



ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDENTS
DEPARTMENT OF MARKETING MANAGEMENT

Factors Affecting the Adoption of Digital Marketing Strategies: In case of Ethiopian Airlines (Head office).

BY: ELSHADAY MILLION NEGASH
ADVISOR: TEMESGEN BELAYNEH (PHD)

**A THESIS SUBMITTED TO ST. MARY'S UNIVERSITY SCHOOL OF
GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE
REQUIREMENT FOR THE MASTERS OF MARKETING MANAGEMENT**

JUNE, 2024
ADDIS ABABA, ETHIOPIA

**ST. MARY’S UNIVERSITY
SCHOOL OF GRADUATE STUDENTS
DEPARTMENT OF MARKETING MANAGEMENT**

*Factors Affecting the Adoption of Digital Marketing Strategies: in case of
Ethiopian Airlines (Head office).*

**BY: ELSHADAY MILLION NEGASH
ADVISOR: TEMESGEN BELAYNEH (PHD)**

**A THESIS SUBMITTED TO ST. MARY’S UNIVERSITY SCHOOL OF
GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE
REQUIREMENT FOR THE MASTERS OF MARKETING MANAGEMENT**

**JUNE, 2024
ADDIS ABABA, ETHIOPIA**

Certification

The undersigned certify that they have read and hereby recommend to St. Mary's University the thesis entitled "factors affecting the adoption of digital marketing strategies; in case of Ethiopian Airlines submitted by Elshaday Million Negash" in partial fulfillment of the requirements for the award of a Master of Marketing Management.

-----	-----	-----
Name of External examiner	signature	date

-----	-----	-----
Name of internal Examiner	signature	date

-----	-----	-----
Name of head of Department/PM coordinator	signature	date

Acknowledgement

I sincerely thank God for his constant providence and granting me sound health in the course of this study. My gratitude also goes to my supervisor, Temesgen Belayneh (PHD) for his guidance, patience and encouragement in this pursuit.

I am thankful to Temesgen Belayneh (PHD) for his constant encouragement, and the long hours he put to correct me and help me make my work sensible. My gratitude also goes to Mr. Dessie Melkie for helping me used SPSS to analyze and output statistical data.

I also do not forget my siblings, parents and friends who have been an encouragement to me, for bearing with me even when I was not available to spend time with them. I also remain indebted to my colleagues at Ethiopian airlines who made sacrifices to enable me to pursue this study.

I am also grateful to the principal of Ethiopian airlines, airline employee and managers for providing me with an enabling to fulfill the questioners and interview environment to pursue this study.

Table of Content

<u>Table of Contents</u>	<u>Page</u>
Acknowledgement	iii
Table of Content	iv
Table of Contents	v
Acronyms	vi
List of Tables	vii
List of Figures	viii
<i>Abstract</i>	x
CHAPTER ONE	1
INTRODUCTION	1
1.1. Background of the Study	1
1.2 Background of the Organization	2
1.3. Statement of the Problem	3
1.4. Research Questions	5
1.5. Objectives of the Study	6
1.5.1. General Objective	6
1.5.2. Specific Objectives	6
1.6. Scope of the Study	6
1.6.1. Thematic scope	6
1.6.2. Spatial scope	6
1.6.3. Methodological Scope	6
1.6.4. Temporal Scope	7
1.7. Significance of the Study	7
1.8. Limitations of the Study	7
1.9. Operational Definition	8
1.10. Structure of the Study	9
CHAPTER TWO	10
LITERATURE REVIEW	10
2.1 Conceptual Review	10
2.1.1. Basic Concepts and Definitions	10

2.2 Theoretical Review	12
2.2.1. Digital Marketing	12
2.2.2. Overview of E-Marketing	13
2.2.3. E-Marketing In the Airlines Industry.....	13
2.2.4. Overview of Digital Marketing in Ethiopia.....	15
2.2.5. History of E-ticket	16
2.2.6. Buying E-ticket on Online	19
2.2.7. Aviation Industry.....	19
2.2.8. Civil Aviation	20
2.2.9. Aviation Sector and Digital Marketing.....	21
2.3 Empirical Studies	23
2.3.1. Factors of Digital Marketing Strategies in Ethiopian Airlines	23
2.4 Conceptual Framework	25
2.4.1. Explanation of the Conceptual Framework	25
CHAPTER THREE	27
RESEARCH METHODOLOGY	27
3.1. Research Approach and Methods	27
3.2. Sources of Data	28
3.2.1. Primary Sources of Data	28
3.2.2. Secondary Sources of Data	28
3.3. Population of the Study.....	28
3.3.1. Sample Size.....	29
3.3.2. Sampling Technique	29
3.4. Tools of Data Collection	29
3.5. Data Processing, Analysis, and Presentation Methods	30
3.5.1. Data Processing.....	30
3.5.2. Data Analysis	30
3.5.3. Data presentation.....	30
3.6. Validity and Reliability	31
3.7. Ethical Considerations	32
CHAPTER FOUR.....	34

DATA ANALYSIS, PRESENTATION AND INTERPRETATION	34
Introduction.....	34
4.1. The Questionnaire Response Rate.....	34
4.2. Demographic Information of Respondents	34
4.3. Descriptive Method of Data Analysis	34
4.4. Characteristic Profiles of the Respondents	35
4.5. Descriptive statics for determinants of digital marketing practice.....	39
4.6. Descriptive statics for infrastructure factors	41
4.7. Descriptive statics for Perceived Usefulness factors	44
4.8. Descriptive statics for Perceived Trust factors	46
4.9. Descriptive statics for Security factors	47
4.10. Correlation matrix	48
4.11. Tests of Normality.....	50
4.12. Multiple linear Regression Analysis.....	52
4.13. Discussion of the result	55
CHAPTER FIVE	57
SUMMARY, CONCLUSION AND RECOMMENDATION.....	57
5.1. Summary of Findings	57
5.2. Conclusion.....	57
5.3. Recommendations	58
Reference	60
Appendix 1	65

Acronyms

AA: Aviation Companies Airlines

BA: British Airways

EAL: Ethiopian Airlines

ETC: Ethiopian Telecommunication Corporation

GDS: Global Distribution System

IATA: International Air Transport Association

OLM: Online Marketing Service

SITA: Specialist in air Transport Communication and IT solutions

SPSS: Statistical Package for Social Sciences

List of Tables

TABLE 3.1: RELIABILITY TEST MEASURES USING CRONBACH’S ALPHA	31
TABLE 4.1. SAMPLE DISTRIBUTION OF TOTAL RESPONDENTS’ RATE.....	34
TABLE 4.2. CHARACTERISTIC PROFILES OF THE RESPONDENTS	36
TABLE 4.3. DIGITAL MARKETING PRACTICE RESPONDENTS.....	39
TABLE 4.4. DEMOGRAPHIC/INFRASTRUCTURE FACTORS	41
TABLE 4.5. SAMPLE OF PERCEIVED USEFULNESS FACTORS.....	43
TABLE 4.6. SAMPLE OF PERCEIVED TRUST FACTORS	46
TABLE 4.7. THE SAMPLE OF SECURITY FACTORS.....	47
TABLE 4.13: RULE OF THUMB FOR ABOUT THE STRENGTH OF CORRELATION COEFFICIENT	49
TABLE 4.8. PEARSON’S CORRELATION BETWEEN THE MARKET DEVELOPMENT AND THE FIVE INDEPENDENT VARIABLES.....	49
TABLE 4.10: MODEL SUMMARY INDEPENDENT FACTORS AS PREDICTORS TO DIGITAL MARKETING	53
TABLE 4.11: ANOVA TABLE.....	54
TABLE 4.12: COEFFICIENT OF INDEPENDENT VARIABLES (FACTORS) AS PREDICTORS TO THE DIGITAL MARKETING.....	54

List of Figures

FIGURE 2.1. CONCEPTUAL FRAMEWORKS (OWN MODEL)	24
FIGURE 4.2: NORMALITY TEST (HISTOGRAM).....	51
FIGURE 4.3: NORMALITY TEST (P-PLOT)	52

Abstract

The general objective of this study was to investigate factors affecting the adoption of digital marketing strategies in case of Ethiopian airlines. Relevant data were collected from customers using structural questions. The research was conducted using a mixed-methods approach, with both primary and secondary data sources being utilized. Stratified sampling methods were employed to selected respondents. The questionnaire was filled out by 254 respondents. Multiple linear regression and correlation analyzes were used to analyze data. The coefficient of multiple determinations (R^2) was 0.739 and adjusted R^2 value also was 0.736. This means that 73.9% of the variation in the dependent variables is explained by the explanatory variables included in the model. This means that the impacts of all independent variables were the outcomes of the digital marketing. The source of regression analyses indicates that perceived usefulness caused a statically significant positive effect on digital marketing adoption of perceived usefulness factors ($B=0.76$, $p<0.05$), followed by infrastructure factor, ($B=0.518$, $p<0.05$), and perceived trust factor ($B=0.146$, $p<0.05$). Moreover, security factor negatively affected the adoption of digital marketing practices of the Ethiopian airline ($B=0.518$, $p<0.05$). Therefore, it is recommended that the Perceived usefulness factor 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.

Key words: *Ethiopian Airline, customer acquisition, factors, and market development*

CHAPTER ONE

INTRODUCTION

In the backdrop of the study, the problem being investigated, the research questions and objectives to be met, the significance of the study, its scope and limitations, definitions of key terminology, and the organizational structure of the thesis are all covered in this chapter.

1.1. Background of the study

The Cold War and the struggle between USSR and US technologies led to the creation of the Internet. The World Wide Web originated in fact with the Soviet Union's 1957 Sputnik I satellite launch, despite the fact that it was founded in 1991 (Dickey and Lewis, 2011: 2). In the 1990s, as the number of people using the internet rose, company owners started to realize how profitable this new kind of media might be. Businesses that still use outdated methods can no longer function in the new era of technology. For companies that still utilize antiquated procedures run slower than those that know how to employ technology and digital systems. Using digital systems simplifies the process for both clients and employees. High-tech goods are used in the aviation sector. It's therefore categorized as a field that necessitates large investments in societal change and technology predictions. Soto, M.J. and Veloso. F, (2001).

The term "digital marketing" describes methods and approaches for promoting products and services and building an online following (Kotler et al., 2010). The advent of the internet has altered the rules, and marketers are forced to follow them (Scott, 2009). Indeed, the development of internet-based technologies has fundamentally changed numerous industries, marketing being only one of them.

Technological progress and digitalization permeate every facet of daily life. People have easy access to modern technology, such as smartphones, PCs, and smart tablets. With the aid of technology, people may conduct their ordinary duties with ease. Truskina, N.V., Molchanova, K.M., and Katerna, O.K. (2020). Thanks to apps for smart devices, buying airline tickets is now feasible swiftly. It is also a fact that national boundaries do not always align with technical breakthroughs, digitization, and the ways in which people profit from technology. Countries and businesses need to make significant investments in order to profit from technological breakthroughs and speed up the digitization process. Belais, R. (2013), Innovation Economics & Management. However, e-marketing makes use of the internet as a platform to help businesses

adjust to the needs of their clients, lowers the cost of transactions, and enables clients to shift from location and time-based to non-location and time-based behavior (Watson et al. 2002). Online marketing opens up new business options for companies because any size organization can sell its products or services to any market in the world (Jobber 2001).

According to Avram (2017), the cost of the technology and aviation items used in the aviation industry is comparatively high. Businesses that digitize their processes can more easily compete in the market by satisfying customers. Airlines create a digital membership card system in order to boost customer satisfaction and loyalty. Passengers have digital access to airline prices. Consumers of airlines have access to the internet to find out about the services available to them from the beginning to the end of their journey. Airlines can provide their customers eating and shopping alternatives in addition to aircraft services.

1.2 Background of the Organization

The Ethiopian Airline was founded on December 1945. Offering dependable, safe, and profitable air transportation services for passengers and cargo, as well as other aviation-related services, is Ethiopian's main objective. Since its establishment in 1946, Ethiopian has taken the lead in the African aviation industry. Ethiopian Airlines is known to as "Africa's Link to the World." Over 1.5 million passengers are transported by the airline each year to 22 domestic and 44 international destinations on four continents. On April 8, 1946, the airline was operating its first scheduled trip from Addis Ababa to Cairo, making a stop in Asmara, Ethiopia. Weekly flights to Djibouti and Aden were introduced later.

While creating an internal route network is crucial, the country's external connection was come first. The international route network began to develop northward in the late 1950s, first to Frankfurt and then to Athens. In 1960, a second route was reaching Monrovia, Liberia, via Accra, Ghana; Lagos, Nigeria; and Khartoum, Sudan. The 19-hour trip was been offered once a week at first. This was go down as a major turning point in African aviation history, being the first east-west link to the continent since the days of Imperial Airways. In the past, tourists would link to multiple African countries through hubs located in Europe. The airline has expanded to link almost every network in the globe under the Ethiopian Airlines brand. Ethiopians who work in the aviation industry boost sales and profit margins while also offering trustworthy and secure transportation services. EAL is the largest cargo network operator in Africa, with over 120

international destinations across five continents, over 61 destinations in Africa, over 22 domestic destinations within the country, and 54 cargo destinations, according to data taken from the 2019 Ethiopian Factsheet. As a prominent participant in the aviation industry, EAL offers OLM services to clients. In order to improve customer satisfaction, OLM assists in providing the service. This field of study is primarily motivated by the effects of OLM qualities on customer satisfaction.

Ethiopian Airlines began using digital marketing in 2002 as per the terms of their contract with Amadeus. Later in 2006, Sabre Company installed new software to enhance Ethiopian Airlines' e-ticketing system. Because the Sabre Sonic Web provides more online booking and ticketing alternatives, the airlines continue to adopt it. (Magazine Selamta, 2007). Ethiopian Airlines signs up for Sabre Passenger Solution on September 1st, 2017. The use of Sabre Intelligence Exchange Micro-Apps, which are lightweight and agile applications that enable airlines to find solutions for specific business pain points in weeks rather than months, has started among Ethiopian airlines.

Therefore, the aim of the study was examination the factors that affect the adoption of digital marketing strategies for customer acquisition in aviation industry in the case of Ethiopian Airlines (Head office) because of there are aviation of EAL in the study area were not accomplished based on their agreement.

1.3 Statement of the Problem

The degree and use of e-commerce determine an airline's ability to compete in the market. The airlines can offer ticket cheaper than the price that the agent offered to the customer. Furthermore, with reducing transaction costs in automatic ordering and invoicing systems can lead to lower price. In addition, the utilizing of e-commerce also reduced the cost in terms of using paper. Hence all airlines use it as an effective marketing tool, to cut the cost and increase efficiency. Electronic marketing via internet, Extranet, and mobile phones may create lot of opportunities for a business as well reduces a lot of threats (Anuja Bokhare and Pravin Metkewar).

The report of IATA states that in Africa infrastructure and investment capacity have made electronic ticketing more challenging. In this regard, despite Ethiopian airline is most profitable

airline in Africa, it is categorized as low level with regard to e-ticketing per IATA standard which demand 100% e-ticket as a goal by 2020. Recently the airline has reported 2 billion birr worth ticket transaction was done through e-commerce within 9 months. The report state that 37% of ticket sales of the flight from Addis Ababa to international destinations, 50% of total domestic route sales is done through e-commerce. But the expected total online sales goal for the period was 50% (both international and domestic) of sale to be via e-commerce (Mr, Mihreteab, and Director Digital Sales EAL).

