers attempt to explain the fact that perceived risk is the overall perceived security of transactions in an online environment and it is not related to a single seller.

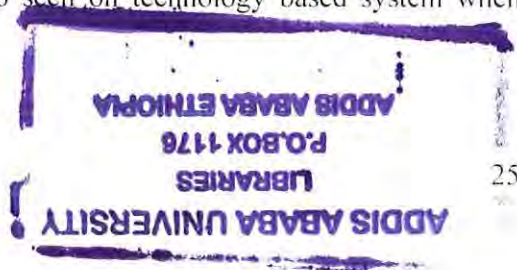
According to Cunningham, et. al., (2005) perceived risk is measured on different dimensions such as financial, performance, physical, psychological, social and time dimensions. It explained that the implementation of new technology would be affected on those dimension. The risk incurred by implementing e-ticketing system would also be seen on those dimensions thereby measuring customer's psychological readiness to accept or reject the system and companies' financial strength to fulfill necessary infrastructures help minimize customer's perception of a new system as risky.

2.4.2 Perceived usefulness

The word useful: "capable of being used advantageously." It implies within an organizational context, people are generally reinforced for good performance by raises, promotions, bonuses, and other rewards (Pfeffer, 1982; Schein, 1980; Vroom, 1964) cited in Davis, (1989). A system high in perceived usefulness, in turn, is one for which a user believes in the existence of a positive use-performance relationship.

Perceived usefulness refers to the degree to which a person believes that using a particular system would enhance his or her job performance (Davis 1989). It explained that an individual's choice of behavior is based on the probability that an action will provoke a specific consequence. For instance, the consequences of the purchase of online tickets on passengers can be seen as a good example of this factor. However, it needs so many preconditions such as infrastructure facility, awareness and security.

It also depends on the capacity of something to act as a means to a desired end or purpose. According to Shan, et. al., (2006), means-end relationship shows the reasons for customers using a product or a service. This explains the fact that the nature of the product or service will influence the user/customer and finally getting output or benefits from those products or service considered as ends. Such kind of relationship is also seen on technology based system when customer perceived the system as useful.



2.4.3 Ease of use

According to Davis (1989), perceived ease of use refers to the degree to which a person believes that using a particular system would be free of effort. Effort is a finite resource that a person may allocate to the various activities for which he or she is responsible (Radner 1975). It shows an application perceived to be easier to use than another is more likely to be accepted by users.

Although most researches have found perceived ease of use to be directly related to usage, the findings of Ndubisi et. al., (2001) revealed that perceived ease of use had no effect on usage of technology. This was because their study was conducted in 2000 on a sample of women entrepreneurs who were not aware of or exposed to technology as they were small entrepreneurs who had to deal with day-to-day activities rather than using technology to enhance their performance. When a technology is new the significant driving force would normally be perceived usefulness.

The above review attempted to explain that perceived ease of use can not be affected by any effort. It can be performed with out any special skill or techniques. In this case the new system would be run without special knowledge. However, customer attitude may be influenced specially by online shopping. In the context of e-ticket it shows that perceived easy of use depends on the interface of the website. User friendly websites including language options create positive or negative attitudes towards using new IT technology.

2.4.4 Behavioral control

Control beliefs give rise to perceived ease or difficulty of performing the behavior. According to Ajzen (1991) and Taylor & Todd, (1995) cited in Chiou (1998), explained that perceived behavioral control reflects beliefs regarding the access to resources and opportunities needed to perform a behavior. They also divided perceive behavioral control into two components. The first component reflects the availability of resources needed to engage in the behavior. This includes access to financial resources, time and other resources. The second component reflects the focal person's self confidence in the ability to conduct the behavior.

It is also determined by control beliefs about the power of both situational and internal factors to facilitate the performing of the behavior. This belief shows the ability of using internet and website in order to gather information and buy ticket online. The control is expected to be most

efficient when the person perceives an item as a significant one and is able to actually control it (Billari, et al. 2005).

In general, the above review attempt to explain perceived behavioral control in two aspects: how much a person has control over the behavior and how confident a person feels about being able to perform or not perform the behavior. All in all, customers may perceive ease to perform while applying new technology-based system if the necessary resources are provided.

2.4.5 Subjective norm

Subjective norms deal with studying those respondents who purchase e-tickets in a given company's website or through an agent. It applies by asking them how important could their opinions be influencing the attitude of others in their personal decision-making.

Subjective norm refers to one's perception of social pressure to perform or not to perform the behavior under consideration and its effect in the initial stages of system implementation (Athiyaman, 2002). It explained that when applying new technology/system social pressure needs at the begging of the system.

According to Chiou (1998), subjective norm is a function of beliefs about the expectations of important referent others, and his/her motivation of complying with these referents. Similarly, Ajzen (1991) stated that subjective norm is the person's perception that most people who are important to him think he should or should not perform the behavior in question. The above two reviews were attempted to give emphasis on the individual's behavior whether to perform or not to perform by the influence of referent group.

The opinions of important referents could affect the person's feelings about the utility of the technology (Jackson, et al. 2006). It attempted to explain the fact that the personal behavior of individuals to perform or not perform a given technology depends on his/her referent group, like the family, friends or others.

2.4.6 Trust

Trust is a necessary part of any relationship. Against this backdrop, the objective of e-ticketing is creating a long lasting relationship with customers by making the service trustable. Knowing the

definition of trust and identifying the different categories of actors involved in the practice of new technology helps assess the influence of trust on the perception of a new technology.

Trust is defined as the willingness to rely on an exchanging partner in whom one has confidence (Moorman, 1993). Another definition suggested by Rousseau, et. al., (1998) cited in Montijn and Midden (2008), trust is the psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another. In addition to that, trust has become the make-or-break element of e-business; those with the best reputation for maintaining the privacy and security of consumer and business information will prosper. That is without adequate privacy and security measures, e-business face the risk of litigation, negative publicity, and loss of customer loyalty (Shaw, 2001).

The importance of trust has been especially emphasized in the context of electronic based system and is basically seen as a common mechanism for reducing social complexity and perceived risk of transaction. It performs the task of increasing the expectation of a positive outcome and perceived certainty regarding the expected behavior of trust (Handy, 1995). It attempted to explained that without trust it is difficult to meet organizational goal while practicing new technology.

2.4.7 Security

Security refers to the need to protect data, equipment and processing time. Organizations restrict access to certain data and protect data and applications from manipulation or contamination. According to Bargh et. al. (2008), security services offering protection from security threats are: identification, authentication, confidentiality, integrity, access control, and non-reputation.

Security breaches can lead to numerous problems such as destruction of operating systems or disruption of information access. According to Gattiker, et. al.,(2000), customers who adopt electronic services are more likely to perceive problems related to loss of privacy as the internet and other electronic tools seemingly allow other people to access their information easily.

Although the security requirements had been already recognized by researchers, practitioners and the Internet and electronic communities, security concerns still considered as one of the most important challenges for electronic commercial use in the future. Customers still fear higher risk in using the Web for financial transactions (Rotchanakitumnuai and Speece, 2003).

According to Groucutt and Griseri (2004), an organization may have specifications and security procedures for software that its specialist computer staff install, but have no system-based protection against the installation of unauthorized software, or even connection of hardware, at local PCs or workstations located in different parts of the company. This statement clearly underscored the need for high security by specialist computer staff for companies that use computer systems and other related activities.

Online environment differs in terms of access and usage of transaction and privacy information exchange during buying and selling. Online environment has access to personnel privacy information and transaction (credit card) information (Elliot & Fowell, 2000). To ensure safety of all forms of online payment mechanism, strict security, advanced policies and technology are adopted especially in the areas of credit card fraud (Cai & Jun, 2003). In most cases, loss of financial data is considered as a security problem. Kolsaker and Payne (2002) maintain that security reflects perceptions regarding the reliability of the payment methods used and the mechanisms of data transmission and storage.

Cursory investigations of available sources reveal that different authors attempt to explain security in different ways. The common idea here is that security mainly concerns both customer and organization. It is determined by the technology in use and its effect could be seen by performance or not performance of the customer and the organization. In general perceived security may be defined as the subjective probability, that is, consumers believe that their personal information (private and monetary) will not be viewed, stored, and manipulated during transit and storage by inappropriate parties in a manner consistent with their confident expectations.

The technical aspects that ensure security include the integrity, confidentiality, authentication and non-recognition of transactions. The integrity of an information system refers to the impossibility of the transmitted or stored data being modified by third parties without permission. Confidentiality involves the data being seen by authorized individuals. Authentication allows a certain operation to be carried out only after identification, or if there are guarantees of the identity of the party one is dealing with (e.g. a web site). Finally, non-repudiation refers to procedures that prevent an individual or organization from denying that they had carried out a certain operation (e.g. a purchasing order).

2.4.8 Infrastructure

According to Lafond and Sinha (2005) there are three infrastructure systems, these are: communication, payment, distribution and delivery. According to Groucutt and Griseri (2004) Investing in the infrastructure necessary to enable widespread use of the internet represent a massive capital cost for many nations. They also explain about the key elements of an effective internet infrastructure. Such as:

- The necessary improvement in telecommunication service, from archaic analogue to state-of-the-art digital systems;
- The acquisition of reliable hardware and software system;
- The provision of reliable uninterrupted power supplies, particularly inclusive to many African countries;
- The necessary training, although this can be obtained on line. However, basic computer skills must be achieved prior to gaining access to the internet.

Infrastructure is an integral part in implementing technology-based system. Infrastructure has been playing a crucial role in implementing e-ticketing system in a given organization. Particularly the internet, LAN and WAN network tools are playing a pivotal role in communicating passengers with organization, making online payment anywhere and any place, and delivery and distribution while performing e-ticketing.

2.5 Perception of consumer

Perception is defined by different author in different ways. Foxall (1980) citing Engel et. al (1978) understand perception to mean the process whereby stimuli are received and interpreted by the individual and translated into a response. While, Walters (1974) refers to it as the entire process by which an individual becomes aware of his environment and interprets it so that it will fit into his own frame of reference.

The above two researchers' ideas are explained in general form as: Perceptions of reality differ from individual and each person interprets physical and social stimuli so that they are harmoniously accommodated within his overall world-view (Foxall, 1980).

In the history of technological change, consumer perception of new technologies has often been ambivalent. New technologies have been regarded either as a threat or as a benefit for the consumer. When consumers perceived new technology as a benefit it is called positive perception and when they perceived it as a threat that is called negative perception.

Consumers' perceived as positive

Consumers decisions whether to shop or not to shop online are influenced by the consumers perception towards online shopping. Usefulness in the context of online shopping refers to consumers' perceptions that using the internet as a shopping medium enhance the outcome of their shopping experiences (Monuwe et. al., 2004). According to Davis (1989, 1993), "usefulness" is defined as the individual's perception that using the new technology will enhance or improve her or his performance. Apart from this, Venkatesh (2000) linked usefulness with "ease of use" to determine consumers' attitude towards online shopping. According to them, usefulness is influenced by ease of use because the easier a technology is to use, the more useful it can be.

Those researchers in general attempted to explain consumer perceived usefulness based on individual benefits. While e-ticketing creates cost savings for the airlines companies, passengers get their benefits in terms of convenience. Currently, in many airlines companies passengers do not need to carry a paper ticket, which means that the tension of misplacing a ticket is eliminated. Besides, passengers are allowed to check-in online over the web, see what choice of seats is available on the screen and make the appropriate choices accordingly.

Jeong and Lambert (1999) indicated that customers' attitudes towards the usability of website together with their perceptions of the usefulness and quality of the website information were the best indicators of consumers' purchasing behavior. Moreover, the most important attributes of online shopping to consumers are convenience and accessibility. The consumers have a greater intention to shop online because it saves time and effort. They attempted to explain that features of the website determine consumer purchasing behavior. That is, consumers get benefit from an easy to use website, portable and interactive websites will impose a consumer to perceive it as useful.

In addition, by using the Internet to shop, they can shop in a comfortable home environment. Avery (1996) pointed that consumers who are not able to shop in traditional stores owing to an illness or other immobilizing factors tend to turn to the Internet as another alternative for shopping. It is indicated that flexibility, convenience, efficiency, and enjoyment are some examples of positive feelings customers may have about shopping online while concerns about possible risks of online transactions and lack of control are hard to ignore.

