THE IMPACT OF EFFECTIVE ONLINE MARKETING ON TRAINEES' ONLINE APPLICATION INTENTION THE CASE OF ETHIOPIAN AVIATION ACADEMY

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The Impact of Effective Online marketing on trainees' online Application Intention

The Case of Ethiopian Aviation Academy

A thesis submitted in partial fulfillment of the requirements for the award of Masters of Arts degree in Marketing Management

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STATEMENT OF CERTIFICATION

This is to certify that Mekdes Dagnachew carried out this research on the topic entitled "The Impact of Effective Online Marketing on Trainees' Online Application Intention: The case of Ethiopian Aviation Academy" and this work is original in nature and is suitable for submission for the award of the Master of Arts Degree in Marketing Management.

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Place: Addis Ababa, Ethiopia

STATEMENT OF DECLARATION

I, Mekdes Dagnachew, hereby declare that this research paper entitled "The Impact of Effective Online Marketing on Trainee's Online Application Intention: The case of Ethiopian Aviation Academy" is my original work and has not been used by others for any other requirements in any other university and all sources of information in the study have been appropriately acknowledged.

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Acronyms and Abbreviations

AMTS- Aircraft Maintenance Technicians School

CC & CS - Cabin Crew & Catering School

C & GSTS - Commercial and Ground Services Training School

Dept. – Department

Dev't - Development

EAA - Ethiopian Aviation Academy

ETAG- Ethiopian Aviation Group, alternately used to refer Ethiopian Airlines (ET)

ET- Ethiopian Airlines, alternatively used with ETAG

EOU- Ease of Use

IATA- Int'l Air Transport Association

IT – Information Technology

L & CDTS- Leadership & Career Dev't Training School

OAI- Online Application Intention

PAT - Physical Attractiveness

PRO - Professional Look

PTS- Pilot Training School

SBUs – Strategic Business Units

USF- Usefulness

ABSTRACT

The main objective of this study was to examine the impact of online marketing, particularly effective web site marketing on the online application intention of trainees of Ethiopian Aviation Academy. Though there are many factors that can be studied in this area the researcher tried to analyze four factors namely Ease of Use, Usefulness, Physical Attractiveness and Professional look. A quantitative research design is applied in the study. With regard to sampling technique, a stratified random sampling technique was applied to determine the sample size from the three training schools of the academy (AMTS, CC & CS, C & GSTS).

The researcher has used both primary and secondary data. The primary data were collected through structured questionnaires prepared in English and distributed to 290 trainees. Whereas, the secondary data are gathered from existing literatures, previous studies, the academy's web site, internal publications, fact sheets and the internet as well. SPSS Version 20 was used to analyze the collected data with descriptive and inferential statistics and to test the hypotheses put forward. The findings obtained from multiple regression analysis have shown that Ease of Use and Usefulness have positive and significant correlation with online application intention which led to supporting of hypothesis one and two.

While physical attractiveness and professional look were found to be statistically insignificant in impacting online application intention which led to not supporting of hypotheses three and four. Therefore, the academy has to work aggressively to improve the ease of use and usefulness features of its web site to improve the experience of its trainees so that the users of online application platform can increase. The study highlights more studies to be conducted in the area by broadening the scope, sample size and the variables involved.

Key Words: Ethiopian Aviation Academy, ease of use (EOU), usefulness (USF), physical attractiveness (PAT), professional look (PRO), online application intention (OAI)

CHAPTER ONE

INTRODUCTION

This chapter gives general introduction on the subject matter i.e "Analyzing the impact of online marketing on online application intention of trainees- The case of Ethiopian Aviation Academy" with a particular focus on web site marketing. To this end it covers the background of the study and EAA, statement of the problem, research questions, objectives, significance, scope, limitations, definition of terms and lastly organization of the study.

1.1. Background of the Study

The world of digital media is changing at a phenomenal pace. Its constantly evolving technologies, and the way people are using them, are transforming not just how we access our information, but how we interact and communicate with one another on a global scale. It's also changing the way we choose and buy our products and services. (Ryan and Jones, 2009)

Much of the world's business today is carried out over digital networks that connect people and companies. The internet, a vast public web of computer networks, connects users of all types all around the world to each other and an amazing large information repository. The web has fundamentally changed customers' notions of convenience, speed, price, product information and service. As a result it has given marketers a whole new way to create value for customers and build relationship with them. *(Kotler, Armstrong, Agnihotri and Haque, 2010)*

Ethiopian Airlines Group (referred as ET, hereafter), as one of the globally operating companies, is implementing different digital technologies in its various operations and services. Being one of the seven SBUs, Ethiopian Aviation Academy (referred as EAA hereafter) is the training division of the Ethiopian Airlines Aviation Group. The aviation training department of Ethiopian Airlines was established in 1956 with the objective of providing the airline with the required skilled aviation personnel. It

is this seed of the training department that has flourished into what is now Ethiopian Aviation Academy (EAA). Since its inception, the Academy has proved itself to be a center of excellence in developing skilled workforce for operational divisions of not only Ethiopian Airlines but also the wider African aviation industry. (History of EAA Archive)

Due to the Airlines' commitment for developing qualified aviation professionals, the Academy has continuously expanded both in capacity and staffing over the years.
Driven by the ever-increasing demand for its basic and recurrent training programs from domestic and international customers, the Ethiopian Aviation Academy has undergone a massive transformation by heavily investing to equip itself with modern training aircraft, computer based trainings, simulators, and other ultra-modern facilities. Currently, the academy is offering different kinds of basic and recurrent trainings to its employees, private trainees and customized trainings for organization members as well in 9 training programs and 5 training schools namely Pilot Training School, Cabin Crew and Catering School, Commercial and Ground Services Training School, Aircraft Maintenance Technicians School and Leadership and Career Dev't Training School. The website of the academy (www. Ethiopianairlines.com) was developed in house and launched in 2008 with the aim of information communication and online application of trainees. Currently, the site consists of 5 main pages. (www.ethiopianairlines.com/EAA). A significant face lift in terms of content, pictorial representation and interactiveness was made in 2018 changing the former address (www.ethiopianairlines.com) to the current one (www.ethiopianairlines.com/EAA).
As opposed to the tremendous growth of the academy, with respect to the academy's admission capacity, the implementation of on line marketing, web site marketing in particular is at lower stage in terms of the allocated resources, the number of its users and the extent of user engagement.
As one manifestation of this, there are significant number of training applicants who are applying through the traditional way and do their application by coming to the academy in person.

Therefore, this paper tries to look into and analyses the determinant factors related to web site features that affect online application tendencies of trainees. It will also try to identify areas of improvements and will also give possible recommendations based on the findings.

1.2. Statement of the Problem

Through digital marketing companies can place their business or products on the internet for millions of users to access and turn their web site into a strong tool to maximize their sales, enhance their customer satisfaction level and business potential. One of the digital marketing types is internet marketing. As defined by Kotler (2010), online marketing is a company's effort to market products and services and build customer relationships over the internet. It is the fastest growing form of direct marketing. Recent technological advances have created a digital age. Widespread use of the internet is having a dramatic impact on both buyers and the marketers who serve them. Website marketing is one of the internet marketing forms and, at the very least, a website should be easy to use, professional looking, physically attractive and useful. (Kotler, Armstrong, Agnihotri and Haque et al. 2010)

Currently, EAA is using different digital platforms to market its training services and receive online training applications. These include website, e-mail, social media, and telephone SMS texting. The website of the academy is mainly meant for receiving training applications and also to share information and advertise the academy's training services. As indicated in various studies an effective web site, which is a function of various parameters (as described in chapter 2) will increase users' engagement and use of a company's web site by its target customers. However, the web site, www.ethiopianairlines.com/EAA receives limited number of online applications. This could be attributed to insufficient awareness about the site by target groups, incompleteness of the website contents in terms of providing complete details, lack of clarity on existing details, and absence of interactive features, among others. Even though, the web site applications are gaining popularity from time to time, the traditional form is still the most widely used channel of application. Again, though viewership and online applications received

are picking up, it is not up to par with the number of admissions the academy wants to enroll or the visibility it wants to create in the market.

As present, interested training applicants are observed making their training applications by coming into the academy in person. And even those who apply online need to come to the academy to finalize the application process.

In addition to creating inefficiency in the application process, this entails additional cost for the academy to register applicants in person and this is not in line with the airline's corporate digital movement. Furthermore, it defies the effectiveness and the very purpose of the website, hence the marketing efforts associated with it.

1.3. Research Questions

In line with the above concepts, this research raises the following questions?

- What is the impact of EAA's web site's "ease of use" feature on trainees' online application intention?
- What is the impact of EAA's web site's "usefulness" feature on trainees' online application intention?
- What is the effect of EAA's web site's "physical attractiveness" on trainees' online application intention?
- What is the effect of EAA's web site's "professional look" feature on trainees' intention to apply online?
- How do demographic factors (like age, gender, level of education and type of school) affect trainee's online application intention?

1.4. Research Objectives

In this study the researcher has the following general and specific objectives that take the study through: -

1.4.1. General Objectives

This study tries to investigate the impact of the very least features of the academy's web site (EOU, USF, PAT, PRO) and trainees' demographic profiles (age, gender, education level and type of school) on their intention to apply on line.

1.4.2. Specific Objectives

- ✓ Examine the impact of EAA's website "ease of use" on trainees' online application intention
- ✓ Assess the effect of EAA's website "usefulness" on trainees' online application intention
- ✓ Analyze how "physical attractiveness "of EAA's website affect trainees' online application intention
- ✓ Study the impact of EAA's website's "professional look" on trainees' online application intention
- ✓ investigate the relationship of demographic factors (age, gender, education level and type of school) and trainees' intention to apply on line.

1.5. Significance of the Study

This research tries to identify how the academy's trainees are impacted by the basic features of the website of the academy and how these in turn affect the academy from online application and marketing point of view. Thus, the academy would be able to get concrete analysis on the subject matter which ultimately can help to set a better direction on its web site marketing.

As online marketing (web marketing in particular) becomes more and more practical globally, not applying same for effective marketing / sales activities will be a lost opportunity for the academy hence, the research is also believed to benefit the marketing and registrar depts. of the academy in identifying problem areas and to develop web marketing strategies (based on the findings) that can be used to increase volume of online application and reduce manual processing of applications, enhance effectiveness of the web site marketing practices and the staff's productivity and ultimately provide more convenient and less costly application processing platforms to its trainees.

Finally, the study may also open the door for other interested researchers to make in depth studies on the area.

1.6. Scope of the Study

The scope of the study is limited to the private and local trainees of the academy and to the three schools namely Cabin Crew and Catering, AMTS, and Commercial and Ground Services Training Schools. This is because the academy receives relatively large number of trainees in these three streams as compared to the other two schools (Pilot Training School & Leadership and Career Dev't Training School). Furthermore, the online application option is focused on these three schools because currently there is no private training program for PTS and that of L&CDTS usually come from organizations using e – mail/letter/telephone requests and in a group.

1.7. Limitations of the Study

There are so many factors that may influence aviation trainees' INTENTION to apply online. However, due to the limitations of time and resource, the research does not cover all factors exhaustively but focuses only on analyzing the four variables (ease of use, usefulness, physical attractiveness and professional look) of website in the context of EAA and tries to see their impact on online application behaviors of the trainees. In addition, the research does not include the two schools of the academy namely PTS and L&CDT Schools and other aviation colleges in Addis Ababa and elsewhere.

1.8. Definition of Terms

Digital Marketing – is a marketing practice used to market products and services using the digital channels such as the internet, mobile, TV and other similar technological devices (Kotler et al, 2010).

Online Marketing – a company's effort to market products and services and build customer relationships over the internet (mainly via the web site, social media and e-mail). (Kotler et al, 2010)

Online Web Application – application done using the website of the academy as opposed to the traditional way of in person application and e mail application.

Online application intention- intention of trainees to apply on the website of the academy.

Private Applicants/trainees – Self sponsored applicants/trainees who are not sponsored by ET.

Local Trainees - trainees who apply from Ethiopia and whose home base is Ethiopia.

International Trainees – trainees who apply from outside Ethiopia and whose home base is outside Ethiopia.

Basic Trainings program – training program designed to newly recruited trainees.

Recurrent Training program - training program designed to already working personnel.

1.9. Organization of the paper

This study comprises of five chapters that are organized in a sequential manner. Chapter one gives the general introduction about the research and gives overview on background of the study, Ethiopian Airlines (ET), and Ethiopian Aviation Academy (EAA), statement of the problem, research questions, objectives, significance, scope and limitations of the study.

Whereas, the second chapter consists of review of related literature on online marketing in general and website marketing in particular and presents the conceptual framework and hypotheses of the study.

Chapter three covers a detailed presentation on the research methodology (research design, research approach, population and sample data, data source and types, data collection procedures and validity and reliability of data and ethical considerations. The forth chapter presents detailed analysis and discussion of the data collected and interpretations of the results of the study.

Finally, chapter five provides the reader with the summary of major findings, conclusions and possible recommendations.

Also included as appendices are the list of references, questionnaire used and statistical results of the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This section of the study presents review of existing literatures on the broader aspects of online marketing and on specific attributes of website that affect customers' use of web site and general effectiveness of a web site. The theoretical literature review part mainly covers overview of internet and its impacts, E-Marketing, E-Business and E-Commerce, objectives and benefits of E-Marketing, domains of online marketing, types of websites, characteristics of effective websites and Kotler's four basic requirements for a web site. Moreover, the conceptual framework and hypotheses of the study are presented in this chapter.

2.1. Theoretical Review

2.1.1 The internet and its Impacts

Technically speaking, the internet is a global network of interconnected networks. This includes millions of corporate, government, organizational, and private networks. Many of the servers (hard drives and software) in these networks hold files, such as Web pages and videos that can be accessed by all networked computers. Every computer, cell phone, or other networked device can send and receive data in the form of e-mail or other digital files over the internet. These data move over phone lines, cables, and satellites from sender to receiver. One way to understand this process is to consider the internet as having three technical roles: (1) **content providers** who create information, entertainment, and so forth that reside on Web servers or computers with network access; (2) **users** (also known as client computers) who access content and send e-mail and other content over the network (such as a Facebook comment); and (3) **technology infrastructure** to move, create, and view or listen to the content (the software and hardware). Note that individuals can be both users and content providers at various times so the line between roles 1 and 2 is slowly disappearing. As explained by Strauss and Frost (2014), the internet is not a place but a medium, similar to radio and television and there are three types of access to the internet:

1. Public internet—The global network that is accessible by anyone, anywhere, anytime.
2. Intranet—A network that runs internally in a corporation but uses internet standards such as HTML and browsers. Thus, an intranet is like a mini-internet but with password protection for internal corporate consumption.
3. Extranet—Two or more proprietary networks that are joined for the purpose of sharing information. If two companies, or a company and its suppliers or customers, link their intranets, they would have an extranet. Access is limited to extranet members. (Strauss and Frost, 2014)

As Blythe (2005) puts it, nobody owns the Net; it is a communications medium spread across thousands (even millions) of computers worldwide, which operates independently of the telephone companies that supply its cable connections, of the governments in whose countries it resides, and even of the computer owners in whose machines data are stored. (Blythe, 2005)

The business community has been fundamentally changed by the advent of the internet as a means of communication and trading. The development of the World Wide Web in the mid 1990s opened up the commercial viability of the internet as, for the first time; ordinary citizens were able to access the resources that it held. Soon, the number of websites increased from tens of thousands to millions. The internet has become an integral part of many organisations' means of undertaking business. It can be used as an additional channel through which businesses communicate with and trade with customers (business-to-consumer, B2C) and suppliers and partners (business-to-business, B2B). The internet and related technologies, such as intranets and extranets, also help organizations to increase efficiency in their internal processes. From a business perspective, the internet has had a profound effect on the way firms operate, how they communicate with others, what products they produce, how they deliver products and services, and how they seek competitive advantage. The internet has changed the 'rules' of trading by presenting new challenges and opportunities and altering the way firms engage and build relationships with customers. (Combe, 2006)

All kinds of companies now market online. Click-only companies operate only on the internet. They include a wide array of firms for e-tailers such as Amazon.com and

Expedia.com that sell products and services directly to search engines and portals (such as Yahoo!, Google, MSN), transaction sites (eBay), and content sites (the Economic Times on the web, geosuper.tv and Encyclopedia Britannica online). As the internet grew, the success of the .coms caused existing brick-and-mortar manufacturers and retailers to reexamine how they served their markets. Now almost all of these traditional companies have set up their own online sales and communication channels, becoming click-and-mortar companies. (Kotler, Armstrong, Agnihotri and Haque, et al. 2010)

Impact of the internet to individuals, community, business and society

Strauss and Frost (2014) explain the impact of internet as below.

