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Determinants of e- commerce adoption in the hotel industry: the case of selected hotels in Addis Ababa

*A Thesis Submitted to School of Graduate Studies of Addis Ababa University,
College of Business and Economics in Partial Fulfillment for the Award of
Master of Business Administration in Management*

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Advisor: Meskerem Mitiku (PhD)

May, 2020

Addis Ababa

DECLARATION

I hereby declare that this work entitled: “*Determinants of e-commerce adoption in the hotel industry: the case of selected hotels in Addis Ababa*”, is the outcome of my own effort and study and that all sources of materials used for the study, to the best of my knowledge, have been duly acknowledged. I have produced it independently except for the guidance and suggestion of my research advisor.

This study has not been submitted for any degree in this university or any other university. It is offered for the partial fulfillment of Degree of Masters of Business Administration in Management.

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ECONOMICS**

Postgraduate Program Approval

This is to certify that the thesis prepared by Desalegn Kidane Basha, entitled: “*Determinants of e-commerce adoption in the hotel industry: the case of selected hotels in Addis Ababa*”, submitted in partial fulfillment of the requirements for the Degree of Masters of Business Administration in Management complies with the regulations of the university and meets the accepted standard with respect to originality and quality.

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Desalegn Kidane

LIST OF ACRONYMS

AAU: Addis Ababa University

ANOVA: Analysis of Variance

CEO: Chief Executive Officer

EAD: E-commerce Adoption

EU: European Union

FsQCA: Fuzzy-set Qualitative Comparative Analysis

ICT: Information Communication Technology

DOI: Theory of Diffusion

IDT: Innovation Diffusion

MoCT: Ministry of Culture and Tourism

MRA: Multiple Regression Analysis

PEER: Perceived Environmental E- Readiness

POER: Perceived Organizational E- Readiness

PERM: Perceived E- Readiness Model

SCCE: Secure Electronic Commerce Environment

SET: Secure Electronic Transaction

STOPE: Strategy Technology Organization People and Environment

TOE: Technological Organizational and Environmental

TAM: Technology Acceptance Model

TVET: Technical and Vocational Education and Training

UN: United Nations

UNECAF: United Nations Economic Commission for Africa

VIF: Variance Inflation Factor

WTTC: World Travel & Tourism Council

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ABSTRACT

E-commerce is one of the various internet based transaction platforms that had become the major tools for promotion, communication, enhancing services, improving sales and many more in the hotel and hospitality businesses. The main intention of this research work is to examine factors that determine e - commerce adoption in the hotel industry of Addis Ababa. The study followed quantitative method/approach and applied perceived e-readiness model (PERM). To examine determining factors of e-commerce adoption together with their extent to which these factors in the hotel industry explanatory research design is chosen to be more appropriate.

In the study, 105 star hotels in Addis Ababa were targeted and this study is conducted using the data collected from 72 of these star hotels through standard questionnaire. The various statistical analyses are done using SPSS software version 24 and MS excel 2007. The result of the study reveals that supporting industries E-Readiness, human resource, commitment, technology resource and government E-Readiness have contributed positively to e-commerce adoption in the hotel industry of Addis Ababa. Whereas the contribution of the remaining factors namely market forces e-readiness, awareness, business resource and governance are not fully confirmed by the result of the study. The other major finding is that 85.2% the variation in e-commerce adoption is explained by these nine factors collectively and the remaining 14.8% is explained by some other factors.

Although the findings of this study provides a few important investigative information regarding e-commerce adoption factors in the hotel industry of Addis Ababa, further research works should be done in order to examine the impacts of other factors and their result using the various other e-commerce adoption models. Otherwise, the hotel industry in Addis Ababa may not cope-up with the rapid and aggressive change of the emerging electronic transactions.

Key words: E-commerce Adoption, Hotel Industry, Perceived e-readiness model

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CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

The hotel business is recognized to have a significant impact in the advancement of tourism sector globally (Kankam, 2015). Tourism, which is regarded as information intensive sector, is the mostly affected sector by technology revolution and its traditional trading structures have been influenced by information communication technology (Kinfe-michael, 2019). The Internet is becoming one of the main channels of communication that can significantly influence our way of life and the ways we do our business activities. Globally, the number of Internet users has rapidly increasing. The hotel and the hospitality industry have always been among the lead to capitalize on new innovations.

Hotel and tourism are inseparable sectors (Tsegay, 2017). To boost the development of tourism and hospitality sector, a country needs to own modern hotels, lodges and other recreational centers (Tsegay, 2017). Now a days, hotel and hospitality businesses are striving to explore the potential of own internet based services and enhance their websites as part of their marketing strategy to effectively communicate with their prospective customers (Assegid and Apar, 2019).

Even though information communication technology plays a significant role in every sector and service, its function is very suitable to support the tourism and hospitality industry (Alelign, 2018).

“Technological innovations such as the Wi-Fi, remote sensing, cable and non-cable networking, telephone, computer, iPad, iPTelevision, internet, photo-video cameras, security cameras, magnetic keys, Content Management Software, file transfer applications and the print media in various forms and patterns have gigantically transformed the long-waiting and bulky traditional means of communication into an easy to “touch and embrace” micro- and nanoseconds” (Alelign, 2018, p 404).

The hotel and hospitality sector have transactions that have global nature. They are supposed to host international conferences, panels, meetings and also many more other global and multinational events that intensively utilize the above mentioned technology innovations. Therefore, the hotel industry should have to pay attention to improve the overall operation by

taking the advantages of the newly emerging innovations and technologies especially for their core processes for the best of their competitive and comparative advantages.

Addis Ababa, which is also called as the capital of Africa, is a get way to most of the incoming tourists of Ethiopia. It is also the transit center for tremendous travelers, one of the diplomatic centers of the world. Following this a number of international hotel chains like Marriot, Sheraton, Radisson blue, Ayat reGENCY are already opened and enjoying the opportunity in hotel industry of Addis Ababa since years ago (MoCT, 2019).

E-commerce has been defined in several ways depending on the context and research objective of the author (Elizabeth and Michael, 2004, p.197). In some literatures e-business, e-commerce and e-marketing are used interchangeably. In some cases e-commerce and e-marketing are considered as a subsets of e-business. For the sake of this research work, we take in the meaning of e-commerce as the process of selling, buying, transferring, or exchanging products, services, and information through the Internet platform (Turban, Outland, King, Lee, Liang, & Turban, 2018).