As part of encouraging digital marketing, EAL has release the new mobile application as of December 1, 2017 that means e-ticketing. Since then EAL has been working to expand the usage through different means like discounts when booking online and conducting different campaigns (Go-Digital Campaigns) internationally and in domestic stations. Currently, the airline has introduced a new mobile application with 4 language preference, user friendly features and with 10% discount for using the application. The airline is also aggressively promoting e-ticketing through Medias, website ads and local Medias. This indicates that the airline involvement and span of activity regarding ecommerce specifically e-ticketing has greatly improved compared to what it was in 2010. But despite the efforts exerted. Because of the above facts, it becomes clear that further investigation is needed in order to identify the current challenges to improve the digital marketing practice in such way that meet the IATA standard and achieve the goal to accelerate online sales. This study then investigates the factors that may affect the adopting of digital marketing in Ethiopia airline on customer acquisition.

According to Louise Burgers (Aug, 2015) Digital marketing plays a significant role in the nation and international communication. Airlines that have achieved an advance online e-commerce stage realize important benefits. They include improved economic performance and stronger brand attraction to expanding distribution channels. Because of its important world leading airlines engaged to offer online marketing for their own customer. By offering online pricing, advertising, social Medias to get loyal followers, including online reservation and check-in process most of world airlines are communicated with world nation. An airline's level of development on online marketing is often associated with how much revenue it generates online. The higher a carrier's online revenue as a share of total revenue, the arguably more advanced the company is in its online marketing capabilities. Due to homogenous nature of airline industry

service differentiation is so difficult and costly; this may cause very strong competitive pressure in the airline business. So that Ethiopian airlines is expected to shift its focus toward the effect of online marketing to satisfy the customers.

According to Michael Hanke, (2016) in the Lack of customer readiness may be one of the external reasons although several internal aspects including lack of overall corporate vision for ecommerce, small talent base, and insufficient resources often play a role as well. Hence this research study would contribute to filling the internal and also the external gaps for online marketing to serve satisfactory customer service at Ethiopian airlines. Some of the effects of online marketing on airlines customer satisfaction studied by different researchers are applicable for some specific world airlines. So it is important to study the effect of adopting of digital marketing over an individual airlines Ethiopian can have a good understanding about Ethiopian airlines.

This research was having theoretical value by adding knowledge on pointing out the factors affecting adoption of digital marketing strategies by EAL. Therefore, this research fills the literature gap by studying adoption of digital marketing strategies by EAL. Again, it has a practical significance by enabling EAL to focus on the factors that affect the adoption of digital marketing strategies. In general, this research hopes to establish adoption of digital marketing strategies. Therefore, as stated the above, what is the negative issue of EAL's adoption of digital marketing strategy. If the customers of Ethiopian Airlines are not satisfied with the digital marketing strategy, what was been the problem, to fill the gap where the influence came from. So, the study attempts to bridge the gap between the customers who are not satisfied with the digital marketing strategy, what was the problem, and what is the negative issue of digital marketing strategy to fill the gap.

1.4 Research Questions

- ▶ What is the effect of digital marketing adoption by EAL?
- ▶ What is the effects of infrastructure on digital marketing adoption by EAL?
- ▶ What is the effect of perceived usefulness on digital marketing adoption in case of EAL?
- ▶ What is the effect of perceived trust relationship on digital marketing adoption by EAL?
- ▶ What is the effect of security on digital marketing adoption by EAL?

1.5 Objectives of the study

1.5.1 General Objective

The main objective of this study was to examine the major factors that affect the adoption of digital marketing strategies in the case of Ethiopian Airlines.

1.5.2 Specific Objectives

- ▶ To examine the effect of digital marketing adoption by EAL.
- ▶ To examine the effects of infrastructure on digital marketing adoption by EAL.
- ▶ To examine the effect of perceived usefulness on digital marketing adoption in case of EAL.
- ▶ To examine the effects of perceived trust relationship on digital marketing adoption by EAL.
- ▶ To examine the effect of security on digital marketing adoption by EAL.

1.6 Scope of the Study

1.6.1. Thematic Scope

The study was concentrated on the Ethiopian airlines and its customers. The outcome of this study was believed to address factors affecting the adoption of digital marketing strategies in the case of Ethiopian Airlines. The study would focus on understanding on how different elements related to infrastructure, perceived usefulness, perceived trust issue and security impact the overall success of digital marketing initiatives.

1.6.2. Spatial Scope

Ethiopian airline was one of the latest airlines in Africa. It was limit to select some of desideration domestic destrutions and customer in the samples selected by the study of factors affecting the adoption of digital marketing strategies in the case of Ethiopian Airlines.

1.6.3. Methodological Scope

The most target population is visible in terms of customer size; the researcher uses the probability sampling method. The research is qualitative in nature, primarily using descriptive data analysis methodology, with some correlation to discuss the relationship between digital marketing and customer satisfaction. To collect qualitative data structured questionaries' were used. The research problem tends to be explanatory which seeks to explain the relationship between digital marketing adoption and its factors, to achieve the objectives of the study and to test the questions.

1.6.4. Temporal Scope

This study was been held from January 01 to June 10, 2024 G.C.

1.7 Significance of the Study

This study was mainly increase body of knowledge by showing the factors affecting digital marketing strategies in the case of Ethiopian Airlines. The study will be an input to decision making for Ethiopian Airlines managers, directors and also the concerned one to focus on adoption of digital marketing strategies to address their ultimate needs from the airline service. Mainly help the company to identify its limitation and to take corrective action.

1.8. Limitations of the Study

This study was having a number of limitations that was mentioned below. Due to security concerns, the aviation industry was the least wising to provide information, making it difficult to obtain data from them. Due to the nature of airline services, the majority of customers were throughout rush hour. Therefore, this presents additional challenge for providing customers with questioners with a suitable response. The researchers' observations, unlimited samples and the interview both indicate that reference resources with detailed information have a temporal limit. Among the main restrictions was the financial situation, the absence of sufficient secondary sources, published manuals, and online databases.

W.G. Cochran's (1977) sample selection algorithm was used to randomly select 254 respondents from the whole calling population in order to determine the sample size of the consumers (used for infinite population or if the population was more than 50,000). So, it is difficult to apply to determine the sample size by applying the unknown population of digital marketing for customer acquisition in Ethiopian airline.

1.9 Operational Definition

Marketing: is the science and art of exploring, creating and delivering value to satisfy the needs of the target market at a profit. It defines measures and quantifies the size of the identified market and profit potential (Philip Kotler 2010).

Digital marketing: digital marketing is advertising and marketing the product or service of a business over internet. Online marketing is also termed as Internet marketing, Web marketing, E-marketing or simply OLM.

Micro-App: is an interactive software module designed to perform like a fully coded application or website.

Customer: is an individual or business that Purchases Company's good or service. A customer is a recipient of a good, service product or idea, obtained from a seller, vendor, or supplier from a monetary or other valuable consideration. (www.definations.net)

Customer satisfaction: (Philip Kotler 2000) Philip Kotler defines customer satisfaction as a person feeling of pleasure or disappointment, which resulted from comparing a products perceived performance or outcome against his/her, expectation. (Oliver 1980) Customer satisfaction is an attitude. It is an evaluation formed by customer based on the expectation of what customer would receive from a product or services and on their perception on the performance a product or service they actually receive. Customer satisfaction, perceived performance, buyer's expectation

Reservation: An arrangement by which transport arrangements are secured in advance (wikidiff).

Sabre: American owned reservation system that Ethiopian airlines used based on agreement of 0.2 USD per each booking.

Amadiou: France owned reservation system used by EAL before SABRE replaces it.

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

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

Shaba mile (Frequent Flyer): A name given for an account given for the passenger flying with Ethiopian that enables passengers to accumulate points whenever they fly and get different discount and allowance.

Check-in: Getting a paperless ticket on mobile device to directly board to aircraft without going to airline agent, usually it is auto-generated barcode.

Perception: is defined as the process by which an individual select, 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.

EAL Mobile Application: Android version of EAL online booking website.

Mobile and Internet Banking: A service provided by banks that allow customers to pay online for different purpose.

EAL Website Booking: Booking made on EAL official website.

1.10 Structure of the study

The paper was five main chapters. Chapter one is the introduction part which contains background of the study, statement of the problem, research questions, general and specific objectives of the study, scope of the study, Significance of the study, limitation of the study and organization of the study. Chapter two is literature review includes theoretical and empirical literature review and conceptual frame work. Chapter three is research methodology which contains research design data type and source, sample size and method, data collection methods and instrument, data processing and presentation, method of data analysis, ethical consideration and finally budget and time schedule. Chapter four is the analysis section. The final chapter five is conclusion, finding, summary and recommendation part of the paper.

CHAPTER TWO

LITERATURE REVIEW

2.1 Conceptual review

2.1.1 Basic Concepts and Definitions

Digital marketing strategy: In this domain, a digital marketing strategy is crucial. Businesses use tactics to advance and hold onto their market position. Digital marketing allows businesses to sell their products globally and promote their brand. It may effortlessly announce marketing and promotion announcements to the whole world. Competing companies throughout the world keep up with technology advancements to bolster their sales tactics. An essential part of this technical process is the creation of commodities and services. It is critical that businesses provide their staff with training so they can effectively use the rapidly advancing technologies. As a result, they must develop innovative techniques to simplify difficult operations. Employers can use digital technology to lessen the strain of their staff members.

Method of digital marketing's: are using the internet to satisfy personal requirements like shopping and information access is rising in tandem with the overall increase in internet usage. All over the world is accessible because of the internet. One resource that can be used continuously is the internet. To use the internet service, users must pay a particular sum of money. However, free internet is available to the public in many nations across the world, including squares, cafes, and subway stations. Digital marketing has given rise to new organizations. In addition to bolstering the economy by generating new job possibilities, digital marketing can be used in instances when traditional marketing is insufficient. The virtual environment in which digital marketing functions gives the chance to connect with merchants worldwide. Airlines can't overstate the value of digital marketing. Customer satisfaction can be raised by airline firms through digital marketing. Consumers can use gadgets like laptops, tablets, and cell phones to purchase and pay for their airline tickets online using credit cards. They can also follow all ticket-related procedures directly from the digital application. Airlines can use digital media to publicize specials and campaign services to their loyal flyers. Digital marketing can help businesses make more money.

Benefits from customer's: from the perspective of airline customers, the primary advantage is a notable increase in convenience, time savings, and simplicity of access from any location in the

world. A purchase order can be placed by the customer at any time. The following is a summary of the primary advantages of online shopping for consumers: Lower transaction costs for market participants, more comfort transactions may be completed 24 hours a day without a face-to-face encounter with the service provider and time savings customers can purchase or request tickets online at any time. Continuous and rapid information access, customers was finding it simpler to obtain information and examine several websites with just a single button click. Convenience: All transactions can be completed comfortably while seated at home, at the office, or wherever the customer desires. Compare with other service providers: By using the airline's website or mobile application, customers can quickly determine which flight service providers are offering the best value in terms of price and safety. They can also purchase products that aren't offered in their area or country, giving them more access to a wider selection of products than they had previously. Ethiopian Airlines tickets are available for purchase in Europe, with instant delivery available to customers who can print their electronic tickets right away upon purchase. This makes e-tickets perfect for last-minute purchases or decisions because customers can leave reviews about goods or services from an application or the business website, see what other people are purchasing, or read other people's reviews before deciding what to buy. All of this is safe and secure. Online tickets are secure and safe. False and duplicate tickets are completely eliminated with barcode validation.

Benefits from airlines: from the perspective of airlines, e-commerce mostly benefits from higher income and lower operating and maintenance costs via the internet. Among them are the following: Improves revenue, lowers operating and maintenance expenses, lowers purchase and procurement costs, boosts customer loyalty and retention, lowers customer transportation costs, and cultivates customer relationships by offering channels for more rapid, dependable, and efficient communication with partners and customers. It also expedites the selling process, enhances internal and external communication, builds the company's reputation, and boosts sales. Using E-Commerce (e-marketing), orders for the products can be generated anytime, anywhere without any human intervention. By this way, dependencies to buy a product reduce at large and sales increases, advertising: E-Marketing increases the reach of advertising of products and services of businesses.

These advantages might not be realized in every business, though. This is because these advantages are dependent on a number of variables, including the characteristics of the website,

the company's infrastructure, and user and/or consumer awareness. According to Bryan Wilson of the International Air Transport Association (IATA), the elimination of paper airline tickets is expected to lower the cost of issuing a ticket from \$10 to \$1 during a period when airlines have increased fares or added fees for everything from excess baggage to seat selection. As of June 1, 2008, IATA no longer provides paper ticket stock, as it has for decades, to 60,000 travel agencies in 125 countries worldwide due to the aforementioned factor.

2.2 Theoretical Review

2.2.1 Digital Marketing

According to Kingsnorth (2019), digital marketing refers to the use of digital technology by companies to promote their goods and services to clients virtually. Technology-related devices like computers, phones, and the internet play a significant role in people's daily lives. Digital platforms have made a wide range of products available to consumers.

According to J. Bughin (2014) in the realm of digital marketing, businesses establish their own shared values in order to create an economic market. It is critical that consumers promote the goods they purchase. Thus, the company uses digital marketing as a means of implementing Customer Relationship Marketing, Second Edition. Stone M., Machtynger L., Woodcock N. (2000). Businesses can guarantee that their items are acquired from digital media at reasonable costs by utilizing digital marketing. Products can be sold for less money since internet marketing does not require payments for things like store expenses (rent, shipping, attendant charge, etc.).

Current reports indicate that it is anticipated that digital sales would increase significantly more in 2020, Warokka A., Herman S., and Sriyanto S. With digital marketing, a new era of technology has dawned. In a digital setting, customers can haggle. Consumers can participate in the auction by placing bids on the goods they wish to purchase. When people want to purchase digitally, they want to use a computer or phone to get straight to the product. In a highly competitive market, businesses need to employ digital marketing strategically to both survive and grow their sales Wind J., Mahajan V., (2002). In the competitive market, well-established companies account for 80% of revenue in the digital marketing industry, according to a 2019 McKinsey analysis.

Talented individuals were been invested in, as is evident in all fields, including digital marketing. Chief digital officer (CDO) and chief analytics officer (CAO) positions are found in all

businesses that are successful in the field of digital marketing. These professionals' job is to stay ahead of the curve in the realm of digital marketing by producing precise analysis and innovating. McKinsey, Deakin, O'Beirne, and Bughin (2019). Baltes (2016) found that since digital marketing first entered the workforce, it has made an effort to maintain high levels of client happiness and interest. He claims that using digital marketing techniques, it is possible to attract clients who are used to traditional marketing. Furthermore, Baltes reported that eighty percent of consumers focus more on the product image and title than the product description. Establishing client trust and brand loyalty is a crucial aspect of digital marketing. Baltes-Patrutiu, L., (2016).

2.2.2 Overview of E-Marketing

E-marketing, often known as electronic marketing, is a contemporary business strategy and new concept that involves marketing products, services, ideas, and information online and through other electronic channels. For that reason, Strauss and Frost define it 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,” whereas Smith and Chaffey define it as “achieving marketing objectives through applying digital technologies” (Smith and Chaffey, 2005). However, compared to e-marketing, e-business and e-commerce have a far larger reach (Hans et al. (2015). Additionally, despite being negligible, e-business has a broader scope than e-commerce; there is a slight distinction between the two.

2.2.3 E-Marketing in the Airlines Industry

Airlines were compelled to refocus their strategy on technical advancements in order to increase their competitiveness due to the mid-1990s advent of the internet and the development of intranets and extranets (Buhalis, 2004). Since 2005, the airline industry has been looking for new and creative methods to operate. Many low-cost tactics produced the majority of the innovations that were raised during this time (Muktar S. al Hasimi, 2018).

The airline industry is expanding incredibly quickly. The IATA research predicts that by 2034, there was be 7.3 billion passengers worldwide. Writer Surabhi Ghosh Chatterjee claims that in addition to being inconvenient for passengers, flight delays and operational inefficiencies cost the airline business a lot of money. According to estimates, the journey time, fuel consumption, and flight path of any particular flight are inefficient by 18% to 22%, and the operator loses \$81

each minute on an idle aircraft. More than ever, technology-born solutions are required to address such inefficiencies.