- **on Individuals**

The internet provides individual users with convenient and continuous access to information, entertainment, networking, and communication. If "information is power," individuals have more power than ever before, as many companies' experience. Consumers compare product features and prices using search engines and read product reviews from other consumers at epinions.com, Facebook, and other sites.

- **on Communities**

Strangers in countries worldwide form online communities to discuss a variety of things, facilitated by the internet. Consumers pay fees to compete in highly engaging multimedia games as mobile apps or on the Web and virtual worlds online, such as Second Life. Another example of online communities is auctions in both business and consumer markets. Finally, independent, private communities have formed around peer-to-peer file sharing. Individuals upload, share, and collaborate on documents and files at Google Docs and Dropbox from far away geographic locations.

- **on Businesses**

The digital environment enhances business processes and activities across the entire organization. Employees across disciplines work together in cross-functional teams worldwide using computer networks to share and apply knowledge for increased efficiency and profitability. Financial experts communicate shareholder

information and file required government statements online. Human resources personnel use the internet for electronic recruiting and training—in fact, 89 percent of recruiters use search engines to learn more about candidates and 70 percent have eliminated prospects based on what they found (according to CareerThoughtLeaders. com as cited in Strauss and Frost et al (2014)). Strategists at top corporate levels leverage computer networks to apply a firm's knowledge in building and maintaining a competitive edge. Digital tools allow executives easy access to data from their desktops and show results of the firm's strategies at the click of a mouse.

- **on society**

Digital information enhances economies through more efficient markets, more jobs, information access, communication globalization, lower barriers to foreign trade and investment, and more

Easy computer networking on mobile devices from any location means that work and home boundaries are blurring. Although this option makes working more convenient, it may encourage more workaholism and less time with friends and family.

2.1.2. E-Commerce, E-Marketing and E-Business

According to Arya and Pal (2005), one of the most important changes that internet has brought to the world of business is E-commerce. E-Commerce refers to the use computer networks for buying and selling goods, information and services. (Arya and Pal, 2005). Similarly, as per Strauss and Frost (2014) E-Commerce refers to online transaction: selling goods and services on the internet, either in one transaction or over time with an going subscription price (Strauss and Frost, et al 2014)

E-business, e-marketing, and e-commerce are internet applications. E-business is the optimization of a company's business activities using digital technology. Digital technologies include products and services, such as computers and the internet, which allow the storage and transmission of data in digital formats (1s and 0s).

E-business involves attracting and retaining the right customers and business partners. It permeates business processes, such as product buying and selling. It

includes digital communication, e -commerce, and online research, and it is used in every business discipline.

E-commerce is the subset of e-business focused on **transactions** that include buying/ selling online, digital value creation, virtual marketplaces and storefronts, and new distribution channel intermediaries.

E-marketing is only one part of an organization's e-business activities. E-marketing is the use of information technology for the marketing activity, and the processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large. More simply defined, e-marketing is the result of information technology applied to traditional marketing. E-marketing affects traditional marketing in two ways. First, it increases efficiency and effectiveness in traditional marketing functions. Second, the technology of e-marketing transforms many marketing strategies. This transformation also results in new business models that add customer value and/or increase company profitability, such as the highly successful Craigslist, Facebook, and Twitter (Strauss and Frost et al.2014).

As explained by Chaffey and Smith (2008) E-commerce is primarily about selling online or the ability to transact online. This includes e-tailing, online banking and shopping – which involve transactions where buyers actually buy and shoppers actually shop. Some suggest that e-commerce includes all online transactions such as a responding to an enquiry or an online catalogue search. E-commerce itself does not include the marketing nor the back office administration processes that are required to actually run a business. E-business has a broader perspective. It involves the automation of all the business processes in the value chain – from procurement or purchasing of raw materials, to production, stock holding, distribution and logistics, sales and marketing, after sales, invoicing, debt collection and more. E-business creates the ability to run a business online. This includes e-marketing and e-commerce. E-marketing is at the heart of e-business, getting closer to customers and understanding them better, adding value to products, widening distribution channels and boosting sales through running e-marketing campaigns using digital media channels such as search marketing, online advertising and affiliate marketing. It also includes using the website to facilitate customer leads, sales and managing after sales service. E-Marketing is broader

than e-commerce since it is not limited to transactions between an organization and its stakeholders, but includes all processes related to marketing. (Chaffey and Smith, et al. 2008)

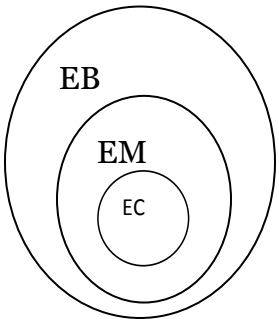

Figure 2.1 E-business encompasses e-marketing and e-commerce but e-marketing involves more processes than e-commerce (Source -Chaffey and Smith, et al. 2008)

As Combe (2006) puts it, Electronic business (e-business) can be defined as the use of the internet to network and empower business processes, electronic commerce, organizational communication and collaboration within a company and with its customers, suppliers, and other stakeholders. (Combe, et al 2006) E-businesses utilize the internet, intranets, extranets and other networks to support their commercial processes. Electronic commerce (e-commerce) is the buying and selling, marketing and servicing of products and services via computer networks. Since e-business includes the process of transacting with suppliers and customers there is an overlap in activities with e-commerce. Although the terms 'e-business' and 'e-commerce' are often used synonymously, the distinction between them lies in the broader range of processes in e-business that incorporates internal transactions within an organization. These include transactions relating to procurement, logistics, supply chain management, payments, stock control and order tracking. As Chaffey (2004) notes as quoted in Combe (2006) that, e-commerce can best be conceived as a subset of e-business. Where the two concepts overlap is in the buying and selling of products and services.

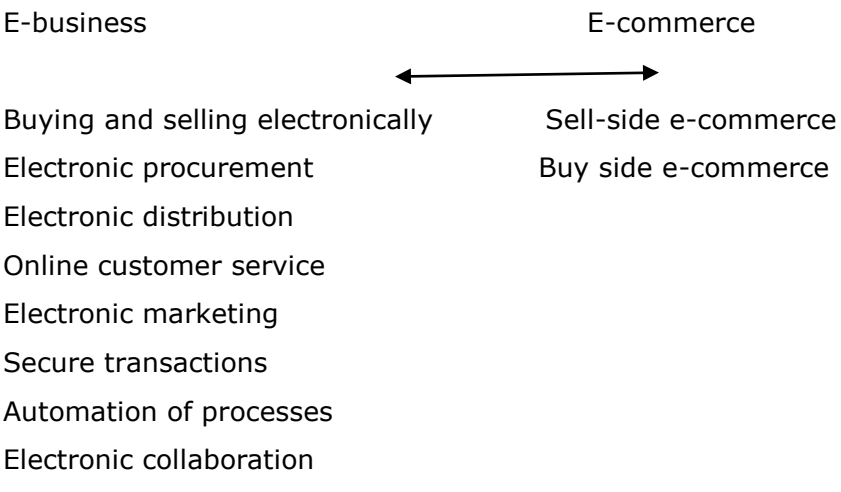

Figure2.2 The relationship between e-business and e-commerce (Source- Combe 2006)

2.1.3. Benefits and Objectives of E-Marketing

2.1.3.1. Benefits of E-Marketing

Benefits for buyers

E-marketing is convenient, easy and private. E-Marketers never close their doors and customers do not have to battle traffic, find parking spaces and treck through stores to find products. From the comfort of their homes or offices, they can browse catalogues or company web sites at any time of the day or night. Business buyers can learn about products and services without tying up themselves with salespeople. E-marketing can also give buyers access to a wealth of comparative information about companies, products and competitors. Good websites often provide more information in more useful forms than even the most helpful retail salesperson can. For example, the Amazone.com site offers more info than most of us can digest, ranging from top 10 product lists, extensive product description and expert and user product reviews to recommendations based on customer's previous purchase.

Benefit for Sellers

It is a powerful tool for building customer relationships. Using database marketing, today's marketers can target small group or individual consumers and promote their offers through personalized communications. Online marketing offers sellers a low cost, efficient, speedy alternative for reaching their markets. On line marketing has grown rapidly in business- to-business marketing, partly in response to the

ever increasing costs of marketing through the sales force when personal sales calls cost an average of more than $320 per contact, they should be made only when necessary and to high-potential customers and prospects. Lower cost per contact media like telemarketing, direct mail, and company web sites often prove more cost effective.

In addition, E-marketing results in improved efficiency, speedier handling of channel, greater flexibility and gives sellers the access to buyers that they could not reach through other channels. (Kotler, Armstrong, Agnihotri and Haque, et al. 2010)

The internet has created a new communications channel and provides an ideal medium for bringing people together cheaply, efficiently and for a wide range of different reasons. It has also presented opportunities and challenges for the business community. As consumers become more knowledgeable about using the internet to service their needs and wants so the business community has been boosted by the potential the internet presents for extending markets, developing new products and services and achieving a competitive advantage and profitability. New markets quickly emerged based on applications of the internet, most prominently the business-to-consumer (B2C) and business-to-business (B2B) sectors. (Combe et al. 2006)

Firms	**Consumers**
Ease of access	Ease of access
Ease of use	Ease of use
Access to wider market	Access to market information
Potential economies of scale	Convenience
Marketing economies	Lower prices
Improved logistics	Personalization
Automated processes	Customization
Network externalities	Network externalities
Improved customer knowledge	One-to-one customer service
Lower costs	Access to internet community
Increased Efficiency	Empowerment

Figure 2.3 Advantages of using the internet (Source Combe et al. 2006)

The internet has a number of value-adding characteristics for consumers. Gascoyne and Ozcubukcu (1997) as quoted in Combe et al. (2006) highlight the main ones as being:

- Convenience;
- Continuous availability;
- Price transparency;
- Interactivity;
- Wider choice;
- Quicker fulfillment;
- Personalization;
- Customization;
- Access to a huge amount of information.

2.1.3.2. Objectives of E-Marketing

As per Chaffey and Smith (2008), one reason why many new businesses, and in particular new e-businesses, go horribly wrong is often because objectives are not clearly agreed and companies keen to get on with it jump straight to tactical e-tools (such as web sites and banner ads) without first agreeing clearly defined objectives and razor sharp strategies. Companies should examine the kind of clear objectives and goals that will drive them in to good e-marketing. So before making the change to e-marketing first they should be clear with: Why do they want to go online? What are the objectives? What advantages and benefits are expected? and what are the areas on which they want to focus as they improve their e-marketing.

Apart from competitive paranoia, there are five broad benefits, reasons or objectives of e-marketing:

●Grow sales (through wider distribution, promotion and sales).

●Add value (give customers extra benefits online).

●Get closer to customers (by tracking them, asking them questions, creating a dialogue, learning about them).

●Save costs (of service, promotions, sales transactions and administration, print and post) and so increase profits on transactions.

●Extend the brand online. Reinforce brand values in a totally new medium. All these e-marketing objectives can be summarized as the 5Ss – Sell, Serve, Speak, Save and Sizzle. Once a company has defined (and quantified) 'where it is going' (its objectives), it can then decide 'how to get there' – Strategy. First objectives need to be considered. (Chaffey and Smith et al 2008)

Ryan and Jones (2009) on the other hand focus on **conversion goals**. According to them, all of the digital marketing techniques have one thing in common: they're designed to drive targeted, pre-qualified traffic to the website. But traffic on its own does nothing but consume internet bandwidth. It's the website that converts that traffic into prospects and/or customers – taking the numbers and transforming them into something of tangible value to the business. For a digital marketer, website is not just an online brochure to let people know who the company is and what it does. Granted, some of the information provide on its site will serve that purpose – but only in a peripheral capacity. Nor is it simply there to garner search engine 'mojo' and generate huge volumes of traffic. Think of the website primarily as a conversion engine for the traffic a company garner through all of its other digital marketing endeavours. Yes, a company need to provide information about its business, products and services – but always with its conversion goals in mind. Everything on the website should be geared towards achieving those conversion goals, either directly (products and service information, online ordering and sales functionality, sales-focused copy and calls to action, enquiry forms, newsletter sign-up, etc) or indirectly (business and brand information that builds trust, and content that encourages repeat visits and/or establishes authority or reputation).

The conversion goals could be anything from an actual online purchase (a sales transaction), to an online query (lead generation), to subscribing for online newsletter (opt-in for future marketing) – or whatever else a company decide is important for its business and appropriate for its customers. A company can, of course, have multiple, tiered conversion goals. The primary goal might be an online sale or booking, the secondary goal could be online lead generation and tertiary goal could be to harvest e-mails for opt-in mailing list. It doesn't matter what the goals are or whether the website is a small information or brochure-type site or a

huge online store; the important thing is to keep in mind, when a web site is designed (or redesigned), that conversion is the key to digital marketing success; a company's website, and the user experience it delivers through it, is what will ultimately drive that conversion. (Ryan and Jones, 2009)

2.1.4. The World Wide Web (W.W.W)

The most significant factor that transformed the internet into a global communications phenomenon was the development of the World Wide Web (WWW) in the early 1990s. This extended the functionality of the internet by introducing hypertext that linked documents held on the internet servers. This facilitated access to particular parts of documents or even to other relevant documents held on other servers. This was called the hypertext transfer protocol (HTTP) and derived from a mark-up language called hypertext markup language (HTML). Within the servers, each document, or pages within documents, are given a unique address. The addresses are termed universal resource locators (URL's). The ability to access pages, documents and servers from many different websites created a network of interconnectivity and gave rise to the term the World Wide Web. The WWW was one of the most significant developments leading to the globalization and commercialization of the internet because it allowed free access to huge amounts of information, facilitated communications between people and provided a mechanism for different activities to take place, including e-business (Combe et al. 2006).

As Stones and Desmond (2007) explained, many files which are posted on the World Wide Web (the 'Web') are accessed and retrieved by browsers using FTP (File Transfer Protocols). Telnet allows users to log in to remote machines and run an interactive session. The Network File System (NFS) allows areas of disk on one machine to be accessed by another. To a user the remote disk appears to be a local one. The Web is both a text and a space. In one respect it can be viewed as a huge library or series of texts which are constructed using a special code known as HyperText Markup Language (HTML) using the Hypertext Transfer Protocol (HTTP). However, the Web may also be thought of as a linked chain of spaces or sites ranging from individual 'home' pages to organizational sites and online communities. The Web allows users of the medium to provide and interactively

access hypermedia content and to communicate with each other. (Stones and Desmond, 2007)

The usability of the internet was greatly enhanced after researcher Tim Berners Lee developed the hypertext transfer protocol (HTTP) at the CERN atomic research centre in Switzerland in 1993. Through HTTP it is possible to use a hypertext markup language (HTML) to design web pages with text, graphics and a range of other formatting techniques to create a visually appealing layout, as well as linking documents electronically to other documents. The links in each document are connected to links in other documents thereby creating a network of information sources on a worldwide scale. The technology underpinning the WWW is relatively simple. A computer acting as an internet server is turned into a site on the WWW by activating software on the server that enables it to talk the language of HTTP. The language facilitates access to documents marked up with HTML codes and allows users to link from other servers to the documents or to use the documents as jumping off points to other sites on the WWW. Crucially, the WWW brought together information on a common topic to ease the process and speed of searching. However, there was still work to be done before the internet could become the global phenomenon that it is today.

In the months following the release of Berners Lee's HTTP there were only 50 websites in existence compared to the millions there are today. Hyperlinks alone could not attract a global level of usage because the internet still ran on the open operating system Unix. The problem of usability remained. To overcome this, researchers had to find a way of moving the internet beyond the confines of the academic world to one that would be readily available to anyone with access to a computer. Thus, very soon after the development of the WWW in 1993 a team of researchers at the National Center for Supercomputing Applications (NCSA) at the University of Illinois developed a windows-based graphical user interface for the internet. The window is a specialized form of software which is run on client computers to provide an instant interface for the Web. The generic name for the software is a Web browser. The web browser developed by Marc Andreeson and his team of researchers at the NCSA was called 'Mosaic' and represented the first truly

worldwide web. In 1994 the same group of researchers developed Netscape, a browser with a 'search engine' that enables searches using keywords. Netscape briefly enjoyed a near monopoly of the market for web browsers. However, the market domination of Netscape has subsequently been eroded by competition, most notably from Microsoft's Internet Explorer. The market for web browsers is also competitive, with Google, Lycos, Yahoo! and AltaVista being among the more prominent websites specializing in facilitating keyword searches. By 1995 the NCSA team had been tempted into the commercial arena by Jim Clark, Chief Executive Officer of computer hardware company Silicon Graphics. Between them they created one of the world's best-known browsers – Netscape Navigator. Prior to the development of the WWW and Netscape, businesses had mostly used the internet for publishing information online relating to products, prices and other marketing material. However, by the mid 1990s businesses across the globe began using the internet for conducting online transactions (e-commerce) and a host of other business activities such as communicating with suppliers, distributors, partners, manufacturers and government bodies (e-business). The need for quick and efficient access to information became the key to gaining a competitive advantage in the web browser industry. (Combe, et al. 2006)

2.1.5. Online Marketing Domains

Kotler and Armstrong (2012) and Chaffey and Smith et al. (2008) classify online marketing domains in to four categories.