Currently, the usage of the internet platforms for marketing activities like promoting and improving sales in the hotel businesses is rapidly increasing. Together with the growth of internet application as precursor to e-commerce adoption, 98% of Graded hotel businesses in Ethiopia have made an attempt to use web based platforms as one of their marketing strategy to pursue a competitive advantage and have embarked on the first step towards delivering an attractive customer service (Assegid and Apar, 2019). There is a high likelihood that the use of the Internet to create a conducive and cost effective communication channel between customers, partners and companies. It is also increase the number of customers and effectiveness of services and communication. Agag and El-Masry(2016), Bilghan and Bujisic(2015), Sigala (2018) and (Bigne&Dercop, 2019)as cited by (Assegid and Apar, 2019).

There are researches conducted in the theme of e commerce adoption locally and relatively various researches conducted across the globe. We can find a few research works conducted in the area of e-commerce adoption at macro level in Ethiopia as well as at secretarial levels like: at banks, insurances, small and micro enterprises (SMEs), supermarkets and tour operators. Assegid and Apar (2019) have investigated the overview of e-marketing adoption in tourism businesses of Ethiopia focusing on e-marketing implementation modalities. They identified the

acceptance; reutilization and diffusion of e-marketing were lagging behind. This research considered the general overview of tourism businesses of Ethiopia.

Tesfahun (2019) has also investigated factors affecting e-marketing adoption on Ethiopian supermarkets. He applied Technology, Organization and Environment (TOE) model and he identified five factors affecting the adoption of e-marketing in Ethiopia. Nega (2019), Ayana (2014) and Fikru (2019) have also investigated the factors affecting e-commerce adoption in the banking sector of Ethiopia following different theoretical models. Nega (2019) and Ayana (2014) were apply Technology, Organization and Environment (TOE) model while and Fikru, (2019) was apply Technology Acceptance Model (TAM) and Innovation Diffusion Theory (IDT). Kinfemichael, (2019) has also investigated factors that affect e-commerce adoption in tour operators applying Technology Acceptance Model (TAM), innovation diffusion and e-readiness theories. Some other research works are also briefly reviewed here in chapter two below.

This research has considered those factors that affect e-commerce adoption in the hotel industry of Addis Ababa applying Perceived E-readiness Model. To the best of the researcher's knowledge, no research is conducted in e-commerce adoption in Ethiopia at large as well Addis Ababa with the special focus giving for the hotel industry. This research work is original by considering e-commerce adoption in the hotel industry of Ethiopia in general and Addis Ababa city hotel industry in particular. This research is believed to contribute to the body of knowledge by identifying the influencing factors of e-commerce adoption in the hotel industry developing and a model that predict the impact of this factors to the industry which help to visualize the future master plan regarding e-commerce adoption.

1.2. Problem Statement and Justification

As UNECA (2015) report, The Growth and Transformation Plan of Ethiopia (2015 to 2025) gives significant attention to the contribution of tourism to the overall development. Following the plan, Ethiopia records biggest growth in world Travel & Tourism. For instance, Ethiopia's Travel & Tourism economy grew by 48.6% in 2018, the largest of any country in the world (WTTC, 2019). As (WTTC, 2019) report, in 2018, Travel & Tourism contributed BIRR 202 billion US\$7.4 billion to the country's economy, an increase of BIRR 59 billion(US\$2.2bn) on 2017.

The sector now represents 9.4% of Ethiopia's total economy. Ethiopia now accounts for one in every eleven dollars in the entire economy and one in 12 of all jobs from the tourism and hospitality sector (WTTC, 2019). In 2017, number of arrivals for Ethiopia was 933,000. Between 1998 and 2017, number of arrivals of Ethiopia grew substantially from 112,000 to 933,000. In the same year, tourism expenditures for Ethiopia were 363 million US dollars.

This growth in number of arrival and tourism expenditure is a great opportunity to the hotel industry. The hotel industry should focus on the ways customers are effectively communicated in seeking information and channels that enhance maximum possible return on investment. Moreover, they should plan to cope with the growth so that this promising result of tourism master plan gets them farther to their success. Information flow amongst hospitality, travel and leisure industries needs to be supported electronic channels of communication. However, adoption of electronic channels in these industries in Ethiopia lags behind.

Studies by different researches show various factors contribute for the e-commerce adoption to lag behind in the tourism and hospitality sector (Demeke and Olden, 2012; Demeke, Olden and Nocera, 2016). Assegid and Apar argue that the technopolitics of the country in general and the monopolistic control of the telecom sector in particular as the one that undermine the adoption of e-marketing in the country (Assegid. and Apar, 2019).

In spite of the fact that hotel industry take the lead in the adoption of ICT and the internet of to improve management, the diffusion of e-commerce has evidently remained at the infant stage in this businesses in Ethiopia. When we realized the adopters' categories, the majority of these firms adopted the new technology between 1-5 years ago and a few of them have adopted it before 10 years ago. But the average age of adoption was 2-3 years. Perhaps this age was highly

palatable with the global acceleration of the internet, and with the development of WIFI, Web.2, smart phone and other social networking (Assegid and Apar, 2019).

In Ethiopia, the acceptance and diffusion of e-commerce were lagging behind not only because of the monopolistic control of the telecom sector. There are also other factors like, IT infrastructure, Owners and/or managers IT knowledge, governmental support, organizational competency, perceived benefits, perceived compatibility, perceived complexity, market e-readiness, supporting industry and government e-readiness among others (Kinfemichael, 2019; Fikru, 2019). Therefore, it is important to check out how the factors that will impact the adoption of e-commerce in the industry of Addis Ababa

This research work, therefore, is desired to investigate determining factors that affect e-commerce adoption in the hotel industry of Addis Ababa particularly the hotel industry of Addis Ababa using Perceived E-Readiness Model (PERM) from the hotel businesses' perspective.

1.3. Research Questions

This research work is intended to answer the following questions.

1. What are the factors affecting the adoption of e-commerce in the hotel industry of Addis Ababa?
2. To what extent do these factors affect adoption of e-commerce in the hotel industry of Addis Ababa?
3. Which factors are the driving factors and which are inhibiting factors?

1.4. Objectives of the Study

The following objectives had been targeted to achieve in this research work.