Airlines were the pioneers of the e-market, and as of right now, the majority of online product sales are airline tickets, claims Yang (2001). For this reason, all airlines employ it as a cost-effective and efficient marketing technique. According to Muhammad Afar Malik, (2008) certain airlines may be using e-commerce more successfully than others.

2.2.3.1 Advantages and Disadvantages of E-Marketing

Electronic networks was soon make it possible for people to overcome time and location constraints and to take advantage of worldwide marketplaces and business opportunities that are currently unthinkable, creating a new era of economic opportunity and advancement (Jaing et al., 2002). According to Joseph (2005), e-marketing has the following advantages:

Advantages of E-Marketing

Worldwide Reach: It can provide you with immediate access to other countries, and in fact, internet networks have sparked the emergence of a worldwide community. Additionally, it eliminates the obstacles of time and distance that impede doing business with clients abroad.

Reduced Cost: It can assist extend the marketing budget and save money. In other words, electronic copies of brochures, specification sheets, and catalogues eliminate the need for printing, packaging, shipping, and storage.

Save time: It can expedite the marketing process and eliminate procedures. Marketers can now obtain the information they need without waiting on a sales associate.

Rich in information and interactive: It may be interactive and full of information. It makes it possible for prospective customers and existing clients to find the information they require fast.

Operational efficiency: When consumers use the internet for the majority of ticket purchases, businesses are unable to focus their resources on other tasks. Furthermore, when unavoidable issues like the current worldwide pandemic arise, it is crucial to prevent or compromise service irregularity by using the service without any barriers.

Reduce entry barriers: It can provide equitable access opportunities and reduce entry obstacles. Disparities based on gender, ethnicity, or even firm size don't seem to matter as much when conducting business online.

24-Hour Marketing: Even when the office is closed, clients can use the company's website to learn more about its goods and services.

Personalization: If the company's website is connected to the customer database, it can welcome visitors with offers that are specifically tailored to them. The more they purchase from the business, the more it can target its marketing and client profile more precisely.

Increased Conversion Rate: the consumers are always just a few clicks away from completing a transaction if you have a website or mobile application. The aforementioned assessment highlights the advantages of e-marketing for both the company and the clientele. These advantages might not be realized in every business, though. This is because these advantages are dependent on a number of factors, including user awareness, the characteristics of mobile and webpage applications, and the company's infrastructure.

Disadvantages of E-Marketing

Even while e-tickets are essential to the airline business, they have several drawbacks and restrictions. Crosby (2007) lists the following drawbacks of e-tickets: When a reservation is made, the majorities of payment-related issues arise, so creating an efficient payment flow is crucial. Despite e-ticketing's greatly increased efficiency, a system collapse or latency might cause a passenger's reservation and other information to simply disappear. This would exacerbate unemployment. Moreover, e-ticketing could render some occupations, including those at travel agencies and airline reservations desks, Certain experts contend that the processes involved in obtaining and utilizing electronic tickets make it more difficult to identify potential threats, given the ongoing global conflicts and security concerns.

2.2.4 Overview of Digital Marketing in Ethiopia

Even though Ethiopia has slow ICT infrastructure development and adoption and poor but improving internet access, a 2011 UN report reveals that there is a growing demand for internet services, even though Ethiopia has monopoly control over the sector. However, there is a movement toward ISP (internet service provider) liberation to the private sector, which bodes well for improved service quality and accessibility. Ethiopia, like other developing African countries, is seeing a 37% yearly growth in internet users and a 20% annual growth in the number of active social media users (internet stat.com). According to research, the majority of Ethiopians use mobile devices to access the internet, which is the best sign that e-commerce is starting to take off and grow. There are presently 15 million internet users in the nation, according to data. Ethiopia now has a rate of internet penetration of 1.90% or higher, a rate of

mobile internet penetration of 5% annually, and a population of over 30% that uses mobile devices (internet stat.com).

One of the main factors influencing e-commerce components like e-marketing is the internet and accompanying ICT infrastructure. According to a UN report, the reason why the number of internet and ICT users in developing countries such as Ethiopia is rapidly increasing is not because the quality and accessibility of the internet is improving as one might anticipate, but rather because people are starting to realize the advantages of utilizing the internet for a variety of purposes. According to a 2011 UN research, dealing with the business culture and practice adjustments that firms was need to make in order to successfully implement an e-commerce strategy is the main difficulty facing developing nations, not the technical component of e-commerce.

The most important thing to keep in mind is that while the infrastructure and other associated constraints, such as the lack of a legal framework and a skilled labor pool, are impeding the growth of e-commerce, they cannot stop businesses from implementing e-commerce on a variety of levels and in various contexts. The United States of America is a notable example, having excelled in e-commerce for many years without a formal legal structure (UN report 2011). Since e-commerce would make it simpler for businesses to exchange inputs and outputs online, it would be an additional contribution to the nation's efforts to draw in foreign direct investment (Biniyam: Founder dire tube). During the second growth and transformation plan, the nation's internet connectivity (international gateway) increased to 20 gigabytes per second from 3.2 gigabytes in 2009, 2010. As a significant global corporation, Ethiopian Airlines is renowned for embracing new technologies quickly. Future advancements in the field may benefit from learning from Ethiopian Airlines' expertise in this area.

2.2.5 History of E-ticket

Ethiopian Airlines (EAL) has partnered with Sabre, SAP, and Microsoft enterprises to digitize all of its business activities, including e-ticketing. The airline stated that it is making great efforts to fulfill its goal of being a fully digitalized business. Even if the airline operates entirely digitally and doesn't utilize paper in any area of its business process, it must nevertheless give paper documents to its partners and other stakeholders who haven't fully embraced digitalization (Ezega.com).

As of September 28, 2017, Ethiopian revealed that it had completely eliminated paper from its entire system and fully digitalized all of its business processes, including aircraft maintenance, flight operations, commercial operations, finance, human resource management, customer services, procurement, supply chain management, and management approvals and authorizations. One of the digitization features is e-ticketing. By contracting with Sabered Airline Solutions to provide the application software, EAL began utilizing e-ticketing. For the previous 20 years, SITA's software was applied by the EAL. Despite having support from the passenger management system, this technology is not going to be integrated with e-booking. Thus, in accordance with the agreement reached with Amadeus Airlines Solution Company to utilize the Amadeus engine, EAL integrated e-booking in 2002 (Ethiopian Airlines Selameta Magazine, 2007).

Nevertheless, there were a lot of drawbacks to this software. It was less user-friendly, incompatible with other programs, and had problems with upkeep and updates. Additionally, the EALs began using the e-ticketing system in 2006 after terminating their contract with SITA at the end of that year and entering into a contract with Sabere Airlines Software Solution. EAL provides e-ticketing services in two modes, as stated in the EAL Sales and Service Procedures Manual (2019): digital Semi-electronic paper tickets are still considered electronic tickets because the data is saved on a computer and made available at the ticket office. Full electronic tickets (mobile and website) are sent via email, text message on a mobile device, or short text code via mail. Sabre software is the platform that is used by both tickets.

The main distinction between them is how a customer gets hold of them. When a consumer purchases a ticket at the ticket office, they were been asked for certain information, requested to pay, and given a printout of a document with the itinerary details on it. However, we refer to the second scenario as a full e-ticket when customers purchase a ticket via the firm website and mobile application and pay with a credit or debit card, a direct bank deposit, or using mobile or internet banking instead of visiting the ticket office. With this kind of traveler, all they have on their computer or mobile device is a code and a PDF itinerary detail. According to IATA, airlines could save more than 58% on distribution costs by using full e-tickets. Based on the truth EAL is examining the utilization of website and mobile application to avail e-ticket for clients. Even

with the enormous efforts made to digitize digital ticketing, the increase remains modest when compared to IATA requirements.

EAL plans to use digital ticketing, or e-ticketing, to achieve the following goals and advantages: E-ticketing was benefit the customer by: Preventing lost tickets, Easy reservations from any location to any location with an internet connection Facilitate refunds and reissues, Allow travelers to easily switch from one airline's flight to another's service without requiring a paper ticket, allows the traveller to check in at their intended location without requiring a paper ticket and Schedule flights that are jointly operated with other airlines. For example, one can schedule a flight from Addis Ababa to Washington via Ethiopian Airlines and from Washington to New York via United Airlines.

When two flights are correctly connected, the system was provide the aggregate price as a buyer search, offer an online buyer discount, Order any additional demands, for free or at a cost, such as a meal, a seat, special assistance at the airport, and an easy way to make payments. It ensures security by offering over five different ways for customers to pay for their reservations. Credit cards, debit cards, mobile banking, and the most popular method of domestic payment at over eleven local banks are a few of them. Travel agents (EAL): E-ticketing can increase efficiency and productivity while lowering delivery costs and, ultimately, the final customer's pricing. By obtaining online, you can give current information about the status of the coupons. Overall, the EAL can offer its clients effective services, save money by doing away with paper tickets, and obtain real-time coupon status information thanks to the e-ticketing system. All online reservations made via the Ethiopian Airlines official website, the Ethiopian Airlines mobile application, and third-party websites and applications, such as booking.com, was result in the issuance of e-tickets.

2.2.6 Buying E-ticket on Online

The traveler would use the company's website to make airline reservations, and they would pay for those reservations online with various credit/debit cards or with cash at the EAL ticket office. This is thought to help passengers save money and time. The EAL ticket issuance handbook provides the following explanation of the e-ticketing process: EAL web sales engine makes it easy to book one way and come back in only six easy actions. Featuring functions like a flexible timetable option, cheap fare option, and interactive calendar, among others. At least two hours

prior to departure, the reservation must be made online at www.ethiopianairlines.com using either the desktop or mobile versions.

2.2.7 Aviation Industry

The industrial revolution has led to significant advancements in technology and digitization. Merritt B., (2016). The aviation sector is intimately tied to technology and digitalization Warokka A., Herman, S., Sriyanto, S. (2020). The employment of aircraft as "cargo aircraft" was been the first commercial step in the aviation business. In the years that followed, passenger seats were positioned where cargo is carried on aircraft to carry people, giving rise to the idea of "human aircraft" Merritt B. (2016). Numerous employment sectors have been created as a result of the aviation industry. In the twenty-first century, the aviation industry is seen as a significant player on the global stage. The latest technologies are essential for the aviation sector to use. As a result, the aviation industry requires large investments.

The aviation industry has many benefits despite its share of challenges. Additionally, nations view aviation as a mark of prestige. F. Carlsson (2004) People can now use aero planes to fly to any location in the world. The rise in popularity of air travel in the twenty-first century has stimulated tourism and the economy. Compared to many other industries, the tourist and aviation industry has grown quickly. D.J. Dimitriou (2016) an economy that is dependent on both the tourism and aviation sectors is formed. In order for tourism to grow and become more international, the aviation sector must expand. Gössling S., Peeters P., Strasdas W., Dubois G., Ceron, J. P., Upham P., and Broderick J. (2016). For a nation's economy, the tourist industry is crucial. The tourism industry contributes to the nation's financial inflows. The tourism and aviation sectors are closely intertwined. Travel between nations is possible because of the aviation service. In this sense, the aviation sector is viewed as a source of both entertainment and transportation.

2.2.8 Civil Aviation

Developed nations place a high value on the aviation industry. A significant amount of money is used in the aviation sector. For instance, if a nation were to focus only on the aviation sector, its GDP would rank 17th in the world. Last viewed on 2023/01/15. ABBB Homepage, <https://aviationbenefits.org/economic-growth>. The defense industry has had a major role in the growth of the aviation industry. States began to privatize the aviation industry following World

War II as a means of advancing their economies and showcasing their influence in international relations. Private cargo aircraft were used to launch civil aviation. Later, passenger jets emerged Addepalli S., Pagalday G., Salonitis K., Roy R., Socio-economic and Bremen (2017). Investors shied away from the civil aviation business because it required significant capital outlays. The majority of states have established various funds and offered incentives to investors who choose to get into the aviation business. Guo L., Dai Z., and Luo Q. (2019). The civil aviation industry differs based on the economic status of the nation.

As a result, the aviation sector places a high value on the economics. Compared to other industries, the aviation sector often has a greater employee ratio. Many workers are required for the airport's ground handling services as well as for the operation and upkeep of aircraft Harvey G., Turnbull P. (2009). Technology adaptation shapes the labor market in today's globalized society. Technology has advanced to the point that many rival businesses have gone digital. Businesses have benefited from digitalization and technology in numerous ways. The advantages of technology have led to the opening of new job opportunities. In the aviation and civil aviation sectors, digitalization is crucial. Every piece of data from outdated systems is moved to digital media.

This sector's digitalization process necessitates large investments and drawn-out procedures. Technological and human factors may also cause the process of digitalization to take longer than expected. With the technology employed in the aviation industry, the environmental harm is attempted to be minimized. For instance, efforts are made to reduce the amount of hazardous gases that are discharged into the environment by aero plane engines. The aviation industry's contribution to the global economy 87.7 million workers are supported by employment A value addition of USD 3.5 trillion (4.1%) to the economy 143 million employees in 2038 was contribute to employment Value addition to the economy in 2038 (6.3 trillion USD). Technology and the aviation sector's impact on the environment a 2% decrease in fuel efficiency reduction of ambient noise by 50% to 75% 50% less carbon monoxide recycling contribution 85%–95%.

2.2.9 Aviation Sector and Digital Marketing

Harvey G., Turnbull P., (2009). In civil aviation, digitalization and digital marketing are crucial Avram, B. (2017). In this regard, YouTube and Instagram work incredibly well. Advertisements can be filmed by businesses and aired on their own digital platforms. It has the ability to translate

its advertisements into multiple languages and distribute them globally. YouTube advertisements hold significant value alongside the company's own sponsorships and advertisements. Customers can find website service, a significant area of digital marketing, convenient. User-friendly content is essential for websites. For instance, a client should be able to handle business on their own without assistance while purchasing a ticket on the airline's website.

Specifically, airline businesses ought to design their websites so that they grab users' attention. It needs to guarantee that the customer who previously visited the website returns here. Kaur G., (2017). Within the civil aviation industry, traditional and digital marketing are used in tandem with service and product sales. Even though the aviation sector has been using cutting-edge products since its inception, it has also experienced an analogue phase. Digitalization has been accomplished over time, largely due to the advantages of the technological age. With digital marketing, aviation companies may advertise.

These kinds of service possibilities help businesses increase client satisfaction and loyalty. It can also raise the profit rate and draw in more clients at the same time. In addition, it offers the business advertising through the selling of promotional goods and services. Todor R. D. (2016) lists the benefits of digital marketing for the aviation sector are:

- To encourage more user activity.
- Providing customers with rich content
- A rise in productivity.
- To provide customers with information about airport facilities in a digital context.
- To guarantee that travellers may complete their purchases swiftly and effortlessly.
- To lessen the amount of work.
- Increasing client satisfaction.

Employee workload is known to be reduced in civil aviation as a result of digitization. On the other hand, digital marketing can help airline firms boost their profits and productivity. Digitization in the aviation industry benefits personnel and customers. An employee of the organization can quickly access customer information when they need to take action regarding the customer. The customer avoids dealing with drawn-out procedural procedures and time-consuming forms in this way. In this instance, the officers' burden is also lessened. Concurrently,

data is kept in the digital realm, making it possible for the authorities to review this information. Sims C., Smith B. A., Murphy M. P., (2011). One of the oldest companies in civil aviation, Turkish Airlines (THY), is heavily involved in digital marketing. Turkish Airlines employs global cultural promotion and advantages as a digital marketing tactic.