1. Business-to-consumer (B-to-C) online marketing Businesses selling goods and services online to final consumers.
2. Business-to-business (B-to-B) online marketing Businesses using online marketing to reach new business customers, serve current customers more effectively, and obtain buying efficiencies and better prices. Most major B-to-B marketers now offer product information, customer purchasing, and customer-support services online.
3. Consumer-to-consumer (C-to-C) online marketing Online exchanges of goods and information between final consumers. C-to-C involves interchanges of information through Internet forums that appeal to specific special-interest groups. Such activities may be organized for commercial or noncommercial

purposes. Web logs, or blogs, are online journals where people post their thoughts, usually on a narrowly defined topic. Blogs can be about anything, from politics or baseball to haiku, car repair, or the latest television series.

4. Consumer-to-business (C-to-B) online marketing Online exchanges in which consumers search out sellers, learn about their offers, and initiate purchases, sometimes even driving transaction terms.

	Targeted to Consumers	Targeted to Business
Initiated by business	B-to-C (business-to-consumer)	B-to-B (business-to-business)
Initiated by consumer	C-to-C (consumer-to-consumer)	C-to-B (consumer-to-business)

Figure 2.4 Online Marketing Domains (source - Kotler and Armstrong, 2012 Chaffey and Smith et al. 2008)

Furthermore, Strauss and Frost et al. (2014) in their book of E- marketing and Combe et al. (2006) have added five more online marketing domains as listed below by adding Government as a third component.

- Government-to-Business (G2B)
- Government- to –Consumer (G2C)
- Business-to-government (B2G)
- Consumer-to-government (C2G)
- Government-to-government (G2G)

Note that after B2C and B2B markets, the business-to-government (B2G) and consumer-to-consumer (C2C) markets are where most e-business activity occurs. (Strauss and Frost et al.2014)

	To business	To consumer	To government
Initiated by business	B2B	B2C	B2G
Initiated by consumer	C2B	C2C	C2G
Initiated by government	G2B	G2C	G2G

Figure 2.5 Online Marketing Domains (Source- Strauss and Frost et al. 2014)

2.1.6. Types of Web sites /web presence

Chaffey (2006) as quoted in Chaffey et al. (2008) identify five main types of online presence or components possible as part of a site:

1. Transactional e-commerce site. Manufacturers or e-retailers provide products available for purchase online. The main business contribution is through sale of these products. The sites also support the business by providing information for consumers who prefer to purchase products offline.

2. Services-oriented relationship building web site. Provides information to stimulate purchase and build relationships. Products are not typically available for purchase online. Information is provided through the web site, along with e-newsletters, to inform purchasing decisions. The main business contribution is through encouraging offline sales and generating enquiries or leads from potential customers. Such sites also help by adding value for existing customers by providing them with information of interest to them. Examples: B2B examples are management consultants such as PricewaterhouseCoopers (www.pwcglobal.com) and Accenture (www.accenture.com). A B2C example is the UK portal for energy supplier British Gas (www.house.co.uk). Most car manufacturer sites may be services-oriented rather than transactional.

3. Brand-building Site. Provides an experience to support the brand. Products are not typically available for online purchase, although merchandise may be. The main focus is to support the brand by developing an online experience of the brand. They are typical for low-value, high-volume, fast-moving consumer goods (FMCG brands). Examples: Tango (www.tango.com) and Guinness (www.guinness.com).

4. Portal or media site. These intermediaries provide information or news about a range of topics. Portal refers to a gateway to information with a range of services such as a search engine, directory, news, shopping comparison, etc. This is information both on the site and links through to other sites. These are the three different types of destination sites described above. Portals have a diversity of options for generating revenue, including advertising, commission-based sales and sale of customer data (lists). Examples: Yahoo! (www.yahoo.com) (B2C) and FT.com (www.ft.com) or Silicon (www.silicon.com) (B2B).

5. Social network or community site. A site enabling community interactions between different consumers (C2C model). Typical interactions including posting comments and replies to comments, sending messages, rating content and tagging content in particular categories. Well-known examples include Bebo, Facebook, MySpace and Linked-In. Other startups also have a social network element such as Delicious (social bookmarking or rating web pages), Digg (comment on blog postings), Flickr (image tagging), Technorati (blog postings) and YouTube (videos). In addition to distinct social network sites such as these, they can also be integrated into other site types, in particular into media owned sites. Large social networks such as Facebook or MySpace are effectively media owners and advertising is their main revenue source.

Note that these are not clear-cut categories of Internet sites since many businesses will have sites which blend transactional, services-oriented, brand-building, media and social network components, depending upon the range of products they offer. Virgin (www.virgin.com) is an example of one such company. (Chaffey and Smith, et al 2008)

As Kotler and Armstrong (2012) put it web sites vary greatly in purpose and content. The most basic type is a **corporate (or brand) Web site.** These sites are designed to build customer goodwill, collect customer feedback, and supplement other sales channels rather than sell the company's products directly. They typically offer a rich variety of information and other features in an effort to answer customer questions, build closer customer relationships, and generate excitement about the company or brand. Other companies create a **marketing Web site**. These sites engage consumers in an interaction that will move them closer to a direct purchase or other marketing outcome. (Kotler and Armstrong et al.2012)

2.1.7. Basic Features of an Effective Web site

Creating a Web site is one thing; getting people to visit the site is another. To attract visitors, companies aggressively promote their Web sites in offline print and broadcast advertising and through ads and links on other sites. But today's Web users are quick to abandon any Web site that doesn't measure up. The key is to create enough value and excitement to get consumers who come to the site to stick

around and come back again. The Internet can be a useful tool for increasing customer intimacy. Because of the social presence effect, customers feel more comfortable in divulging information, and feel closer to the website owner. There are five dimensions of service quality on the Internet: (Blythe, et al. 2005)

1.Access. The website should be easy to access, quick to download and simple to understand.

2.Website interface. This should be informative, easy to navigate, and engaging for the individual.

3. Trust. Establishing trust is particularly important, since ordering goods over the Internet involves divulging credit card details. There have been instances of website security being breached, and credit card details being used fraudulently.

4.Attention. Websites should attract attention, and should also show that attention has been paid to customer needs.

5.Credibility. Exaggerated claims, small print, and unverifiable statements are likely to detract from the overall credibility of the site.

As per Kotler and Armstrong (2012), at the very least, a Web site should be

- *easy to use,*
- *professional looking,*
- *and physically attractive*.
- Ultimately, however, Web sites must also be *useful.*

When it comes to Web browsing and shopping, most people prefer substance over style and function over flash. Thus, effective Web sites contain deep and useful information, interactive tools that help buyers find and evaluate products of interest, links to other related sites, changing promotional offers, and entertaining features that lend relevant excitement. (Kotler & Armstrong et al. 2012)

2.1.8. Designing effective and successful Web site

As Stokes (2013) put it, web design is the process of creating all the visual aspects of the interface. This covers the layout, colour scheme, images, logos, type, design elements (such as buttons and links), and anything else that you can see. The web is a visual medium, so design is a very important part of creating successful assets that are both engaging and effective. At the same time, however, designers need to keep in mind the technical aspects of design, as well as the all-important human

factor. Digital properties shouldn't just be beautiful; they also need to create a good experience for the visitor and meet business objectives. Design is not just about aesthetics, although looks are very important. Design is about the visual clues we give users so that they know what to do next. Design is the way in which we communicate with our users. It assures web visitors of our credibility and ability to answer their questions, and turns them into customers. Good interface design involves many things (including years of training and experience), but here are a few basic considerations. These are closely linked to user experience and the visual designer plays a key role in defining them: (Stokes, 2013)

- *Navigation*: the signage of the site, indicating to users where they are and where they can go.
- *Layout*: how content is structured and displayed.
- *Headers*: the usually consistent top part of a web page.
- *Footers*: the usually consistent bottom part of the page.
- *Credibility*: telling users that you are who you say you are.

Chaffey and Smith (2008), on the other hand, noted that web site design should consider the five elements of function, content, form, organization and interaction.

Web site design = Function + Content + Form + Organization + Interaction

Combining these elements web site design presents a challenge few have mastered since success requires a range of skills. Companies need to harness internal skills and/or use specialist agencies on all of the success factors for web site design which are listed below. (Chaffey and Smith et al.2008)

- *Accessibility* – This should be built into all web sites since it is a legal requirement under disability and discrimination law. An accessible design supports visually impaired site users and other disabled users with limited limb movements. It also helps users accessing the site with a range of different web browsers using different devices such as mobiles and it also assists search engine optimization.
- *User-centered design and usability* – With a user-friendly site visitor can find the information they are seeking, have a satisfactory experience and complete actions efficiently. User centered web site design is an essential approach to ensure the web site meets visitors needs.

- *Information architecture and find ability* – Analysis and design to create a sound system of structure and labeling content in headings and navigation is essential to help find ability through standard navigation and on-site search.
- *Search engine optimization (SEO)* – If SEO isn't considered in site design and within content management systems, search robots will be unable to crawl content and the relevance of different pages will be unclear.
- *Web standards* – Complying with standards to produce consistency in the way sites are coded and displayed in different browsers as promoted through the World Wide Web consortium (www.w3.org) and the Web standards Project (www.webstandards.org).
- *Persuasion to deliver commercial results* – web design should emphasize specific content and journeys through the site in order for the site to meet its objectives. Users should not be given free rein to visit any content, instead you should prioritize most valuable content in a similar way to a supermarket using merchandising to promote specific products.
- *Visual design* – The experience of a brand and a site will not be memorable and positive if the visual design isn't energizing and doesn't fit with what the visitor would expect from a brand.
- *Web analytics* – Analysis of site visitor journeys can help improve navigation and conversion to different site goals.
- *Legal requirements* – Site owners need to check they comply with the many laws to control a web presence.
- *Internet marketing planning and improvement process* – The web site must fit within the wider world where it supports different organization goals, integrates with other sales channels and is continuously reviewed and improved to achieve them.

Blythe (2005) shares the following checklist for establishing a successful website where by persuasion criteria of Chaffey and Smith et al. (2008) is replaced by informativeness:

- The objectives for establishing the site must be clear from the outset.
- The site itself should be informative rather than persuasive, since it is a sought communication.

• Graphics should be kept as simple as possible; they take a long time to download, and many users are too impatient to wait.
• The impact of the communication should not depend entirely on the graphics; particularly in Europe for example, where local telephone calls are paid for, the graphics can be expensive to download. This is not a problem in the United States or Australia.
• The site must be integrated with other communications; cross-marketing will encourage subscribers to visit the site.
• The site should be set up to gather information from those who visit it.
• The site should encourage interactivity by the use of offers, competitions, sales promotions and other incentives.
• Hyperlinks need to be fast, so that users can access the information they really need quickly. (Blythe, et al. 2005)

Ryan and Jones (2009), put effectiveness and successfulness separately and accordingly an effective website is essentially about the convergence of two things: the company's business goals and the needs of the target market. When companies build something that aligns the two, then they will end up with an effective website. Broken down like that it sounds simple, but achieving that convergence can be a tricky process – and a quick surf around the web will soon demonstrate that it's easier to get it wrong than to get it right. On the other hand, for a website to be successful people need to be able to find it (which is dealt under web search subject), but if companies build their site to cater for the right people's needs they significantly can increase the chance that, once they arrive, they'll become more than just a passing statistic (Ryan and Jones, et al. 2009)

Kotler (2010) puts it, as suggested by one expert; online marketers should consider the seven **Cs of effective website** design (Kotler et al. 2010)

- Context – the site's layout and design
- Content- the text, pictures, sound, and video that the web site contains
- Community- the ways that the site enables user-to-user communication

- Customization- the site's ability to tailor itself to different users or to allow users to personalize the site
- Communication- the ways the site enables site-to user, user-to-site, or two-way communication
- Connection- the degree that the site is linked to other sites
- Commerce-the site's capabilities to enable commercial transactions
- Constant change

2.2. Empirical Literature Review

Garett, Chiu, Zhang and Young (2016) have noted that proper design has become a critical element needed to engage website and mobile application users. However, little research has been conducted to define the specific elements used in effective website. According to them, the design elements mentioned most frequently in the reviewed literature were navigation, graphical representation, organization, content utility, purpose, simplicity, and readability.

Internet usage has increased tremendously and rapidly in the past decade ("Internet Use Over Time," 2014). Websites have become the most important public communication portal for most, if not all, businesses and organizations. As of 2014, 87% of American adults aged 18 or older are Internet users ("Internet User Demographics," 2013). Because business-to-consumer interactions mainly occur online, website design is critical in engaging users (Flavián, Guinalíu, & Gurrea, 2006; Lee & Kozar, 2012; Petre, Minocha, & Roberts, 2006). Poorly designed websites may frustrate users and result in a high "bounce rate", or people visiting the entrance page without exploring other pages within the site (Google.com, 2015).

On the other hand, a well-designed website with high usability has been found to positively influence visitor retention (revisit rates) and purchasing behavior (Avouris, Tselios, Fidas, & Papachristos, 2003; Flavián, 2006; Lee & Kozar, 2012)

The study uncovered 20 distinct design elements commonly discussed in research that affect user engagement. They were (1) organization – is the website logically

organized, (2) content utility – is the information provided useful or interesting, (3) navigation – is the website easy to navigate, (4) graphical representation – does the website utilize icons, contrasting colors, and multimedia content, (5) purpose – does the website clearly state its purpose (i.e. personal, commercial, or educational), (6) memorable elements – does the website facilitate returning users to navigate the site effectively (e.g., through layout or graphics), (7) valid links – does the website provide valid links, (8) simplicity – is the design of the website simple, (9) impartiality – is the information provided fair and objective, (10) credibility – is the information provided credible, (11) consistency/reliability – is the website consistently designed (i.e., no changes in page layout throughout the site), (12) accuracy – is the information accurate, (13) loading speed – does the website take a long time to load, (14) security/privacy – does the website securely transmit, store, and display personal information/data, (15) interactive – can the user interact with the website (e.g., post comments or receive recommendations for similar purchases), (16) strong user control capabilities– does the website allow individuals to customize their experiences (such as the order of information they access and speed at which they browse the website), (17) readability – is the website easy to read and understand (e.g., no grammatical/spelling errors), (18) efficiency – is the information presented in a way that users can find the information they need quickly, (19) scannability – can users pick out relevant information quickly, and (20) learnability – how steep is the learning curve for using the website. The seven website design elements most often discussed in relation to user engagement were navigation (62.86%), graphical representation (60%), organization (42.86%), content utility (37.14%), purpose (31.43%), simplicity (31.43%), and readability (31.43%). The base for selecting these seven elements was because they exceeded the researchers' threshold level of 30% representation in the literature and were included into a short list of website design elements to operationalize effective website design and for facilitating or predicting user engagement. (Garett, Chiu, Zhang and Young, 2016)

A study conducted by Dr. Marzie Astani (2003) at Winona State University in the United States revealed the importance of four major categories 1. Finding the information 2. Understanding the information 3. Supporting user tasks 4.

Presenting the information. According to the findings of the study, in designing a university Web site, developers need to take the following elements into consideration 1) online admission application, 2) a search tool, 3) simple and clear text, and 4) current resources.

In other studies, a number of the usability problems for e-commerce sites have been explored. For example, Tilson (2003) as cited by Dr. Marzie et al.2003 in their study discussed major issues such as ineffective communication with shoppers, ineffective feedback given to the users, and lack of easy navigation tools throughout the site. The authors suggested that a good e-commerce site must provide features such as support for the users' control with proactive assistance, simplicity that doesn't compromise usability for function, obviousness to make objects and their controls visible and intuitive, feedback to create a feeling of progress and achievement, accessibility to all objects at all time, and flexibility that allows users to customize.