1.4.1 General Objective

The general objective of this research is to examine the factors that determine the adoption of e-commerce in the hotel industry of Addis Ababa.

1.4.2 Specific Objectives

The specific objectives of the research are:

- To identify the factors affecting the adoption of e-commerce in the hotel industry of Addis Ababa
- To examine the extent of these factors in affecting adoption of e-commerce in the hotel industry of Addis Ababa.
- To differentiate those factors that drive and those factors that inhibit.

1.5. Scope of the Study

There are three broad categories of hotels in the perspective of ministry of culture and tourism. The first category is those hotels that are graded from star five to star one in their descending order of standard fulfillment. The next category is those that can be graded with their current standard but not graded so far. The remaining hotels categorize under hotels which cannot be graded in their current standards. The first category of hotels are currently 78 in number. The second category includes some 27 hotels. The number of the third category is not clearly registered under (MoCT, 2019).

The scope of this research work had been limited to the first two categories. They are currently 105 in number. The survey had been conducted in these 105 hotels that are found Addis Ababa city administration. The significance of these hotels for the tourism industry is supposed to be more important than the third category. This significance and the scarcity of time to cover all the three categories are the reasons to be limited to the first two categories.

1.6. Significance of the Study

The output of this study can benefit all the stakeholders compounded around hospitality industry in general and the hotel industry in particular. These include: hotel customers and partners, tourists and tour operators, government, those that invest or will invest in the hospitality industry, employees in the hotel industry, hotel managers at different levels and the country at large will benefit from this study.

1.7. Limitations

Due to the declaration of emergency in connection with the spread of COVID 19 pandemic, collecting data through interview and focus group discussion had become impossible. The busy schedule of hotel owners and hotel managers together with the fear of personal contact due to the

pandemic was made data collection more challenging. Therefore, this research work was done based on the standard questionnaires only.

1.8. Organization of the Study

The paper is organized into five chapters. In the first chapter, the background, statement of the problem and justification, the objectives of the study, the scope limitations and organization of the thesis are presented.

The second chapter goes through the review of related literatures focusing on concepts of transaction through internet, meanings of key terms used interchangeably and controversial, e-commerce adoption theories and models, types of e-commerce and empirical review. Based on the review, factors identification, variable definitions, research modeling and conceptual model development are included in this chapter.

The third chapter is dedicated to methodological issues. In this part, the research design, the target population, the sample size, the sampling technique, data collection instruments, data analyzing statistical tools and techniques, data interpreting mechanisms and ethical considerations are presented.

The fourth chapter deals with the data analysis and discussion of results. Rate of respondents, demographic data of respondents, reliability analysis of data, descriptive statistics, inferential statistics and their interpretation, development and interpretation of regression equation, model prediction and hypothesis testing are included in this chapter.

Finally, summery of findings, concluding remarks and recommendations are heighted in the fifth chapter.

CHAPTER TWO

LITRETURE REVIEW

2.1. Introduction

This section review relevant literature related to the subject matter. Initially, the concepts and definitions of e-business, e-commerce, e-marketing and mobile marketing are reviewed. Next review explains e-commerce adoption, theories and models which is followed by benefits and challenges of ecommerce adoption. Then, review of e-commerce adoption in the hotel industry of some African countries and finally, a brief description of the hotel industry in Addis Ababan are presented. At the end, review of factors affecting e-commerce adoption and hypothesis development for this study is included.

2.2. Concepts and Definitions of E-Commerce, E-Business, E-Marketing and Mobile Marketing

The wide range of business activities related to e-commerce brought about a range of other new terms and phrases to describe the internet phenomenon in business sectors. Some of these focus on purchasing from on- line stores on the internet. Since transactions go through the Internet and the Web, the terms *I- Commerce* (Internet Commerce), and even *Web-Commerce* have been suggested are also rarely used (Semeneh, 2018). This section reviews some of the various definitions these terms and phrases presented in the literature :

2.2.1. Definitions of E-commerce

E-commerce has been defined in several ways depending on the context and research objective of the author (Elizabeth and Michael, 2004, p.197).

- “E-commerce is sharing business information, maintaining business relationships, and conducting business transactions by means of telecommunications networks” (Vladimir,1996, p. 3).
- E-commerce is the business transaction like buying selling and exchange of goods and services on the internet (Abdul, 2016, p. 19; Elizabeth and Michael, 2004, p.197).
- E-commerce is an exchange of commercial information, products and/or services. It is also comprised of main components like communication systems, data management systems and security (Yaser, 2013, p. 190).

Different international organizations also define e-commerce as follows:

- The definition of includes the use of Internet and non-Internet communication systems, such as telephone ordering, interactive television and electronic messaging (UNTCTAD, 2017).
- The EU definition for e-commerce: “e-commerce is based on the electronic processing and transmission of data. It includes diverse activities like electronic trading of goods and services, online delivery of digital content, electronic fund transfer, electronic share trading, and public procurement.” (EU(97)/157)

2.2.2. E-Business Vs E- commerce

Major literatures distinguish between the meanings of e-commerce and e- business. They argue that the variation as electronic commerce or internet commerce refers to an exchange of goods or services using the internet, and the transfer of funds and information to execute these transactions. E-commerce is typically refers to the sale physical products online, but it can also describe any commercial transaction that is going through the internet platform. Whereas E-business refers to all aspects of operating an online business, ecommerce refers specifically to the transaction of goods and services. (Rodda, 2018)

2.2.3. E-Marketing and Mobile Marketing

According to Turban et.al (2008), e-marketing is the buying, selling, transferring, or exchanging process of products, services and information based on conditions such as ease of internet and e-mail availability and the use of World Wide Web to enhance business activity. E-marketing allows enterprises to sell products, advertise, purchase supplies, bypass intermediaries, track inventory, eliminate paperwork, and share information, it helps in reducing the expenses, time, distance and space in carrying out business activities which leads to better customer service, increased efficiency, improved products and high profits for the enterprises. Through its use, many enterprises are able to gain a competitive advantage by selling their goods and services directly as well as for communicating with suppliers, customers, creditors, partners, shareholders, clients, and competitors around the world (Lee & Viehland, 2008).