On its official website, Turkish Airlines not only provides campaigns, sales, and language options, but it also updates its clients about current happenings. For instance, Turkish Airlines posted the safety procedures and guidelines used during the flight on its website and other digital platforms, and apprised its patrons of the impact of the Covid-19 pandemic that struck in 2019. During the Covid-19 pandemic, Turkish Airlines informed its customers via digital channels about the steps being taken by the government, the steps being taken at the airport, the steps being taken by employees, the steps being taken for passengers, and how the crisis was being managed. For instance, it provides services like booking hotels, renting cars, purchasing tickets, locating tourist attractions, and membership cards. British Airways (BA) is another reputable civil aviation company. This company uses a variety of digital marketing methods, including a website, mobile application, Instagram, Twitter, and YouTube. On Instagram, BA posts social and occasionally sentimental content. On its Twitter account, BA shares news updates and formal announcements. In addition to job advertisements, the company's LinkedIn application contains official announcements.

American Airlines (AA), one of the top aviation businesses in the world, makes heavy use of social media. The business uses social media effectively to connect with a wide audience of customers, foster greater customer interaction, and raise brand awareness. Popular social media sites including Facebook, Twitter, Instagram, LinkedIn, and YouTube all have official accounts for AA. The business notifies clients about new destinations, promotions, travel news, and other information via various channels. Additionally, a range of information is shared, including client tales, interviews, and videos. Generally speaking, AA employs a strategy that seeks to actively use social media to engage with its clientele and enhance its brand image. It engages with people on social media and enhances the trip experience by consistently posting current content.

2.3 Empirical Studies

2.3.1 Factors of Digital Marketing Strategies in Ethiopian Airlines

The use of digital technology by companies to promote their goods and services to clients virtually is known as "digital marketing," Kingsnorth, S., (2019). Technology-related devices like computers, phones, and the internet play a significant role in people's daily lives. The amount of people making purchases online is growing daily. J. Bughin (2014) in the realm of digital marketing, businesses establish their own shared values in order to create an economic market. It is critical that consumers promote the goods they purchase. Providing the customer with information about the product guarantees their satisfaction and the company's trust. Thus, the company uses digital marketing as a means of implementing Customer Relationship Marketing, Second Edition. Stone M., Machtynger L., Woodcock N. (2000). Businesses can guarantee that their items are acquired from digital media at reasonable costs by utilizing digital marketing. The digital marketing sector continues to evolve swiftly. Current estimates indicate that there is a strong expectation that a digital sale was Herman, S., Warokka A., and Sriyanto, S. (2020). Digital marketing has ushered in a new era of technology. The internet environment gives customers the ability to haggle. This was lessening the employees' workload. Matt C., Hess T, Benlian A., (2015). For many businesses, digital marketing triggers a process of transition. The sectors' strategies alter during this process. Ranking digital marketing tactics in a single category is incorrect. (2017) Schwertner, K. The virtual environment in which digital marketing functions gives the chance to connect with merchants worldwide. Airlines can't overstate the value of digital marketing. Customer satisfaction can be raised by airline firms through digital marketing. Consumers can use gadgets like laptops, tablets, and cell phones to purchase and pay for their airline tickets online using credit cards. They can also follow all ticket-related procedures directly from the digital application. Airlines can use digital media to publicize specials and campaign services to their loyal flyers. Digital marketing can help businesses make more money.

This research was having theoretical value by adding knowledge on pointing out the effects of digital marketing on the satisfaction of Ethiopian airlines customer. Therefore, this research fills the literature gap by studying how digital marketing affect customer acquisition. Again, it has a practical significance by enabling Ethiopian airlines to focus on the factors that affect the

adoption of digital marketing to customer acquisition. In general, this research hopes to establish customer acquisition through digital marketing. Therefore, as stated the above, what is the negative issue of Ethiopian Airlines' adoption and implementation of digital marketing strategy on customer acquisitions. If the customers of Ethiopian Airlines are not satisfied with the digital marketing strategy, what was been the problem, to fill the gap where the influence came from. So, the study attempts to bridge the gap through the customers are not satisfied with the digital marketing strategy, what was the problem, and what is the negative issue of digital marketing strategy on customer acquisitions to fill the gap.

This analysis looks at the variables that affect Ethiopian Airlines' adoption of digital marketing strategies for acquiring new customers. The following eight influencing factors perceived risk, ease of use, behavioral control, subjective norm, and the goals of these research studies have been used more frequently than others in relation to ICT technology-based systems or e-ticket systems based on various research models. Perceived security, perceived utility, and perceived demographics/infrastructure are the most often cited customer acquisition criteria that explain digital marketing consumer practices.

2.4 Conceptual Framework

As shown the figure 2.1, the major objective of the study is to analyze digital marketing relationship between dependent and independent variables.

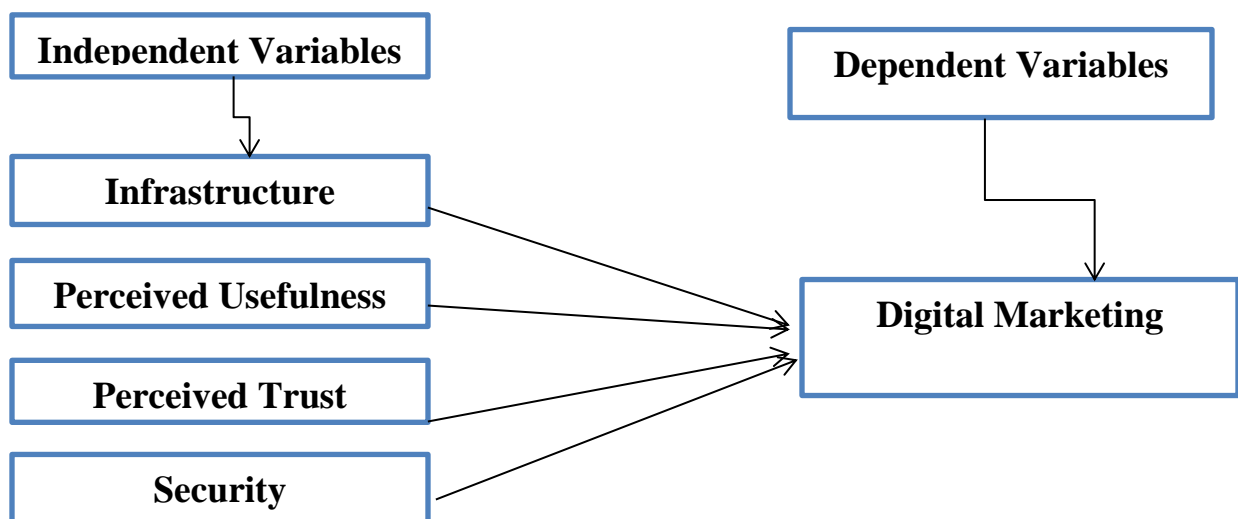


Figure 2.1. Conceptual Frameworks (Own model)

Source: Endegenä Taye (June, 2020)

2.4.1. Explanation of the Conceptual Framework

The research hypothesis of the researcher proposed that:

H1: The infrastructure has positive and significant effect on digital marketing practice

H2: Perceived usefulness has positive and significant effect on digital marketing practice

H3: Perceived trust has positive and significant effect on digital marketing practice and

H4: Security has positive and significant effect on digital marketing practice was the researcher prediction.

According to Groucutt and Griseri (2004), investing in the infrastructure needed to support widespread internet use would come at a large financial cost to many nations. They also discuss the fundamental elements of a productive internet infrastructure. E-commerce depends on effective national logistics infrastructures. To prevent fraud and other criminal activities, the development of dependable and secure payment infrastructures is necessary to support its further growth (Boerhanoeddin 2000). The country's economic, geographical, political, and governmental factors all play a part in the quick development of the infrastructure needed for e-commerce. Lafond and Sinha (2005) identified three distinct infrastructure systems. They are distribution, delivery, payment, and communication. 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 and the necessary training, although this can be obtained on line. But first, one needs to become an expert computer user before they may access the internet. Infrastructure is needed for the implementation of a technology-based system. An organization's infrastructure is essential to the implementation of an e-ticketing system. The infrastructure of a company is crucial to the operation of an e-ticketing system. Specifically, the internet and LAN/WAN network technologies are necessary for online payments from any location, distribution, and delivery during the e-ticketing process, as well as for communication between passengers and the airline.

The degree to which an individual feels that utilizing a specific system would improve his or her performance at work is known as perceived usefulness (Davis 1989). In the context of online consumer behavior, Chen et al., (2002), Heijden et al., (2001) found perceived utility to be a significant factor determining intention to shop online. It clarified that a person's behavior

selection is predicated on the likelihood that a particular action would result in a particular outcome. An excellent illustration of this lecture would be the effects on travellers of purchasing tickets online. Within the context of airline marketing, user-friendliness is associated with a website that is easily navigable and well-organized, as well as with mobile applications that are simple to use and can enhance customer satisfaction by streamlining and expediting the execution of online marketing campaigns. But there are a lot of prerequisites that must be met, including infrastructure, security, and awareness.

According to Moorman (1993), trust is defined as the readiness to rely on a partner in whom one has previously had confidence. When opposed to traditional shopping, online marketing is a new type of business activity that typically carries a greater degree of risk and uncertainty. Furthermore, trust is now a critical component of e-business success; companies with the best reputation for protecting the privacy and security of customer and corporate data was thrive. As a result, the idea of trust assumes significant importance when discussing online consumer behavior. Numerous research (George, 2002; Heijden et al., 2001; Pavlou and Chai, 2002) have demonstrated that trust is a key factor in determining an individual's attitude towards online shopping. Furthermore, Lynch et al. (2001) discovered that a potential customer's intention to shop online is highly influenced by trust.

Bargh et al. (2008) state that the following security services provide defense against security threats: non-reputation, identity, authentication, confidentiality, integrity, and access control. According to the survey, security was been the second important element in e-banking customers' adoption of CBE. This suggests that the bank is not secure, has not communicated security issues effectively across many communication channels, and lacks confidence in the e-banking services transaction process.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Research Approach and Methods

This chapter discusses the processes and techniques used in carrying out the study. It also gives a description of the respondents including information on the study population, the number of respondents and how they were selected. It also provides an outline of research design and the instruments for data collection. The methods adopted in the administration of the research instrument, data collection procedure, data analysis and measures used to ensure validity of the instrument used. A quantitative research approach was appealed for this study because the research problem tends to be explanatory which seeks to explain the relationship between digital marketing adoption and its factors, to achieve the objectives of the study and to test the questions.

For this study, data collection and analysis was done using a mixed-methods approach (qualitative and quantitative). As a result, a mixed-methods strategy allows the researcher to collect more meaningful evidence and information than a single method. To get a detailed understanding of the factors of digital marketing: their major activity, contribution to enhancing aviation industry in Ethiopian Airlines and the city's environment, and limitations, a qualitative approach was been used. To collect qualitative data, structured questioners were used. The assessment of opinions, attitudes, and behavior is central to a qualitative research technique (Kothari, 2004). With the help of surveys collected from digital marketing, this study takes a quantitative approach. Quantitative analysis approaches aid in the exploration, presentation, description, and examination of linkages and trends in data (Saunders et al, 2009). A quantitative approach was used to quantify and see the relationship among variables. Questionnaires were formed to be effective due to the relative easiness of obtaining standard data appropriate for achieving the objectives of this study. Questionnaires were framed for the survey based on the identified factors of digital marketing EAL.

3.2. Sources of Data

3.2.1. Primary Sources of Data

This was the type of data which was collected in the field of study for answering research questions. They were collected by research assistants from the field to answer a research question/issue (Adam & Kamuzora, 2008). The primary data was collected through a questionnaire.

3.2.2. Secondary Sources of Data

This study was collected secondary data from sources include books, journal articles, newspapers, reports, and publications of various associations and organizations as well as other documentary reviews from the internet.

3.3. Population of the Study

The goal of this study was to assess adoption digital marketing strategies in the case of Ethiopian Airlines. Therefore, on the study area there exists customers, so the customer total population is unknown but yearly estimation of them in the last one year up to 7.5 million and 2 million customers visit the website and mobile application registered respectively. On the other hand, for the airline digital customers of the population was a used random selection 254 respondent from the total of more than 50,000 populations.

According to Stillwell and Clarke (2011), a population is the complete collection of elements from which inferences are to be drawn. Using deliberate or judgmental sampling, the researcher can apply judgment to choose cases that address the study's objectives (Saunders et al. 2009).

3.3.1. Sample Size

W.G. Cochran's (1977) sample selection algorithm was use to randomly select 254 respondents from the whole calling population in order to determine the sample size of the consumers (used for infinite population or if the population was more than 50,000). A confidence interval of five (the margin of error) and a two-tailed 95% confidence level was used to determine the sample size. So, the researcher to select the supple size of this study from W.G.cochrant (1977) random selection 254 respondents from the total of more than 50,000 population. The researchers utilize Slovin's sampling formula Yamane (1967) to determine to use probability random sampling.

3.3.2. Sampling Technique

Sampling is the statistical process of choosing a portion of a population of interest, known as a sample, in order to observe and draw conclusions about the population. Sampling approaches are classified as either non-probability or probability. B. Anol (2012). All Ethiopian Airlines digital marketing was included in the target population. In this study, it is challenging to get fully randomized samples (Random sampling) due to the unknown numbers sampling frame, which was a large of the population under study.

3.4. Tools of Data Collection

This study was use questionnaires data collection tools. And also investigates factors affecting the adoption of digital marketing strategies of EAL with dependent and independent variables. Digital marketing strategies are the dependent variable of this study to see the effect of independent variables. And the researcher used perceived usefulness, security, perceived trust and infrastructure, as independent variables those were explained changes in the value of the dependent variables.

During the study, the questionnaire was design singly, basing on research questions. Through this tool, the respondent within the areas of the study was in a position to answer the questions concerning the study. The questionnaire has been used mainly closed ended. The rationale behind using closed-ended questions was target to get answers or responses that was direct, brief, and straight to the point. Above all, this method was say to was efficient in the field of research in the sense that it was not expensive, it was free from the bias of the interviewer and the respondents was in a position to provide answers accurately and clearly.

3.5. Data Processing, Analysis, and Presentation Methods

3.5.1. Data Processing

In the data processing procedure editing, encoding, classification, and tabulation of the collected data was be made. Data cleanup was made to detect anomalies, errors, and omissions in responses and checking that the question was been answered accurately and uniformly. Numeral assigned to reduce responses into a limited number of categories or classes. Data having common characteristics was place together and, in this way, the entered data was dividing into some groups.

Finally, tabulation and figures was been used to summarize the raw data and displayed it. The transformation of the processed data to look for patterns and relationships between among data groups by using descriptive and inferential statistical analysis with the aid of Statistical Packages for Social Scientists (SPSS –version 20).

3.5.2. Data Analysis

Data was analyzed through descriptive and inferential statistics. Mean scores and standard deviations was use to describe the characteristics of customers in terms of demographics and customer's experience with automated queuing. Descriptive statistics was also use describe customer acquisition perceived digital marketing. The relationship between automated digital marketing and factors of airline experience was established using correlation and regression analysis. The correlation and regression model was in the form of model specification that is multiple linear regressions are a method of estimating or predicting a value on some dependent variable given the values of one or more independent variables. Like correlations, statistical regression examines the association or relationship between variables. Unlike correlations, however, the primary purpose of regression is prediction. In this study multiple regressions was applied. Multiple regression analysis takes into account the inter-correlations among all variables involved.

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$$

Where:

Y = Dependent variable- digital marketing

X= Independent or explanatory variables (internal and external factors)

X₁= demographic/infrastructure factors, X₂= perceived usefulness factor, X₃= perceived trust factor, X₄= security factor, are the β_0 is the intercept term- constant which was equal to the mean if all slope co-efficient are β_0 , β_1 , β_2 , β_3 and β_4 are the coefficients associated with each independent variable which measures the change in the mean value of Y, per unit change in their respective independent variables.