Having an inviting Web site that is easy to navigate and provides necessary information is vital to any organization (as emphasized by Dr. Marzie et al. 2003) People who go online have high expectations regardless of whether they are online for work or personal reasons. As a result, an organization, whether it is a business firm or an educational institution, needs to be very careful about the image that is projects through its Web site. In the academic world, universities use the Internet as a tool for recruiting students. These educational institutions know that parents and high school students use the Internet as an initial tool to shop around for the best college. The goal of these organizations should be to present their academic programs, services, and opportunities they can offer through their Web sites effectively. A major concern of these educational institutions should be whether their Web sites are projecting their schools effectively. To address this concern, the initial step is to identify the features and elements of an effective web site.

2.3. Conceptual Framework and Hypotheses of the study

2.3.1. Conceptual Framework

As explained by Kotler (Kotler et al. 2012), at the very least, a company's web site must possess four basic features for it to be effective. It should be easy to use, useful, professional looking and physically attractive. Based on this theory the following conceptual framework is established which will take the study through. In addition demographic variables are also incorporated in to the conceptual framework as shown below in line with one of the objectives of the research which is studying the relationship between trainees' demographic profiles and their intention to apply online.

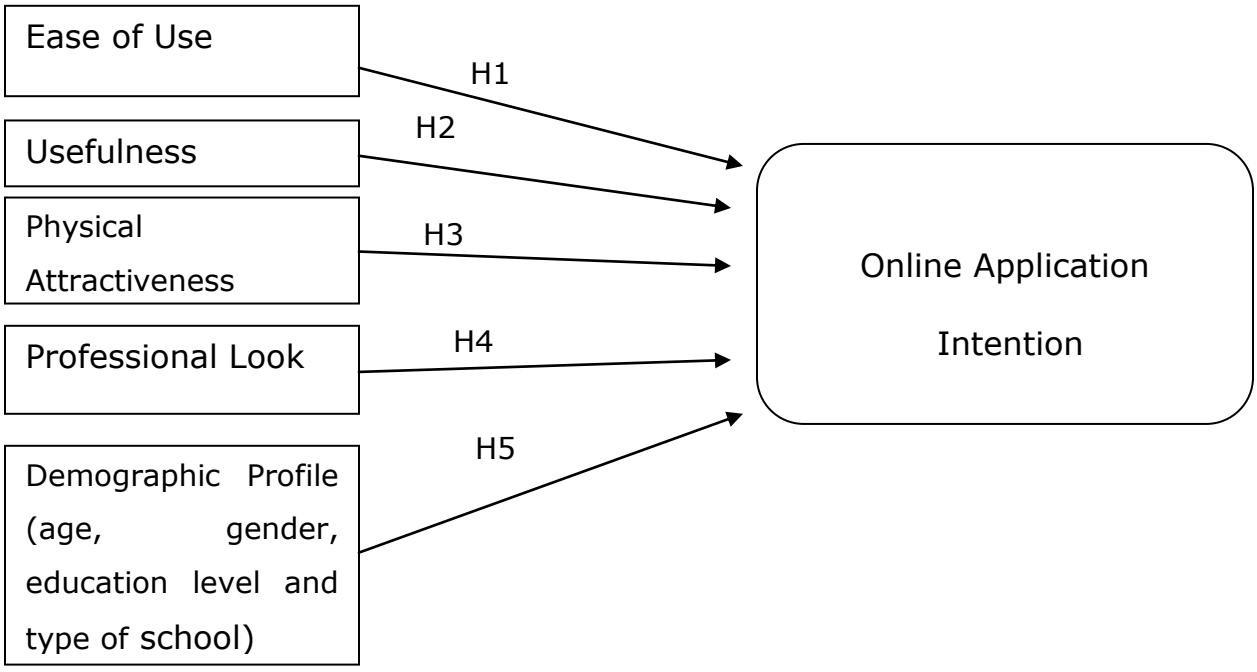

Figure.2.6 Conceptual Framework (Source - Kotler et al 2012)

2.3.2. Hypotheses of the study

According to the above conceptual framework, the below hypotheses are studied in order to show the predicted relationship of the identified variables. (Ease of use, Usefulness, Physical attractiveness, Professional look, trainees' demographic profiles and online application intention of trainees)

H1- There is a significant positive relationship between web site's ease of use and online application intention.

H2- There is a significant positive relationship between web site's usefulness and online application intention.

H3- There is a significant positive relationship between web site's physical attractiveness and online application intention.

H4- There is a significant positive relationship between web site's professional look and online application intention.

H5: There is no significant relationship between demographic profiles (age, gender, educational level and type of school) and trainees' intention to apply online.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter presents the research design and methodology adopted to undertake the research and that helped the researcher to analyze the impact of basic web site features on online application behaviors of trainees, to address the already identified research questions and to formulate the way how the findings can be interpreted and generalized within the scope of the study. The methodology used in this study specifies the research approach and design, total population and sample size, sampling technique, data collecting instrument, source of data, method of data analysis and finally reliability and validity of the data.

3.1. Description of the Study Area

This research tried to study the impact of the basic features of web site (ease of use, usefulness, physical attractiveness and professional look) on online application behaviors of trainees of EAA and how and if these features affect the trainees' online application tendencies.

3.2. Research Approach

The research follows a deductive approach which starts with hypothesis based on existing literature or knowledge. Such research aims at testing an already established theory. Deductive reasoning is a logical process in which a conclusion is given based on the concordance of multiple premises that are generally assumed to be true. It is sometimes referred to as top- down logic (Creswell, 2009).

As the aim of this study is to test the effect and relationship of EAA's website features on trainees' online application it would be appropriate to employ a deductive research approach. With the use of this approach, the study tries to test an objective theory by examining the relationship among variables and the variables are then measured, typically on instruments so that the numbers can be analyzed using statistical procedures and the final report will have a set of structure

consisting of introduction, literature review, methods, results and discussions (Creswell et al. 2009)

The deductive method operates from "the general to the specific ". A general set of propositions relating to a given phenomenon is narrowed down to a specific set of testable hypotheses or to a single testable hypothesis. Testing the hypotheses requires the application of relevant data which may or may not confirm the original argument in the theory. (Adams, Khan, Raeside, White, 2010) Based on this, the researcher has established a set of hypotheses and have tested them using the data collected.

3.3. Research Design

Studies that establish causal relationships between variables may be termed as explanatory studies. The emphasis here is on studying a situation or a problem in order to explain the relationships between variables. (Saunders, Lewis and Thornhill, 2007)

Hence, with respect to the research design, this study has employed explanatory research design and tried to study the impact and relationship of the independent variables (ease of use, usefulness, physical attractiveness and professional look) and the dependent variable (on line application intention).

With regard to the nature of data, the research has made use of quantitative data collected through questionnaires.

3.4. Population, Sampling Techniques and Sample Size

3.4.1. Population and Sampling Technique

A population can be defined as all people or items (unit of analysis) with the characteristics that one wishes to study. The unit of analysis may be a person, group, organization, country, object, or any other entity that you wish to draw scientific inferences about. (Anol Bhattacherjee, 2012)

The target population of this study are private trainees of EAA who are currently pursuing their education in the three schools of the academy (AMTS, CC & CS and C & GOTS). Hence, the population size consists of a total of 715 trainees. The units of analysis of this research are trainees.

Table 3.1 Active number of Trainees in EAA as of 12 Dec.18 (Total Population Size) (Source- EAA Registrar)

	Aviation Maintenance Training School	Cabin Crew & Catering School	Commercial and Ground Operation Training School	Total
Male	117	0	29	146
Female	3	355	211	569
Total Trainees	120 (17%)	355 (50%)	240 (33%)	715 (100%)

With probability samples the chance, or probability, of each case being selected from the population is known and is usually equal for all cases. This means that it is possible to answer research questions and to achieve objectives that require the researcher to estimate statistically the characteristics of the population from the sample. Consequently, probability sampling is often associated with survey and experimental research strategies. (Saunders, Lewis and Thornhill et al. 2007)
In line with this, samples were selected from the three schools using a stratified sampling technique which is one of the probabilistic sampling techniques. In stratified random sampling, samples are drawn equally or proportionately from each group termed as "Stratum".

3.4.2. Sample Size Determination

Following the above population size, the sample size is determined based on Yamane 1967 (Taro Yamane), simplified and the most ideal method used when the only thing known about the underlying population is its size.

$$n = \frac{N}{1 + N(e)^2}$$

Where n= the required sample size

N= the total Population Size

e= the acceptable sampling Error (Margin of Error (MoE))

With the desired level of confidence of 95% e would be 5% = 0.05. Hence the total sample size would be 257 which is calculated as below.

$$n = \frac{715}{1 + 715 \times (0.05) \times (0.05)}$$

$$n = 257$$

If the size of each group varies, it would be appropriate to select samples proportionate to the stratum size. (Adams, Khan, Raeside, White, et al, 2010) so a proportional approach based on the total population proportion is then used to determine the sample size from each school as shown below.

Table 3.2- Sample Size per School (Source – Own Survey (2018))

	Aviation Maintenance Training School	Cabin Crew & Catering School	Commercial and Ground Operation Training School	Total
Male	117	0	29	146
Female	3	355	211	569
Total Trainees	120	355	240	715
Sample Size	44 (17%)	129 (50%)	84 (33%)	257 (100%)

3.5. Data Sources and Types

Both primary and secondary data have been used in this study. The primary data are collected from the target groups (trainees) through survey questionnaires. Whereas, the secondary data sources include books, Journals, research papers, data and reports from int'l organizations like IATA, from company manuals, fact sheets, brochures, web site and the internet as well.

3.6. Data Collection Tool and Procedures

Survey research utilizes questionnaires designed to elicit quantitative data ("How much would you buy?"), qualitative responses ("Why would you buy?"), or both. Survey research is often conducted by means of a questionnaire distributed through the mail, by telephone, or in person (Keegan and Green, 2011).

As per Saunders, Lewis and Thornhill, the survey strategy is usually associated with the deductive approach. It is a popular and common strategy in business and management research and is most frequently used to answer who, what, where, how much and how many questions. It therefore tends to be used for exploratory and descriptive research. Surveys are popular as they allow the collection of a large amount of data from a sizeable population in a highly economical way. Often obtained by using a questionnaire administered to a sample, these data are standardized, allowing easy comparison. In addition, the survey strategy is perceived as authoritative by people in general and is both comparatively easy to explain and to understand. (Saunders, Lewis and Thornhill et al, 2007)

Accordingly, this research used structured questionnaire consisting of questions with a five point Likert scale labelled from "Strongly Agree "to "Strongly Disagree" with a "Neutral" option as well. The questionnaire is prepared in English considering the educational level of the trainees and has three parts. The first part consists of general introduction and demographical questions (age, gender, educational level, name of school, how did they apply and why), the second part consists of questions relating to the four basic features of the web site (ease of use, usefulness, physical attractiveness and professional look) and the last part is having questions relating to the INTENTION of trainees to apply online or not.

As to the data collection procedures, the researcher has followed the following procedures to conduct the survey.

1. First sample number of trainees was identified as explained in item 3.3 above, under each of the three schools.
2. Then the questionnaires were distributed to the sample trainees during their break times after briefly explaining the purpose of the survey and the ethical considerations made to protect their privacy and rights.
3. Respondent trainees were then given the chance to fill the questionnaires at their convenient time and place and return them to their respective school offices.

3.7. Data Analysis

As being conducted based on a quantitative survey, focusing on the relationships between the identified variables (EOU, USF, PAT, PRO) and Online Application INTENTION of trainees, the researcher thought it would be quite appropriate to use regression analysis as the main data analysis technique. In order to do the statistical analysis, Statistical Package for Social Science (SPSS) software Version 20 was used with statistical description in terms of frequency, mean, standard deviation and inferential statistics: correlation, regression and ANOVA.

3.8. Data Validity and Reliability

3.8.1. Validity

According to Kumar (2005), validity is the ability of an instrument to measure what it is designed to measure. There are two forms of validity; internal and external validity. Internal validity confirms the ability of a research instrument to measure what it is supposed to measure; while external validity is the data's ability to be generalized across persons, setting, and times. (Cooper and Schindler, 2008) Similarly, Campbell and Stanley define internal validity as the ability of a research design to adequately test research hypotheses. (Campbell & Stanley, 1963 as quoted in Bordens and Abbott, 2011).

In line with these points, in order to ensure the validity of the research design content and construction validity of the research were checked. And, the attributes were derived from relevant literature to ensure the validity of the questionnaire. Likewise, the content validity was verified by the respected advisor of this research who looked into the appropriateness of the questions and the scales of measurement. In addition, discussions with present and previous fellow researchers and subject matter experts were made and the results from the pilot survey were also other ways of ensuring the validity of the research instrument.

3.8.2. Reliability

Reliability refers to the extent to which the items measure accurately and consistently what they intend to measure. Hence, Cronbach's coefficient alpha is used to measure the reliability and internal consistency of each of the attributes. The coefficient of internal consistency provides an estimate of the reliability of measurement and assumes that items measuring the same construct should correlate (Kinberline and Winterstein, 2008). And higher Alpha coefficients indicate higher scale reliability. Specifically, Malhotra (2007) suggested that an alpha of 0.60 or greater should be considered adequate where as Zikmund (2003) suggest that a Cronbach's alpha value of > 0.7 indicates a considerably high reliability.

As shown in the below table (Table3.3) Cronbach's Alpha coefficients for the research variables ranged from 0.735 to 0.919. Hence, based on the examination of the research scales and constructs, it can be said that each variable represents a considerably reliable and valid construct.

Table 3.3. Reliability test (Source: Survey data (2019))

Variables	Cronbach's Alpha	No. of Items
Ease of Use	0.735	6
Usefulness	0.763	6
Physical Attractiveness	0.892	6
Professional Look	0.936	5
Online Application INTENTION	0.878	3
Overall Reliability	0.919	26

Reliability result for that of the pilot test can be found on appendix II.

3.9. Ethical Consideration

In order to increase the quality of the study, the researcher believes that ethical issues have to be considered at the very beginning and throughout the research process. In order to keep the anonymity and confidentiality of the participants' and their responses, respondents were not required to write their names on the questionnaires and are made to fill them at their convenience to avoid possible disclosure that may be created otherwise. The questionnaires also clearly assured

them that their responses will be treated with high confidentiality and will be used only for the intended purpose.

At the beginning of the questionnaire, respondents were also enlightened about the purpose of the study, that participation is purely voluntary and the research is independent and impartial. Furthermore, the questionnaires are also made to be free from leading, biased and ambiguous questions as much as possible.

As much as possible the researcher has conducted the research with maximum responsibility and honesty to keep the integrity of the study.

CHAPTER FOUR
DATA PRESENTATION ,ANALYSIS AND INTERPRETATION

4.1. Introduction

This chapter presents the results of the data collected in terms of response rate, general info (demographic data in frequency and percentage), descriptive data, Assumptions of regression Analysis (Normality Assumptions, linearity, Homosedasticity, multicollinearity test), Inferential Analysis of variables (correlation test, test of linear regression, multiple regression analysis and hypothesis testing), and finally interpretation of results.

In an attempt to make the data more representatives of the population, a total of 290 questionnaires were distributed to trainees of the three schools in the academy (50 to AMTS, 150 to CC&CS, 90 to C & GSTS) and a total of 257 (89%) of these questionnaires were completed and used for the data presentation and analysis.

Table 4.1 Response Rate of Questionnaires (Source- Survey data 2019)

	No. & percentage of Questionnaires	
Status	Number	Percentage
Returned complete	257	89%
Returned incomplete	24	8%
Unreturned	9	3%
Total Distributed	290	100%

4.2. Demographic Characteristics of Respondents

This part discusses the general demographic characteristics of respondents in terms of frequency and percentage against their gender, age, educational background, school attending, how they applied for the training, and why they did not apply online (if applicable).

4.2.1. Demographic Profile of respondents

The gender, age and level of education of respondent trainees are presented in the below table for ease of reference.

Table 4.2. Demographic Profile of Respondents (Source–Survey Data (2019))

Gender		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MALE	60	23.3	23.3	23.3
	FEMALE	197	76.7	76.7	100.0
	Total	257	100.0	100.0	
Age Group		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	206	80.2	80.2	80.2
	26-35	51	19.8	19.8	100.0
	Total	257	100.0	100.0	
Level of Education		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	HIGH SCHOOL GRADUATE	94	36.6	36.6	36.6
	COLLEGE OR UNIVERSITY GRADUATE	122	47.5	47.5	84.0
	10 +2	24	9.3	9.3	93.4
	10+3	7	2.7	2.7	96.1
	LEVEL III	2	.8	.8	96.9
	LEVEL IV	8	3.1	3.1	100.0
	Total	257	100.0	100.0	

As shown on the above table, out of the total 257 respondents, 60 (23.3%) of them were male whereas 197 (76.7%) of them were females and this shows that females took the largest part amounting to more than threefold from the numbers of males. The age of the respondents is classified in the two ranges and majority of the respondents (80.2%) are in the first age group (i.e. 18-25 years) while, the remaining 19.8% are in the second age group (i.e. 26-35 years). As per the data, the respondent trainees are dominated by the younger generation (18-25 years old) with no respondent in the third age group (36 and above).