According to (Thakur and Srivastava, 2013, p. 52) mobile commerce refers to “all activities related to a (potential) commercial transaction conducted through communication networks that interface with wireless devices”, whereas, Chong defined m-commerce which is “any

commercial exchange that involving the transfer of ownership or rights to use goods and services, which is initiated and/or completed by using mobile access to computer-mediated networks with the help of mobile devices” (Chong, 2013, p. 1351).

2.2.4. Types of E-commerce

E-commerce is classified based on different perspectives. A common classification of e-commerce is based on the type of the transactions and the transacting members Rania (2011) as cited by (Semeneh, 2018). The major types of e-commerce transactions are:

- Business-to-Business (B2B): e-commerce where transactions between and among organizations which covers majority of e-commerce volume.
- Business-to-Consumer (B2C): e-commerce includes retail transactions of products or services from businesses to individual shoppers. For example, the typical shopper at Amazon.com is of this type. Since the sellers are usually retailers, we also call this type e-tailing.
- Business-to-Business-to-Consumer (B2B2C): In business-to-business-to-consumer (B2B2C) e-commerce, a business (B1) sells a product to another business (B2). B2 then sells, or gives away, the product to individuals who may be B2’s own customers or employees.
- Consumer-to-Business (C2B): In consumer-to-business (C2B), people use the Internet to sell products or services to individuals and organizations. Alternatively, individuals use C2B to bid on products or services.
- Intra-business e-commerce: The intra-business e-commerce category refers to ecommerce transactions among various organizational departments and individuals.
- Business-to-Employees (B2E): The business-to-employees (B2E) category refers to the delivery of services, information, or products from organizations to their employees. A major category of employees is mobile employees such as field representatives or repair services that go to customers. E-commerce support to such employees is also called business-to-mobile employees (B2ME).
- Consumer-to-Consumer (C2C): In the consumer-to-consumer (C2C) e-commerce category individual consumers sell to or buy from other consumers. Examples of C2C include individuals selling computers, musical instruments, or personal services online.

- Collaborative Commerce: Collaborative commerce (c-commerce) refers to online activities and communications done by parties working to attain the same goal. For example, business partners may design a new product together.
- E-Government: In e-government e-commerce, a government agency buys or provides goods, services, or information from or to businesses (G2B) or from or to individual citizens (G2C). Governments can deal also with other governments (G2G).

2.2.5. E-commerce Readiness

E-readiness is defined as the capability to track value creation opportunities through the use of the Internet and represents different thing to different people in different context for different purposes Choucri et al (2003). Likewise, E-commerce readiness is defined as the measure of the availability of necessary preconditions to adopt e-commerce. Technological, Political, Social and Legal factors are some of the precondition factors that will inhibit or allow the adoption of e-commerce (Elizabeth et al, 2010). According to (Emishaw, 2017) following the robust foundations of e-readiness of a country successful e-business and e-commerce could take place

2.2.6. E-commerce Adoption

Rogers (1983) stated that adoption is the decision to make full use of the innovation; Damanpour (1991) defines adoption of innovation as the generation, development and implementation of new initiatives or activities. The adoption of innovation is a process that results in the introduction and use of a product, process, or practice that is new to the adopting organization (Kimberly and Evanisko, 1981; Damanpour and Wischnevsky, 2006). Adoption of IT is defined as ‘use of computer hardware and computer software applications to support business operations, organizational management and decision making processes’ (Thong and Yap, 1995:431). As IT is considered as technological innovation, theories based on technological innovation may rightfully apply in empirical studies on IT adoption (Mumtaz, Steve and Stephen, 2012).

“E-commerce adoption - generally refer to the process of conducting business online, spanning both Business-to-Business (B2B) and Business-to-Consumer (B2C) markets to reach global players, gaining market share for competitive advantage, utilizing telecommunication networks and internet” (Kinfemichael, 2019).

2.3. Theoretical Models of E-Commerce Adoption

This sub section reviews some of the various theoretical models presented in the literature. A number of theories and models have been developed and used to investigate the adoption of ICT. According to Sila (2013) review 25 different theories have been developed and used for factors affecting the adoption of e-marketing at organization level. Different theories and models have different focuses, and are designed to investigate different aspects of ICT adoption. Some theoretical models focused only the external environmental factors while others examined technological factors (Sila, 2013).

In the review of theoretical concepts the researcher singled out four theoretical models that mostly used by the research communities in the area of adaptation of e commerce. These theories are Technology Adoption Model (TAM), Innovation Diffusion Theory (IDT), the technology, organization, and environment (TOE) model (Tornatzky & Fleischer, 1990) and The Perceived e-Readiness Model .The aims of reviewing these theories are to know the extent of variables and other circumstances in relation to factors affecting the adoption of e-marketing at organization level

2.3.1. Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is an information systems theory. Davis (1989) explains perceived usefulness as the degree to which a person believes that using a particular system have benefit them in their job performance. In addition, perceived ease of use is the degree to which the use of the system would be free from effort. The advantage of this measure is its simplicity. The technology can have a multitude of capabilities; this is useful only if the users perceive that it is useful for their job.

However, TAM is criticized as having limited explanatory ability. It is not possible to predict using TAM if potential adopters have adopt a system based on perceived usefulness and ease of use (Chuttur 2009). Chuttur argues that TAM lacks any practical value. Furthermore, adopters of technology are influenced by many factors; some of these factors include their ability to use the technology, its affordability and its compatibility with their value and culture.

Any review of the literature and research on Information Communication Technology acceptance and usage have indicate that TAM as one of the most significant models in the study

area. Thus, have a sound theoretical contribution to the study of e-commerce adoption. Nevertheless, the model ignores the external pressure to the business of that affect the adaptation of e-commerce. So, when accepting this model it should be expanded to include some other external factors that affect e-commerce.

2.3.2. Diffusion of Innovation Theory

Innovation diffusion is defined as “the process in which an innovation is communicated through certain channels over time among the members of a social system” (Rogers 2003, p. 5). Rogers (2003) defined innovation as a perception of something new by a person or a group, which may be an object, a service, an application, or merely a notion. Innovations have attributes, perceived by potential adopters, which determine their ultimate take-up and use.

The diffusion of new technologies requires transparency and communication to enable users to adapt and gain competency in the new business model. There are five stages of the innovation diffusion process: knowledge, persuasion, decision, implementation, and confirmation. These are the elements that are related to the need for information by the users of the innovation in order to move from one stage to the next, with the creation of awareness and the provision of information being considered as very important elements for the adoption of innovation (Rogers 2003). The theory identifies the factors which facilitate or hinder the adoption of technology to assess the rate of diffusion of a technology.