After the completion of data collection from both qualitative and quantitative methods and secondary sources, data was analyze using different methods of data analysis. For the quantitative data, descriptive statistics techniques of data analysis such as table, frequency, and percentage was be employed to present different variables. To be clear, the main rationale to use

descriptive statistics in this study was to best present numerical data either in the form of a table. Moreover, for the attitude questions, the Likert rating scale was used. Likewise, in this research variables that could measure the attitudes of the client on public construction were prepared to have five points of Likert scale. Such scale was strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agrees (5). Thus, the formula to calculate the mean score of responses of respondents presented as:

3.6. Validity and Reliability

The degree to which data collection techniques accurately measure what they were designed to assess is known as validity (Saunders, 2003). The degree to which measurements are error-free and produce consistent results is known as reliability. In terms of operations, reliability is the internal consistency of a scale that evaluates how homogeneous the objects are. The internal validity was satisfied by the correspondence between the theoretical framework and the research data collection. Conversely, the external validity, which this formal theory generated as well, indicates that the results were applied in a broader context. Second, the researcher comes to a sufficient consensus during the study process, and the degree of agreement establishes the internal reality. The Cronbach's alpha coefficient was utilized to calculate reliability for all the parameters that impact the adoption of brand personality and customer loyalty. A good consistency of items was use in the questionnaire is indicated by a measure between 0.7 and 1.0, which may be found by using the Cronbach Coefficient to determine the reliability of the instrument (Mugenda, 2003).

Table 3.1: Reliability Test measures using Cronbach's alpha

Items	Cronbach's Alpha if Item Deleted	Number of Items	Source of other authors
Digital marketing	.920	6	Kingsnorth, S., (2019), to support the study.
Infrastructure factor	.933	5	Groucutt and Griseri (2004), Lafond and Sinha (2005), to support the study.
Perceived usefulness factor	.893	9	Chen et al., (2002), Heijden et al., (2001), to support the study.
Perceived tersest factor	.914	4	Heijden et al., 2001; Pavlou and Chai, 2002), to support the study.
Security factors	.894	4	Bargh et al. (2008), to support the study.

Source: Survey Data, 2024

A reliability analyses was conducted to each variable of the instrument. The reliability of the measures is to examine factors affecting the adoption of digital marketing strategies for customer acquisition in aviation industry specifically Ethiopian airlines Addis Ababa was examined through the calculation of Cronbach's alpha coefficients. Therefore, the Cronbach's alpha values are reported as follow. Starting to Infrastructure factor model yield to Cronbach's alpha=0.933, Perceived usefulness factor model yield to Cronbach's alpha=0.893, Perceived trust factor model yield to Cronbach's alpha=0.914, Security Factors model yield to Cronbach's alpha=0.894. The Cronbach's alpha values for all the variables considered are greater than 0.7 and this indicates the items in each of the domains are well understood by the respondents. Therefore, as saw from the above table, the reliability of the instrument was measured by using Cronbach alpha method with help of Statistical Package for Social Science (SPSS) version 20. Accordingly, the questionnaires were evaluated and the result of reliability test was statistically computed by the SPSS and the Cronbach's alpha was found all of greater than 0.7. That is the instrument was found to be reliable as statistical literature recommended a test result of 0.7 and above is reliable according to George and Mallery (2003).

3.7. Ethical Considerations

Ethics relate to the appropriateness of the behavior regarding the rights of others who become the topic of work or are factors by it, according to (Saunders et al. 2009). Research ethics concerns how a researcher formulates and clarified a research topic, designs the research and obtains access, collects data, processes and stores data, analyzes data, and writes up the research findings morally and responsibly. This means that the researcher must ensure that the research is conducted in a methodologically sound and morally acceptable manner to all parties concerned.

The researcher evaluate the ethical difficulties that could arise and describe in the study before composing the project work. These concerns apply to every stage of the research process. The researcher's problem was be researched for the benefit of individuals, and the results was useful to others. The researcher were not further marginalized or disempower study participants, and an assertion regarding groups to which the results cannot be generalized was been limited. The study's goal had been explained to the participants, and a letter of approval was issued to establish confidence and trustworthiness. If necessary, the researcher was not put participants in danger, was respect vulnerable populations, and was keep participants' identities confidential.

Once the data has been analyzed, the researcher was storing it for a fair amount of time before discarding it to avoid it becoming into the hands of other researchers who might misuse it. The researcher was not use language or words that are discriminatory against people based on their gender, sexual orientation, race or ethnicity, handicap, or age. Suppression, falsification, and invention of findings to satisfy the needs of the researcher and/or participants were eliminating.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

In this chapter, findings of the study are presented. Data was analyzed, presented and interpreted. The data presented was in line with the objectives of the study and data related to the demographics of the respondents was analyzed and interpreted.

4.2 The Questionnaire Response Rate

Two hundred fifty-four questionnaires were administered and 254 of the questionnaires were fully responding respectively successfully conducted. This translated 100 percent response rate. The high response rate was because the respondents were guaranteed of anonymity. The researcher was also familiar with most of the respondents and was also helped to collect data by assistants who respondents were familiar with. In addition, the respondents were given adequate time to respond to the questionnaires.

Table 4.1. Sample distribution of total respondents' rate

Response Rate			
No.	Respondents category	Frequency	Percentage
1	Responded	254	100
2	Did not responded	0	0
Total		254	100

Source: Survey Data, 2024

The study sought to establish the gender of the respondents. This was important as it gave the researcher insight into the relationship between one's gender and the way they factors affecting the adoption of digital marketing strategies for customer acquisition in Aviation Industry with others in their work place.

4.3 Demographic Information of Respondents

Descriptive analysis was used to explain the demographic and other characteristics of the customers of the Ethiopian Airlines that are involved in this study. The study sought to establish the gender, age, education status, nationality, access to internet, buy e-tickets through, paid for e-ticket in the form of?, how often have you been taking flights with EAL? How many flights have

you been taking in the last 12 months in the current of the EAL? These were included on the demographic infrastructure respondents.

4.4 Descriptive Method of Data Analysis

Descriptive analysis is used to reduce the data in to a summary format by tabulation and measure of central tendency. Descriptive statistics helps facilitate data visualization. It allows for data to be presented in a meaningful and understandable way, which, in turn, allows for a simplified interpretation of the data set in question. The reason for using descriptive statistics is to compare the different factors.

Table 4.2. Characteristic profiles of the respondents

Items		Frequency	Percent
Nationality of respondents	Ethiopian	182	72.0
	Others	72	28.0
Gender of respondents	Male	114	44.9
	Female	140	55.1
Age of respondents	18-25 years	56	22.0
	26-35 years	100	39.4
	36-45 years	56	22.0
	46-55 years	42	16.5
Education background of respondents	below diploma	43	16.9
	Diploma	58	22.8
	undergraduate degree	72	28.3
	Masseters degree and above	81	31.9
Access to internet	From Mobile phone	142	55.9
	From internet café	70	27.6
	From work Place	42	16.5
I buy e-tickets through	EAL website	71	28.0
	EAL Mobile application	113	44.5
	Travel agency	28	11.0
	EAL call center	42	16.5
I paid for e-ticket in the form of	Credit/debit card	70	27.6
	Mobile Banking	184	72.4
How often have you been taking flights with EAL?	Regularly	99	39.0
	Sometimes	85	33.5
	Occasionally	14	5.5
	Rarely	56	22.0
How many flights have you been taking with EAL in the last 12 months? (Count return trip as 2 flights)	Less than 5	43	16.9
	6-10 Times	99	39.0
	11-15 Times	70	27.6
	16-20 Times	42	16.5
	Total	254	100.0

Source: From Survey Data 2024

As displayed in the above table, the biggest numbers of respondents 183 (72) were shown to be Ethiopian passengers exceeding Ethiopian. 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.

In terms of sex, 44.9 % of them were male and the remaining 55.1 % were female. This indicates that concerning the sex, the number of females is shown higher than males. According to the data of passenger manifest of EAL, females are more travelers than males.

The table shows the age composition of sampled passengers of Ethiopian Airlines. The mean age of passengers who have participated in this survey study was 46-55 years with the minimum and maximum ages 26-35 years, respectively. The finding reflects that most of the passengers of Ethiopian Airlines are in the adults' age cohort.

On the side of the education level of sampled passengers of Ethiopian Airlines, more than half of the respondents 72 (28.3%) have a first degree and 81 (27.8%) of the respondents have second degree and above. The rest 101 (33.4%) of the respondents are diploma and below diploma holders. So, the researcher understood that concerning on the educational background of the passengers the number of first degree and above shown higher than diploma and below diploma holders.

The above table informs the fact that, the greatest number of respondents 142 (55.9) has internet access from their mobile phone. While the number of passengers using internet workplace 42 (16.5) is small due to current fast adoption of smart phone by users. So, most passengers are able to access internet from their mobile phone. The data also show that as smartphones equipped with many applications are becoming popular today and there is no the availability of free networks like WIFI at workplace and home make the access of internet easy from workplace. From this one can learn that, passengers are becoming more equipped to perform online transaction like e-ticketing and EAL can utilize this opportunity to transform passengers to online customers.

Concerning E-ticket purchase in general shows in the above figure, majority of respondents have been bought tickets from EAL Mobile application 113 (44.5%) and EAL website 71 (28%)

respectively. Accordingly, call center by which passengers book on phone and travel agency or pay at bank also contribute 27.5%, were passenger's book through phone call and make a payment at bank or ticket office. Among them 28 (11% of passengers buy at travel agencies. However, as a new trend the number of passengers bought e-ticket through the company's new Mobile Application shows tremendous growth (44.5%). The web still shows slow growth that there were only 28 % of passengers buy through website. The interactive, responsiveness, the design and user friendliness of the website are most determinant factors affect passengers their intention to buy online. Generally, we can conclude that among the total passengers only 72.5 % (Mobile and Website) of them buy online ticket without involvement of EAL agents.

The above table illustrates that majority of the passengers preferred to pay in the form of Mobile Banking 184 (72.4%), and only 70 (27.6%) of payment made in the form of Credit/Debit card. Therefore, the passengers pay contributors of credit/debit card payment are low that means the Ethiopian credit and debit cards are not eligible for online payment. 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.

As can be seen from the table, the largest numbers of respondents have had flights with EAL regularly 99 (39), followed by respondents used to have sometimes flights 85 (33.5) and the lowest percentage in the table depicting respondents with occasional 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 was greatly helped portray the full picture of e-ticketing experience by the EAL passengers.

With regards to the respondent passengers' flight experience using EAL shown in the above figure, less than half of the passengers 43 (16.9%) claimed to for using it less than 5 times and shown in 11-18 times and the large number of respondents 99 (39.0%) were reported as 6 to 10 times. Still 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.

4.5 Descriptive Statics for Determinants of Digital Marketing Practice

Table 4.3. Digital marketing practice respondents

Item	Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree	Mean	Standard Deviation
The Ethiopian airline offer digital marketing for customer acquisition.	15 (5.9)	40 (15.7)	15 (5.9)	96 (37.8)	88 (34.6)	3.80	1.24
The payment security of Ethiopian airline website has positive effect on the service satisfaction.	20 (7.9)	50 (19.7)	25 (9.8)	73 (28.7)	86 (33.9)	3.61	1.34
The Ethiopian airline serves with quality digital marketing service.	10 (3.9)	60 (23.6)	42 (16.5)	74 (29.1)	68 (26.8)	3.51	1.22
The Ethiopian Airlines has adequately promoted its service delivery to its customers.	20 (7.9)	55 (21.7)	42 (16.5)	102 (40.2)	35 (13.8)	3.30	1.18
The customers tell positive about Ethiopian airline digital marketing service.	18 (7.1)	38 (15)	17 (6.7)	111 (43.7)	70 (27.6)	3.70	1.22
The Ethiopian Airlines' implementation of customer travel payment using a digital transaction system increase customer satisfaction	17 (6.7)	44 (17.3)	53 (20.9)	73 (28.7)	67 (26.4)	3.51	1.24
N=254							

Source: Survey Data, 2024

As shown in the table above, on the Ethiopian airline offer digital marketing for customer acquisition, the respondents they sought that the minimum respondents they sought uncertainly 15 (5.9) and the maximum were agree 96 (37.8) and strongly agree 88 (34.6). Therefore the researchers understood that the Ethiopian airline offer digital marketing for customer acquisition. On the payment security of Ethiopian airline website has positive effect on the service satisfaction, the majority of the respondents said strongly agree 86 (33.9) and 73 (28.7) of them were said agree and the minimum respondents they said that strongly disagree 20 (7.9). Therefore, the study sought that the payment security of Ethiopian airline website has positive effect on the service satisfaction were properly performed in the EAL and the payment security of Ethiopian airline website not affect the EAL customer satisfaction success.

The majority of the respondents said agree for the Ethiopian airline serve with quality digital marketing service 74 (29.1), and 68 (26.8) of them were said strongly agree. The minimum

respondents they said strongly disagree 10 (3.9) and uncertain 42 (16.5) respectively. So, the study sought that for the Ethiopian airline serve with quality digital marketing service were properly performed in the AL and it is not affects customer satisfaction.

As shown in the table above, the Ethiopian Airlines has adequately promoted its service delivery to its customers, the study indicates that the minimum respondents they said strongly disagree 20 (7.9) and the maximum said agree 102 (40.2). Therefore in the study the researchers understood that the Ethiopian Airlines has adequately promoted its service deliveries to its customers.

The above table, of the respondents said for the customers tell positive about Ethiopian airline digital marketing service, were the study indicates that The majorities' respondents they sought was agrees 111 (43.7) and strongly agree 70 (27.6). On the other hand the minimum respondents they sought strongly disagree 18 (7.1), disagree and uncertain 17 (6.7) respectively. Therefore in the study the researchers understood that the customers tell positive about Ethiopian airline digital marketing service.

The majority of the respondents said agree 73 (28.7) and 67 (26.4) of them were said strongly agree and also the minimum respondents they said strongly disagree 17 (6.7) and disagree 44 (17.3) for the Ethiopian Airlines' implementation of customer travel payment using a digital transaction system increase customer satisfaction respectively. So, the study sought that for the Ethiopian Airlines' implementation of customer travel payment using a digital transaction system increase customer satisfaction.

Generally, the findings on mean and standard deviation (SD) results in the above table was the total score of all six items about from that the mean score of 3.56 and SD 1.24 is come up the digital marketing factors this indicates that the digital marketing was affected by the independent variables within the assigned looking at the total score of all five items. The result of this study is supported by the previous research conducted by the researchers; the digital marketing in the Ethiopian airline. According to Kingsnorth, S., (2019), use of digital technology by companies to promote their goods and services to clients virtually. In the above, the researchers support the current study.

4.6 Descriptive Statics for Infrastructure Factors

Table 4.4. infrastructure factors

Item	Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree	Mean	Standard Deviation
The Ethiopian Airline has stable and fast internet connection to access digital marketing system.	40 (15.7)	25 (9.8)	30 (11.8)	79 (31.1)	80 (31.5)	3.53	1.42
Have required knowledge to buy digital marketing from website or mobile application.	5 (2.0)	10 (3.9)	20 (7.9)	57 (22.4)	162 (63.8)	4.42	0.94
Have a credit card or Mobil banking to buy e-tickets on the company website or Mobile Application.	20 (7.9)	25 (9.8)	50 (19.7)	72 (28.3)	87 (34.3)	3.71	1.25
Can buy e-ticket by following different mode of payment at Ethiopian Airline digital marketing system.	5 (2.0)	10 (3.9)	42 (16.5)	87 (34.3)	110 (43.3)	4.13	0.96
Buying e-ticket through Ethiopian Airline Mobile application or website doesn't require high level of technical skills.	20 (7.9)	25 (9.8)	57 (22.4)	101 (39.8)	51 (20.1)	3.54	1.15
N=254							

Source: Survey Data, 2024

As the table above shows, the maximum respondents said strongly agreed 80 (31.5) and the minimum those who said disagree 25 (9.8) that the Ethiopian Airline have stable and fast internet connection to access digital marketing system. Therefore, it is clear from this study that the Ethiopian Airline has not stable and not fast internet connection to access digital marketing system for the customer. So, this indicates that the Ethiopian Airline stability and the fast internet connection access is the factor of the digital marketing system in Ethiopia.