Consumers' Perceived as negative

Like any other industries, the travel management industry also faces challenges brought about by technological advances. Thus, the implementation of new technology may fail due to negative perception of the customer. That is the degree of importance of the situation can determine the potential effect of risk. Therefore, perceived risk or perceived as negative is posited as prominent barrier of consumer acceptance of e-ticket in an organization system.

Lee and Turban (2001) in their study discovered that lack of trust is one of the most frequently cited reasons for consumers not to shop online. This indicates the difficulties of physically checking the quality of products or monitoring the safety and security of sending sensitive personal and financial information while shopping on the internet adding a perceived risk. Similarly, Monsuwe et al., (2004) also pointed out that violation of consumers' trust in online shopping, in terms of privacy invasion or misuse of personal information negatively influences attitude towards online shopping and leads to the reluctant behavior among consumers to shop on the internet in the future. In addition to trust, customers expressed concerns about security, privacy and trustworthiness in connection with surfers.

Another customer's negative perception is on the financial transactions made via the internet. This risk deals with using a payment alternative that will lead to financial loss. According to Salam et al., (2003) state financial loss means that the consumer cannot get a refund when needed or is not able to reverse the transaction or to stop payment after discovering the mistake. It also may include fraudulent and sometimes unauthorized use of credit cards leading to financial loss. These are some of the most prevalent types of risks that may be associated with marketing and sales transactions through the internet.

As consumers don't get the possession on purchase they also fear that the goods transferred may be damaged. In case of e-ticketing such consumers may perceive that the e-ticket may not contain proper personal and flight information, for instance, the e-ticketing system may deliver a ticket through email that has wrong names and flight timing/seat number.

Choi & Lee (2003) also divided this product delivery risk in to three. These are:

- The first concern for online buyers is to see whether the products purchased online will be delivered in a timely manner by the seller or not.
- The second factors consumers consider significant is whether the delivery products much the ordered description in online store or not? The responses showed that consumers perceive that there might be some description and rated this element as number second most important along with on-time delivery.
- Undamaged delivery.

In general, customers' perceived risk depends on the willingness of consumers to buy online through the company's website. However, this negative perception comes out of different reasons, such as low level of awareness and demographic factors. Therefore, consumers are said to be unwilling to practice the new technology based on his/her experience or/and expectations.

Chapter Three

Research Methodology

Many scholars emphasize that the selection of methodology should be based on the research problem and stated research questions. Nachamias, et. al., (1996), for instance, state that methodologies are considered to be systems of explicit rules and procedures, upon which research is based, and against which claims for knowledge are evaluated. With this in mind, the researcher has tried to base the research on a well established methodology.

3.1 Research Design

The descriptive research design was employed by following survey approach. The reason for selecting descriptive research design was that it is a systematic method for gathering information from a relatively large number of cases at a particular time (Best and Kahn, 1989). Moreover, it is relatively better in describing the extent of correlation between variables. Since the objectives of this research were exploring the factors affecting e-marketing practice at the EAL (e-ticketing perspective) and examining the perception of customers towards the use of e-ticketing in the company's website, employing descriptive survey was found to be appropriate.

3.2 Sampling procedure and Sampling Techniques

A blend of sampling techniques was used for the selection of the various sources of information for this study. Therefore, **Judgmental sampling** was used to select frequent routes. Out of 72 EAL flight destinations the researcher was selected 15 frequent passenger flight routes. It would save time and finance for the research and also created better chance to meet passengers.

Convenience sampling technique was also applied to select the respondents from each selected routes and to distributed questionnaires. The reason for proposing this technique was that passengers came to the departure and check-in with different mood and having different educational background. So, the researcher selected respondents based on their actual or perceived willingness to complete the questionnaires.

Additionally, three interviewees were selected purposely from EAL's head office managerial staff (Marketing and sales, customer loyalty and Distribution department), who have direct concern to

the e-ticketing system and their responses were scored separately on the issues of e-ticketing system. In this case, one person was selected from the three departments.

Target Population and sample size

The target population on the part of passengers were: - from North America (1 route): Washington .DC; from Africa (35 routes): Accra, Lagos, Cairo, Nairobi, Johannesburg; from the Middle East and Asia: Bangkok, Dubai, Beijing; from Europe (6 routes): Frankfurt and Rome; and from domestic (16): Mekelle, Lalibela, Bahar-Dar, Dire-Dawa were selected. Convenient sampling technique was applied to select the respondents from each selected routes. Thus, the questioners were completed by the passengers at Addis Ababa Bole international airport terminal (departure & check-in). The reason was in the departure majority of respondent completed all process and waiting to flight. In this way, a total of 200 passengers were contacted from all selected routes proportionate to size of the passengers in each routes.

Table 1: Sample Design

Number of routes & Regions	Name of Selected routes	Number of passenger in a route*	Sample size (respondent) Departure from AA
Africa (35)	Accra,	50	9
	Lagos,	40	7
	Cairo,	55	10
	Nairobi,	45	8
	Johannesburg	65	12
The middle East & Asia (14)	Bangkok,	85	15
	Dubai,	155	28
	Beijing	105	19
N. America (1)	Washington	150	27
Europe (6)	Frankfurt,	95	17
	Rome	80	14
Domestic (16)	Mekelle,	52	9
	Lalibela,	45	8
	Bahar-Dar,	55	10
	Dire-Dawa	45	8
Total		1122	200

* It indicates that average number of passengers flight with EAL (Source: EAL distribution department’s record from November 16-29, 2009.)

3.3 Data Source

Both secondary and primary sources were explored to obtain relevant data for the study. Primary data were collected through questionnaires and interviews. Secondary data sources were those obtained from documents, such as, research report, annual reports, books, websites, journals and articles. Moreover, relevant documents and database files that are available at EAL were investigated to increase the reliability of information.

3.4 Data gathering instruments

3.4.1 Questionnaire

In order to gather the primary data the researcher predominantly used questionnaires. It was designed in such a way to include mainly closed ended questions and few open ended items for EAL passengers. The questionnaire had two parts: general questions and perception questions. Depending on the type of questions the statements were placed on a 5 point Likert-type scale (1 for Strongly Disagree and 5 for Strongly Agree). The reason for using this method was widely used for rating scale. That requires the respondents to indicate a degree of agreement or disagreement with each of a series of statements about the stimulus objects (Malhotra, 1996).

The language construction of the questionnaire was refined to be used for the final study and administered with 200 respondents by using both English and Amharic versions (Appendix A&B), in a bid to providing maximum opportunity for accurate communication of ideas between the researcher and the respondents.

3.4.2 Interview

As indicated Wilkinson and Bhandarkar (1999) cited in Taye (2008), interviewing is necessary to get deep feeling, perceptions, values or how people interpret the world around them, and past events that are impossible to replicate. In line with this, the researcher conducted interviews purposely with department managers using semi-structured questions which are related to the knowledge and practices of e-ticketing system with a view to supplementing the data obtained through questionnaire.

3.5 Data Collection procedure

Before conducting the actual data collection process, the first draft of questionnaire was given to the adviser for comment. After the comments, it was duplicated and then a pilot-test was conducted to 25 passengers' respondents to obtain their perceptions regarding e-ticketing practices. The pilot test was conducted in order to evaluate the accuracy of the questionnaire and unforeseen problems such as missing of data, inconsistency of data, to understand respondent concepts on questions and evaluate the nature of respondents as well as estimate the time required to fill a single questionnaire. Finally, the actual data collection process was conducted after making corrections and comments by the colleagues of the researcher based on the information obtained from pilot-test results.

After the target populations were identified the questionnaire was administrated to respondents. The respondents were contacted personally by the researcher during check-in and departure. Data collection took place from March 02 up to 27, 2010 at the Addis Ababa Bole International Airport. Some 200 questionnaires were distributed among Airline passengers in the old and new terminals based on their flight schedules. First the questionnaires were distributed in the checking areas which resulted in low co-operation of subjects as they were busy doing checking-in luggage and other general procedures involving with receiving the boarding pass. Considering this situation, the researcher decided to change the location in to the departure area where most of the passengers usually become idle and waiting for the gate to be opened. By describing the purpose of the study, the researcher encouraged and asked the respondents to fill out the questionnaires and return back on the spot.

A total of 200 questionnaires have been distributed within the time mentioned above, among which 192 questionnaires were usable showing a response rate 96%.

3.6 Data Organization, Analysis and Interpretation

Data Organization

Data entry started after the actual data collection and manual editing had been completed. The data were entered into the computer using the SPSS version 13 software. Once the process of data entry was accomplished, cleaning of the data started. Data cleaning and editing focuses on

checking whether the assigned value for each case is legitimate, logically consistent and structured.

Methods of Data Analysis and Presentation

Both qualitative and quantitative methods were used in this study to organize and analyze the data. The *quantitative* methods involved a series of cross-tabulation and statistical tools analysis to present the final findings. The *qualitative* data was including data collection using semi-structured interviews with individual respondents.

The responses obtained from the questionnaire were analyzed by descriptive (Mean, standard deviation and percentage) and inferential statistical techniques (correlation and regression analysis). In so doing, the collected data were coded and edited. All the close-ended questions of the questionnaire including the preliminary data were entered in to the SPSS and quantitatively analyzed and interpreted. With regard to this quantitative method of data analysis the study employed correlation analysis to identify the relationships of each variable, and Alpha was set at 0.05. Multiple regressions were applied for the evaluation of the combined effect of independent variables to the prediction of e-ticketing practice at EAL.

The data obtained from the open-ended question of the questionnaire and from interview were also qualitatively transcribed and analyzed. Finally, major findings and conclusions were made. Based on the peculiarities of the findings, some recommendations have been given.

3.7 Variables

This study was investigating factors affecting e-marketing with dependent and independent variables. E-marketing practice is the dependent variable of this study to see the effect of independent variables. And the researcher will use perceived risk, perceived usefulness, ease to use, infrastructures, security, trust, behavioural control and subjective norm as independent variables those were explained changes in the value of the dependent variables.

Chapter Four

Data Analysis and Interpretation

Data collected, by following the specified methodology, were exposed to various statically analyses in a bid to generate the results inline with research objectives. This chapter explores the techniques used in scale reliabilities and analyzing data associated with general Information of the respondent. Moreover, eight independent variables and one dependent variable were included in this study.

4.1 Analysis of questionnaires

It has two main sections. The first section discussed the general information with descriptive statistics. In the second section, the data were presented and analyzed with inferential and descriptive analysis.

4.1.1 Reliability Analysis

Internal consistency involves correlating the responses to each question in the questionnaire. There are various methods for calculating internal consistency. Cronbach's alpha, one of the most frequently used methods, is the degree of inter-correlations among the items that constitute a scale. A reliability 0.60 and 0.70 or above is considered to be the criteria for demonstrating internal consistency of new scales and established scale respectively (Nunnally 1988). The code items of below scale reliability (table 2) shown in Appendix D.

Table 2: Scale reliability (Cronbach alphas) e-ticket practice

Independent variables	Items	Alpha Coefficients for Independent variables	Cronbach's Alpha if Item Deleted
Infrastructure	IN1	0.850	0.794
	IN2		0.797
	IN3		0.794
	IN4		0.799
	IN5		0.796
Easy of Use	EU1	0.893	0.801
	EU2		0.799
	EU3		0.798
	EU4		0.803
	EU5		0.800
Security	SC1	0.924	0.786
	SC2		0.785
	SC3		0.785
	SC4		0.794
	SC5		0.792
Perceived usefulness	PU1	0.893	0.788
	PU2		0.788
	PU3		0.784
	PU4		0.791
	PU5		0.796
	PU6		0.791
	PU7		0.796
	PU8		0.784
	PU9		0.786
	PU10		0.792
Subjective Norm	SN1	0.884	0.799
	SN2		0.798
	SN3		0.793
	SN4		0.799
	SN5		0.799
Perceived risk	PR1	0.857	0.809
	PR2		0.809
	PR3		0.804
	PR4		0.808
	PR5		0.806
Trust	TR1	0.878	0.800
	TR2		0.796
	TR3		0.796
	TR4		0.797
	TR5		0.795
Behavioral Control	BC1	0.897	0.800
	BC2		0.798
	BC3		0.801
	BC4		0.802
	BC5		0.800
	BC6		0.803
Reliability of the total scale 0.810			

Source: From Survey Data

To review the internal consistency of the identified passengers' perception scale items, Cronbach coefficients (alpha) were computed and found to be 0.810 (table 2). Moreover, the 8 factors demonstrated internal consistencies ranging from 0.784 (the lowest) to 0.809 (the highest). This shows that the factor scales are internally consistent and indication of acceptability of items.