Educational level was also assessed as one of demographic profile of respondents. According to the data obtained, relatively majority of the respondents (47.5%) are college or university graduates, 36.6 % are high school graduates and the rest (15.9%) constitute those in 10+2, 10+3, Level III & IV levels.

4.2.2. Training School and How applied for training

Presented in this part is the composition of respondents in terms of which school they are attending and how they applied for training.

Table 4.3 No. of respondent trainees per school and how applied for training (Source- Survey data (2019))

Which School?		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	AMTS	50	19.5	19.5	19.5
	CC & CS	123	47.9	47.9	67.3
	C & GSTS	84	32.7	32.7	100.0
	Total	257	100.0	100.0	
How you applied for training?		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	ONLINE THROUGH THE WEBSITE	38	14.8	14.8	14.8
	IN PERSON	216	84.0	84.0	98.8
	THROUGH E-MAIL	3	1.2	1.2	100.0
	Total	257	100.0	100.0	

As shown above, most (123) of the respondents are from Cabin Crew and Catering School (CC & CS) with 47.9% followed by 84 from Commercial and Ground Services Training School (C & GSTS) with 32.7% and 50 of them were from Aircraft Maintenance Training School (AMTS) with 19.5%.

As mentioned in the first chapter (under the scope of the study), there is no any respondent from PTS (Pilot Training School at the time of the survey as the school has not yet started private applicants program for this school. From this table we can say that the Academy should work more on attracting and enrolling aircraft technician and pilot trainees which have relatively few and nil number of population and respondents respectively.

In addition, the above table shows how the respondents applied for their training and accordingly the majority (84%) of them applied in person, followed by 14.8% who applied through the academy's web site whereas only 1.2% of them applied through e-mail. This shows that there is a high intention for respondents to apply in person than to use the digital means of application (both the web site and e-mail options) indicating that much is not done by the academy to promote and enable the online application channels. Trainees were also asked their reason for not using the website application channel and have responded as compiled below.

Table 4.4. Respondent's reason not to apply on the academy's web site (Source-Survey Data (2019))

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NOT BEING AWARE OF THE WEBSITE	47	18.3	21.0	21.0
	WEB NOT INTERACTIVE	37	14.4	16.5	37.5
	NO COMPLETE INFORMATION ON THE WEBSITE	63	24.5	28.1	65.6
	COMPLEXITY OF THE WEB	19	7.4	8.5	74.1
	WEB NOT RESPONDING FAST	38	14.8	17.0	91.1
	TECHNICAL PROBLEM DURING APPLICATION	20	7.8	8.9	100.0
	Total	224	87.2	100.0	
Missing	99.00	1	.4		
	System	32	12.5		
	Total	33	12.8		
Total		257	100.0		

The above table shows trainee's response for their reasons behind not using the web site of the academy for their application to be enrolled in to the academy. Accordingly 28.1% of the respondents said that they could not get complete info on the web site, 21% said they were not aware of the web site, 17% cited that the web site was not responding fast, where as 16.5% said it is because the web is not interactive, 8.9% of them said it was because of technical problem during

application, and the others 8.5% mentioned that it was because of complexity of the web site. Among the 219 respondents who did not apply online, one (0.5%) respondent did not respond on her reason not to apply on the web and hence is shown as missing.

Therefore, if the academy works more on awareness creation & promotional activities, simplifying complexity of the web, making the site more complete and interactive it can be said that the number of trainees applying online would increase.

On the other hand from those who applied on the web (38 respondents), 6 (15.8%) of them have still responded on the web site features as presented below.

Table 4.5. Web Applicants' response on their experience (Source- Survey Data (2019))

No. of web site applicant	What experienced during application
1	Web site is not interactive
2	No complete info. on the web site
2	Web site not responding fast
1	Technical problem during application

The above data also shows that still for those who applied on the web, the web site has some limitations which the academy need to work on in order to improve the trainees' experience they pass through while using the web site.

4.3. Descriptive Data Presentation and interpretations

Presented below is the summarized data for the independent and dependent variables. As shown on the below table the highest mean score is that of physical attractiveness with a value of 3.20 with std. Deviation of 0.836. This result in turn indicates that respondents believe that the web site of the academy is physically attractive. Next higher mean is that of professional look with a score of 2.98 and std. deviation of .950. Again this indicates that respondents believe that the web site has professional look and they are satisfied with it.

The mean value of the dependent variable i.e Online Application INTENTION (2.1855) is the lowest with standard deviation of 0.846 followed by the other two independent variables namely Ease of Use (2.667) and Usefulness (2.679) with standard deviation of 0.727 and 0.733 respectively. Except Ease of Use, Usefulness and OAI, the other two variables (PAT and PRO) have above average mean results. From these results we can see that respondents were not satisfied with the ease of use and usefulness features of the academy's web site and have low INTENTION to use online application.

Table 4.6. Summarized mean and Standard Deviation (Source-Survey Data (2019))

	N	Minimum	Maximum	Mean	Std. Deviation
EASE OF USE	257	1.00	4.17	2.6674	.72728
USEFULNESS	257	1.00	4.33	2.6790	.73314
PHYSICAL ATTRACTIVENESS	257	1.00	4.83	3.2082	.83620
PROFESSIONAL LOOK	257	1.00	4.20	2.9891	.95010
ONLINE APPLICATION INTENTION	257	1.00	4.33	2.1855	.84662
Valid N (listwise)	257				

4.4. Assumptions of Regression Analysis

4.4.1. Normality Assumption

The normality of the data has been tested before running the regression analysis because multiple regressions require the independent variables in the analysis be normally distributed. According to Brooks (2008), if the residuals are normally distributed, the histogram should be bell shaped. From the Histogram figure (refer appendix IV) it can be noted that the data distribution is normal curve, demonstrating that the data matches to the normality assumption. In addition, the normal probability plots were also used to test the normality assumption as shown on the appendix IV. Again the result is normal P P-Plot figure. It shows the residuals were normally distributed around its mean of zero which indicates that the data were normally distributed and it was consistent with a normal distribution assumption. The P P-Plot figures confirmed the normality assumption of the data and imply that inferences made about the population parameters from the sample statistics tend to be valid.

Another common test for normality is to run descriptive statistics to get skewness and kurtosis. Skewness should be within +2 and -2 range, if the data is normally distributed. Kurtosis is the peakedness or flatness of a distribution and this distribution shall also commonly fall between +2 and -2, although a few other authors according to Garson (Garson, 2012), are more lenient and allow kurtosis to fall within +3 and -3. Following the above justification, the normality test was done for the variables on SPSS, which resulted in all the variables' skewness to fall within +2 and -2 range and all the variables' kurtosis to fall within +3 and -3 range. Consequently, the data utilized for this research was found to be normally distributed.

Table 4.7 Test of Normal distribution (Source: Survey data (2019))

Variable	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
1. EASE OF USE	257	0.002	0.152	-0.527	0.303
2. USEFULNESS	257	0.060	0.152	-0.308	0.303
3. PHYSICAL ATTRACTIVENESS	257	-0.460	0.152	-0.382	0.303
4. PROFESSIONAL LOOK	257	-0.419	0.152	-1.011	0.303
Valid N (listwise)	257				

4.4.2. Linearity Test

Linearity refers to the degree to which the change in the dependent variable is related to the change in the independent variables. To determine whether the relationship between the dependent variable and the independent variables is linear; P-P plots (probability–probability plot) of the regression residuals through SPSS software has been used and it is presented in appendix IV. The straight line in this plot represents a normal distribution, and the points represent the observed residuals. Therefore, in a perfectly normally distributed data set, all points lie on the line (Field, 2009). Likewise, as we see in the P-P plot (appendix IV), the dots are closely plotted to the straight line, which indicate a small or no deviation from normality and there are no extreme cases observed. Therefore, the assumption of simple linear regression has been met and it can possibly be assumed that the model is accurate and can probably be generalized to the population.

4.4.3. Homosecdasticity

Homoscedasticity is an assumption in regression analysis that the residuals (RESID) at each level of the predictor (PRED) variables have similar variances. At each point along any predictor variable, the spread of residuals should be fairly constant. First *ZRESID (Y- axis) against *ZPRED (X-axis) is plotted on SPSS because this plot is useful to determine whether the assumptions of random errors and homoscedasticity have been met (Field et al , 2009). The graph of *ZRESID and

*ZPRED should look like a random array of dots evenly dispersed around zero. If this graph funnels out, then the chances are that there is heteroscedasticity in the data. If there is any sort of curve in this graph, then, the chances are that the data does not fulfill the assumption of linearity (Field et al , 2009). The scattered plot (as shown on appendix IV) shows the residuals at each level of explanatory variables are evenly dispersed around zero and that the graph is not scattered and cone shaped. Therefore, this study has no homoscedasticity problem.

4.4.4. Test of Multicollinearity

Multicollinearity is a phenomenon in which one predictor (independent variable) in a multiple regression model can be linearly predicted from the others with a substantial degree of accuracy. It is a state of high inter-associations among the independent variables.

Multicollinearity test is used to check whether there are inter-correlations among independent variables. According to Gareth James, the values of Variance Inflation Factor (VIF) for all independent variables should be less than 10 (Gareth James, 2013) for the data to be free from multicollinearity concern. Hence, as per the below results, there is no multicollinearity among the independent variables of this research. Therefore, it is possible to use correlation and multiple regressions analysis.

Table 4.8. Test of Multicollinearity (Source: Survey data (2019))

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	EASE OF USE	.565	1.769
	USEFULNESS	.508	1.968
	PHYSICAL ATTRACTIVENESS	.542	1.844
	PROFESSIONAL LOOK	.519	1.925

4.5. Inferential Analysis of Variables

4.5.1. Correlation Test between Variables

In this topic the researcher analyses the relationship (correlation) of each of the four independent variables with that of the dependent variable. Correlation analysis is a method of statistical evaluation used to study the existence, direction and strength of a relationship between two variables. It's often misunderstood that correlation analysis determines cause and effect, however ,this is not the case because other variable that are not present in the research may have impacted on the results, so the researcher used correlation to analyze the presence and direction (direct/indirect) of relationship between the variables.

Correlation coefficients take values between -1 and 1 ranging from negatively correlated (-1) to uncorrelated (0) to positively correlated (+). The sign of the correlation coefficient defines the direction of the relationship. The absolute value indicates the strength of the correlation. Dancey and Reidy (2004) state that a correlation result of 0 indicates no/zero correlation, a result which is between 0.1 and 0.3 indicates a weak correlation among variables, a result which is between 0.4 and 0.6 shows a moderate correlation, a result between 0.7 and 0.9 indicates a strong correlation among variables, while a result of 1 indicates perfect correlation.

Whereas as per Marczyk, Dematteo and Festinger, 2005, correlations of .10 to .30 are considered small, correlations of .30 to .70 are considered moderate correlations of .70 to .90 are considered large, and correlations of .90 to 1.00 are considered very large.

The correlations between each of the independent variables with the dependent variable are presented below on the basis of Karl Pearson's coefficient of correlation.

Table 4.9 Correlation Table (Source: Survey Data (2019))

		EASE OF USE	USEFULNESS	PHYSICAL ATTRACTIVENESS	PROFESSIONAL LOOK
EASE OF USE	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	257			
USEFULNESS	Pearson Correlation	.643**	1		
	Sig. (2-tailed)	.000			
	N	257	257		
PHYSICAL ATTRACTIVENESS	Pearson Correlation	.334**	.374**	1	
	Sig. (2-tailed)	.000	.000		
	N	257	257	257	
PROFESSIONAL LOOK	Pearson Correlation	.254**	.435**	.654**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	257	257	257	257
ONLINE APPLICATION INTENTION	Pearson Correlation	**.483****	**.631****	**.357****	**.399****
	Sig. (2-tailed)	**.000**	**.000**	**.000**	**.000**
	N	257	257	257	257

According to the above table, we can see that all of the independent variables i.e. EOU (r=0.483), USF (r=0.631), PAT (r=0.357) and PRO (r=0.399) have statistically significant and positive correlations with online application intention as indicated by P=0.000 and the positive r values above.

While EOU and USF are moderately correlated with OAI as indicated by r=0.483 & r=0.631 respectively (supporting hypothesis 1 & 2), PAT and PRO are found out to have weak correlation with OAI as indicated by r=0.357 and r=0.399 respectively (supporting hypothesis 3 & 4).

- **Inter variable Correlation**

This analysis is used to check if the independent items interrelate well. Regarding the relationship between the independent variables, the above table shows that each of the independent variables are significantly and positively correlated with each other at a significance level of $p<0.05$. The correlation between PAT and PRO

is the highest (r=0.654) followed by the correlation between EOU and USF (r=0.643). The lowest correlation is between EOU and PRO with a correlation value of r=0.254) followed by that of EOU & PAT (r=0.334).

4.5.2. Linear Regression Test

Correlation R and R^2

Multiple R is the correlation between the observed values of Y and the values of Y predicted by the multiple regression model. Therefore, large values of the multiple R represent a large correlation between the predicted and observed values of the outcome. A multiple R of 1 represents a situation in which the model perfectly predicts the observed data. Coefficient of determination: the proportion of variance in one variable explained by a second variable. It is the Pearson correlation coefficient squared (R^2). Adjusted R^2 is a measure of the loss of predictive power or shrinkage in regression. The adjusted R^2 tells us how much variance in the outcome would be accounted for if the model had been derived from the population from which the sample was taken (Field, 2009).

Table 4.10 Model Summary (Source: Survey Data (2019))

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.656[a]	.430	.421	.64415

a. Predictors: (Constant), EASE OF USE , USEFULNESS, PHYSICAL ATTRACTIVENESS, PROFESSIONAL LOOK

b. Dependent Variable: ONLINE APPLICATION INTENTION

Accordingly, the model summary shows R value of 65.6 % which represents the overall correlation between the independent variables (EOF, USF, PAT and PRO) with the dependent variable i.e Online Application Intention (OAI).

According to Cohen (1992), R square values of 0.12 or below indicate low, between 0.13 to 0.25 values indicate medium, 0.26 or above values indicate high effect sizes. In this study, the R^2, which is the coefficient of determination, was found to be 43% which indicates that the independent variables account for 43% of the

variation on the dependent variable. This in turn implies that there are still other factors that can explain the behavior of trainees towards using the online application channel, but the model used in this study, which includes the four independent variables of EOU, USF, PAT & PRO, can explain close to 43% of it. In other words, 57% of the variation in online application intention cannot be explained by these four parameters and that there must be other variables that have influenced the trainees' behavior towards using the academy's site and the associated outcome.

Table 4.11 Regression ANOVA (Source : Survey Data (2019)

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	78.930	4	19.733	47.557	.000[b]
	Residual	104.562	252	.415		
	Total	183.492	256			

a. Dependent Variable: ONLINE APPLICATION INTENTION

b. Predictors: (Constant), , EASE OF USE , USEFULNESS, PHYSICAL ATTRACTIVENESS, PROFESSIONAL LOOK

The above ANOVA summary table shows the various sums of squares described in the table and the degrees of freedom associated with each. The average sum of squares (the mean squares) is calculated by dividing the sums of squares by the associated degrees of freedom. The most important part of the table is the F-ratio, which is a test of the null hypothesis that the regression coefficients are all equal to zero. In other words, this F statistic tests whether the R proportion of variance in the dependent variable accounted for by the predictors is zero and the table also shows the associated significance value of that F-ratio (Field et al, 2009). For the data under study, F is 47.557, which is significant at $p<0.001$ (because the value in the column labeled Sig. is less than 0.001). This result tells us that there is less than a 0.1% chance that an F-ratio would happen, if the null hypothesis proposed about F-ratio were true. Therefore, we can say that the regression model has resulted in significantly better prediction about trainees online application INTENTION and that the regression model overall predicts the online application INTENTION significantly well. As we see from the above ANOVA table the P value

(the value in the column labeled Sig.) is 0.000 which is less than the level of significance or 0.05. Therefore the overall regression model is significant.