On the other hand, with the required knowledge to buy digital marketing from website or mobile application, the maximum of the respondents said strongly agree 162 (63.8) and the minimum strongly disagree 5 (2.0). Therefore, it is clear that most respondents have required knowledge to buy digital marketing from website or mobile application.

Most of the respondents strongly agreed 87 (34.3) and agreed 72 (28.3) also the minimum respondents said strongly disagree 20 (7.9) with the fact that the respondents have a credit card

or Mobil banking to buy e-tickets on the company website or Mobile Application. Therefore, the study shows that most respondents have the credit card or Mobil banking to buy e-tickets on the company website or Mobile Application.

As shown in the table above, on the can buy e-ticket by following different mode of payment at Ethiopian Airline digital marketing system the respondents they sought that the minimum respondents they sought strongly disagree 5 (2.0) and disagree 10 (3.9) respectively. Therefore the researchers understood that there were buy e-ticket by following different mode of payment at Ethiopian Airline digital marketing system.

The majority of the respondents said agree for buying e-ticket through Ethiopian Airline Mobile application or website doesn't require high level of technical skills 101 (39.8), the second 51 (20.1) of them were said strongly agree and the minimum respondents they said that strongly disagree 20 (7.9). Therefore, the study sought that well buying e-ticket through Ethiopian Airline Mobile application or website does require high level of technical skills in EAL and it affect buying e-ticket through Mobile application or website success.

Generally, the findings on mean and standard deviation (SD) results in the above table was the total score of all five items about from that the mean score of 3.87 and SD 1.14 is come up the infrastructure factors this indicates that the infrastructure was the effect of the dependent variables within the assigned looking at the total score of all five items. The result of this study is supported by the previous research conducted by the researchers; the infrastructure factors are the Ethiopian airline digital marketing. According to Groucutt and Griseri (2004), Lafond and Sinha (2005), support widespread internet use would come at a large financial cost to many nations. In the above, the researchers support the current study.

4.7 Descriptive Statics for Perceived Usefulness factors

Table 4.5. Sample of Perceived Usefulness factors

Item	Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree	Mean	Standard Deviation
Digital marketing system makes it easier to buy tickets in Ethiopian Airline.	54 (21.3)	25 (9.8)	44 (17.3)	92 (36.2)	39 (15.4)	3.15	1.38
Use digital marketing system in Ethiopian Airline enables me to buy tickets more Quickly.	13 (5.1)	28 (11.0)	13 (5.1)	143 (56.3)	57 (22.4)	3.80	1.07
Could reduce/ save travel cost by using online ticket through Ethiopian Airline Mobile application and website.	27 (10.6)	18 (7.1)	1 (4)	151 (59.4)	57 (22.4)	3.76	1.19
Digital marketing system easily makes proper adjustments related to my flight schedules in the Airline.	30 (11.8)	35 (13.8)	39 (15.4)	96 (37.8)	54 (21.3)	3.43	1.29
Passengers are provided on immediate refund for unused tickets through Ethiopian Airline e-ticketing system.	10 (3.9)	30 (11.8)	30 (11.8)	104 (40.9)	80 (31.5)	3.84	1.11
Is not worry when e-ticket being lost or stolen?	30 (11.8)	35 (13.8)	30 (11.8)	87 (34.3)	72 (28.3)	3.54	1.34
Buy online ticket as it is customized based on my needs.	35 (13.8)	30 (11.8)	51 (20.1)	79 (31.1)	59 (23.2)	3.38	1.33
Overall, the beneficiary with the e-ticketing system of Ethiopian Airline.	13 (5.1)	25 (9.8)	23 (9.1)	113 (44.5)	80 (31.5)	3.87	1.12
Will definitely recommend others to buy tickets online tickets through website and mobile application.	15 (5.9)	50 (19.7)	21 (8.3)	99 (39.0)	69 (27.2)	3.62	1.24
N=254							

Source: Survey Data, 2024

The majority of the respondents said strongly agree 92 (36.2) and the minimum respondents they said disagree 25 (9.8) for the digital marketing system makes it easier to buy tickets in Ethiopian Airline. So, the study sought that the digital marketing system makes it easier to buy tickets in EAL.

As shown in the table above, on the use of digital marketing system in Ethiopian Airline enables to buy tickets more quickly, the maximum respondents they said that agree 143 (56.3) and the minimum respondents they said strongly disagree 13 (5.1). Therefore the researchers understood that the use of digital marketing system in Ethiopian Airline enables to buy tickets more quickly in the EAL.

The above tables of the respondents said on to could reduce/ save travel cost by using online ticket through Ethiopian Airline Mobile application and website were the study indicates that the minimum respondents they said uncertain 1 (4) and the majority respondents they sought were agrees 151 (59.4). Therefore, the researcher understood that could reduce/ save travel cost by using online ticket through Ethiopian Airline Mobile application and website so, the perceived usefulness in the EAL.

On the digital marketing system easily makes proper adjustments related to flight schedules in the Airline, the respondents they sought that the maximum and the minimum respondents they said agree 96 (37.8) and strongly disagree 30 (11.8) respectively. Therefore, the researcher understood that the digital marketing system easily makes proper adjustments related to flight schedules in the Airline.

The above tables of the respondents said for the passengers are provided on immediate refund for unused tickets through Ethiopian Airline e-ticketing system were the study indicates that the minimum respondents they said that the minimum respondents they sought that strongly disagree 10 (3.9) and the maximum 104 (40.9) agree. Therefore in the study the researchers understood that the passengers provided on immediate refund for unused tickets through Ethiopian Airline e-ticketing system. As the table above shows, most of the respondents agree 87 (34.3) and strongly agree 72 (28.3) when e-ticket being lost or stolen. So, in the study the researchers understood that when e-ticket being lost or stolen because the majority of the respondents sought those agree and strongly agree.

The above tables of the respondents said for to buy online ticket as it is customized based on the needs were the study indicates that the minimum respondents they said disagree 30 (11.8), the majority respondents for to buy online ticket as it is customized based on the needs they sought were agree 79 (31.1) and strongly agrees 59 (23.2). So, in the study the researchers understood

that for to buy online ticket as it is customized based on the needs because the majority of the respondents sought those agree and strongly agree.

As shown in the table above, on overall, the beneficiary with the e-ticketing system of Ethiopian Airline the respondents they said that the majority agree 113 (44.5) and strongly agree 80 (31.5). The minimum respondents they said strongly disagree 13 (5.1). Therefore in the study the researchers understood that overall, the beneficiaries with the e-ticketing system of Ethiopian Airline.

The item on the table reveals was definitely recommend others to buy tickets online tickets through website and mobile application, the respondents they said that the majority of them agree 99 (39.0) and the minimum of them were strongly disagree 15 (5.9). So, in the study buy tickets through online tickets through website and mobile application definitely recommend others was not the factors of the perceived usefulness in the AL.

Generally, the findings on mean and standard deviation (SD) results in the above table was the total score of all nine items about from that the mean score of 3.56 and SD 1.25 is come up the perceived usefulness factors this indicates that the perceived usefulness was the effect of the dependent variables within the assigned looking at the total score of all nine items. The result of this study is supported by the previous research conducted by the researchers; the perceived usefulness factors are the Ethiopian airline digital marketing. According to Chen et al., (2002), Heijden et al., (2001), found perceived utility to be a significant factor determining intention to shop online. In the above, the researchers support the current study.

4.8 Descriptive Statics for Perceived Trust factors

Table 4.6. Sample of Perceived Trust factors

Item	Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree	Mean	Standard Deviation
Feel that Ethiopian airlines website is trustworthy.	5 (2.0)	30 (11.8)	30 (11.8)	141 (55.5)	48 (18.9)	3.78	0.95
Feel safe in my transaction with Ethiopian airlines website.	5 (2.0)	40 (15.7)	52 (20.5)	127 (50)	30 (11.8)	3.54	0.96
Believe Ethiopian airlines website protect the privacy.	10 (3.9)	55 (21.7)	52 (20.5)	64 (25.2)	73 (28.7)	3.55	1.19
The Ethiopian airlines website is reliable for digital Shopping.	30 (11.8)	45 (17.7)	10 (3.9)	114 (44.9)	55 (21.7)	3.47	1.32
N=254							

Source: Survey Data, 2024

Regarding to the feel that Ethiopian airlines website trust worthy, the majority of respondents who are participated from this study they sought agree 141 (55.5) and strongly agree 48 (18.9) and the minimum respondents sought strongly disagree 5 (2.0). Therefore, in the study the researcher understood the customers feel that the Ethiopian airlines website trust worthiness. On the feel of safe in the transaction with Ethiopian airlines website, the respondents they said that the maximum agree 127 (50) and the minimum respondents they said strongly disagree 5 (2.0). Therefore in the study the researchers understood that the feel of safe in the transaction with Ethiopian airlines website EAL.

On the side of customers believes of Ethiopian airlines website protect the privacy, the respondent sought that the majorities of the respondents were strongly agreed 73 (28.7) and the minimum strongly disagree 10 (3.9). So, in the study the researchers understood that Ethiopian airlines website protects the privacy of EAL. On the analysis the Ethiopian airlines website is reliable for digital shopping that the total respondents sought from the minimum were uncertain 15 (4) and the majorities were agree 165 (44.5). Therefore, in the study the researchers understood that the Ethiopian airlines website reliability for digital shopping was not the factors of perceived trust.

Generally, the findings on mean and standard deviation (SD) results in the above table was the total score of all four items about from that the mean score of 3.59 and SD 1.11 is come up the perceived trust factors this indicates that the perceived trust was the effect of the dependent variables within the assigned looking at the total score of all four items. The result of this study is supported by the previous research conducted by the researchers; the perceived trust factors are the Ethiopian airline digital marketing. According to Heijden et al., 2001; Pavlou and Chai, 2002), have demonstrated that trust is a key factor in determining an individual's attitude towards online shopping. In the above, the researchers support the current study.

4.9 Descriptive statics for Security factors

Table 4.7. The sample of Security factors

Item	Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree	Mean	Standard Deviation
The Ethiopian airlines digital ticketing system ensures security on all credit debit card payments for e-tickets.	30 (11.8)	45 (17.7)	55 (21.7)	81 (31.9)	43 (16.9)	3.24	1.26
Feel that Ethiopian airlines online ticketing system is secure from any threat/ fraud.	5 (2.0)	40 (15.7)	56 (22.0)	80 (31.5)	73 (28.7)	3.69	1.11
Believe my personal information is safe on Ethiopian airlines website and mobile application.	10 (3.9)	37 (14.6)	64 (25.2)	87 (34.3)	56 (22.0)	3.56	1.10
Think the transaction information is secured when using online ticketing.	25 (9.8)	44 (17.3)	37 (14.6)	77 (30.3)	71 (28.0)	3.49	1.32
N=254							

Source: Survey Data, 2024

Regarding to the above table on analyzed on the Ethiopian airlines digital ticketing system ensures security on all credit debit card payments for e-tickets, from the majority of them the respondents sought that agree 81 (31.9) and the minimum respondents strongly disagree 30 (11.8). Therefore, in the study the researchers understood that the Ethiopian airlines digital ticketing system ensures security on all credit debit card payments for e-tickets EAL security.

From the feel that the Ethiopian airlines online ticketing system is secure from any threat/ fraud, the majority of the respondents said that agree 80 (31.5) and the minimum said that strongly

agree 5 (2.0). So, the study sought that the Ethiopian airlines online ticketing system security from any threat/ fraud that the EAL customers' security. On the analysis believe the personal information is safe on Ethiopian airlines website and mobile application, that the total respondents sought from the minimum were strongly disagree 10 (3.9), and the majorities were agree 87 (34.3). Therefore, in the study the researchers understood that believe the personal information is safe on Ethiopian airlines website and mobile application was not the factors of the security in the EAL.

Regarding to the above table by the think of the transaction information is secured when using online ticketing, the respondent sought that the majorities of the respondents were strongly agreeing 77 (30.3) and the minimum of them said strongly disagree 25 (9.8). So, in the study the researchers understood that the transaction information security when using online ticketing was not the factor of the EAL on the customer's transaction security.

Generally, the findings on mean and standard deviation (SD) results in the above table was the total score of all four items about from that the mean score of 3.50 and SD 1.20 is come up the security factors this indicates that the security was the effect of the dependent variables within the assigned looking at the total score of all four items. The result of this study is supported by the previous research conducted by the researchers; the security factor is the Ethiopian airline digital marketing. According to the survey Bargh et al. (2008), security was been the second important element in e-banking customers' adoption of CBE. In the above, the researchers support the current study.

4.10 Correlation Matrix

Researcher choice the Pearson product-moment correlation coefficient, too often to observe to examine the factors affecting the market development in Ethiopian airline specifically Addis Ababa, is a measure of the strength and direction of association that exists between two continuous variables. The Pearson correlation generates a coefficient called the Pearson correlation coefficient, denoted as r . The Pearson correlation coefficient, r , indicates how far away all these data points are to this line of best fit. Its value can range from -1 for a perfect negative linear relationship to +1 for a perfect positive linear relationship. A value of 0 (zero) indicates no relationship between two factors.

Table 4.13: Rule of thumb for about the strength of correlation coefficient

Range of Coefficient	Description of Strength	Range of Coefficient	Description of Strength
± 0.81 to ± 1.00			Very Strong
± 0.61 to ± 0.80			Strong
± 0.41 to ± 0.60			Moderate
± 0.21 to ± 0.40			Weak
± 0.00 to ± 0.20			None

Source: Bhattacharjee, (2012)

Table 4.8. Pearson's correlation between the market development and the Five Independent Variables

Correlations					
Pearson Correlation	Market development	Infrastructure factor	Perceived Usefulness factor	Perceived trust factor	Security factors
Digital marketing	1				
Infrastructure factor	.806**	1			
Perceived usefulness factor	.710**	.622**	1		
Perceived trust factor	.675**	.570**	.799**	1	
Security factors	.701**	.615**	.998**	.797**	1
Sig. (2-tailed)	.000	.000	.000	.000	
N	254	254	254	254	254
**. Correlation is significant at the 0.01 level (2-tailed).					

Source: Survey data 2024

The outputs as can be evidenced from the correlation matrix table 4.8. Above, there is a positive and significant relationship in between the factors and that all correlation coefficients are statistically significant at 99 percent confidence level. This implies that at a 1 percent level of significance. As to the magnitude of the correlation scores is concerned, the following points can be supposed. The Pearson correlation Analyses were employed among factors shows the correlation analyses among all constructs is to factors affecting the adoption of digital marketing

strategies for customer acquisition in aviation industry in case of Ethiopian airlines. The first column of the correlation analysis result table shows that the relationship between the explanatory variables such as, Infrastructure factors, Perceived usefulness factors, Perceived test factor and Security factors do have a positive relationship with dependent variable digital marketing.

According to Bhattacharjee (2012) the above table, the result show that there are significant positive correlations the variable digital marketing is highly very strong positive correlation with digital marketing as it was explained by the Pearson correlation coefficient ($r = .100$, $P < 0.01$). The second variable which was analyzed for correlation was Infrastructure. Infrastructure was very strong positive related with digital marketing as it was explained by the Pearson correlation coefficient ($r = .806$, $P < 0.01$). The third explanatory variable Perceived usefulness was very strong positive related with digital marketing as it was explained by the Pearson correlation coefficient ($r = .710$, $P < 0.01$). The fourth variables were perceived trust was very strong positive related with digital marketing whose Pearson correlation coefficients was ($r = .675$, $P < 0.01$). The fifth variables were security was strong positive related with digital marketing whose Pearson correlation coefficients were ($r = .701$, $P < 0.01$) respectively.