The analysis also considered the statistics of 'alpha if item deleted' which implies the increase of total Cronbach alpha coefficient if corresponding item is excluded from the construct for rest of the scale. However, not found to be useful as deletion of any of the items was not found to be contributing to improve scale reliability.

4.1.2 Characteristics of the respondents

Descriptive statistics were applied to summarize percentages of respondents' on the general information questions as below tables, relating to the personal profile of passenger participate in this study.

Table 3: Passengers' profile

		Frequency	Percent
Nationality	Ethiopia	100	52.1%
	Others	92	47.9%
	Total	192	100%
Sex	Male	97	50.5%
	Female	95	49.5%
	Total	192	100%
Age Group	Below 18	11	5.7%
	18-25	43	22.4%
	26-35	46	24%
	36-45	43	22.4%
	46-55	37	19.3%
	Above 55	12	6.3%
	Total	192	100%
Educational Status	Below Diploma	13	6.8%
	Diploma	26	13.5%
	Undergraduate degree	93	48.4%
	Masters Degree and Above	54	28.1%
	Others	6	3.1%
	Total	192	100%

Source: From Survey Data

As displayed in the above table 3, the biggest number of respondents were shown to be Ethiopian passengers exceeding non-Ethiopian ones with some 4.2%. It explains the fact that more than half of EAL customers departing from Ethiopia were Ethiopian Nationalities. In view of this, it is crucial for EAL to operate e-ticket system and modify the same targeting Ethiopian customers as well as their expectations.

Concerning the sex, the percentage of male and female is shown to be relatively proportional. So, it indicates both sex were equally involved in this study. In addition to this, the e-ticketing system did not affect sex difference.

As indicated in the above table 3 in age group, age groups between 26-35, 18-25, 36-45 and 45-55 highly practised the new technology. Whereas, less than 18 years old and above 55 years old were not practising e-ticketing system comparative to the other age groups. It suggests that, the EAL can take advantage of the middle age group (from 18 to 55). Thus, the EAL can be targeting those age groups to make interactive interface, advertisement or any modification on the part of e-ticketing system.

With regarding to Academic status, the majority of respondents were shown to be trained professionals holding certificates from first to third degrees and above. While the second and third largest percentages of respondents pertain to those having Diploma and below diploma level certificates. Lastly, less than 4% belongs to other qualifications. This finding is a tangible proof that majority of respondents possess better educational background to be able to use the EAL e-ticketing system. Moreover, the said respondents were capable of responding to the queries with good know-how.

Percentages

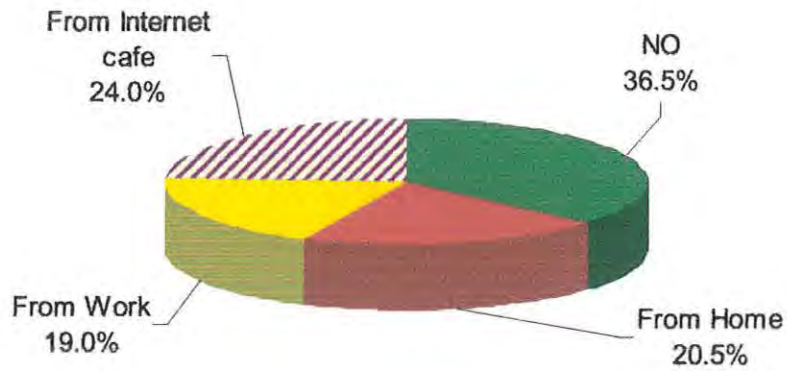


Figure 6: Respondents' Access to Internet

Source: From Survey Data

The above figure 6 informs the fact that, the greatest number of respondents lack internet access. While the number of passengers using internet cafes, home based internet service and those using internets at work place are put in decreasing order. From this one can learn that, passengers are hindered by infrastructural short comings blocking the opportunity to practice E-ticketing in the EAL website.

Percentages

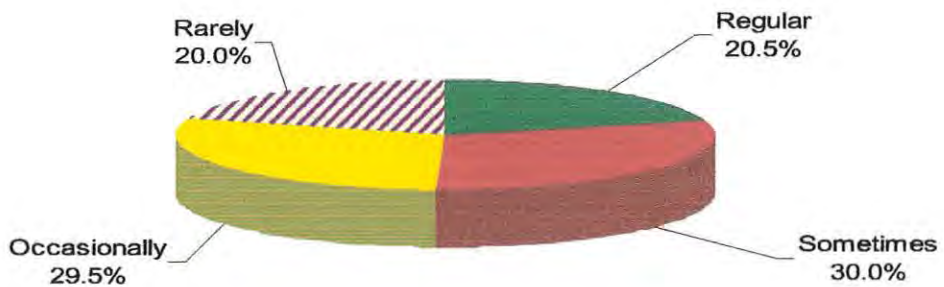


Figure 7: Respondents views regarding frequency of using EAL

Source: From Survey Data

As can be seen from the figure 7, the largest number of respondents have had flights with EAL sometimes, followed by respondents used to have occasional flights and regular EAL flights respectively. The lowest percentage figure depicting respondents with rarely flights with the EAL can reasonably be attached to customers having alternative choice. This study has made consistent examination of the experiences from all the EAL passenger categories. In the opinion of the researcher, this approach will greatly help portray the full picture of e-ticketing experience by the EAL passengers.

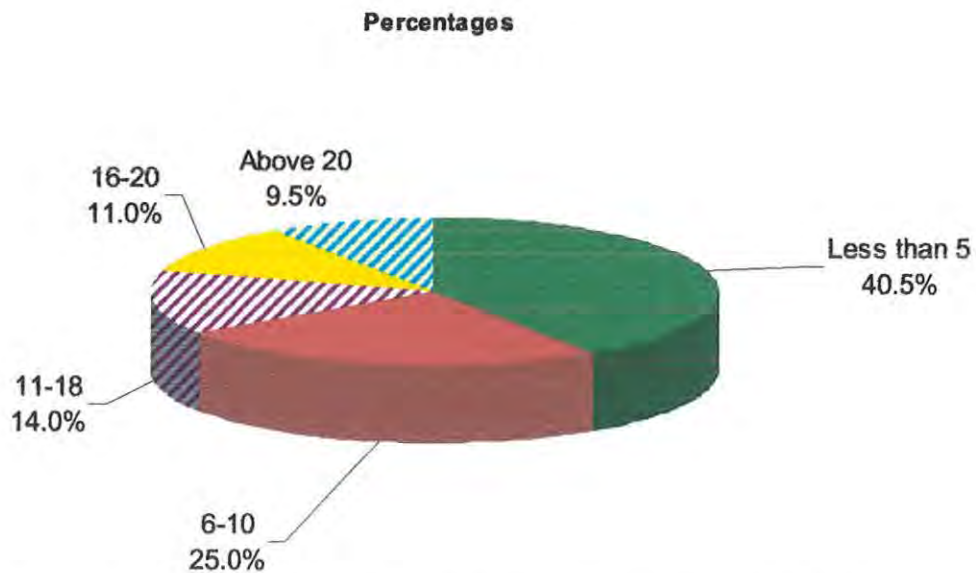


Figure 8: Respondent passengers' views about their flights using EAL in the last 12 months

Source: From Survey Data

With regards to the respondent passengers' flight experience using EAL shown in the above figure 8, less than half of the passengers 40.5% claimed to for using it less than 5 times, however, one-fourth (25%) were reported as 6 to 10 times, with the remaining percentage shown in 11 times and above in the last 12 months. It is possible to suggest that most respondents were less experience to uses EAL. It can be assumed that they have another alternative to use transportation. That helps to answer the questions as they other flight experience and expectation from the e-ticket service.

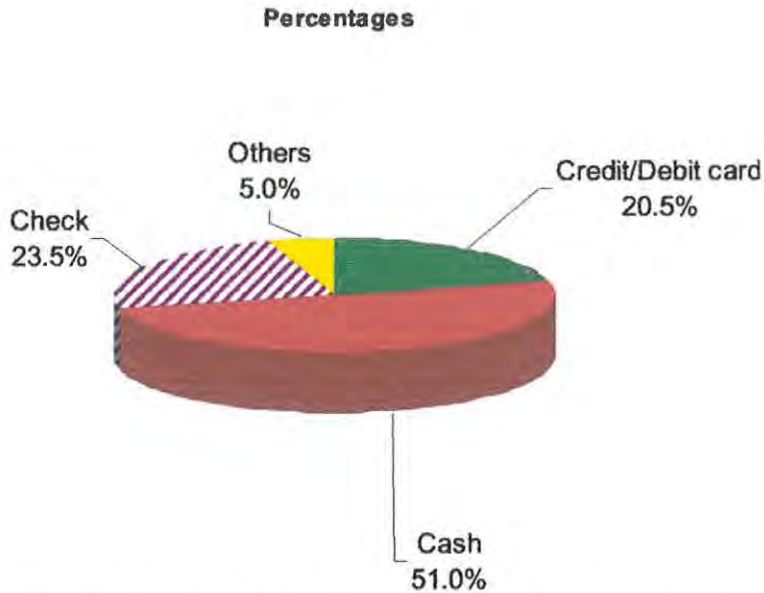


Figure 9: Respondents' Views about mode of payment for e-ticket

Source: From Survey Data

The above figure 9 illustrates that majority of the passengers preferred to pay in the form of cash 51%, 23.5% paid in the form of check, 20.5% of paid in the form of Credit/Debit card, and the remaining 5% used different forms of payment other than those mentioned above. It shows that passengers perceived to pay in cash as safe and easy than to pay in credit/debit card. Moreover, inadequate credit/debit card facilities, low level awareness and security matters on credit/debit card payment were some of the stumbling blocks for passengers to pay in the form of credit/debit card.

4.1.3 Cross tabulation analysis for buying e-ticket in Destination

EAL flight passengers can be buying e-ticket in mainly in three ways. First, through online in the Company's website i.e. every process can be finished on the website and passengers do not need to come the EAL ticket office or agents. Second, at the EAL ticket offices i.e. through booking online or other ways, but e-ticket will be processed by the EAL agents. Third, through travel agents i.e. they can process e-tickets for passengers in accordance with the rules and policies of the land. In addition to those there might be buying e-ticket in other methods.

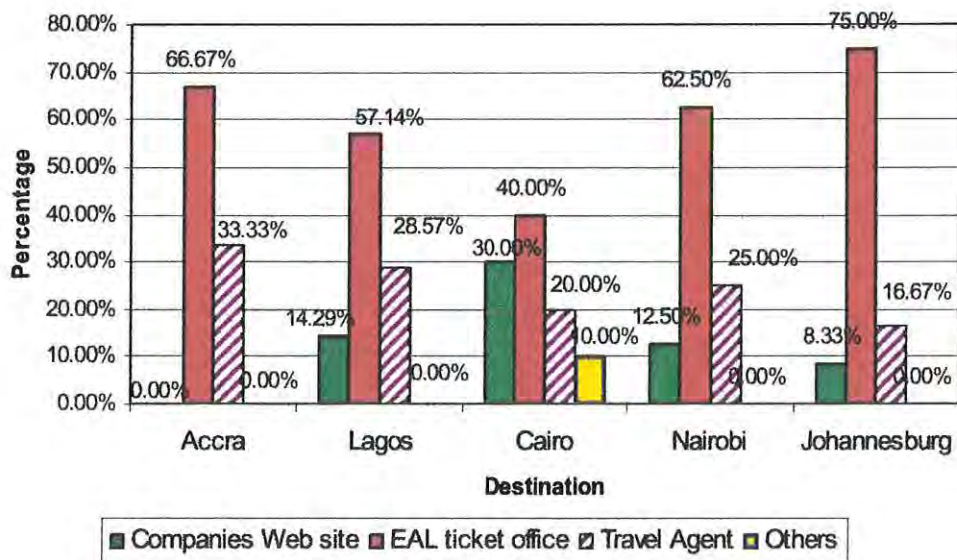


Figure 10: Buying E-ticket in Africa Region

Source: From Survey Data

As can be seen from the above Figure 10, among the African destinations the majority of passengers bought e-tickets through the EAL ticket offices, followed by respondent bought ticket through Travel agents and the company's website. However, using other methods to buy tickets was made only in Cairo passenger respondents. It also shows that three-fourth (75%) of Johannesburg passenger respondents bought tickets through EAL ticket office. Similarly, a large number of respondents' flights in Nairobi, Accra, and Lagos also bought e-tickets from the EAL ticket offices. The main reason seems that the EAL made a decision for West African passengers not to use credit card. The other reason could be due inadequate infrastructure facilities such as credit card facility. This proves that West African passengers had not benefited from e-ticketing to save time and transport costs. On the other hand, Cairo's passengers who bought e-tickets from the Company's website were better than others. It implies that there were better infrastructure facilities in Cairo than other African nations.