4.5.3. Multiple Linear Regression Analysis

Multiple regression analysis is a statistical technique used to investigate the relationships between a dependent variable and two or more independent variables (Kothari, 2007). Multiple regressions allow to predict someone's score on one variable on the basis of their scores on several other variables (Julie, 2005). A multiple regression analysis was performed in order to assess relative importance of the previously mentioned antecedents of online application intention (OAI). OAI was regressed on the four antecedents namely EOU, USF, PAT & PRO as shown and analyzed below.

Table 4.12 Multiple Regression Result on determinants of OAI
(Source: Survey Data (2019))

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.190	.195		-.973	.331
	EASE OF USE	**.150**	.074	.129	2.037	**.043**
	USEFULNESS	**.547**	.077	.473	7.098	**.000**
	PHYSICAL ATTRACTIVENESS	.057	.065	.056	.868	.386
	PROFESSIONAL LOOK	.110	.059	.123	1.871	.063

Here the values of the regression coefficient b represent the change in the outcome, resulting from a unit change in the predictor (independent variable) and if a predictor is having a significant impact on the ability to predict the outcome, then, this b should be different from 0 (and big, relative to its standard error). And the t-test tells us whether the b-value is different from 0. SPSS provides the exact probability that the observed value of t would occur if the value of b in the population were 0. If the observed significance is less than 0.05, then scientists agree that the result reflects a genuine effect (Field et al , 2009). In this study,

from the four independent variables, only for two of them (namely EOU and USF) the probabilities are less than 0.05.

Therefore, we can say that the probability of these t-values or larger occurring, if the values of b in the population were 0, is less than 0.05. Therefore, the bs are different from 0 and we can say that the ease of use and usefulness of the academy's website make a significant contribution ($p < 0.05$) in predicting online application intention.

The coefficient of EOU and USF is 0. 150 and 0.547 respectively. This means, if the EOU and USF are increased by one percent each, the intention of online application will be improved by 15.0% and 54.7% respectively. On the other hand, the p values for the other two variables (namely PAT and PRO) shows more than 0.05 hence they are found to be insignificant.

4.5.4. T-Test and One Way ANOVA

In order to see if there is any difference between the demographic profile of trainees and their online application tendencies, two inferential statistics (namely T-test and One Way ANOVA) techniques were used. These techniques were applied to compare demographic characteristics and investigate how they are related with online application intention. One of the only differences between a t-test and an ANOVA is that ANOVA can compare means across more than two groups or conditions.

4.5.4.1. T-Test

Theoretically, T-test can be used even if the sample sizes are very small (e.g. as small as 10), as long as the variables are normally distributed within each group and the variation of scores in the two groups is not reliably different (Gleam & Rosemary, 2003). In this study, independent sample T-Tests are performed for gender and age as presented below.

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
ONLINE APPLICATION INTENTION	Equal variances assumed	.684	.409	1.081	255	.281	.13491	.12480	-.11085	.38068
	Equal variances not assumed			1.080	97.604	.283	.13491	.12486	-.11289	.38271

Table 4.13 Independent Sample T-Test for gender and online application intention (source: survey data,(2019))

As it is shown in the above table 4.13, the sig. (2-tailed) value is 0.281 and 0.283 when equal variance assumed and not assumed respectively. As these values are above the required cut-off of 0.05, this shows that there is no statistically significant difference in the mean OAI and gender of respondents. Hence gender did not affect OAI.

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
ONLINE APPLICATION INTENTION	Equal variances assumed	.3.924	.049	.577	255	.565	.07646	.13259	-.18464	.33757
	Equal variances not assumed			.615	83.361	.540	.07646	.12439	-.17092	.32385

Table 4.14 Independent Sample T-Test for age and online application intention (source survey data, 2019)

As it is shown in table 4.14 above, the sig. (2-tailed) value is 0.565 and 0.540 when equal variance assumed and not assumed respectively. As these values are above the required cut-off of 0.05, it shows that there is no statistically significant difference in the mean OAI and age of respondents. Hence age did not affect OAI.

4.5.4.2. One-way ANOVA (Analysis of Variance)

One-way ANOVA is a general method for studying sampled-data relationships and to test mean comparisons. The method enables the difference between two or more sample means to be analyzed, achieved by subdividing the total sum of squares. One way ANOVA is the simplest case. In statistics, is a technique used to compare means of two or more samples (using the F distribution). It is a way to test the equality of three or more means at one time by using variances. In a one-way ANOVA (also known as a single classification ANOVA), there is one measurement variable and one nominal variable. Multiple observations of the measurement variable are made for each value of the nominal variable. In this study, one way ANOVA test is done for gender, age, level of education and school enrolled.

Table 4.15 One way ANOVA between gender and OAI (Source: survey data 2019)

ANOVA

ONLINE APPLICATION INTENTION

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.837	1	.837	1.169	.281
Within Groups	182.655	255	.716		
Total	183.492	256			

ANOVA result in the above table (4.15) shows that gender is not a significant factor for online application behavior of trainees with a significant level (0.281) which is greater than 0.05.

Table 4.16 One way ANOVA between age and OAI (source: survey data2019)

ANOVA

ONLINE APPLICATION INTENTION

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.239	1	.239	.333	.565
Within Groups	183.253	255	.719		
Total	183.492	256			

ANOVA result in table 4.16 above shows that variables are not perceived differently among respondents, who are in different age groups, with a significant level (.565), which is greater than 0.05. Hence age group is not a significant factor for OAI.

Table 4.17 One way ANOVA between level of education and OAI (source: survey data, 2019)

ANOVA

ONLINE APPLICATION INTENTION

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.328	5	1.466	2.088	.067
Within Groups	176.165	251	.702		
Total	183.492	256			

As per ANOVA result in table 4.17 above , the variables are not perceived differently among respondents who have different educational level , with a significant level (.067), which is greater than 0.05.

Table 4.18 One way ANOVA between school attending and OAI

ANOVA

ONLINE APPLICATION INTENTION

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	5.135	2	2.567	3.656	.027
Within Groups	178.358	254	.702		
Total	183.492	256			

ANOVA result in table 4.18 above shows that variables are perceived differently among respondents, who are attending different schools, with a significant level (.027), which is less than 0.05.

4.5.5. Hypothesis Testing and Interpretation of Results

Hypothesis One: There is a significant positive relationship between ease of use and online application intention.

Based on the tables and justifications provided in the preceding paragraphs, ease of use has significant relationship with the dependent variable (OAI), where the t-statistic value was calculated to be 2.037 at p value <0.05 with sig. Value of 0.043. This implies that, a change in the EOU has impact on the trainees' intention of online application other factors remaining constant. These results indicate that, if the academy pay more attention to make the application site more easy to navigate and use, trainees will most likely be willing to use the online application channel. The greater the ease of use, the greater for trainees to apply online. Therefore, H1 is supported.

Hypothesis Two: There is a significant positive relationship between usefulness and online application intention.

As per the multiple regression results provided that the coefficient of usefulness was found out to be 0.547% which indicates that keeping other factors constant, a unit change in usefulness will result in a positive effect of 54.7% increase in online application. Usefulness has significant relationship with the dependent variable (OAI), where the t- statistic value was calculated to be 7.098 at p value <0.05 with sig. Value of 0.000. This implies that, a change in the USF has significant impact on the trainees' intention of online application other factors remaining constant. Hence the relationship of the independent factor usefulness (at p-value of 0.000) with that of the dependent variable i.e OAI is found to be positive and statistically significant, leading us to support H2.

Hypothesis Three: There is a significant positive relationship between physical attractiveness and online application intention.

The third hypothesis testing provided that physical attractiveness has a positive but insignificant relationship with the dependent variable i.e OAI as evidenced by the t-statistic value which was found out to be 0.868 and p value > 0.05. The p value of PAT was found to be 0.386 indicating non-significant relationship with OAI. This means, even if the academy works to improve the web site's attractiveness, the

model predicts that no significant number of applicants will decide to use the web site application channel, (because of the p value > 0.05) other factors remaining constant. Therefore, H3 is not supported.

Hypothesis Four: There is a significant positive relationship between professional look and online application intention.

This hypothesis is also rejected because of the p-value >0.05. The coefficient was computed to be .063, which represents the fact that any improvement on the professional look of the web site has no considerable impact on the online application behavior of trainees. This implies that professional look has no significant relationship with trainee's online application behavior. Therefore, H4 is not supported.

Hypothesis Five: There is no significant relationship between demographic profiles (gender, age, educational level and type of school) and trainees' intention to apply online.

This hypothesis is supported partially because of the one–way ANOVA results some of which are greater than 0.05 and one is less than 0.05. Accordingly, gender, age and educational level have no significant relationship with OAI as shown with sig. value of 0.281, 0.565, and 0.067 respectively. Whereas one-way ANOVA test result for that of type of school enrolled showed 0.027 which is less than 0.05 indicating significant relationship with OAI. Therefore, H5 is partially supported.

Table 4.19 Summary of hypothesis testing results (Source - Survey Data (2019))

Hypothesis	Independent Variable	Dependent Variable	Supported?	Result
There is a significant positive relationship between ease of use and online application intention.	*Ease of Use*	*Online Application Intention*	Yes	Correlation Results r=0.483 Regression Result, Sig.0.043
There is a significant positive relationship between usefulness and online application intention.	*Usefulness*	*Online Application Intention*	Yes	Correlation Results r=0.631 Regression Result, Sig.0.000
There is a significant positive relationship between physical attractiveness and online application intention.	*Physical Attractiveness*	*Online Application Intention*	No	Correlation Results r=0.357 Regression Result Sig.0.386
There is a significant positive relationship between professional look and online application intention.	*Professional Look*	*Online Application Intention*	No	Correlation Results r=0.399 Regression Result Sig.0.063
There is no significant relationship between demographic profiles and trainees' intention to apply online.	*gender, age, educational level and type of school being enrolled*	*Online Application Intention*	Partially yes	One Way ANOVA test result of sig. Gender= 0.281, Age=0.565, Education level = 0.067 School enrolled =0.027

CHAPTER FIVE-SUMMARY,CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

This chapter presents summary of major points and findings of the study, major conclusions and possible recommendation that the researcher proposes based on results of the study. In addition, it pinpoints the limitations of the study and indicates future research areas for interested researchers in the applicability of online marketing in general and web site marketing in particular. As mentioned on the introduction part, the results of this study would help the academy to provide its trainees a more effective and efficient training application service and to avoid unnecessary deployment of resource on trainee's application processing by its sales and registrar offices and shows the way that needs to be followed in its roadmap in line with the airline's corporate digital marketing strategy, the academy's annual intake capacity.

5.2. Summary of the major findings

This study has tried to look in to factors that impact trainee's intention to use the online application platform of Ethiopian Aviation Academy. Accordingly, the major points and findings are presented as below.

- ✓ The regression analysis results show that the intention of online application is significantly and positively affected by usefulness (β= 0.547 with p=0.000), followed by ease of use (β= 0.150, with p=0.043). These figures indicate that if the academy's web site is made to be more useful and easy to use and if each of these features is increased by one percent, the intention of using the web application can automatically improve by 54.7% and 15% respectively.
- ✓ Usefulness is found out to be the primarily significant variable followed by ease of use.

- ✓ On the other hand the regression analysis result showed that the other two variables namely physical attractiveness and professional look found out to be insignificant with p values of 0.386 & 0.063 respectively which are both >0.05. This implies that any effort to improve these two features will not have any significant impact on trainees' intention of using the web application.

- ✓ The overall regression model is significant and there is 65.6% overall correlation between the dependent (OAI) and the independent variables (EOU, USF, PAT, PRO) as shown by R value of 0.656.

- ✓ The R^2 value is found out to be 0.430 which implies that about 43% of variation in online application intention is expressed by the variation on the independent variables (EOU, USF, PAT, and PRO). The remaining 57% can be explained by other variables that are not covered in this study.
- ✓ The T-Test showed that gender does not have significant effect on online application intention.
- ✓ Similarly based on the T-test age groups have no significant difference on the dependent variable, OAI.
- ✓ Likewise, one-way ANOVA test results showed age, gender and educational level have no significant relationship with online application intention.
- ✓ Whereas the one-way ANOVA test result showed that school being enrolled have significant relationship with online application intention. As per the study majority (60.5%) of those who applied online are from AMTS, followed by CC & CS (34%) and C & GSTS (5.5 %.)

5.3. Conclusions

The primary objective of this study was to analyze the factors that influenced trainee's online application intention from digital marketing perspective (web site marketing in particular) hence the academy's web site features were considered. To this end a number of statistical tests were made and based on the findings of the study the following conclusions can be drawn.

- Ease of Use feature of EAA's web site has positive and moderate relationship with trainee's online application intention. This leads to the conclusion that a one unit increase in EAU results in a positive increase in the number of trainees who would apply online.
- Similarly, Usefulness feature of EAA's web site has positive and moderate relationship with trainee's online application intention. This leads to the conclusion that a one unit increase in USF results in a significant (54.7%) increase in number of trainees who would apply online.

- Physical attractiveness and professional look has positive but weak relationship with online application intention. Because of p value > 0.05 a one unit increase in PAT & PRO will have no significant change on trainee's online application intention.

- While EOU & USF variables have positive and significant correlation with OAI, PAT & PRO variables have positive but insignificant correlation with online application intention (OAI). From this we can conclude that all the four independent variables are positively related with the independent variable under the study.

5.4. Recommendations

Based on the findings and conclusions drawn, the following recommendations are proposed.

- As shown in the descriptive data presentation the number of trainees who used the online application is very low as compared to those who come in person. This shows that majority of the trainees are not using the online application platform hence the web site of the academy is not being as effective as it should be. As such practices are not in line with the airlines' corporate digital strategy, the academy should actively work towards enhancing the quality of its web site in terms of making it complete, interactive, useful, fast and easy for applicants to use it. Upgrading the web site would allow to create good experience for the web visitor and at the same time to meet its business objectives.

- Being a profit center and one of the major SBUs of the airline, the academy should have a well-established digital/internet marketing and sales strategy.

- In order to successfully implement online marketing and sales activities the academy should have the necessary human resource and its own digital marketing unit that works in line with the academy's core marketing objectives.

- The academy should work aggressively to promote and increase awareness about its website in the minds of its target customers as there were customers who were not aware of the website and as a result who opt for the traditional way of application.

- The academy has to be able to convey the essence of its brand through its web site as the web site is one of the channel that viewers establish first impression/image and experiences about the company.

- The academy should consider taking the advantages of value-adding features of online marketing such as creating convenience, 24/7 service and saving customers' time and aggressively promote usefulness as this feature of the web site can significantly and positively impacts the trainees' intention to apply online.

- As an initial stage, as a means of encouraging trainees, the researcher recommends for the academy to incentivize those who apply online like for example giving discount for online applicants.

- Again until such time the site becomes familiar and customers become comfortable in using the site by their own, the academy should consider establishing online application ports with in the academy and a support team to assist customers as needed.

- Upon maturity of the site and fulfillment of all the missing information and features, the academy should consider making the online application a mandatory requirement to enroll in to the academy. This would allow the

marketing and sales dep't to focus on its core activities and would contribute to the airline's corporate digital strategy.

- The academy should also work to create on line payment facilities integrated with the web application platform which would in turn create better and time saving experience for trainees and enhance the revenue of the academy.

- As identified in the research, one of the issues faced by the respondents is related to response speed of the web site. Hence, the academy needs to deploy reliable and speedy network infrastructure and system to ensure that the online application services operate smoothly so that it can encourage trainees to make use of the site for the application process.

5.5. Limitations of this study and future area of research

This study was conducted using sample size taken from the three schools of the academy (Cabin Crew and Catering, AMTS, and Commercial and Ground Services Training Schools). As mentioned in the scope of the study, samples were not taken from the other two schools (PTS & L & CDTS). In addition, the study was focused on the least features of a web site (namely EOU, USF, PAT and PRO) as identified by Kotler (2012). As explained in chapter 4, there are other variables that definitely have impacted the trainees' intention for online application. Hence, these facts would limit the research and call for an in depth study to be made on the area. Other researchers can expand this research to investigate the impacts of other unexplained variable such as background, prior use of the internet, trust, risk, social factors and the likes which were not addressed in this research.