4.11 Tests of Normality

In order to test the normality of data, skewness and kurtosis value, Normal Probability Plot (NPP) and histogram tests of normality were used and conducted on SPSS 20. According to Hair et al. (2010), normality is the most important of the three afore-mentioned assumptions in multivariate analysis and pertains to the bell-like shape of the distribution. Normality states that the distribution of errors of prediction is independently and normally distributed across all levels of the dependent variable. Researchers have suggested that “the most commonly used critical values are ± 2.58 (0.01 significance level) and ± 1.96 , which corresponds to a .05 level” (Hair et al. 2010, p. 73). Tables found in appendix summarize the statistic and standard error for the mean, skewness and kurtosis as well as the standard deviation for all 53 indicators evaluated in the full measurement model. After careful analysis of the skewness and kurtosis values across of the model, it is determined that the measures for all of the scale variables provide evidence of tolerable symmetrical distributions, thus supporting the critical assumption of normality.

The normality of the disturbance term is also required in estimating the parameters. If this is not the case, all the tests that have been used so far will be invalid. The parameters to be estimated must be the functions of a normally distributed variable (which is, most of the time, disturbance term). Normal Probability Plot (NPP) and histogram of residuals used for the test of normality of the disturbance term. A comparatively simple graphical device to study the shape of the probability density function of a random variable is the normal probability plot which makes use of normal probability plot, a special designed graph. If the variable is from the normal population, the normal probability plot will be approximately a straight line (Gujarati, 2009).

A. Histogram

The histogram is a traditional way of displaying the shape of a group of data. It is constructed from a frequency distribution, where choices on the number of bins and bin width have been made. These choices can drastically affect the shape of the histogram. The ideal shape to look for in the case of normality is a bell-shaped distribution as shown figure 4.1 below.

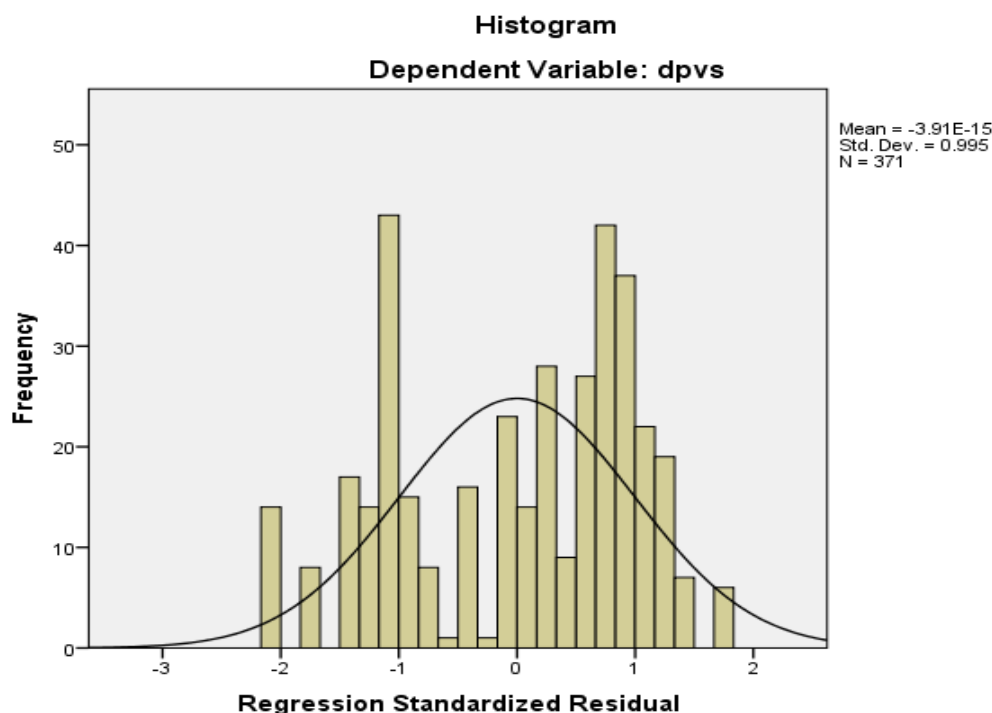


Figure 4.2: Normality test (histogram)

Source: Survey data 2024

B. Linearity Assumptions (P-P) plots)

Linearity is another condition to be met for valid regression analysis, P-P plot presented in Figure 6 blow show that the small circles were close to the diagonal line, this shows the data was roughly close to linearity.

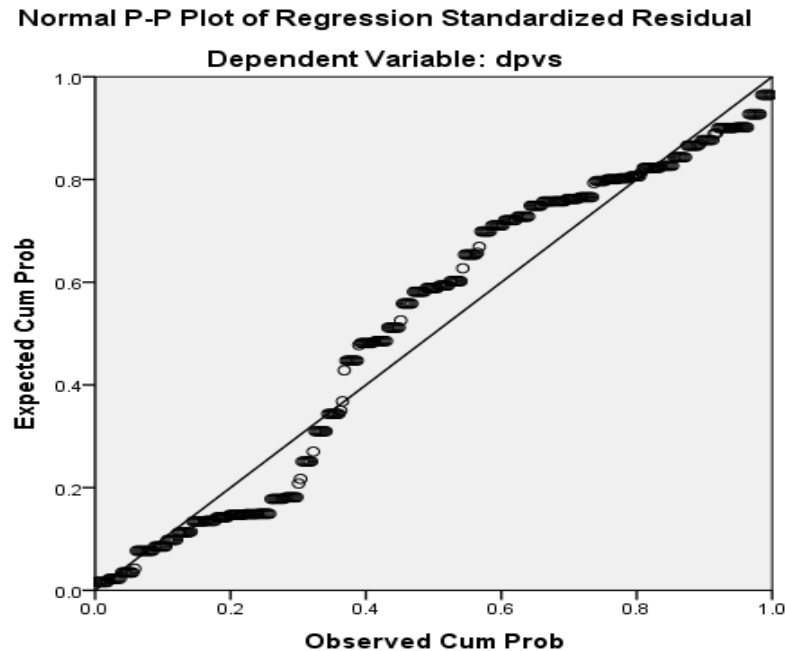


Figure 4.3: Normality test (p-plot)

Source: Survey data 2024

4.12 Multiple Linear Regression Analysis

Regression coefficients were used to evaluate the strength of the relationship between the independent variables and the dependent variable. Beta coefficients of the independent variables were used to determine the relative importance to the dependent variable in the model. Therefore, regression coefficients were used to evaluate the strength of the relationship between the independent variables and the dependent variable. Chu (2002) claim that the beta coefficients of the independent variables can be used to determine its derived importance to the dependent variable compared with other independent variables in the same model. The R² value in the model provided a measure of the predictive ability of the model or measured the percentage of variance in the dependent variable explained collectively by all of the independent variables (Garson, 2008). The closer the value to 1, the better the regression equation fits the data. The F test was used to test the significance of the regression model as a whole.

In this study, a multiple regression analysis was conducted to test relationship among variables i.e. dependent and independent variables. The analysis was done to establish how the specific the factors affecting digital marketing aviation industry in the case of Ethiopian airline.

Table 4.10: Model summary independent factors as predictors to digital marketing

Model Summary^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.860 ^a	.739	.736	2.60346
a. Predictors: (Constant), SF, ISF, PTF, PUF				
b. Dependent Variable: digital marketing				

Source: Survey data 2024

A regression analysis results are presented in above model summary table, the result as shown in the model summary designates that (Infrastructure factors =ISF, Security factors =SF, Perceived usefulness factors =PUF and finally Perceived trust factors =PTF, explained 73.9% of change in digital marketing of Ethiopian airline aviation industry. The remaining 26.1 % of the variance is explained by other factors not included in this study. The coefficient of multiple determinations (R²) was estimated 0.739 and adjusted R² value also was 0.736. This means that 73.9% of the variation in the dependent variables is explained by the explanatory variables included in the model. Furthermore, the adjusted R² of 73.6 % which is significant has further consolidated the goodness of the model; hence, it is econometric significance and reliable. Which is show that the model is fitted and its goodness to indicate the determinations of dependent variable explanations.

Table 4.11: ANOVA table

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7031.616	4	1757.904	259.353	.000 ^b
	Residual	2480.759	366	6.778		
	Total	9512.375	370			
a. Dependent Variable: digital marketing						
b. Predictors: (Constant), SF, ISF, PTF, PUF						

Source: Field Survey 2024

From above table 4.10, The F-ratio found in the ANOVA table measures the probability of chance departure from a straight line. The significance value is 0.000 which is less than 0.05 thus the model is statistically significance in predicting how (Infrastructure factors =ISF, Security factors =SF, Perceived usefulness factors =PUF and finally Perceived trust factors =PTF) and digital marketing of Ethiopian airline aviation industry.

Table 4.12: Coefficient of Independent variables (Factors) as Predictors to the digital marketing

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant intercept	-3.613	.861		-4.194	.000
	Infrastructure factors	.517	.039	.564	13.368	.000
	Perceived usefulness factors	.767	.318	1.158	2.414	.017
	Perceived trust factors	.146	.044	.183	3.341	.001
	Security factors	-.630	.316	-.947	-1.991	.048
a. Dependent Variable: Constant intercept						
b. predictors: ISF,PUF,PTF and SF						
** significant at 1% level						
* significant at 5%level						

Source: Field Survey 2024

From the above regression table 4.11

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Where:

Y = Dependent variable - Constant intercept

X= Independent or explanatory variables

X1= Infrastructure factors, X2= Perceived usefulness factors, X3= Perceived trust factors, X4= Security factors.

The Predicted Constant intercept in Ethiopian airline = -3.613 at sig 0.000, (Infrastructure factors) + .517 at sig 0.000, (Perceived usefulness factors) + .767 at sig 0.017, (Perceived trust factors) + .146 at sig 0.001 (Security factors) -.630 at sig .048 respectively. While security factors, has a negative effect on digital marketing of aviation industry and a coefficient level and at not significance (-.630 at sig .048) as shown on table 4.11 on discussion part. Hence, the digital marketing factors contribute the largest impact on the aviation industry as compared to the other independent factors followed by (Infrastructure factors, Perceived usefulness factors and Perceived trust factors respectively positive and the significance level p value ≤ 0.05 . So, the majority of independent factors are positive and significant relationship with digital marketing while security factors was negatively affect the digital marketing, therefore all of them accepted and support the study.

4.13 Discussion of the result

This study was conducted to enhance adoption of digital marketing strategies by qualitatively and quantitatively analyzing the reviews of EAL passengers digital marketing strategies practice. Therefore, this study quantitatively analyzes the relationships among the four digital marketing strategies evaluation factors of customer acquisition. The airline with higher satisfied customers was rated high in all areas. The result supported the questionnaires that the airlines with higher satisfied customer are getting more passengers. Digital marketing strategies plays significant role to maximize satisfaction of customers. Four attributes of EAL digital marketing strategies (infrastructure factors, perceived usefulness factors, perceived trust factors and security factor) regression analyses to measure the effects on customer's service acquisition. Understanding online reviews as a manifestation of passenger's acquisition can help EAL to identify the main attributes required to achieve positive perception and to minimize negative intention.

This section discusses how factors affecting the adoption of digital marketing strategies for customer acquisition in aviation industry in case of Ethiopian airlines. The results revealed that digital marketing strategy dimensions have significant and positive effect on customer acquisition except security factors. Infrastructure and Security are the most influencing factor among the determinant factors that contribute to the E-Ticketing practice in which the Ethiopian Airlines E-Ticketing Perspective in the case of EAL, Ethiopia.

The finding sought that well buying e-ticket through Ethiopian Airline Mobile application or website does require high level of technical skills in EAL and it affects buying e-ticket through Mobile application or website. The Ethiopian airline offer digital marketing, payment security, digital marketing service, adequately promoted its service deliveries to its customers, the implementation of customer travel payment and customers positive attitude for digital marketing service were good for customer acquisition. The study sought that for the Ethiopian Airlines' implementation of customer travel payment using a digital transaction system increase customer satisfaction.

The finding indicates that the Ethiopian Airline stability and the fast internet connection access is the factor of the digital marketing system in Ethiopia. On the perceived usefulness factors side the digital marketing system the customers makes it easier to buy tickets in Ethiopian Airlines because the EAL makes proper adjustments related to flight schedules, ensures the security of all credit debit card payments for e-tickets, secure from any threat/ fraud, the personal information is safe on website and mobile application and the web site protects the privacy in the transaction so, the customers they feel of safe on the EAL system.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1. Summary of Findings

Based on the correlation analysis, it can be concluded that there is significant positive correlation between Infrastructure, Security, Perceived Usefulness, and Perceived Trust and to the E Ticketing practice. The finding indicates the greater of E-Ticketing practice was depending to Infrastructure, Security, Perceived Usefulness and Perceived Trust. As such any negative factor that affected to these factors was given a significant change in the E-Ticketing practice in which the Ethiopian Airlines E-Ticketing Perspective in the case of EAL, Ethiopia.

5.2. Conclusion

This study provides evidence as to the manner in which Infrastructure, Security, Perceived Usefulness, Perceived Trust, contribute to E-Ticketing practice in which the Ethiopian Airlines E-Ticketing perspective the case of EAL.

Pearson Correlation statistic found that there is significant positive correlation between Infrastructure, Security, Perceived Usefulness, and Perceived Trust and to the E Ticketing practice. The finding indicates the greater of E-Ticketing practice was depending to Infrastructure, Security, Perceived Usefulness and Perceived Trust. As such any negative factor that affected to these factors was given a significant change in the E-Ticketing practice in which the Ethiopian Airlines E-Ticketing Perspective in the case of EAL, Ethiopia.

Infrastructure and Security are the most influencing factor among the determinant factors that contribute to the E-Ticketing practice in which the Ethiopian Airlines E-Ticketing Perspective in the case of EAL, Ethiopia.

Regarding to the characteristics of Profiles of the Respondents gender female was the majority and they were participated the young age as well as at the education level of masters and above. Most of the passengers they use online transaction by the EAL opportunity rather than private agencies but most of them were less experience to uses EAL that means they have another alternative to use transportation.

Ethiopian Airlines offer digital marketing, payment security, digital marketing service, adequately promoted its service deliveries to its customers, the implementation of customer travel payment and customers positive attitude for digital marketing service were good for customer.

From the determinants of infrastructure factors the Ethiopian Airlines stability and the fast internet connection access is the factor of the digital marketing system for the customers. To buy digital marketing from the website or mobile application of the EAL knowledge required. Most customers have the credit card or Mobile banking to buy e-tickets on the company website or Mobile Application so, they buy e-ticket by following different mode of payment at Ethiopian Airline digital marketing system but to apply this does require high level of technical skills.

On the Perceived Usefulness factors side the digital marketing system the customers makes it easier to buy tickets in Ethiopian Airline because the EAL makes proper adjustments related to flight schedules, ensures the security of all credit debit card payments for e-tickets, secure from any threat/ fraud, the personal information is safe on website and mobile application and the web site protects the privacy in the transaction so, the customers they feel of safe on the EAL system.

The coefficient of multiple determinations (R^2) was estimated 0.739 and adjusted R^2 value also was 0.736. This means that 73.9% of the variation in the dependent variables is explained by the explanatory variables included in the model. Furthermore, the adjusted R^2 of 73.6 % which is significant has further consolidated the goodness of the model; hence, it is econometric significance and reliable. Which is showed that the model is fitted and its goodness to indicate the determinations of dependent variable explanations.

5.3. Recommendations

The following recommendations are made based on findings from the results of the analysis: Any technology-based businesses need 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.