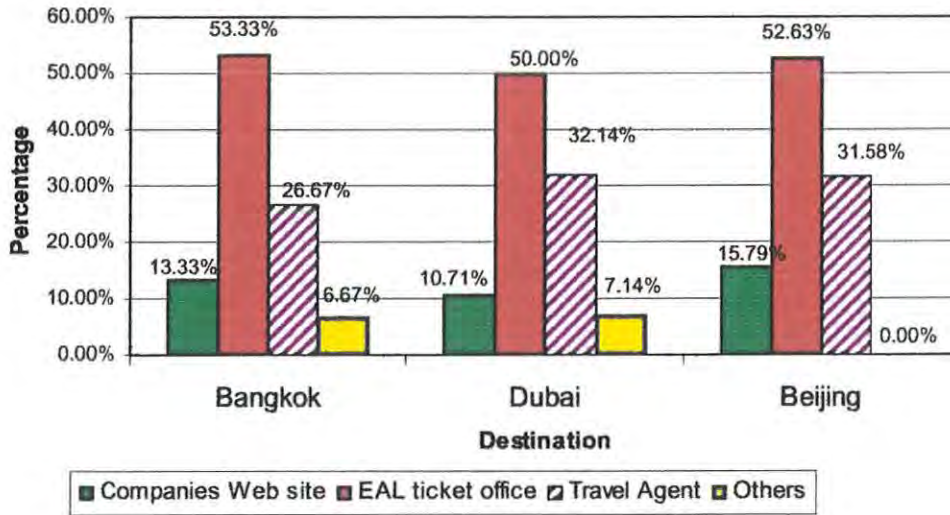


Figure 11: Buying E-ticket in the Middle East & Asia Region

Source: From Survey Data

The above figure 11, shows that a large percentage of Bangkok, Beijing and Dubai passengers bought e-tickets through EAL ticket office, that is, 53.33%, 52.63% and 50% respectively. However, passengers used to buy e-ticket through company's web site in this region were less than one-fourth (25%) of a total percentage. It also implies that like passengers in the African routes, passengers in these routes preferred to buy e-tickets thorough the EAL ticket offices rather than other ways of bought e-ticket. Moreover, it indicates that passengers in those routes might not have confidence on the company's website security.

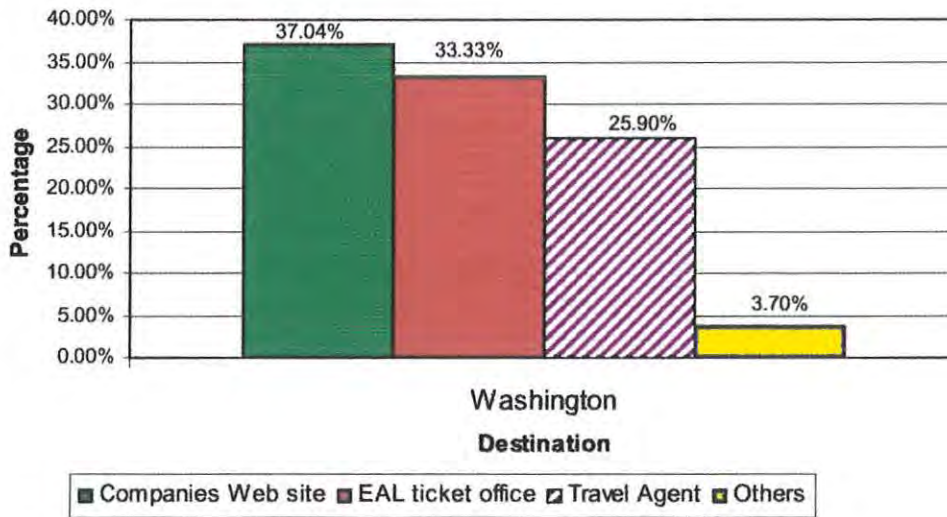


Figure 12: Buying E-ticket in North America Region

Source: From Survey Data

With regards to Washington passengers, 37.04% of respondents buying through company's website by them selves, 33.33% through EAL ticket office and the remaining through travel agent and other ways were 25.9% and 3.7% respectively. It indicates that the majority of North American route passengers preferred to buy using the company's website. The reason seems that there is a relatively advanced technology in this country and the majority of people adopted such kinds of systems in their day-to-day activities.

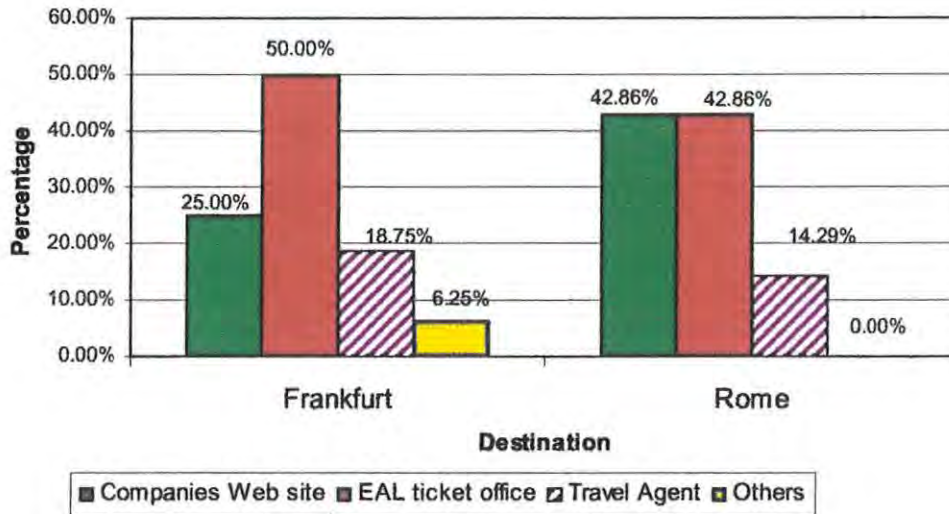


Figure 13: Buying E-ticket in Europe

Source: From Survey Data

Concerning to Europe's sample routes, 50% of Frankfurt passengers bought through the EAL ticket offices, 25% through the company's website and the remaining through travel agents and other ways of paid e-ticket were 18.75% and 6.25% respectively. Rome passengers bought through the EAL ticket offices and the company's website is equal in number, 42.86% for each, and 14.29% passengers bought using travel agents. Like in Africa and the Middle East & Asia, passengers preferred to buy through EAL ticket offices in this area also. Though European countries are developed countries, unlike the African countries and there is better technological advancement and experience on online payment. However, the majority of Europe region passengers preferred to buy air tickets from the EAL ticket offices rather than online through the EAL website. This implies that the EAL did not promote its system and system security mechanisms in these areas. It seems that many passengers feared online payment in relation to security matters. As a result passengers in Europe were almost not beneficiaries on the advantages of e-ticketing such as time saving and 24/7 availability, among others.

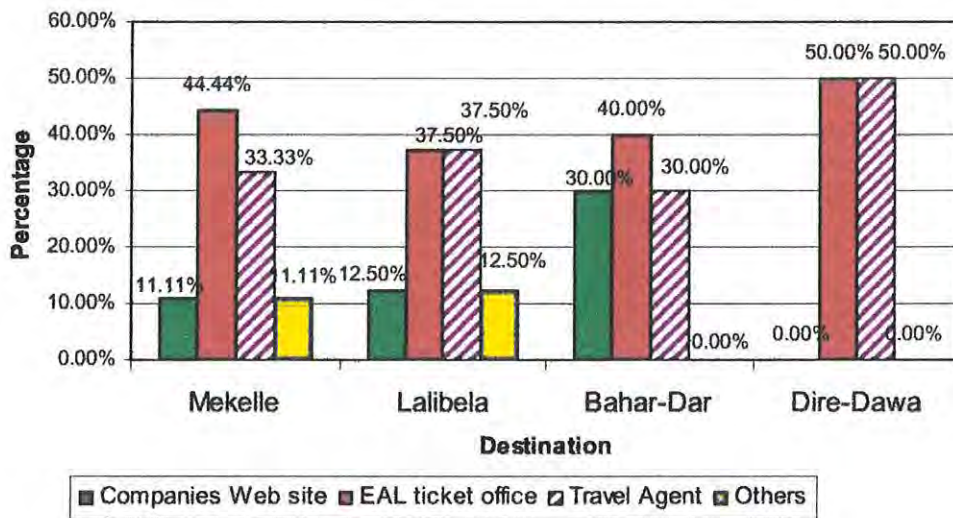


Figure 14: Buying E-ticket in Domestic Area

Source: From Survey Data

With regards to the selected domestic destination on the above figure 14 shown, Mekelle passengers both bought through EAL ticket office and travel agent 44.44% and 33.3% respectively, following bought through other method and company’s website equally, i.e. 11.11%. Lalibela passengers bought using the EAL ticket offices and travel agents equally i.e. 37.5%, Similarly, bought using other methods and the Company’s website equally, i.e. 12.5%. Moreover, 40% of the Bahar-Dar passengers bought through EAL ticket offices and 30% of the remaining bought through the company’s website and travel agents each. Dire-Dawa passengers using the EAL ticket offices and travel agents were equal in number, i.e. 50% and no other methods were used. Besides, in comparison to international destination passengers, the majority of domestic passengers did not use company’s website to buy e-tickets. This shows that the majority of domestic passengers bought through the EAL ticket office. The reason could be that there were many EAL ticket offices around the cities. Moreover, there was poor internet connection and hence passengers preferred to go the nearest EAL ticket office than wait the connection to work or use internet café. Therefore, the EAL domestic passengers also did not use e-ticketing and benefited therein.

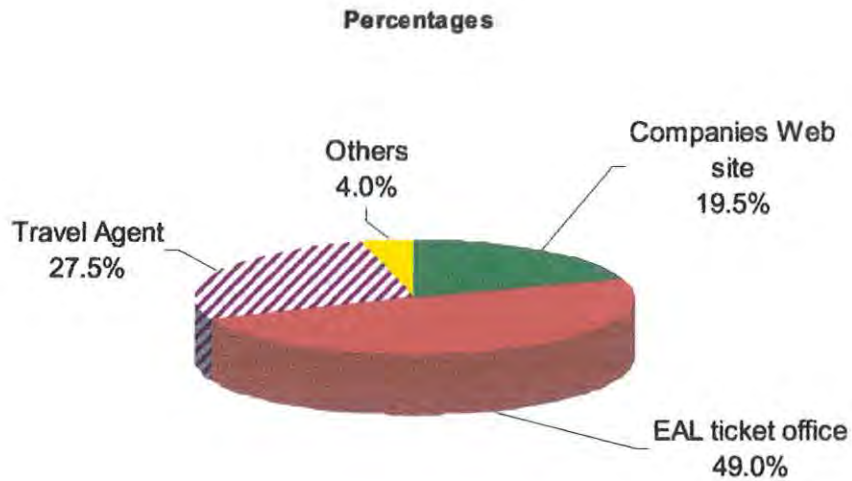


Figure 15: Respondents' views about Ways of buying e-ticket

Source: From Survey Data

Concerning E-ticket purchase in general shows in the above figure 15, majority of respondents have been bought tickets from EAL ticket offices and travel agents. Accordingly 49% were shown to have availed themselves of EAL ticket offices and 27.5% travel agents. However, passengers bought e-ticket through the company's web site less than one-fourth (1/4). From this it can conclude that most passengers purchased e-tickets from ticket offices using as paper ticket trend. Furthermore, it reveals that passengers did not adapt to e-ticket purchase in the Company's website.