Although Rogers’ (2003) model has been used widely to explain the adoption of innovation, it fails to deal with other organizational and environmental factors (Cheung & Lee 2012). Whilst Rogers’ (2003) model contains communication channels, these can be extended to the relationships between trading partners, but it falls short in capturing the dynamics of inter-organizational relationships (IOR) between trading partners (Arash & Jeffrey 2010). For example, the influence of power between the two engaging parties is not captured, although some consider this to be a major factor in the adoption of e-commerce (Arash & Jeffrey 2010).

In a critique of Rogers’ (2003) model, Lundbla (2003) provided details on the importance of inter-organisational and system-related factors and how their exclusion may limit the applicability of the model. It has also been argued that DOI theory neglects the importance of the nature of different industries and the market as factors in technology adoption (Arash & Jeffrey 2010). These researchers believe that in order to form an integrated theoretical framework for

future research on the adoption of organisational e-commerce, additional theory needs to be included.

Recent research (Parker & Castleman 2009) noted that DOI has limitations because it does not provide a lens for examining the nature of relationships between organisational and individual decision-making, and the complex social contexts (including change agents) in which firms make decisions. Considering that e-commerce is a complex organisational technology, the classical assimilation variables by themselves are unlikely to be strong predictors of adoption; thus, additional factors should be added for better outcomes (Perez *et. al* 2004). Technological change in business systems lead to innovation in a firm's business model. This is supported by the TOE model developed by Tornatzky and Fleischer (1990), which is explained below.

2.3.3. Theory of Technology-Organization-Environment Model (TOE)

An analytical technique known as the TOE model was developed by Tornatzky and Fleischer (1990). It measures three groups of organizational factors in the adoption of a firm's technological innovation. The technological in this context describes both the internal and external technologies which are relevant to the organization, and incorporates extant as well as emerging systems and takes account of the various influences on the firm (Chau& Tam 1997). The organizational context describes the characteristics of an organisation that encourage or discourage the adoption of technological innovation. Examples of these characteristics include owner's IT knowledge, cost of ICT adoption, firm size, organizational structure, executive support, human resource competencies, and available resources.

The external environment includes the firm's industry, competitive pressure, governmental support, and access to external resources. This is consistent with Porter's (1985/1998) arguments that a firm's strategic decisions depend, in part, on industry structures and members, although the framework differs from DOI theory in its inclusion of environmental factors. Baker (2012) postulated that the TOE framework would remain relevant and continue to direct research on the adoption of innovation.

On the other hand many researchers agreed that technology, organization and environment (TOE) model provide an excellent theoretical foundation for exploring information system adoption behaviour within retail businesses. For example, Mehrtens *et al.* (2001) adopt TOE framework for investigating the adoption of internet in seven retail enterprises. Lertwongsatien

and Wongpinunwatana (2003) show the suitability of the TOE model for studying the e-commerce adoption study in Thailand small businesses. Ramdani *et al.* (2009) also adopts the TOE framework for predicting the potential enterprise systems adopters in retail businesses in china. Drawing upon the empirical evidence detailed above, the TOE model is an appropriate theoretical foundation for investigating e-marketing adoption in retail businesses. The main contribution of this model is that it encourages the researcher to take into account the broader context in which the adoption takes place (Ramdani *et al.* 2009).

2.3.4. The Perceived E-Readiness Model (PERM)

The Perceived e-Readiness model (PERM) is introduced by Molla and Licker (2005b). This model was designed for e-commerce adoption by business in developing countries. The reason given by them was that businesses in less developed countries encounter different problems to businesses in developed countries. They are different in both the organizational and environmental context. Hence, in regard to e-commerce adoption, it is not suitable if a model that was originally developed based on business in developed countries is applied for business in developing countries.

In this model, e-commerce adoption by business in developing countries is influenced by two factors, which are *Perceived Organizational e-Readiness (POER)* and *Perceived External e-Readiness (PEER)*. In this case, POER refers to:

- **innovation imperative attributes** - the organization's perception, comprehension, and projection of e-commerce and its potential benefits and risk);
- **managerial imperative attributes** - the commitment of its managers;
- **organization imperative attributes** - key organizational components, such as its resources, processes and business infrastructure ()” (Molla and Licker, 2005b: 879).

Then, PEER refers to assessment and evaluation conducted by the organization in regard to relevant external environmental aspects, which are known as “environmental imperative attributes”.

“Government e-readiness”, “market forces e-readiness”, and “support industries e-readiness” are identified as PEER elements. Molla and Licker (2005b) claim that this model can help business

in developing countries to measure and manage risk regarding to e-commerce adoption activities.

2.4. Factors Influencing Ecommerce Adoption

Perceived E-Readiness Model (PERM) factors for e-commerce adoption, according to Molla and Licker's, can be classified generally into two groups:

Perceived Environmental E-Readiness (PEER), which is external to the organization under consideration, and Perceived Organizational E-Readiness (POER), which is internal to the organization under consideration. In PERM there are four major e-readiness factors known as innovational, managerial, organizational, and environmental; these e-readiness factors classified into POER and PEER. POER by itself has six components: awareness (innovation context), commitment (managerial context), resources (organizational context) and governance (organizational context).

- Awareness: - refers to an organization's perception, comprehension, and projection of the benefits and risks of e-commerce.
- Resources: - refers to the level of **human, technological, and business** resources of a firm. Resource provision affects the capacity of an organization to respond to the challenges and opportunities in e-commerce adoption.
- Commitment: - refers to support by key members of the organization, especially its CEO, to champion e-commerce. Top management's commitment to the implementation of ecommerce is a critical success factor.
- Governance: - refers to the strategic, tactical, and operational model that defines the way organizations structure to establish objectives, allocate resources and make decisions.

PEER refers to the readiness of government, support-giving agencies, and market forces for ecommerce adoption (Molla and Licker, 2005).

- Government E-Readiness: - A government can encourage a country's private sectors in the process of e-commerce adoption through provision of supportive conducive infrastructure, enabling directives, rules, and regulatory frameworks.
- Market Forces E-Readiness: - refers to the usage of e-commerce by competitors, customers, suppliers, and other business partners.