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 and the website and mobile banking application usage.

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.

Perceived usefulness 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 stone local languages as well).

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, knowledge and skill in order to effectively and competitively practices e-ticketing system.

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 was be increased the number of e-ticketing users.

Reference

- Lemma, E & Sambasivam, Y (2013). Consumers Perspectives on the Factors affecting E-Ticketing Practices at Ethiopian Air Lines.
- Strauss, J., & Frost, R. (2001), E-marketing. NJ: Prentice Hall.
- IATA. (2008). Industry Bids Farewell to Paper Ticket [Press Release No: 25] Available at <https://www.iata.org/en/pressroom/pr/>.
- Demeke, W. & Olden, A. (2012). Researching the adoption of ICT in Ethiopia: a case study of mall hotels in Addis Ababa.
- Goldsmith, R. (2002). Explaining and Predicting Consumer Intention to Purchase Over the Internet: An Exploratory Study. *Journal of Marketing Theory and Practice*.
- Crosby, T. (2007). How Airlines E-tickets work. Retrieved on 10, janury, 2024 from <http://communication.howstutTworks.com/how-airline-e-tickets-work2.htm>,
- Cunningham, L., Gerlach, J., Harper, M., & Young, C. (2005). Perceived risk and the consumer buying process: Internet airline reservation. *International Journal of service industry management*.
- Yemane R. (2018). E-marketing for Tourism Business Development in Ethiopia: Its Practice, Challenges and Implications on Performance of Tour Operating Firms. WikiDiff. <https://wikidiff.com/booking/reservation>
- Lee, M, & Turban, E. (2001). A trust model for consumer Internet shopping. *International Journal of Electronic Commerce*.
- Miyazaki, A. & Fernandez, A. (2001). Consumer Perceptions of Privacy and Security risk for online shopping. *The Journal of Consumer Affair*.
- Sabre. (2017) Ethiopian Airlines Signs up for Sabre Passenger Reservations Technology Solution [press release]. 31 August. Available at <https://www.sabre.com/insights/releases/ethiopian-airlinessigns-up-for-sabre-passenger-reservations-technology-solution/> (Accessed: 10 janury 2024).
- Customer think (2017). Customer experiences are soaring high for airlines industry in a digital-first world [press reassess]. October 13, 2017. Available at <https://customerthink.com/customerexperiences-are-soaring-high-for-airlines-industry-in-a-digital-first-world/>
- Smith, P. R., & Chaffey, D. (2005). *Marketing excellence: The heart of business*. Amsterdam: Elsevier Butterworth-Heinemann.
- Strauss, J. and Frost, R. (2001) *E-Marketing*. Prentice-Hall, Upper Saddle River, NJ.
- El-Gohary, Hatem. (2010). E-Marketing A Literature Review from a Small Businesses perspective. *International Journal of Business and Social Science*.

- Buhalis, Dimitrios (2004) eAirlines: strategic and tactical use of ICTs in the airline industry Information & Management.
- Crosby, T. (2007). How Airlines E-tickets work. Retrieved on janury 02, 2024 from <http://communication.howstutTworks.com/how-airline-e-tickets-work2.htm>,
- Jeffrey I (2001). Surveying the Digital Future: “Surveying the Digital Future” IATA. <https://www.iata.org/en/pressroom/pr/>.
- Jinhong, X & Steven, M (2001). Electronic Tickets, Smart Cards, and Online Prepayments: When and How to Advance Sell.
- Athiyaman, A (2002). internet user’s intention to purchase air travel online: an empirical investigation. Marketing Intelligence and planning.
- Ajzen. I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes.
- Bargh, M. Janssen, W. & Smit, A. (2008). Trust and Security in E-business Transactions. International Journal information management.
- Billari, F., Philipovs D. & Testa, M. (2005). The influence of attitudes, subjective norms and perceived behavioral control on union formation intentions. Population Research and Policy, Review.
- Buhalis, D. (2004). Airlines: Strategic & tactical use of ICTs in the airline industry. Journal of Information and management.
- Xie, Jinhong & Shugan, Steven. (2001). Electronic Tickets, Smart Cards, and Online Prepayments: When and How to Advance Sell. Marketing Science.
- Viswanath V, Michael G. M, Gordon B. Davis and Fred D: MIS Quarterly. 27 (3) 425-478
Ethiopian Airlines website: <http://www.ethiopianairlines.com> Ethiopian Airlines (2002). Sales and service Procedures Manual
- Gattiker, U.E., Perlusz, S., & Bohmann, K. (2000). Using the Internet for B2B activities: a review and future directions for research. Research: Electronic Networking Applications and Policy.
- Mukhtar S. Al-Hashimi,, Ahmed F.(2018). The Factors of Innovative Technology on the Aviation Industry and on Customers Preference.
- Chiou, J. (1998). The effects of Attitude, Subjective Norm, and Perceived Behavioral Control on Consumers' Purchase Intentions: The Moderating Effects of Product Knowledge and Attention to social Comparison Information.
- Judy, S. et. al.. (2000). E-marketing. (4th ed.) Upper Saddle River, NJ: Pearson education. Inc.
- Kaminsky, A.(2003). What is an Airlines ticket: Retrieved on janury, 10. 2024. <http://www.wisegeek.com/what-is-an-airlines-e-ticket.html>.

- Krueger, G., Swatman, P. and Krueger, O. (2006). E-Ticketing Strategy and Implementation in an Open Access system: The case of Deutsche Bahn, Retrieved on January 2024. <http://www.insyl.unisa.edu.au/publications/working-papers>.
- Moorman, C., Deshpande, R. & Zaltman, G. (1993). Factors Affecting Trust in Market Research Relationships. *Journal of Marketing*.
- Nachamias, D. & Frankfort - Nachamias, C. (1996). *Research Methods in the Social Sciences*. (5th ed.), Arnold, Santa Cruz. CA.
- Owen, R. & Humphrey, P. (2009). The structure of online marketing communication channels. *Journal of Management & Marketing Research*.
- Porter, M. (1980). *Competitive strategy: techniques for analyzing industries and competitors: with a new introduction*. Free Press, New York.
- Roselius, T. (1971). Consumer Rankings of Risk Reduction Methods, *Journal of Marketing*.
- Shan, D., Laffey, J., Lin, Y. & Huang, X. (2006). Social Influences for perceived usefulness & Ease of use of course delivery system. *Journal of Interactive online*.
- Sheth, J. & Sharma, A. (2005), e-marketing: opportunities and issues. *International Marketing Review*.
- SITA (2019). *Airline IT Trends Survey: The Future of 21st Century Travel*, Retrieved on January 8, 2024 at: [http://costkiller.net/tribune/Tribu-PDF/Airline_IT Trends Survey 2019 report.pdf](http://costkiller.net/tribune/Tribu-PDF/Airline_IT_Trends_Survey_2019_report.pdf).
- Smith, P.R., & Chaffey, D. (2005), *e-Marketing excellence: at the heart of e-Business*. Butterworth Heinemann, Oxford, UK, 2nd edition.
- Stone, R. & Gronhaug, K. (1993) Perceived Risk: Further considerations, *European Journal of Marketing*.
- Sulaiman, A., Josephine, N.C. & Mohezar, S. (2008). E-ticketing as a new way of buying tickets: Malaysian perceptions.
- Tan, A. (2005). Infrastructure for the Electronic Business on the Internet. *International Journal of Service Industry Management*, II.
- Venkatesh, V. (2000). Determinants of perceived ease of use: integrating control, intrinsic Motivation and emotion into the technology acceptance model. *Information System Research*.
- Ling, K. & Lau, Teck-Chai & Piew, T. (2010). The Effects of Shopping Orientations, Online Trust and Prior Online Purchase Experience toward Customers' Online Purchase Intention. *International Business Research*.
- Yang, S., (2001). E-Commerce in Airline Business, Paper presented at the International Symposium on Government in E-Commerce Development. April Ningbo. China.

- Molchanova, K.M., Truskina, N.V., Katerna, O.K., (2013) the Electronic Scientifically and Practical Journal. Belais, R., Journal Innovation Economics & Management.
- Veloso, F., Soto, M.J., (2001) Technological Forecasting and Social Change.
- Avram, B., (2017) Expert Journal of Marketing.
- Kingsnorth, S., Digital Marketing Strategy: An Integrated Approach to Online Marketing. (Kogan Page, New York, 2019).
- Bughin, J., Journal of Brand Strategy, (2014)
- Stone M., Woodcock N., Machtynger L., (2000) Customer Relationship Marketing 2nd edn. (Kogan Page Limited, London.
- Warokka A., Herman, S., Sriyanto, S., (2020) International Journal of Psychosocial Rehabilitation.
- Wind J., Mahajan V., (2002). Digital marketing. Symphonya Emerging Issues in Management1.
- McKinsey Quarterly, How Covid-19 (2023) Has Pushed Companies Over the Technology Tipping Point and Transformed Business Forever, <https://www.mckinsey.com/businessfunctions/strategy-and-corporate-finance/our-insights/how-covid-19-has-pushed-companies-over-the-technology-tipping-point-and-transformed-business-forever>, last accessed
- Bughin J., Deakin J., O'Beirne B., (2019) McKinsey Quarterly.
- Baltes-Patrutiu, L., (2016) Bulletin of the Transilvania University of Braşov.
- Matt C., Hess T, Benlian (2015) A., Springer.
- Schwertner K., (2017) Trakia Journal of Sciences.
- Merritt B., (2016) Synthesis Lectures on Emerging Engineering Technologies.
- Carlsson F., (2004) Review of Industrial Organization.
- Dimitriou D.J., (2016) Resilience and Hazards.
- Gössling S., Broderick J., Upham. P., Ceron, J. P., Dubois G., Peeters P., Strasdas W., (2016) Journal Sustainable Tourism.
- ABBB Homepage, <https://aviationbenefits.org/economic-growth/>, last accessed janury 2024.
- Addepalli S., Pagalday G., Salonitis K., Roy R., Socio-economic and demographic factors that contribute to the growth of the civil aviation industry, 6th International Conference on Through-life Engineering Services, TESConf 2017, Bremen (2017).
- Dai Z, Guo L., Luo Q., (2019) Applied Economics.
- Harvey G., Turnbull P., The Factors of the financial crisis on labour in the civil aviation industry (No. 994476973402676). International Labour Organization (2009).

- Kaur G., (2017) International Journal of Research Granthaalayah.
- Todor R. D., (2016) Economic Sciences.
- Sims C., Smith B. A., Murphy M. P., (2011) Enhancing digital services for aviation. In 15th Conf. on Aviation, Range, and Aerospace Meteorology.
- Kothari C. (2004). Research Methodology Methods and Techniques (2nd edition). New Delhi: New Age International.
- Saunders, M. Lewis, P., and Thornhill, A. (2009). Research methods for business students. (5th edition). England: Pearson Education.
- Anol, B. (2012). Social Science Research: Principles, Methods, and Practices. 2nd ed. Florida: University of South Florida Tampa
- Stillwell, J. C. H., & Clarke, M. (2011). Population Dynamics and Projection Methods, (4th Edition). UK: Springer.
- Michael Hanke. (2016). Airlines e-commerce log on take off.
- Louise Burgers. (2015, Aug) Definition of digital marketing. Financial Times. Available from <https://www.bizcommunity.com/Article/196/699/133439.html> Consumers' Attitudes on Intention to Purchase.

Appendix 1



Dear respondents,

This questionnaire is designed to examine factors affecting the adoption of digital marketing strategies for customer acquisition in Aviation industry in the case of Ethiopian Airlines Above all, I want to express my deepest gratitude for your cooperation in filling this questionnaire with the information I need from you. The purpose of this questionnaire will be used as an input to marketing management paper I am conducting to complete my master's degree in marketing management at St. Mary's University of graduate students. In your response please tick [✓] under the choice in the provided space which is the most suitable answers. The information you give will be treated confidentially and will be used for the purpose of this study only. Please do not indicate your name.

With regards to Elshaday Million

Thank you for your co-operation!!

Part I. General Information

In your response please tick [✓] under the choice in the provided space which is the most suitable answers.

Nationality	A) Ethiopian	
	B) Others	
Gender	A) Male	
	B) Female	
Age	A) Below 18	
	B) 18- 25	
	C) 26-35	
	D) 36-45	
	E) 46-55	
	F) Above 55	
Educational status	A) Below Diploma	
	B) Diploma	
	C) Undergraduate degree	
	D) Master's Degree and Above	
Access to internet	A) From Mobile phone	
	B) From internet cafe	
	C) From work Place	
	D) No I Haven't	
I buy e-tickets through	A) EAL website	
	B) EAL Mobile application	
	c) Travel agency	
	d) EAL call center	
	E) EAL ticket office	
I paid for e-ticket in the form of	A) Credit/debit card	
	B) Mobile Banking	
	C) Pay (deposit) at Bank	
	D) pay at ticket office	
How often have you been taking flights with EAL?	A) Regularly	
	B) Sometimes	
	C) Occasionally	
	D) Rarely	
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 Times	
	C) 11-15 Times	
	D) 16-20 Times	
	E) More than 20	

Part II: Questioners of Digital Marketing

In your response please tick [√] under the choice in the provided space which is the most suitable answers for each disagree, strongly disagree, uncertain, agree and strongly agree with the statement by marking one response for each item, (1 = Strongly Disagree, 2 = Disagree, 3 = Uncertain, 4 = Agree, and 5 = Strongly Agree).

No.	Questions	1	2	3	4	5
Dependent variables						
I. Digital marketing						
1	The Ethiopian airline offer digital marketing for customer acquisition.					
2	The payment security of Ethiopian airline website has positive effect on the service satisfaction.					
3	The Ethiopian airline serves with quality digital marketing service.					
4	The Ethiopian Airlines has adequately promoted its service delivery to its customers.					
5	The customers tell positive about Ethiopian airline digital marketing service.					
6	The Ethiopian Airlines' implementation of customer travel payment using a digital transaction system increase customer satisfaction.					
Independent variables						
I. Demographic/infrastructure factors						
1	The Ethiopian Airline have stable and fast internet connection to access digital marketing system..					
2	Have required knowledge to buy digital marketing from website or mobile application.					
3	Have a credit card or Mobil banking to buy e-tickets on the company website or Mobile Application.					
4	Can buy e-ticket by following different mode of payment at Ethiopian Airline digital marketing system.					
5	Buying e-ticket through Ethiopian Airline Mobile application or website doesn't require high level of technical skills.					
II. Perceived Usefulness factors						
1	Digital marketing system makes it easier to buy tickets in Ethiopian Airline.					
2	Use digital marketing system in Ethiopian Airline enables me to buy tickets more Quickly.					
3	Could reduce/ save travel cost by using online ticket through					

	Ethiopian Airline Mobile application and website.					
4	Digital marketing system easily makes proper adjustments related to my flight schedules in the Airline.					
5	Passengers are provided on immediate refund for unused e-tickets through Ethiopian Airline e-ticketing system.					
6	Is not worry when e-ticket being lost or stolen					
7	Buy online ticket as it is customized based on my needs.					
8	Overall, the beneficiary with the e-ticketing system of Ethiopian Airline.					
9	Will definitely recommend others to buy tickets online e-tickets through website and mobile application.					
III. Perceived Trust factors						
1	Feel that Ethiopian airlines website is trustworthy.					
2	Feel safe in my transaction with Ethiopian airlines website.					
3	Believe Ethiopian airlines website protect the privacy.					
4	The Ethiopian airlines website is reliable for digital Shopping.					
IV. Security factors						
1	The Ethiopian airlines digital ticketing system ensures security on all credit debit card payments for e-tickets.					
2	Feel that Ethiopian airlines online ticketing system is secure from any threat/ fraud.					
3	Believe my personal information is safe on Ethiopian airlines website and mobile application.					
4	Think the transaction information is secured when using online ticketing.					