4.1.4 Correlation Analysis

Correlation analysis helps define the direction of the relationship between the variables and used mainly to evaluate the magnitude (between -1 and +1) and also helps gain insight in to the strength of their relationship.

Table 4: Summary of Correlation Coefficients

Variables	IN	EU	SC	PU	SN	PR	TR	BC	EP
IN	1								
EU	.081	1							
SC	.300(**)	-.138	1						
PU	.037	-.030	.385(**)	1					
SN	-.074	-.102	.181(*)	.148(*)	1				
PR	-.098	.052	-.177(*)	-.040	-.031	1			
TR	.000	.015	.172(*)	.188(**)	-.053	.084	1		
BC	.204(**)	.020	.115	.060	-.024	-.664(**)	-.149(*)	1	
EP	.296(**)	.115	.459(**)	.351(**)	.150(*)	-.133	.255(**)	.182(**)	1

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

* Correlation is significant at the 0.05 level (2-tailed).

Source: From Survey Data

Note: IN – Infrastructure, EU – Ease of Use, SC – Security, PU – Perceived usefulness, SN – Subjective Norm, PR – Perceived Risk, TR – Trust, BC – Behavioural Control, EP – E-ticket Practice.

The above table 4 shows that the simple bi-variant correlations between various variables under study. It can be explained that the dependent variable (practice of e-tickets) was found to be significantly ($p < 0.01$, and $p < 0.05$) associated positively and negatively with the independent variables (Security, Infrastructure, Perceived Usefulness, Perceived Risk, Trust, Easy of Use, Behavioural Control and Subjective Norm). The significant association between the dependent variable and the independent variables was reported from higher to lower as follows, Security (0.459), Perceived usefulness (0.351), Infrastructure (0.296), Trust (0.255), and Behavioural control (0.182) correlate with significant at the 0.01. On the other hand, Subjective Norm was

correlated (0.150) significantly at 0.05. Since, the value of 'r' is greater or near to 1, that independent variable is highly correlated. In contrast, perceived risk and ease of use did not correlate with e-ticketing practice.

The result of correlation indicated that the correlation between dependent variable and security was positively correlated ($r=0.459$, $p<0.01$) which is highly correlated than the other variables. This suggests that passengers will not apply the system unless they are assured of the system in online transaction process and trustworthiness of the tickets issued. So, security can highly positively associated with e-ticketing than the other independent variables. Similarly, Bargh, et al., (2008) found that security was significantly correlated positively with e-business transaction. Accordingly, perceived usefulness, infrastructure, trust and behavioral control correlated with e-ticketing practice at a significant level of $p<0.01$. This shows that the existence of higher correlation coefficient value (positive) of e-ticket practice was associated with the majority of independent variables.

Those correlations show that the constructs are both conceptually and empirically distinct from each other and together determine strong predictive power as a result of the present study. It may thus be assumed that the practice of e-ticketing as perceived by the users/passengers as subject to test the condition of multi-collinearity.

4.1.5 Multiple regression Analysis

A multiple regression analysis was employed to identify which variables made significant contributions to predicting end-user to use or practice e-ticketing system. It was also used in order to evaluate the combined effect of all independent variables (Security, Infrastructure, Perceived usefulness, Perceived risk, Trust, Easy of use, Behavioural Control and Subjective Norm) on the dependent variable (e-ticketing practice). They were entered simultaneously. The results of the analysis, including β coefficient and significant level (p) for each independent variable are reported hereunder in table 5.

Table 5: Summary of Multiple Regression Analysis

Independent Variable	Standardized coefficient (β)	Significance (p)
IN	0.170	0.008
EU	0.152	0.011
SC	0.295	0.000
PU	0.175	0.007
SN	0.113	0.062
PR	0.017	0.827
TR	0.195	0.002
BC	0.143	0.046

Dependent Variable: E-ticketing practice

Source: From Survey Data

Note: IN – Infrastructure, EU – Ease of Use, SC – Security, PU – Perceived usefulness, SN – Subjective Norm, PR – Perceived Risk, TR – Trust, BC – Behavioural Control, EP – E-ticket Practice.

Table 5 illustrates the analysis of six variables that make significant contributions to the prediction of passengers' e-ticketing practice. That is the standard beta coefficients (β) gave a measure of the contribution of each variable to the Independent variables. A large value indicates that a unit change in this independent variable has a large effect on the dependent variable.

Since the value of Security shows highly predictor on the dependent variable ($\beta=0.295$, $p<0.01$), it implies that Security is a major influencing factor on individual's intention to use/apply e-tickets. Similarly, Trust was found to be significantly affecting use of e-ticketing system ($\beta=0.195$, $p<0.01$), the effect of trust on e-ticketing practice is shown in its contribution to the system's trustworthiness and increased passengers' perception towards using e-ticket. This is consistence with the finding of Bargh, et al., (2008), who reported the existence of significant positive relationships between security and e-ticket practice as well as trust and e-ticket practice. Perceived usefulness also has impact on e-tickets practice at the third level ($\beta=0.175$, $p<0.01$). This result shows that passengers who practice e-ticketing will become beneficiaries and the service provides them with quality service. Moreover, in the case of perceived usefulness, it was

found out that reduced search cost for finding suitable tickets, availability of website for 24hours a day and 7 days a week are among the most important factors that made people to buy tickets using e-ticketing system. Similarly, Davis (1993) and Shen, et al., (2006) found out the existence of a positive relationship between perceived usefulness and easy of use with the acceptance of internet based business transaction.

Regarding to infrastructure, the above table 5 shows that infrastructure significantly affects e-ticketing practice next to perceived usefulness ($\beta=0.170$, $p<0.01$) and proved that, the implementation of e-ticketing system will be based on it. This is in consistence with the findings of Tan (2005), who reported the existence of a positive significant relationship between the airlines e-ticketing system. The next predictor is ease of use ($\beta=0.152$, $p<0.05$). It had significant and positive effect on e-ticketing practice at the EAL. The last factor on e-ticketing is behavioral control. It was found to be significant ($\beta=0.143$, $p<0.01$).

The remaining variables (Perceived Risk, and Subjective Norm) nevertheless, in the regression equation, did not contribute in any significant way to the predication of e-ticketing practice. However, Davis (1993) found out that these have an impact while applying new electronic technology.

On top of that, the adjusted R Square value indicated that the given model accounts for 32.8% of variance in the e-ticketing practice (Appendix E). Moreover, the relative contribution of each independent variable in predicting e-ticket practice, shown in ranking order from the highest to lowest: Security, Trust, Perceived Usefulness, Infrastructure, Ease of Use and Behavioural Control (Appendix F).

4.1.6 Customers' perceptions for e-ticketing practice

The higher the mean score for perception (more than middle value 3) implies the higher the respondents' agreement for the stated items, since the factors affecting variables suggests performance only '5' point scale. This study's two extreme ends for e-tickets system perception are '1'-strongly disagree and '5'-strongly agree. The items are stated positively except perceived risk. Thus, the score below '3' for the items of those factors is interpreted as EAL cannot fulfilled the stated criteria as perceived by the passenger for e-ticket practices since it directs toward disagreement, and above '3' implies agreement which becomes strong as the scale approaches '5' point and '3' point implies the respondent do not know or want to stay neutral.

Table 6: Customer Perceived e-ticket service

Variables	Items	Mean	Standard Deviation
Infrastructure		2.27	1.086
	IN1	1.78	1.130
	IN2	2.24	1.157
	IN3	1.89	1.129
	IN4	2.68	1.036
	IN5	2.74	.978
Ease of use		2.42	1.133
	EU1	2.32	1.177
	EU2	2.66	1.149
	EU3	2.34	1.025
	EU4	2.42	1.166
	EU5	2.35	1.146
Security		2.37	1.202
	SC1	2.17	1.435
	SC2	2.13	1.196
	SC3	2.46	1.227
	SC4	2.58	1.104
	SC5	2.53	1.046
Perceived usefulness		2.99	1.197
	PU1	3.51	1.307
	PU2	2.31	1.131
	PU3	2.48	1.252
	PU4	3.59	1.113
	PU5	3.56	1.073
	PU6	2.69	1.309
	PU7	3.81	.933
	PU8	3.16	1.437
	PU9	2.35	1.223
	PU10	2.43	1.193
Subjective Norm		2.44	1.184
	SN1	2.57	1.193
	SN2	2.63	1.175
	SN3	2.30	1.102
	SN4	2.30	1.292
	SN5	2.40	1.160
Perceived risk		3.36	1.224
	PR1	3.57	1.184
	PR2	3.42	1.305
	PR3	2.84	1.106
	PR4	3.49	1.207
	PR5	3.47	1.318
Trust		3.33	1.110
	TR1	3.11	1.077
	TR2	3.19	1.091
	TR3	3.50	1.056
	TR4	3.58	1.158
	TR5	3.29	1.166
Behavioral Control		2.350	1.180
	BC1	2.25	1.119

	BC2	2.12	1.250
	BC3	2.56	1.185
	BC4	2.52	1.219
	BC5	2.09	1.224
	BC6	2.53	1.098
E-ticket practice		2.66	1.711

Source: From Survey Data

As shown in the Table 6, EAL fulfilled better as customers' are approaching to agreement. However, this table shows that there is a stable and fast internet connection to access e-ticketing system of the EAL (1.78), as required knowledge to buy e-ticket from the company website (2.24), availability of credit card to buy e-tickets (1.89), and related to different mode of payment at EAL e-ticketing system (2.68), while, level of technical skills required to buy e-ticket (2.74). In general, from those indicators weighted mean of infrastructure is 2.27. That is, passengers disagreed with the infrastructure facility. It suggests that passengers perceived the infrastructure facility as not fulfilled by the EAL to practice e-ticketing.

Regarding respondents' perception about Ease of use, the response level is similar with the above approach of disagreement (2.42), i.e., passengers' discomfort to navigate the EAL website (2.32), the website is difficult to understand for majority of passenger (2.66), and book, buy and print e-tickets by themselves using the website was difficult for majority passengers(2.34), has many steps, rules and procedures, while, the website interface language is user friendly and directs appropriately (2.42), and convenient for me to buy air tickets using EAL website (2.35).

The respondents' personal perceptions about security were disagreement to use e-ticketing system (2.37). With regards to ensure trust/security on all credit/debit card payments for e-tickets was (2.17), passengers feel that EAL website is secure from any threat/fraud (2.13), passengers perceived personal information as safe (2.46), transactional information is secured (2.58), and the website offer various pop-up windows from other organizations to assure security during transaction/buying e-tickets (2.53). It implies that the majority passengers perceived to use EAL e-ticketing system as unsecured. However, according to the information gathered from interviews, the EAL apply different kinds of security mechanisms to make the system secured. In general, the majority of respondents had no idea about the security mechanisms put in place by the ELA. It

seems that the EAL did not promote its system in a way that could raise the awareness of its customers. However, the EAL have put in place the some security mechanism.

Regarding respondents' perception about usefulness, the response level almost approached to the neutral (2.99), i.e., passengers are not sure about the usefulness of the EAL e-ticketing system. Such as, e-ticketing system makes easier to buy e-tickets (3.51), makes adjustments related to journey timings/schedules easy (3.59), provided on immediate refund for unused e-tickets (3.56), reducing worries about e-ticket being lost or stolen (3.81) and customized of the system based on passengers needs (3.16) were shown as agreement on the usefulness. However, it enables to buy tickets more quickly (2.31), it could reduce/save travel cost (2.48), e-ticketing system maintains the ticket cheaper than paper tickets (2.69). Overall, the beneficiary with the e-ticketing system of the EAL (2.35) who recommends others to buy tickets online was found disagreement (2.43). In general, it implies that e-ticketing system simplifies the process of buying tickets by using latest technology. On the other hand, due to low infrastructure facilities and low internet connection to buy online, passengers are still incurring the same cost as the paper ticket system. Moreover, it did not reduce transportation and time cost. Therefore, it seems that EAL did not provide the necessary infrastructural facilities, did not do to raise the awareness of its passengers about e-ticketing and its benefits and also the system by it self did not adjust as customers' demand and expectation.

Concerning to subjective norm, the response level approaches disagreement (2.44). That is, it provides the necessary support to use e-ticketing while buying tickets (2.57), people who buy online e-tickets are more prestigious than those who do not (2.63), the advertising media frequently suggest to me to make air ticket purchase online and friends advice to buy air ticket through the EAL e-ticketing system both found to be (2.30), likewise, employees' support to use credit card (2.40). It implies that the EAL did not use influential personalities or opinion leaders as referent group to promote e-ticket system. So, passengers perceived the system with their personal intention rather than subjective norm. However, the existence of subjective norm could be changes the opinion of individuals on their while making decisions to buy e-tickets.