- E- Readiness of Supporting Industries: - refers to the availability and affordability of services from the industries like: the IT industry, the financial sector and transportation facilities. (Molla &Licker, 2005).

2.5. Research Model

This research is concerned to investigate the factors that determine adoption of e-commerce in the hotel industry of Addis Ababa. It tries to answer the question “What factors determine the adoption of ecommerce in the hotel industry of Addis Ababa?” Based on Molla and Licker’s Perceived E-Readiness Model (PERM) (2005), an integrated model of ecommerce adoption in the hotel industry of Addis Ababa is developed.

2.5.1. Independent Variables

In this research, there are two groups of independent variables. The first groups of variables are those that are categorized under internal factors affecting the adoption of ecommerce in the hotel Industry of Addis Ababa (POER). This includes: Awareness, Human Resources, Business Resources, Technology Resources, Commitment, and Governance. The second group of variables is those that are categorized under external factors affecting the adoption of ecommerce in the hotel Industry of Addis Ababa to the organization (PEER). This includes: Government eReadiness, Market Forces eReadiness and Support Industries eReadiness. Meanings of each of the variables are discussed above in sub topic 2.4.

In line with Molla and Licker (2005), we hypothesize the following two hypotheses:

H1: *Perceived Organizational E-Readiness* positively affects the adoption of ecommerce in the hotel industry of Addis Ababa.

H2: *Perceived External E-Readiness* positively affects the adoption of ecommerce in the hotel industry of Addis Ababa.

Taking each variable in to Consideration and based on the literature review the above two hypotheses are expand to the following nine empirically supported hypotheses.

Table 2.1 : Hypotheses of the Study

Hypothesis H1:	Awareness contributes significantly to the adoption of e-commerce in the hotel industry of Addis Ababa.
Hypothesis H2:	Human resources contribute significantly to the adoption of e-commerce in the hotel industry of Addis Ababa.
Hypothesis H3:	Business resources contribute significantly to the adoption of e-commerce in the hotel industry of Addis Ababa.
Hypothesis H4:	Technological resources contribute significantly to the adoption of e-commerce in the hotel industry of Addis Ababa.
Hypothesis H5:	Commitment contributes significantly to the adoption of e-commerce in the hotel industry of Addis Ababa.
Hypothesis H6:	Governance contributes significantly to the adoption of e-commerce in the hotel industry of Addis Ababa.
Hypothesis H7:	Government e-readiness contributes significantly to the adoption of e-commerce in the hotel industry of Addis Ababa.
Hypothesis H8:	Market forces e-readiness contributes significantly to the adoption of e-commerce in the hotel industry of Addis Ababa.
Hypothesis H9:	Support industries e-readiness contributes significantly to the adoption of e-commerce in the hotel industry of Addis Ababa.

2.5.2. Dependent Variable

The dependent variable in this research is e-commerce adoption. It was measured by using two indicators. The first indicator relates to the level of e-commerce adoption measured by using an e-commerce capability indicator. The indicator is based on the growth model. There are six level of e-commerce adoption, those are:

- not connected to internet and no e-mail which is level zero;
- connected to the internet with e-mail but no web site;
- static website;
- interactive website presence;
- transitive web site presence;
- internally and externally integrated web site presence Molla and Licker (2004) and Molla and Heeks (2007)

The second indicator relates to scope of e-commerce use. The scope of e-commerce use refers to “the extent of e-commerce use for a number of different activities in the value chain, from advertising and marketing to sales, procurement, service and support, data exchange with customers and suppliers, and integration of business process” (Gibbs and Kraemer, 2004, p. 125). In this measurement, respondents are asked about whether they use e-commerce technology in such activities or not.

2.6. Empirical Review of Literature

According to Julián, Ángel and Félix (2016), e-commerce adoption factors are classified into two. These are driving or motivational factors and inhibitors or barriers. The study considers ten driving or motivational factors and five inhibitors or barriers from previous studies. The driving or motivational factors are Convenience (General convenience, Time saving, Effort saving, Flexibility, Payment methods), Economic (Low prices, Comparison shopping), Information seeking, Variety, Social (Social, Antisocial), Customization, Impulsiveness, Fidelity, Online exclusive, Hedonic (Enjoyment, Adventure, Mood) and inhibitors or barriers are Risk (Payment, Personal information, Product), Trust (Vendors, Internet channel), Physical contact, Delivery, Fidelity.

Their study further reduces the number of motivators to seven; namely, hedonic, product variety, product customization, convenience, price, lack of sociality, and Internet exclusive availability and 3 barriers namely, in-person, risk, and delivery. And; the study has proposed using different analytical tool than the popular multiple regression analysis to study relationship between variables.

According to Ayana (2014), factors that affect adoption of E-commerce in the Ethiopian banking industry are security risk, lack of trust, lack of legal and regulatory framework, Lack of ICT infrastructure and absence of competition between local and foreign banks.

The study has suggested a series of measures which could be taken by the banking industry and by government to address various challenges identified. These measures include: Establishing a clear set of legal framework on the use of technology in banking industry, supporting banking industry by investing on ICT infrastructure and banks needs to be focused on technological innovation competition rather than traditional bases of retail bank competition.

The next five are graduate theses very closely related to this research work. Most of these research works consider adoption of e-commerce in banking business sectors one of in the tour operation. These researchers have been used different theoretical models for their analysis and investigation. Most of them follow Technological, organizational and Environmental (TOE) model and Percieved E-readiness Model.

According to Tesfahun (2019) factors affecting the adoption of electronic marketing on Ethiopian Supermarkets include competitive pressure, IT infrastructure, Owners or managers IT knowledge and governmental support. Among these, competitive pressure is proved to be the most significant factor. Adoption cost is identified as inhibiting factor in his study.

Kinfemichael (2019) investigate nine factors affecting the adoption of e-commerce in tour operators in Ethiopia. This are top management support, organizational competency, IT capacity, perceived benefits, perceived compatibility, perceived complexity, market e-readiness, supporting industry and government e-readiness. He highlights Market e-readiness, IT Capability and Perceived Benefit as the most driving motivating factors and lists all the remaining variables in their order of influence in descending order as Market E-Readiness, IT Capability, Perceived Benefit, Supporting industries, Organizational Competency, Government E-Readiness, Perceived Compatibility, Top management support and Perceived Complexity (Kinfemichael, 2019).