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Appendix I-QUESTIONNAIRE

Addis Ababa University
School of Commerce
Department of Marketing Management

Questionnaire on "The Impact of Effective Online Marketing on Trainees' Online Application Intention - The Case of Ethiopian Aviation Academy"

Dear Respondent,

As part of the requirement for the award of Masters of Arts degree in Marketing Management, this questionnaire is prepared by Mekdes Dagnachew, a graduate student at AAU, to collect data on the impact of effective online marketing on the online application intentions of Ethiopian Aviation Academy trainees. Hence, your kind participation and sincere responses are so vital for the success of the study. Please rest assured that your responses shall be used only for the intended purpose, be accessed by the researcher only and remain strictly confidential. Your volunteer participation is highly appreciated and you do not need to write your name. For questions requiring optional response and for those with rating scales please put ✓ mark under the choice that best fits your answer.

Thank you very much for your time and valuable responses. For any enquiries you may contact me at Mekdesd@ethiopianairlines.com, 091 142 8318 (mob.) / 011 517 8495 (off.)

EAA's Web site – www.ethiopianairlines.com/eaa

PART I – General Information

1. Gender A. Male ☐ B. Female ☐
2. Age A. 18-25 ☐ B. 26-35 ☐ C. 36 and above ☐
3. Highest Level of Education A. High School Graduate ☐ B. College/University Graduate ☐
   C. 10+2 ☐ D. 10+3 ☐ E. Level III ☐ F. Level IV ☐
4. In which training school are you enrolled in?
   A. Aircraft Maintenance Training School ☐
   B. Cabin Crew and Catering School ☐
   C. Commercial and Ground Services Training School ☐

5. How did you apply for the training?
   A. Online through the web site of the academy ☐
   B. In person ☐
   C. Through e-mail ☐
6. If you apply in person or through email, what was your reason not to apply on line using the web site of the academy? Please mark all that apply.
   A. Not being aware of the website ☐
   B. Website is not interactive ☐
   C. No complete info. on the website ☐
   D. Complexity of the web site ☐
   E. Website not responding fast ☐
   F. Technical Problem during the application process ☐
   G. Other please specify _____

PART II- EAA's Web Site Features Affecting Online Application

Please indicate, by using ✓ mark, the extent to which you agree or disagree to the below statements on the academy's website.

Sr. No.	**Parameter (Web site Features)**	**Rating**				
	Ease of Use (EOU)	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
1	I can easily locate the application page of the website.					
2	All information related to application are easily accessible on the website.					
3	All application requirements are shown clearly on the web site.					
4	Applying on line requires me less effort.					
5	The ease of use of the web site encourages to do the application online.					
6	Generally speaking, applying on line is easy for me.					
	Usefulness (USF)	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
1	I find the information on the web site useful/relevant.					

2	The application website has complete information.					
3	The online application allows faster application than applying in person.					
4	The web site allows me to apply online at my convenience.					
5	The usefulness of the site encourages to do online application.					
6	Overall, I find the online application site useful.					
	Physical Attractiveness (PAT)	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
1	I find the pictures on the web site attractive.					
2	The fonts used in the web site are physically appealing.					
3	The colors used in the web site are eye catching.					
4	The physical appearance of the site is attractive enough to stay on the site.					
5	The physical attractiveness of the site encourages to do online application.					
6	Overall, the web site of the academy is physically attractive.					
	Professional Look (PRO)	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
1	I feel that the academy's website has a professional design.					
2	The interface layout of the web site looks professional.					
3	The professional look of the site is attractive enough to stay on the site.					
4	The professional look and touch of the site encourages to do the application online.					
5	Generally, the web site of the academy has a professional look.					

PART III- Online Application Intention

Sr. No	Item	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
1	I am satisfied with the online application services of the academy.					
2	The on line application services are adequate to meet trainees' application needs.					
3	I would recommend the online application option to others.					

THANK YOU VERY MUCH IN DEED!!!

Appendix II- PILOT RELIABILITY TEST

As a pilot test, questionnaires were distributed to 20 private trainees to measure the reliability and consistency of their responses and below is the result.

Variables	Cronbach's Alpha	No. of Items
Ease of Use	0.759	6
Usefulness	0.695	6
Physical Attractiveness	0.787	6
Professional Look	0.893	5
Online Application INTENTION	0.823	3
Overall Reliability	0.859	26

Appendix III- DETAILED MEAN SCORE

- **Mean Score of "Ease of Use"**

	N	Minimum	Maximum	Mean	Std. Deviation
1. I can easily locate the application page of the website	257	1.00	5.00	2.9300	1.15030
2. All information related to application is easily accessible on the website.	257	1.00	5.00	2.6148	1.10550
3. All application requirements are shown clearly on the web site.	257	1.00	5.00	2.6226	1.06871
4. Applying on line requires me less effort.	257	1.00	4.00	2.8405	1.04668
5. The ease of use of the web site encourages to do the application online.	257	1.00	5.00	2.4747	1.10058
6. Generally speaking, applying on line is easy for me.	257	1.00	5.00	2.4981	1.15625
Valid N (listwise)	257				

Source: Survey data (2019)

- **Mean Score of "Usefulness"**

	N	Minimum	Maximum	Mean	Std. Deviation
1. I find the information on the web site useful/relevant.	257	1.00	5.00	3.1907	1.27423
2. The application website has complete information.	257	1.00	5.00	2.5136	.97669
3. The online application allows faster application than applying in person.	257	1.00	5.00	2.4942	1.11846
4. The web site allows me to apply online at my convenience.	257	1.00	4.00	2.7549	1.07811
5. The usefulness of the site encourages to do online application.	257	1.00	5.00	2.3268	.98136
6. Overall, I find the online application site useful.	257	1.00	5.00	2.7938	1.04596
Valid N (listwise)	257				

Source: Survey data (2019)

- **Mean Score of "Physical Attractiveness"**

	N	Minimum	Maximum	Mean	Std. Deviation
1. I find the pictures on the web site attractive.	257	1.00	5.00	3.2996	.96406
2. The fonts used in the web site are physically appealing.	257	1.00	5.00	3.2840	.90628
3. The colors used in the web site are eye catching.	257	1.00	5.00	3.3346	1.05182
4. The physical appearance of the site is attractive enough to stay on the site.	257	1.00	5.00	3.1868	1.07354
5. The physical attractiveness of the site encourages to do online application.	257	1.00	5.00	2.9261	1.11031
6. Overall, the web site of the academy is physically attractive.	257	1.00	5.00	3.2257	1.09849
Valid N (listwise)	257				

Source: Survey data (2019)

- **Mean Score of "Professional Look"**

	N	Minimum	Maximum	Mean	Std. Deviation
1. I feel that the academy's website has a professional design.	257	1.00	5.00	3.1595	1.10124
2. The interface layout of the web site looks professional.	257	1.00	5.00	3.1518	.97844
3. The professional look of the site is attractive enough to stay on the site.	257	1.00	5.00	2.9533	1.02591
4. The professional look and touch of the site encourages to do the application online.	257	1.00	5.00	2.6070	1.08128
5. Generally, the web site of the academy has a professional look.	257	1.00	5.00	3.0739	1.13122
Valid N (listwise)	257				

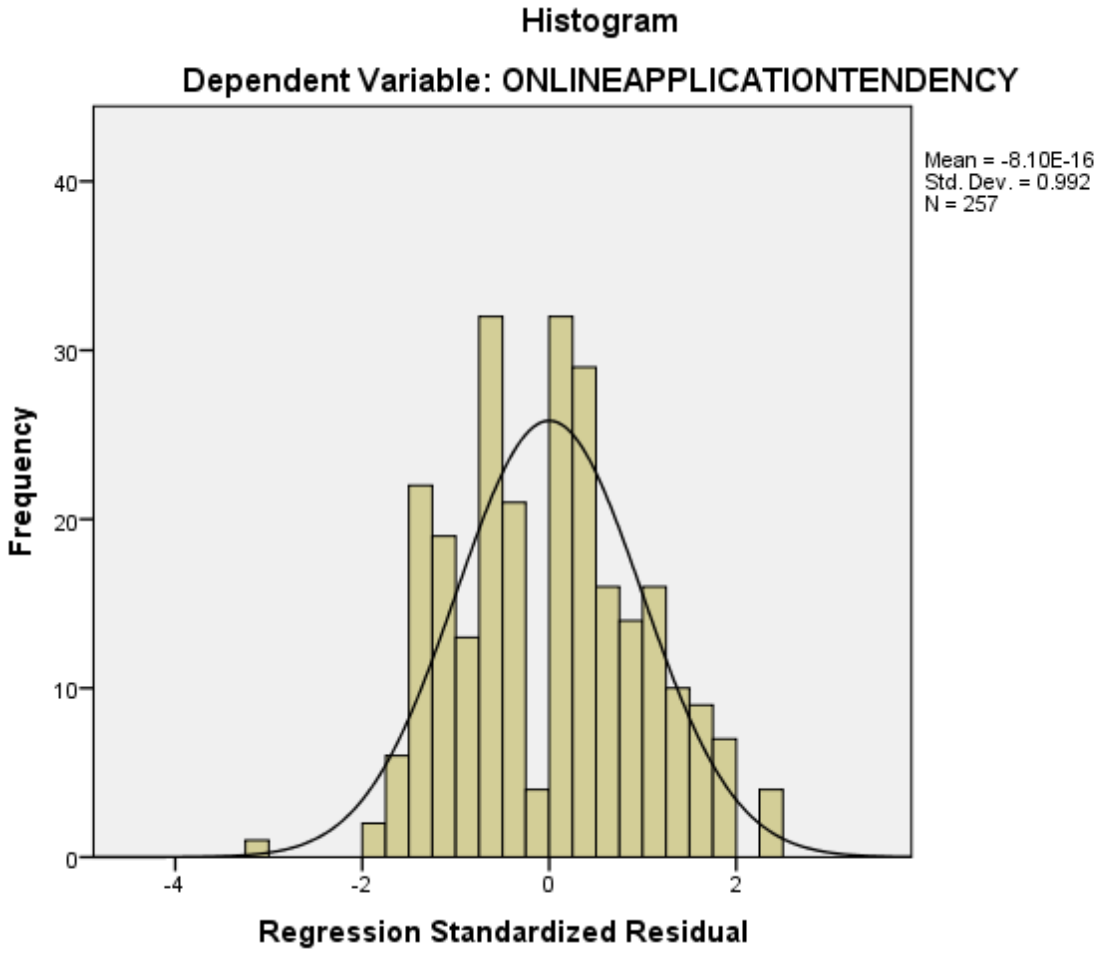
Source: Survey data (2019)

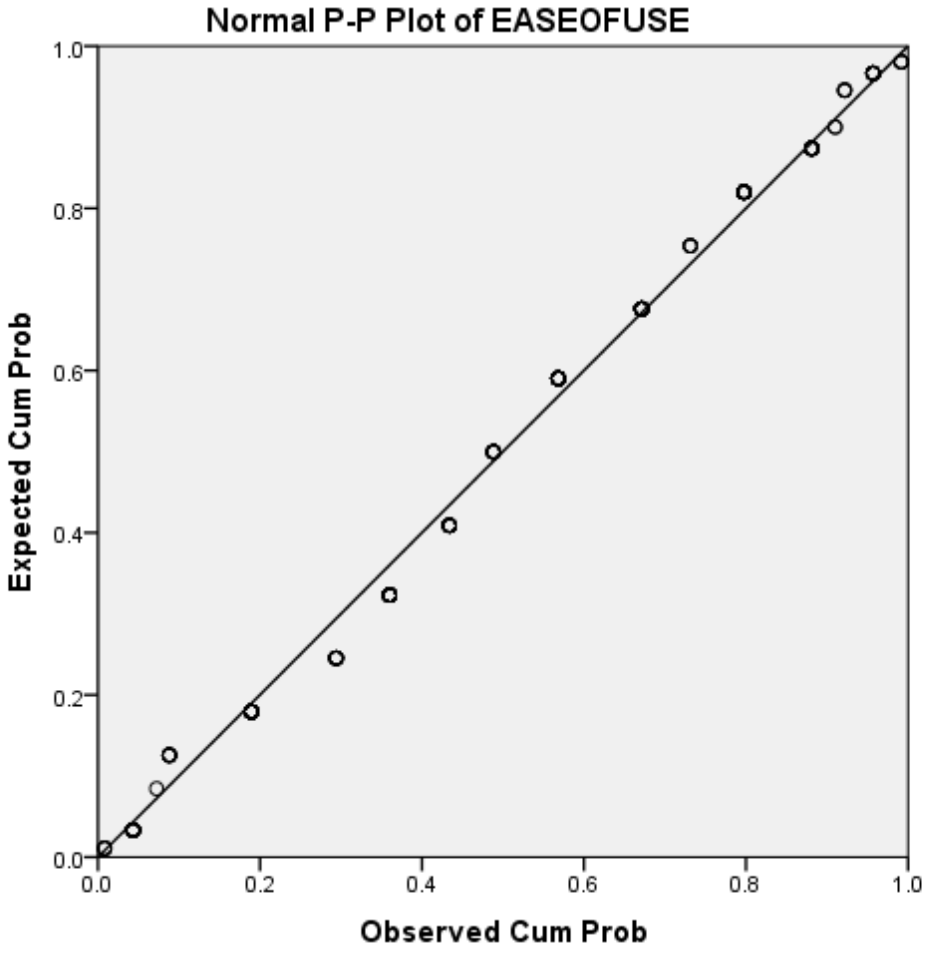
- **Mean Score of "Online Application INTENTION"**

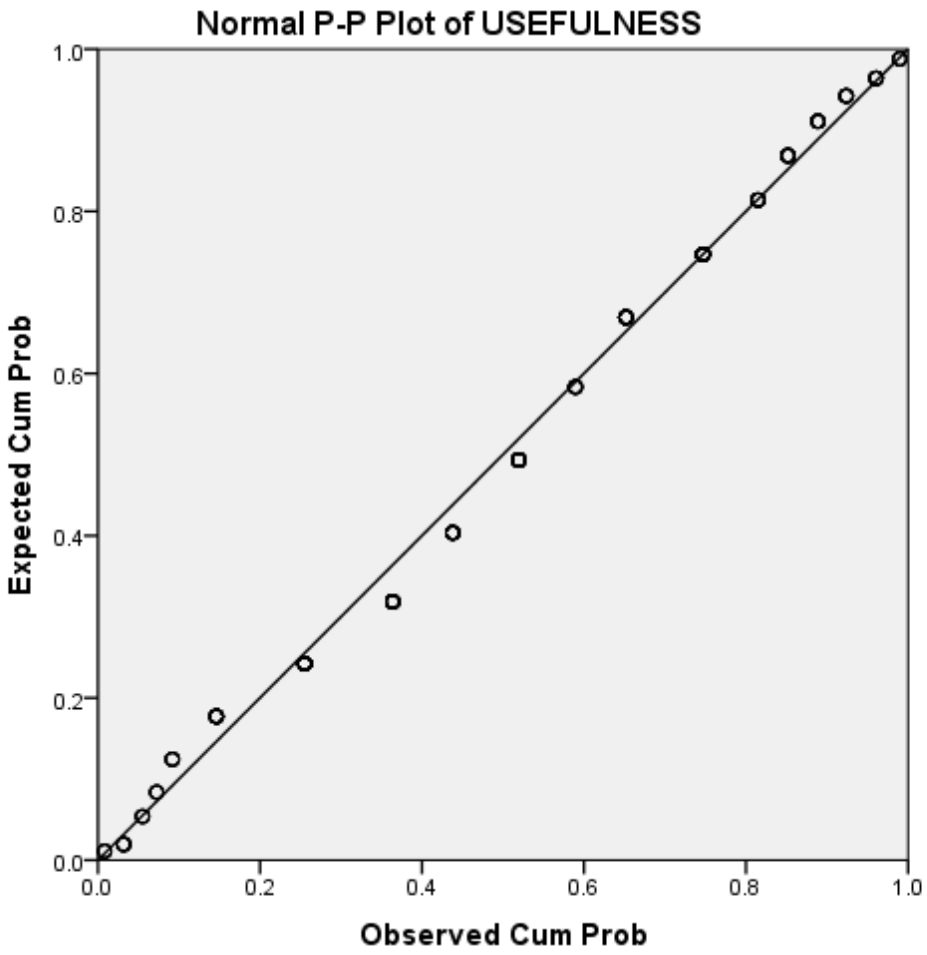
	N	Minimum	Maximum	Mean	Std. Deviation
1. I am satisfied with the online application services of the academy.	257	1.00	4.00	2.2335	.85237
2. The on line application services are adequate to meet trainees' application needs.	257	1.00	4.00	2.1323	.93018
3. I would recommend the online application option to others.	257	1.00	5.00	2.1907	1.04144
Valid N (listwise)	257				