However, with regards to perceived risk, the response level approaches agreement (3.36). These statements were focusing on the risk of e-ticketing. Using online e-ticket system in the EAL is

wastage of time because of poor internet connection (3.57), feel confused (3.42), creates many errors (2.84) and buying e-ticket through credit/debit card is full of risks (3.49) while the EAL website was not frequently updated thereby obtaining risk from non-updated information to the viewer (3.47). Therefore, passengers perceived the EAL e-ticketing system as a threat and there was no guarantee for financial loss on online payments.

Similarly, perception about trust on EAL e-ticketing system response level approaches to agreement (3.33). That is, trust to the EAL website of using latest technology (3.11), tickets purchased through EAL online ticketing system are trustable (3.19), the online ticketing system to safeguard privacy (3.50), buying tickets from unknown websites (3.58) and confident to buy e-tickets from EAL website as it is updated frequently (3.29). It implies that customers have trust on the company's brand. The EAL has more than 60 years of experience and this could build trust on its website. However, hackers could be made fake website. It may create fear and doubtful to practice e-ticketing in the company website.

With regards to respondents' perception about Behavioural Control, the response level almost approached to somewhat lower (2.35), i.e. feeling the EAL e-ticket system is easy (2.25), confidence about EAL e-ticketing service to buy airline tickets (2.12), educational status affects decision to buy tickets online (2.56), feel better when buy e-ticket online than paper ticket (2.52). The internet facility enables me to buy e-ticket through the web (2.09) and it is advisable to buy air tickets online as such purchases provide some discount (2.53). It implies that customers perceived the EAL as it did not fulfil the necessary requirements to practice or perform e-ticketing system. The above indicator show the system is difficult to perform, customers build little confidence for fear of risks, educational status affects to take risk, customers prefer good facilities and accessibility of internet.

In addition to those factors (Infrastructure, Security, Perceived Usefulness, Perceived risk, Subjective norm, Behavioural Control, Trust and Ease of use) the passenger were asked through open-ended questions. The majority of the respondents answered as affected by those factors. Moreover, some passengers responded as affected by other factors such as, customer relation, flight schedule, ticket cost and information.

4.2 Analysis of Interview

Quoting Yin (2003), Tadesse (2006) described data analysis as consisting of categories, tabulation and evidence that will be applied while doing analysis in qualitative research that would, in turn, address the initial proposition of the study. The interview was conducted with respondents from the EAL managers, the Sales and Marketing, Distribution, and Customer Loyalty Department. The researcher tried to grasp the beliefs, perceptions, understandings and ideas of respondents with the help of semi-structural interview. For the sake of anonymity, the researcher assigned codes to all interviewees as follows: respondents from the Sales and Marketing Department were assigned R1, Distribution Department R2 and Customer Loyalty Department were assigned R3.

Moreover, description and interpretations of the data depends on the basic questions forwarded and the researcher tried to describe each of them by synthesizing respondents' reply.

Issues on e-marketing/e-ticketing benefits on implementations

The implementation of any new technology hinges on the benefits it provides for the user and supplier. In line with this, e-marketing offers bottom-line benefits that tie-in directly to the demands placed on the organization which tries to make a transaction in the new economy (Joseph 2005).

Concerning the first question forwarded with regards to the benefits of e-marketing practice at the EAL, all of the respondents answered that e-ticketing has benefits to customers and the Company. They mentioned such benefits including flexibility in usage (one doesn't need to re-print and go through paper process to change date of travel, class, etc), fraud and theft prevention, cost saving compared to paper ticket stock, easily processed financial data because of electronic storage and transmission.

Moreover, the respondents went on adding the benefits of e-marketing in specific to e-ticketing as follows: simplification of ticket changes and refunds, no valuable tickets to be misplaced or lost, faster check-in procedures through the use of self-service check-in kiosks. The majority of the benefits mentioned by the interviewees were similar to those explained in the literature review. This shows that e-ticketing systems benefit the EAL same as it benefits other Airlines.

The response of the EAL managers to the question: Does the EAL really need such kinds of e-ticketing system? Both replied “yes” adding that the EAL needs e-ticketing system. The first reason was that there is a regulatory requirement set by IATA. It decided that all Airlines need to apply the electronic ticketing 100% from May 2008. The second reason was that the EAL needs to work jointly with other airlines. For those reasons the EAL needs to implement the e-ticketing system.

With regards to the question: Does e-ticketing attract more customers compared to paper ticketing? The R1 and R3 respondents replied “yes,” adding it attracts more customers. The rationale behind this, they said, is that the benefits of e-ticketing can attract more customers. However, the other respondent (R2) replied, the EAL still can’t attract more customers since customers were not aware of how to use the EAL website to buy e-tickets.

The last question concerning to the benefits of E-marketing/e-ticketing was on the benefits of e-ticketing in saving costs compared to paper tickets. Their response was “yes,” it saves costs more than paper tickets. The EAL saves such costs as ticket printing cost, GDS cost, commissions to travel agencies and other promotional and memorandum messages to customers.

Issues on Infrastructure

Infrastructure is the basic thing in perform IT business. Large industries that use ICT-based systems such as bank payments, airlines reservation and ticketing systems, automotive industry supply chain networks depend highly on quality infrastructure. The existence of any infrastructural gap will ultimately lead to risk. Infrastructure includes both human and material infrastructures. IT-based material infrastructure includes computers, printers, database software packages, operation systems, and scanners, among others.

The first question asked with regards to infrastructure was: Do you think the EAL fulfil all the necessary infrastructures to use e-ticketing? R1 and R2 respondents replied “yes”. The EAL has almost fulfilled the basic infrastructure facilities such as PCs having enough capacity to run the sabre e-ticketing system software, and network facilities from the ETC and SITA satellites. On the other hand, another respondent (R3) said there are still network connection problems. The EAL provided software related infrastructures such as database and sever by outsourcing the system to the sabre system solution company.

With regards to the kind of infrastructures the EAL uses for implementing e-ticketing, all the three respondents mentioned the main infrastructures as: PC, printer, internet, network cables, 3D security (three dimension security), software (Sabre software), database server, computer accessories, antivirus, among others.

The last question asked on the issue of infrastructure was their opinion about the adequacy of human resource with technical and managerial skills to implement e-ticketing. According to R2 and R3, the EAL has adequate human resources. Moreover, the EAL employees have been trained inside and out of the country e-ticketing system. However, the other respondent (R1) explained that the EAL employees are still bothering to implement and gives support for their customers.

The respondents indicated that the EAL fulfilled all the necessary infrastructures related with human resource, network facilities and appropriate software and so on. Although, the questionnaire result shows that only 20.5% of passengers were paid e-ticket through credit/debit card. This implies that, there is low credit card facility to buy online. In relation to internet facilities, the majority of passengers respond that there is no internet access to buy e-ticket or booking e-ticket online. It shows that passengers have not become beneficiaries. The reason seems that still the majority of passengers went to the EAL ticket offices to buy e-tickets. As a result, passengers were obliged to incur transportation costs and spent a lot of time.

Issues on security

Information security threats include communication and resource related threats. Security services offering protection from security threats are: identification, authentication, confidentiality, integrity, access control, and non-reputation (Bargh et al. 2008). Information security is an integral part of practicing e-ticketing. Therefore, the researcher conducted interview with the EAL managers on the issue of security as follows:

With regards to the issue of security, it was indicated that the EAL fulfilled all the necessary security tools. All interviewees agreed that the e-ticketing system is secured. They mentioned that the EAL incorporated all necessary security tools to implement e-ticketing such as firewall, encryption software, using different passwords, digital signature, and digital certificates, among others. Similarly, they replayed that the EAL security mechanisms can detect or control fraud on credit card payments as it has applied standard security tools. Moreover, if anyone wants to pay e-ticket through credit card, it will be checked by 3D (three dimensional security) tool, and if

passengers paid e-ticketing through credit card, they were asked their ID on the board, payments through credit card at the EAL ticket offices are verified by agents and the tickets are issued after the approval code is obtained on the Saber system.

On top of this, online credit card payments are verified by an internationally established security standard. This is administered by checking the card holder using PIN code and address verification, detail information from client bank on such matters like validity, record on black list, credit card status, and so on. In addition to that, for the purpose of security mechanisms, the credit card holder should be a traveler. That is the credit card holder who pay for him/her self again can pay another person but they must travel together. Respondents replied that the EAL system contributed to detect fraud on credit card payment.

Finally, on the issue of system security from hackers, virus and fake website, all respondents agreed that the system is secured. It is controlled by the EAL IT security department. The website also incorporated international standard encryption tools. In addition, the EAL scanned the client machine and database server using MacAfee Antivirus software. However, fraudulent activist may exist in relation to credit card payments.

Chapter Five

Summary of Major Findings, Conclusion and Recommendations

5.1 Summary of Major Findings

The data analysis leads to the following major findings:

1. It was found out that only 19.5% of the respondents gained benefits by using the company's website.
2. The study disclosed that 20.5% of the respondents paid using credit or debit card.
3. The study indicated that more than half of EAL customers departing from Ethiopia were Ethiopian nationality.
4. The study revealed that the majority of Washington passengers became beneficiaries by using the company's website.
5. It was found out that 36.5% of the respondents did not have Internet access to use company's website
6. Concerning items correlations, the study indicated that there were significant positive correlation between security and e-ticketing practice ($r=0.459$; $p<0.01$).
7. The study revealed that there were correlations between perceived usefulness and e-ticketing practices as well as between infrastructure and e-ticketing practice ($r=0.351$; $p<0.01$ and $r=0.296$, $p<0.01$).
8. It indicated that the combined effect of independent variables (security, Infrastructure, perceived usefulness, perceived risk, trust, easy of use, behavioural control and subjective norm) on the dependent variable (e-ticketing practice) was significant at $p<0.05$.
9. With respect to factors affecting e-ticketing practice at the EAL, the study revealed the following rank order from the highest to lowest: Security, Trust, Perceived Usefulness, Infrastructure, Ease of Use and Behavioural Control.
10. The study indicated that passengers perceived that the infrastructure facilities provided by the EAL to practice e-ticketing system was low (weighted mean = 2.27).
11. The study revealed that respondent passengers perceived that the EAL employees did not assist passengers to use credit/debit card (mean=2.40).

12. It was found out that majority of respondent passengers did not recommend others to buy e-tickets online through company's website (mean=2.43).
13. It was found out that the majority of respondent passengers perceived the EAL website's interface language not user friendly and did not work appropriately (mean=2.42).
14. The study showed that subjective norm and perceived risk had insignificant impact on practicing e-ticketing system.
15. The study revealed that 51% of the respondent passengers paid in cash whereas 23.5% and 20.5% paid in the form of check and in the form of credit/debit card respectively.
16. It was found that most of the domestic passengers did not use company's website compared to international passengers.
17. Regarding to e-ticketing system mechanism, the study revealed that in the view of EAL marketing managers, EAL using standard security tool.
18. The study revealed the most important benefits of practicing e-ticketing at the EAL as flexibility in usage, fraud and theft prevention, cost-saving from paper ticket stock and easier processing of financial data.

5.2 Conclusions

Based on the data analysis and major findings of the study, the following specific conclusions have been drawn:

1. In order to implement e-ticketing system at EAL technological infrastructure is necessary to involved. However, the finding showed that the majority of respondents confirm that there were inadequate infrastructure facilities to practice e-ticketing in the EAL website. This could lead to loss of profit by EAL in light of strong competitions in the world.
2. The findings revealed that only few passengers bought e-tickets through the EAL's website. It can be conclude that the EAL did not work enough on awareness rising that practicing e-marketing system would be more helpful to both itself and passengers in terms of saving time and cost, portability, and simplification of duties. This shows that there is low level of awareness on the part of the customers in using e-tickets on the EAL's website.