Emishaw (2017) identifies organizational support, organizational readiness, ease of use, usefulness, entrepreneurial orientation and perception of decision makers as factors affecting e-commerce adoption in the banking sector. He has proposed a framework for e-commerce adoption in the banking industry. The scope of his study is constrained only to the banking industry and he tried to assess only organization related e-readiness factors. He had also

proposed the need for additional study, considering all the factors (organizational, environmental and technological), and other industries (Emishaw, 2017).

According to Nega (2019), factors affecting the adoption of e-commerce in banking industry in Ethiopia identified and investigated. This factor include IT Capability, Perceived Benefit, Perceived Complexity, Organizational Competence, Supporting Industries and Government Readiness. The major finding of this study had indicated that with the exception of perceived complexity, all other factors have significant influence on the adoption of e-commerce (Nega, 2019).

According to Fikru (2019), the factors influencing the usage of E-banking in Ethiopia include perceived usefulness, perceived ease of use, compatibility, complexity, trainability, observebility, perceived risk or trust, culture, awareness, infrastructure, legal framework and government support and usage. The study found out that the above factors have their own effect on the development of E-banking but infrastructure and compatibility have more weight. He has proposed farther studies in the area and the need for one national platform in order to develop E-banking, e-commerce, e-marketing as well as Digital Economy (Fikru, 2019).

2.7. Ecommerce in Ethiopia

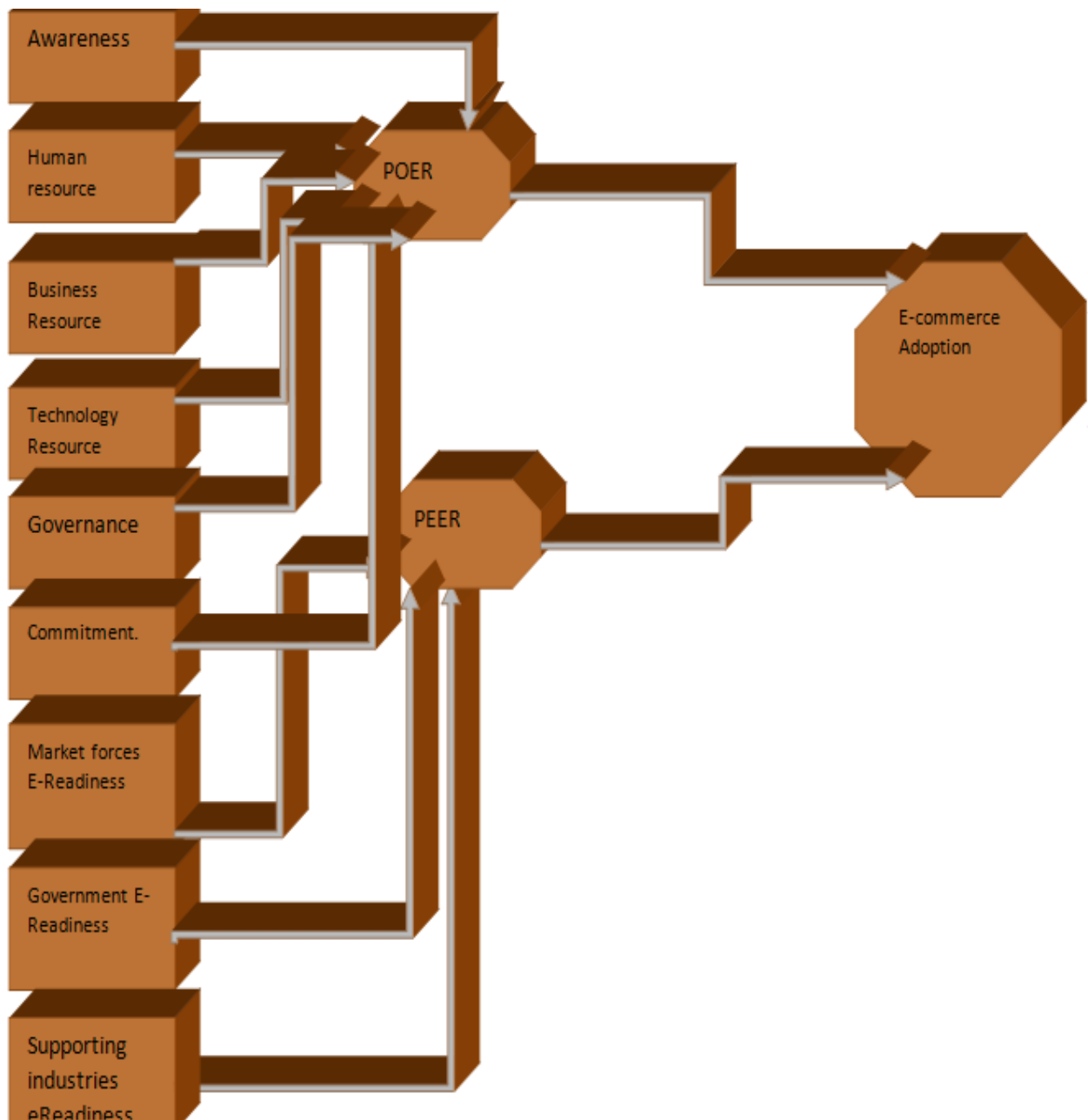
In Ethiopia, e-commerce implementation is dependent on the efficiency of the single state owned telecommunication facility and ICT infrastructure, expansion of ICT's use and diffusion, quality of service, cost of infrastructure usage, secure electronic payment system, efficient regulatory framework, widespread awareness and literacy among the public (Emishaw, 2017).

“Despite the very high rate of growth in internet usage in Ethiopia, the use and adoption of E-commerce services remain low. The E commerce development in Ethiopia is at its starting stage. Currently E-commerce in Ethiopia can be considered as accessing the internet to choose products over the web. Hence, only a customer can see the items and pay in person to actually buy the product. With the advent of new E-payment methods and which serve as a catalyst, E-commerce is on the edge to draw thousands of new users with in Ethiopia. review of the existing literature showed that e-commerce has been widely researched in the developed and emerging economies; however, there is not much of research for the developing Ethiopian economy” Rodda (2018).