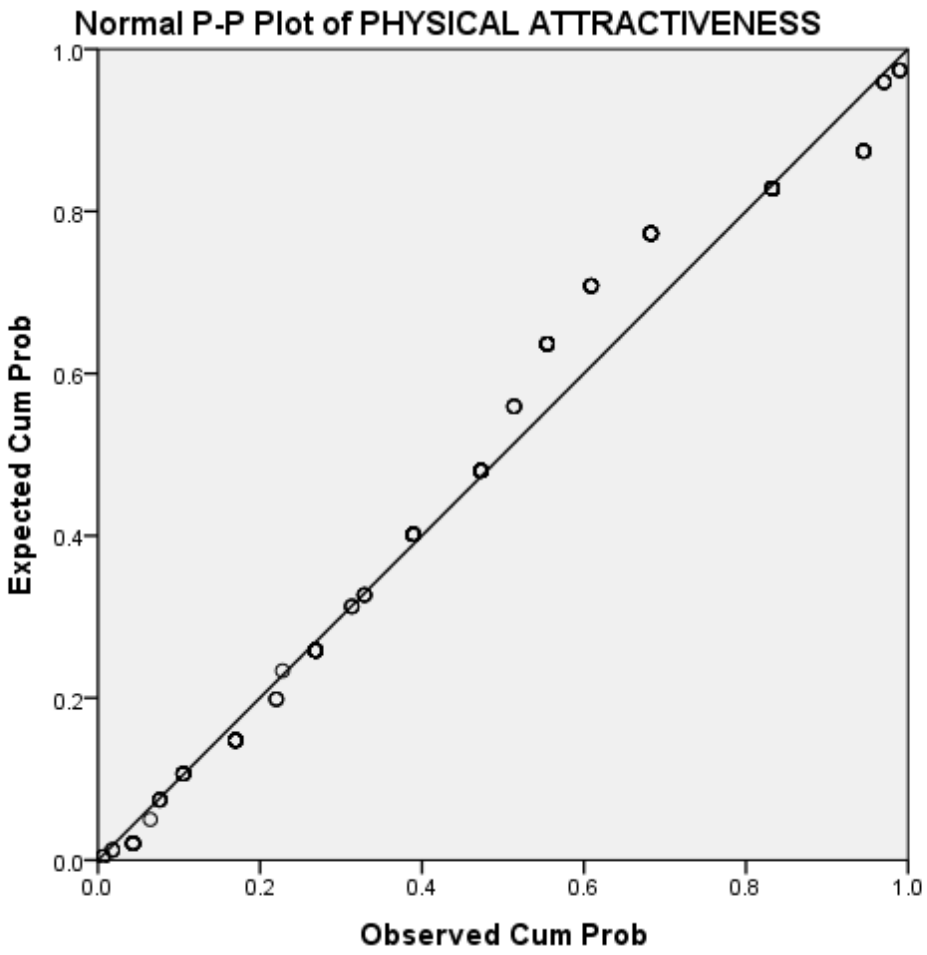
Source: Survey data (2019)

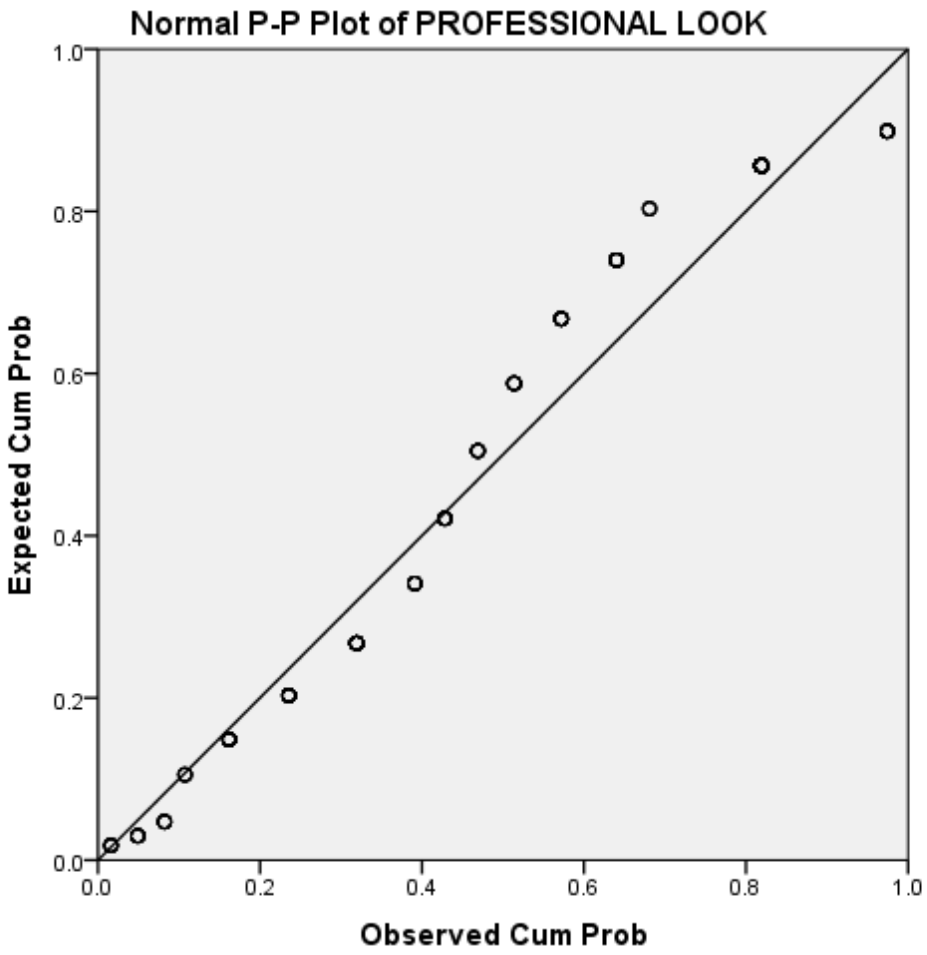
APPENDIX IV. HISTOGRAM and P-P PLOT

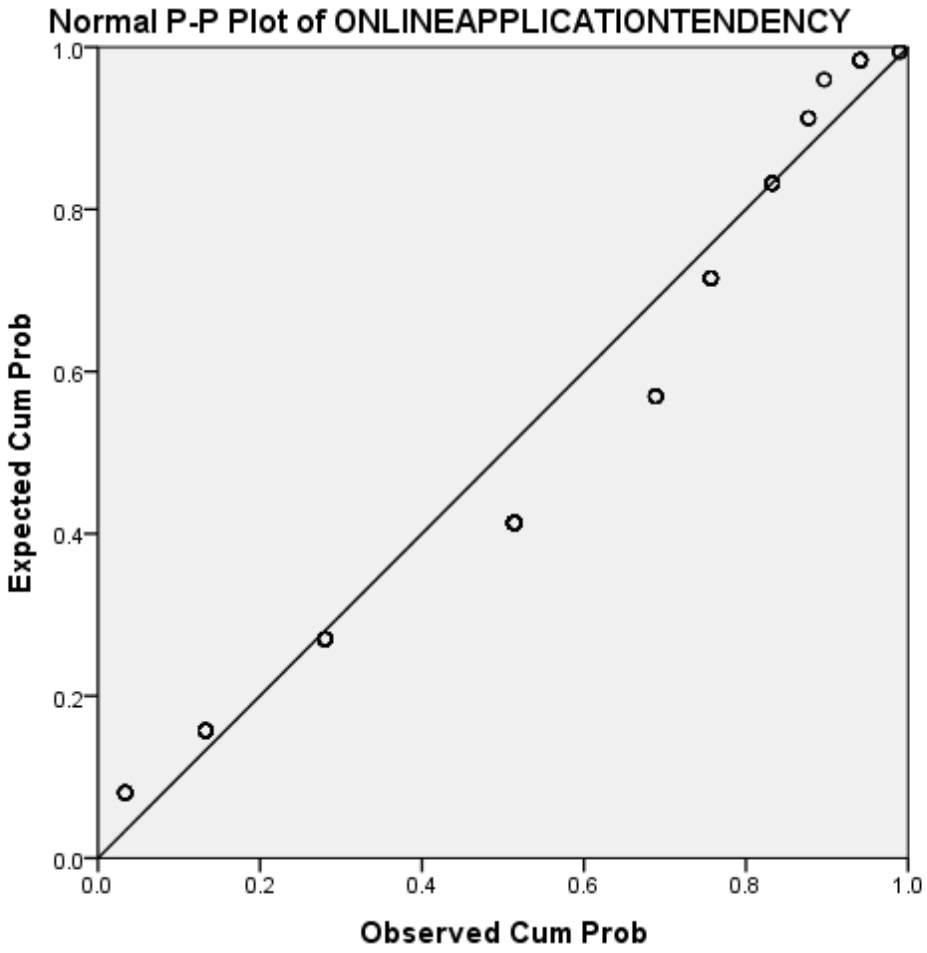


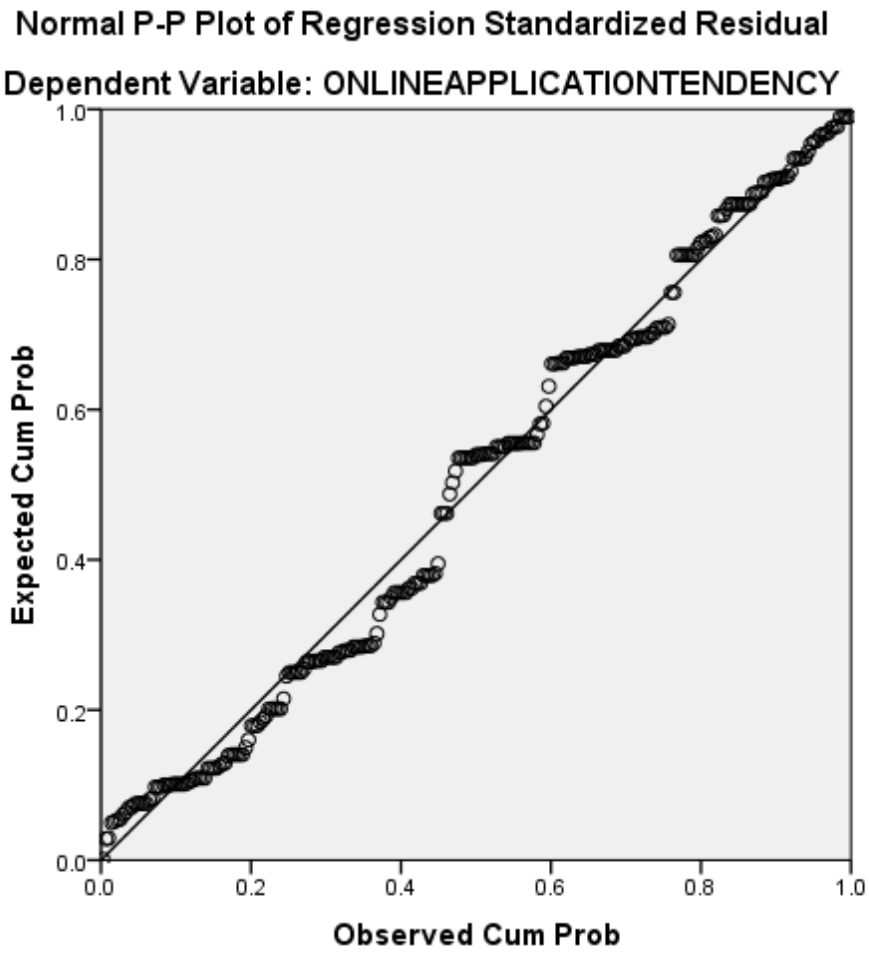

Normal P-P Plot of EASEOFUSE
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0


Normal P-P Plot of USEFULNESS
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0

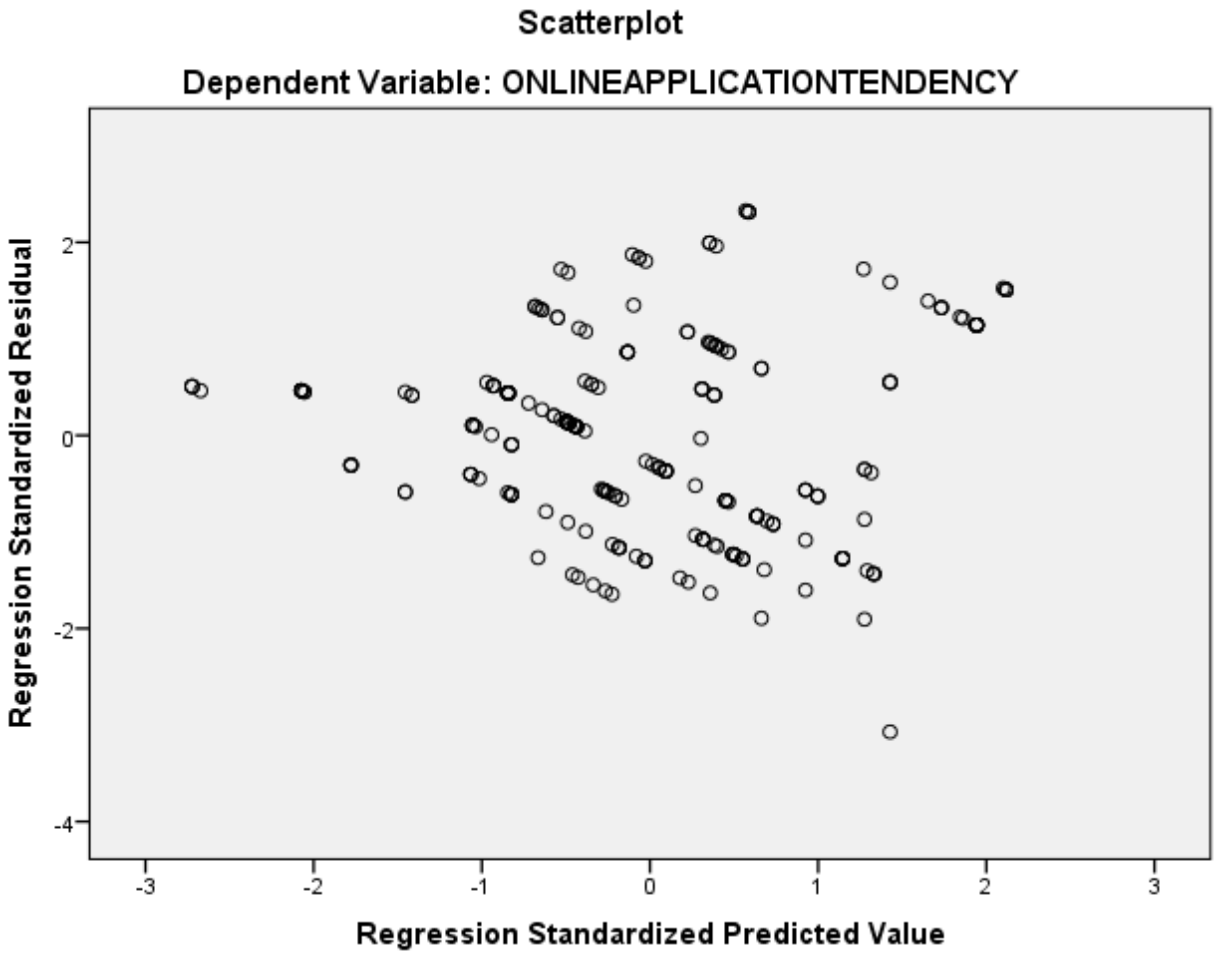

Normal P-P Plot of PHYSICAL ATTRACTIVENESS
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0


Normal P-P Plot of PROFESSIONAL LOOK
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0


Normal P-P Plot of ONLINEAPPLICATIONTENDENCY
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: ONLINEAPPLICATIONTENDENCY
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0

Appendix V- SCATTER PLOT



Appendix VI- CORRELATION TABLE

Correlations

		EASEOFUSE	USEFULNESS	PHYSICAL ATTRACTIVENESS	PROFESSIONAL LOOK	ONLINE APPLICATION INTENTION
EASE OF USE	Pearson Correlation	1	.643**	.334**	.254**	.483**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	257	257	257	257	257
USEFULNESS	Pearson Correlation	.643**	1	.374**	.435**	.631**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	257	257	257	257	257
PHYSICAL ATTRACTIVENESS	Pearson Correlation	.334**	.374**	1	.654**	.357**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	257	257	257	257	257
PROFESSIONAL LOOK	Pearson Correlation	.254**	.435**	.654**	1	.399**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	257	257	257	257	257
ONLINE APPLICATION INTENTION	Pearson Correlation	.483**	.631**	.357**	.399**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	257	257	257	257	257

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