3. Passengers need to have appropriate credit/debit card facilities to buy e-tickets at the company's website. Without adequate credit/debit card facilities it is difficult to get e-ticket services. Moreover, the findings indicated that the majority of domestic routes passengers did not use credit/debit card. From this it can be safely concluded that there were problems associated with access to credit/debit card in the EAL.
4. In order to implement e-ticketing system at EAL depend on the level of security. That is the level of security of the system affects passengers' whether to practice e-ticketing or not. As the finding implies that security is the major factors to practice e-ticketing at EAL. Even if the EAL provided standard security tools, passengers did not easily see and understand how much it is secured. From this, it can conclude that there was a communication gap between the passengers and EAL.
5. Perceived usefulness and ease of use both are the basis for e-ticketing practice including in airlines industries. However, the finding showed that majority of passenger perceived that the system is not easy to perform and less users friendly. Moreover, majority of the respondents were confused whether it is useful or not. This could lead to conclude the EAL did not attach due attention to improve the system based on customers' needs and wants. This negligence of customers' needs would negatively affect the reputation of EAL.
6. As a new technology based system implementation in an organization the end user or customer needs to have appropriate support. However, the finding shows that EAL employees did not adequately support passengers to use credit/debit card as the customer expectations. It can be concluded that EAL employees lacked adequate training on helping passengers how to utilize credit/debit cards.
7. The finding showed that majority of passengers did not recommend others to buy e-ticket online from the EAL. It can be conclude that the provision for e-tickets in the EAL was not well developed.

Finally, there are also other factors that affect the intention of customers to use e-ticketing to purchase airlines tickets. Further tests and expansion of our model may capture other factors that are not contemplated herein.

5.3 Recommendations

Based on the findings and the conclusions drawn in the pervious sections, the following recommendations are forwarded.

1. Any technology-based businesses needs appropriate infrastructure to work properly. Therefore, the EAL should improve its own technological infrastructure to effectively utilize e-ticketing system and compete with similar firms.
2. The EAL could save costs and simplify its work by using e-ticketing. Passengers may also become beneficiaries by using e-ticketing system. Therefore, it is highly recommended that the EAL should, in collaboration with its local and international stakeholders, work towards raising the awareness of customers about the importance of using e-ticketing system.
3. Access to credit card is a pivotal issue in increasing the use of the company's website to buy e-ticket. In order to solve this problem, the EAL should closely work with the Ethiopian local banks with a view to facilitating the use of credit/debit card to customers.
4. It has been noticed that even if the system is secured, the passengers were not sure to pay online. Therefore, it is recommended that the EAL website should incorporate easily understandable messages that the system is secured for users. It should pop-up messages to approve the card is acceptable and secured when one uses entered credit /debit card number or other personal information.
5. Perceived usefulness and ease of use have a colossal impact to practice e-ticketing system. Therefore, it is recommended that the EAL should make the system easy to use and provide additional features in its website for its passengers, such as chat room and e-mail address. Moreover, the e-ticketing system should incorporate in its website one click shopping, more structured and colorful graphics, multi-lingual features (especially

incorporate as additional most widely used languages like Arabic, Spanish and some local languages as well). It will be easier to practice and useful to understand every rules and regulations related to the e-tickets.

6. The implementation of the new technology depends on the capacity/knowledge of employees as well as the user. Therefore, it is recommended that EAL should build the capacity its human resources in order to effectively and competitively practices e-ticketing system.
7. E-ticketing system could be successfully implemented when majority of passengers are practicing it. Therefore, it is recommended that EAL should be providing discount and premium for passengers who made purchase e-ticket through company's website. It will be increased the number of e-ticketing users.

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Appendices

Appendices

Appendix A: – Questionnaires in English

Survey on Factors affecting e-marketing: e-Ticketing practice of Ethiopian Airlines (EAL)

Dear respondent,

My name is Essayas Taye, MA (Marketing) graduating student of AAU. Given below are the items to evaluate your perceptions and experience with Ethiopian Airlines (EAL) related to e-marketing/ticketing. This information will be used for academic purpose and responses will be treated in strict confidentiality. In advance, I thank you very much for active cooperation.

Part I- General Information

1. Nationality: A) Ethiopian , B) Others (Please specify) _____
2. Sex: A) Male , B) Female
3. Age group: A) Below 18 B) 18- 25 , C) 26-35 D) 36-45
E) 46-55 F) Above 55
4. Educational status:
A) Below Diploma B) Diploma , C) Undergraduate degree ,
D) Masters Degree and Above , E) Others (Please specify) _____
5. Access to internet:
A) No , B) From home , C) From work Place D) From internet café
6. I buy e-tickets through:
A) Companies web site by my self , B) EAL ticket office
C) Travel agent , D) Other (Please Specify) _____
7. I paid for e-ticket in the form of :
A) Credit/debit card B) Cash , C) Check
Other (Please Specify) _____



8. How often have you been taking flights with EAL?
 A) Regularly , B) Sometimes , C) Occasionally , D) Rarely
9. How many flights have you been taking with EAL in the last 12 months? (Count return trip as 2 flights).
 A) Less than 5 , B) 6-10 , C) 11-15 , D) 16-20
 E) Above 20
10. Traveling route: Origin (City).....destination (City)

Part II – Perception of e-Ticketing System

For each of the following, please place a “✓” in the box that best represents your level of agreement or disagreement. Strongly Agree=**SA**, Agree=**A**, Neutral=**N**, Disagree=**D**, Strongly Disagree=**SD**

S.N	Statement/Items	Rating				
		SA	A	N	D	SD
1	I have stable and fast internet connection to access e-ticketing system of EAL.					
2	I have required knowledge to buy e-ticket from the company website.					
3	I have a credit card to buy e-tickets on the company website online.					
4	I can buy e-ticket by following different mode of payment at EAL e-ticketing system.					
5	Buying e-ticket through EAL website doesn't require high level of technical skills.					
6	I am comfortable to navigate EAL website.					
7	The website is easy to understand for me.					
8	I can easily book, buy and print e-tickets by myself using the website.					
9	Website interface language is user friendly and directs appropriately.					

S.N	Statement /Items	Rating				
		SA	A	N	D	SD
10	It is convenient for me to buy air tickets using EAL website.					
11	The EAL website ensures trust/security on all credit/debit card payments for e-tickets.					
12	I feel that EAL website is secure from any threat/fraud.					
13	I believe my personal information is safe on EAL website.					
14	I think my transaction information is secured.					
15	The website does offer various pop-up windows from other organizations to assure security during transaction/buying e-tickets.					
16	E-ticketing system makes it easier to buy tickets.					
17	E-ticketing system enables me to buy tickets more quickly.					
18	I could reduce/save travel cost by using online ticket through EAL website.					
19	E-ticketing system easily makes adjustments related to journey timings/schedules.					
20	Passengers are provided on immediate refund for unused e-tickets through EAL e-ticketing system.					
21	E-ticketing system maintains the ticket cheaper than paper tickets.					
22	I am not worry when e-ticket being lost or stolen.					
23	I buy e-ticket as it is customized based on my needs.					
24	Overall, I am beneficiary with the e-ticketing system of EAL.					
25	I will definitely recommend others to buy tickets online (e-tickets) through website.					
26	EAL provides necessary support to use e-ticketing while buying ticket.					
27	People in the society who buy online e-ticket are more prestigious than those who do not.					
28	The advertising media frequently suggest to me to make air ticket purchase online.					

29	My friends advice me to buy air ticket through EAL e-ticketing system.					
30	EAL employees are supporting me to use credit card.					
31	Using online e-ticket system in EAL is wastage of time because of poor internet connection.					
32	I feel confused when I am using e-ticketing in EAL website					
33	Using online e-ticket in EAL has many errors.					
34	I think buying e-ticket through credit/debit card is full of risks.					
35	EAL website are not frequently updated, thus a risk of obtaining non-updated information to the viewer.					
36	I trust the EAL website as it uses latest technology.					
37	I think tickets purchased through EAL online ticketing system are trustable.					
38	I trust the online ticketing system to safeguard my privacy.					
39	I do not buy air tickets from unknown websites.					
40	I am confident to buy e-tickets from EAL website as it is updated frequently.					
41	I feel the EAL e-ticket system is easy.					
42	I have full confidence with EAL e-ticketing service to buy airline tickets.					
43	My educational status affects my decision to buy tickets online.					
44	I feel better when buy e-ticket online than paper ticket.					
45	The internet facility enables me to buy e-ticket through the web.					
46	It is advisable to buy air tickets online as such purchases provide some discount.					
47	Overall, E-ticket system practicing in EAL.					

1. What extra factors do you think may affect people to buy e-tickets/ online-tickets?

ሀ. በዱቤ ካርድ ለ. በጥሬ ገንዘብ ሐ. በቼክ መ. በሌላ (ይገለፅ) _____

8. በኢትዮጵያ አየር መንገድ የበረራት በምን ያህል ጊዜ ነው?

ሀ. በመደበኛ ለ. አልፎ አልፎ
 ሐ. አንዳንድ ጊዜ መ. በጣም የተወሰነ ጊዜ

9. ባለፉት 12 ወራት ውስጥ በኢትዮጵያ አየር መንገድ ያደረጉት የበረራ ድግግሞሽ ስንት ነው? (የደርሶ መልስ ጉዞ በ2 ይቆጠር)

ሀ. ከ5 በታች ለ. ከ6 -10
 ሐ. 11-15 መ. 16-20 ሠ. 20 በላይ

10. የጉዞ መንገድ፡ መነሻ ከተማ _____ መዳረሻ ከተማ _____

ክፍል 2 የኢ-ቴክቲንግ ግንዛቤ

ለሚከተሉት ለእያንዳንዱ የራይት √ ምልክት በሳጥኑ ውስጥ በመፃፍ የስምምነት ወይም ያለመስማማት ሀሳብዎን ይስጡ።

- በእ = በጣም እስማማለሁ እስ = እስማማለሁ
- አል = አልስማማም በአ = በጣም አልስማማም
- አ = አልወሰንኩም

ተ.ቁ	ዓረፍተ ነገር	ደረጃ				
		በእ	እስ	አ	አል	በአ
1	የኢትዮጵያ አየር መንገድ ኢ-ቴክቲንግ ለመጠቀም የተረጋጋና ፈጣን የኢንተርኔት አገልግሎት አለ					
2	ከከባንያው መረጃ መረብ ኢ-ቴክት ለመግዛት ክህሎት ያስፈልገኛል					
3	ከከባንያው መረጃ መረብ ኢ-ቴክት ለመግዛት የዱቤ ካርድ አለኝ					
4	ከኢትዮጵያ አየር መንገድ የኢ-ቴክት ስርዓት የተለያዩ የክፍያ ሃይቶችን በመከተል ኢ-ቴክት መግዛት እችላለሁ።					
5	ከኢትዮጵያ አየር መንገድ ድህረ ገጽ ኢ-ቴክት መግዛት ከፍተኛ እውቀት አያስፈልገውም					
6	የኢትዮጵያ አየር መንገድ ድህረ ገጽ ለመጠቀም አመቺ ነው					
7	የኢትዮጵያ አየር መንገድ ድህረ ገጽ በቀላሉ ለመረዳት የሚቻል ነው					
8	የኢ-ቴክትን ድህረ ገጽን ተጠቅሜ በራሴ በታ መያዝ፣ መክፈልና ፕሪንት ማድረግ እችላለሁ					

9	ድሀረ ገጽን ቋንቋ ለተጠቃሚ ምቹና ቀላል መሪ ነው					
10	የኢትዮጵያ አየር መንገድ ድሀረ ገጽ ተጠቅሜ ተኬት መግዛት ይመቻል					
11	የኢትዮጵያ አየር መንገድ ድሀረ ገጽ ለኢ-ተኬት የሚከለሉ የዱቤ ካርድ ተለማኒነት አላቸው					
12	የኢትዮጵያ አየር መንገድ ድሀረ ገጽ ከማናቸውም መጭበርበር ነገ እንደሆነ እተማመናለሁ።					
13	በኢትዮጵያ አየር መንገድ ድሀረ ገጽ ላይ የግል መረጃዬ በሚስጥር እንደሚያዝ እተማመናለሁ					
14	በኢትዮጵያ አየር መንገድ ድሀረ ገጽ ላይ የማደርገው ገንዘብ ነክ የመረጃ ልውውጥ በጥሩ ሁኔታ እንደሚያዝ እተማመናለሁ					
15	ድሀረ ገጽ ከሌሎች ድርጅቶች የተለያዩ የማረጋገጫ መልእክቶችን የሚያሳይ ሲሆን ይህም በኢ-ተኬት መረጃ ለውውጥና ግዢ ጊዜ አስተማማኝ አገልግሎት እንዲቀርብ ያስችላል።					
16	የኢ-ተኬት አሰራር ተኬት ለመግዛት ቀላል ነው					
17	የኢ-ተኬት አሰራር በፍጥነት ተኬት ለመግዛት ያስችላል					
18	በኢትዮጵያ አየር መንገድ ድሀረ ገጽ በመጠቀም ተኬት መግዛት ለትራንስፖርት የማወጣውን ወጪ ይቀንስልኛል።					
19	የኢ-ተኬት አሰራር የጉዞ ሰዓትና ዕቅድ ለመቀየር ያስቸለኛል					
20	ተጓጎሮች በኢትዮጵያ አየር መንገድ ኢ-ተኬት አሰራር ተኬቱን ካልተጠቀሙ ገንዘብ ባቸው ይመለስላቸዋል					
21	የኢ-ተኬት አሰራት የትኬት ዋጋ ከወረቀት ዋጋ እንዲቀንስ የስችላል					
22	ኢ-ተኬት ቢሰረቅ ወይም ቢጠፋ ብዙም አያስጨንቀኝም					
23	ኢ-ተኬት ስገዛ በፍላጎቴ መሰረት በተስተካከለ ሁኔታ እንደሚመቻኝ ማድረግ ስለሚቻል ነው					
24	ባጠቃላይ በኢትዮጵያ አየር መንገድ ኢ-ተኬት አሰራር ተጠቃሚ ነኝ					
25	በእርግጠኝነት ሌሎች ሰዎች ከመረጃ መረብ ኢ-ተኬት እንዲገዙ እመክራቸዋለሁ					
26	በኢትዮጵያ አየር መንገድ ትኬት ሲገዛ ስለ ኢ-ተኬቱን በቂ ድጋፍ ይሰጣል					
27	ኢ-ተኬት የሚገዙ የሕብረተሰብ አካላት ኢ-ተኬት ከማይገዙት በተሻለ የኑሮ ደረጃ ላይ ያሉ ናቸው					
28	በሚዲያ የሚተላለፈው ማስታወቂያ ከመረጃ መረብ ትኬት እንድገዛ ያበረታታኛል					
29	ጓደኞቼ ከኢትዮጵያ አየር መንገድ ኢ-ተኬት አሰራር ትኬት እንድገዛ ይመክሩኛል					
30	በኢትዮጵያ አየር መንገድ ሰራተኞች የዱቤ ካርድ እንድጠቀም ይረዱኛል					

31	በኢትዮጵያ አየር መንገድ ድህረ ገጽ ቲኬት መግዛት ጊዜን ማባከን ነው ምክንያቱም የኢንተርኔት ፍጥነት ዘገምተኛ ስለሆነ						
32	በኢትዮጵያ አየር መንገድ ድህረ ገጽ ቲኬት መግዛት ያደናግራል						
33	በኢትዮጵያ አየር መንገድ ድህረ ገጽ ብዙ ስህተቶችን ያሰራል						
34	በዱቤ ካርድ ኢ-ቲኬት መግዛት ብዙ ጉዳዮች አሉት						
35	በኢትዮጵያ አየር መንገድ ድህረ ገጽ በየጊዜው ስለሚታደስ ተመልካቹ ወቅታዊ መረጃ አያገኝም						
36	በኢትዮጵያ አየር መንገድ ድህረ ገጽ ወቅታዊ ቴክኖሎጂ ስለሚጠቀም አምነዋለው						
37	በኢትዮጵያ አየር መንገድ ድህረ ገጽ የሚገዙ ቲኬቶች የሚታሙኑ ናቸው						
38	በኢትዮጵያ አየር መንገድ ድህረ ገጽ የምግብው ቲኬት ፍላጎቴን ስለሚጠብቅልኝ አምነዋለው						
39	ከማይታወቅ የመረጃ መረብ የአየር ቲኬት አልገዛም						
40	በኢትዮጵያ አየር መንገድ ድህረ ገጽ በየጊዜው ስለሚታደስ ኢ-ቲኬት ለመግዛት እደፍራለው						
41	በኢትዮጵያ አየር መንገድ ኢ-ቲኬት አሰራር ቀላል ነው						
42	በኢትዮጵያ አየር መንገድ ኢ-ቲኬት አገልግሎት ለመግዛት ሙሉ ሙተማመን አለኝ						
43	ያለኝ የትምህርት ደረጃ በመረጃ መረብ ቲኬት ለመግዛት ተፅዕኖ ያደርግብኛል						
44	በወረቀት ከምግብው ይልቅ በኢ-ቲኬት የምግብው የተሻለ ስሜት ይሰጠኛል						
45	ያለው የኢንተርኔት አቅርቦት ኢ-ቲኬት እንደገዛ ያስችለኛል						
46	የአየር ቲኬት ከመረጃ መረብ መግዛት የዋጋ ቅናሽ ያስገኛል						
47	በአጠቃላይ ኢ-ትኬቲንግን ኢትዮጵያ አየር መንገድ ተግባር ላይ አውሎታል						

1. ሰዎች ኢ-ቲኬት እንዲገዙ ወይም እንዳይገዙ የሚገዳቸው ሌሎች ተጨማሪ ምክንያቶች ቢገልፁልኝ

Appendix C: – Interview questions

Interview question for EAL managerial staff

1. What are the benefits of practicing/maintaining e-market at EAL? (For the company as well as for the customers).
2. What are the advantages of maintaining e-ticketing at EAL? (For the company and customers).
3. Does EAL really need e-ticketing system? If yes why (the significance)?
4. Does the e-ticket system attract more customers comparative to paper ticketing system?
5. How much do you think e-ticketing can save the cost over paper tickets?
6. Do you think that EAL fulfill all necessary infrastructures to use e-ticketing?
7. What kind of infrastructure EAL uses for implementing e-ticketing?
8. Do you think EAL has adequate human resource with technical and managerial skills to implement e-ticket system?
9. How do you ensure security related to e-ticketing?
10. Is there any security mechanism to detect or to control fraud on credit card payments?
11. Do you think E-ticketing system software is secured from hackers, virus and fake website?

Appendix D: – Coded Items

Coded Items	
IN1	I have stable and fast internet connection to access e-ticketing system of EAL.
IN2	I have required knowledge to buy e-ticket from the company website.
IN3	I have a credit card to buy e-tickets on the company website online.
IN4	I can buy e-ticket by following different mode of payment at EAL e-ticketing system.
IN5	Buying e-ticket through EAL website doesn't require high level of technical skills.
EU1	I am comfortable to navigate EAL website.
EU2	The website is easy to understand for me.
EU3	I can easily book, buy and print e-tickets by myself using the website.
EU4	Website interface language is user friendly and directs appropriately.
EU5	It is convenient for me to buy air tickets using EAL website.
SC1	The EAL website ensures trust/security on all credit/debit card payments for e-tickets.
SC2	I feel that EAL website is secure from any threat/fraud.
SC3	I believe my personal information is safe on EAL website.
SC4	I think my transaction information is secured.
SC5	The website does offer various pop-up windows from other organizations to assure security during transaction/buying e-tickets.
PU1	E-ticketing system makes it easier to buy tickets.
PU2	E-ticketing system enables me to buy tickets more quickly.
PU3	I could reduce/save travel cost by using online ticket through EAL website.
PU4	E-ticketing system easily makes adjustments related to journey timings/schedules.
PU5	Passengers are provided on immediate refund for unused e-tickets through EAL e-ticketing system.
PU6	E-ticketing system maintains the ticket cheaper than paper tickets.
PU7	I am not worry when e-ticket being lost or stolen.
PU8	I buy e-ticket as it is customized based on my needs.
PU9	Overall, I am satisfied with the e-ticketing system of EAL.
PU10	I will definitely recommend others to buy tickets online (e-tickets) through website.
SN1	EAL provides necessary support to use e-ticketing while buying ticket.
SN2	People in the society who buy online e-ticket are more prestigious than those

	who do not.
SN3	The advertising media frequently suggest to me to make air ticket purchase online.
SN4	My friends advice me to buy air ticket through EAL e-ticketing system
SN5	EAL employees are supporting me to use credit card.
PR1	Using online e-ticket system in EAL is wastage of time because of poor internet connection.
PR2	I feel confused when I am using e-ticketing in EAL website
PR3	Using online e-ticket in EAL creates many errors.
PR4	I think buying e-ticket through credit/debit card is full of risks.
PR5	EAL website are not frequently updated, thus a risk of obtaining from non-updated information to the viewer.
TR1	I trust the EAL website as it uses latest technology.
TR2	I think tickets purchased through online ticketing system are trustable.
TR3	I trust the online ticketing system to safeguard my privacy.
TR4	I do not buy air tickets from unknown websites.
TR5	I am confident to buy e-tickets from EAL website as it is updated frequently.
BC1	I feel the EAL e-ticket system is easy.
BC2	I have full confidence with EAL e-ticketing service to buy airline tickets.
BC3	My educational status affects my decision to buy tickets online.
BC4	I feel better when buy e-ticket online than paper ticket.
BC5	The internet facility enables me to buy e-ticket through the web.
BC6	It is advisable to buy air tickets online as such purchases provide some discount.

Appendix E: – Multiple Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.596 ^a	.355	.328	.704

a. Predictors: (Constant), BC, EU, PU, SN, IN, TR, SC, PR

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	52.042	8	6.505	13.137	.000 ^a
	Residual	94.578	191	.495		
	Total	146.620	199			

a. Predictors: (Constant), BC, EU, PU, SN, IN, TR, SC, PR

b. Dependent Variable: E-ticket practice

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)					
	IN	-0.138	0.481		-0.288	0.774
	EU	0.17	0.063	0.17	2.683	0.008
	SC	0.138	0.054	0.152	2.558	0.011
	PU	0.239	0.056	0.295	4.233	0.000
	SN	0.174	0.064	0.175	2.714	0.007
	PR	0.099	0.053	0.113	1.879	0.062
	TR	0.015	0.069	0.017	0.219	0.827
	BC	0.184	0.057	0.195	3.197	0.002
		0.128	0.072	0.143	1.782	0.046

a. Dependent Variable: E-ticket practice

Appendix F: – Stepwise Regression Analysis

Summary of stepwise regression analysis of the predictor variables: Stepwise rank order

Model	Variables Entered	Variables Removed	Method
1	SC		Stepwise (Criteria: Probability-of-F-to-enter \leq .050, Probability-of-F-to-remove \geq .100).
2	TR		Stepwise (Criteria: Probability-of-F-to-enter \leq .050, Probability-of-F-to-remove \geq .100).
3	PU		Stepwise (Criteria: Probability-of-F-to-enter \leq .050, Probability-of-F-to-remove \geq .100).
4	IN		Stepwise (Criteria: Probability-of-F-to-enter \leq .050, Probability-of-F-to-remove \geq .100).
5	EU		Stepwise (Criteria: Probability-of-F-to-enter \leq .050, Probability-of-F-to-remove \geq .100).
6	BC		Stepwise (Criteria: Probability-of-F-to-enter \leq .050, Probability-of-F-to-remove \geq .100).

Summary of stepwise regression analysis of the predictor variables: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	Sig. F Change
1	.459(a)	.211	.207	.764	.211	52.957	.000
2	.497(b)	.247	.239	.749	.036	9.311	.003
3	.530(c)	.280	.269	.734	.034	9.201	.003
4	.554(d)	.307	.293	.722	.026	7.435	.007
5	.573(e)	.328	.311	.713	.021	6.120	.014
6	.586(f)	.343	.323	.707	.015	4.374	.038

a Predictors: (Constant), SC

b Predictors: (Constant), SC, TR

c Predictors: (Constant), SC, TR, PU

d Predictors: (Constant), SC, TR, PU, IN

e Predictors: (Constant), SC, TR, PU, IN, EU

f Predictors: (Constant), SC, TR, PU, IN, EU, BC

g Dependent Variable: E-ticket practice

Statement of Declaration

I, the under signed, declare that the thesis is my original work, has not been presented for a degree in any other university and that all sources of material used for the thesis have been duly acknowledged.

Name: Essayas Taye

Signature 

Date July 7, 2010

Confirmed By:

Name: Dr. Rakshit Negi

Signature _____

Date _____