2.8. Conceptual Model Development

Based on Molla and Licker's Perceived E-Readiness Model (PERM) and empirical evidences, the following conceptual framework has been developed.

Figure 2.1: Conceptual Framework of the Study



Source: Adopted from Molla, & Licker (2005)

CHAPTER THREE

METHODOLOGY OF THE STUDY

3.1 Introduction

In this chapter, the research design, the target population, the sample size, the sampling technique, data collection instruments, data analyzing statistical tools and techniques, data interpreting mechanisms and ethical considerations are presented.

3.2. Research Design

The research design is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data. Hypothesis-testing research studies are those where the researcher tests the hypotheses of causal relationships between variables. Such studies require procedures that will not only reduce bias and increase reliability, but will permit drawing inferences about causality (Kothari, 2004).

The main intention of this research work is to examine the factors that influence the adoption of e-commerce in the hotel and hospitality industry of Addis Ababa. In order to achieve the purpose of the study successfully, a quantitative method is used. To examine determining factors of e-commerce adoption together with their extent to which these factors affect adoption of e-commerce in the hotel industry of Addis Ababa explanatory research design is chosen. As this research is an extension of perceived E-readiness Model (PERM) in new area of study, employing explanatory case study is supposed to be more appropriate (Kothari, 2004).

3.3. Target Population of the Study

As per the MoCT (2019) report, there were 78 star graded hotels and 27 hotels which can be graded in their status of the time. Target population of the study was 105 hotels in Addis Ababa and the focus of this study was managers, owners, and/or their delegates. The justification to choose managers and owner is because the level of analysis of this study is organizational level analysis. Moreover, the items of data collecting instrument are designed in such a way that they collect organizational level data.

3.4. Sample Size of the Study

The total population of the study was 105. The sample was calculated from the target population at the confidential interval of 95% letting a marginal error of 5% and a response distribution of

50% using an online calculator at www.Raosoft.com. This online calculator is based on the formula below.

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

Where n is the sample size, e is the margin of error and N is the population size. Based on the numbers selected above, the sample size n and margin of error e and the population size N the sample size had been $105 / (1 + (105)(0.05)(0.05)) = 83$. Here below is the screen shoot of the online result.

Figure 3.1: The Online Calculated Result of Sample Size

The screenshot shows the Raosoft online calculator interface. It features a blue header with the Raosoft logo and name. Below the header, there are four input fields with corresponding labels and instructions:

- What margin of error can you accept?** (5% is a common choice) - Input: 5%
- What confidence level do you need?** (Typical choices are 90%, 95%, or 99%) - Input: 95%
- What is the population size?** (If you don't know, use 20000) - Input: 105
- What is the response distribution?** (Leave this as 50%) - Input: 50%

At the bottom, a summary row states: **Your recommended sample size is 83**.

Source: www.Raosoft.com (as retrieved on Feb. 27, 2020).

3.5. Sampling Technique

Sample was supposed to be the representative of the whole and generalization is made based up on the result found using the analysis of data collected from the sample. In order to include all grades of hotels and those that are not graded so far, stratified random sampling technique was implemented to the study. There were six stratum. These are five star, four star, three star, two star, one star and non graded hotels. Samples were selected proportionally randomly from these six stratum as follows:

Table 3.1:

The Proportional Sample Size

Stratum	No. of hotels(n)	Sample size	Proportional sample size (n/Total)*83
Five Star	7	83	5/6
Four Star	14	83	11
Three Star	29	83	23
Two Star	21	83	16/17
One Star	7	83	5/6
Non graded	27	83	21
Total	105	83	83

Source: MoCT (2019) for the no. of hotels

3.6. Data Collection

Standard questionnaires were developed based on the previous study of Molla, & Licker (2005). The instrument is repeatedly tested and used in the area ecommerce adoption in developing countries. The reliability and validity test is conducted frequently. It followed a five point Likert scale questionnaire ranging from strongly disagree, disagree, neutral, agree and strongly agree. The questionnaires were distributed to managers, owners, and/or their delegates. As the

level of analysis of this study is organizational level analysis, they were supposed to be more appropriate in answering items of data collecting instrument which are designed in such a way that they could collect organizational level data.

A reliability test was conducted to measure the internal consistency of the data items even though previous studies show the reliability of the items. As Molla, & Licker (2005), the number of items included and the reliability test result of the items using Cronbachalph is shown in the table below.

Table 3.2:

Reliability Test Using Cronbach alpha Values of Previous Researchers

Variable	No. of Items	Cronbach Alpha	Overall Cronbach Alpha
Awareness	7	0.89	POER 0.93 33 Items
Human Resource	2	0.87	
Business Resource	6	0.81	
Technology Resource	5	0.85	
Commitment	5	0.88	
Governance	8	0.91	
Market Forces eReadiness	2	0.78	PEER 0.79 10 Items
Government eReadiness	4	0.77	
Supporting Industries eReadiness	4	0.75	

Source: adopted from Molla, & Licker (2005)

3.7. Software Tools and Techniques

The freely accessed SPSS version 24 and Ms Office were used for data analysis. These tools were used for their free availability, ease of use, ability to process the required data, ease of learning and their minimal hardware requirement.

3.8. Data Analysis and Interpretation

Quantitative data collected through questioner was analyzed through descriptive and inferential statistics. The descriptive statistics include: Mean, Standard deviation and variance and the inferential statistics include: correlation, and multiple linear regression functions. These functions are widely used for analysis of relationship between dependent and independent variables and the later is appropriate to hypothesis testing.

3.9. Ethical Consideration

The legal and moral principles were consideration seriously. For this research work, the respondents were briefed about the research topic and they were clearly identified the research. The study had considered the voluntary consent of the respondents while collecting data. Moreover, data collected from the respondents were used for academic research purpose only and cannot be revealed to the third party. This study had paid attention to avoided plagiarism practices and properly recognized the previous studies. The complete information about the previous writers will be mentioned both in the text and reference list in accordance with American Psychological Association (APA) guide line.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSIONS

4.1. Introduction

In the previous two chapters a detailed literature review, research methodology, theoretical model selection, drawing of conceptual frame work and hypothesis formulation is included. This chapter is dedicated to data analysis and discussion of findings.

4.2. Response Rate

Out of the 81 distributed questionnaires 74 questioners had been returned. This represents 91.35% return rate. During data editing, the collected questionnaires was checked for errors and two incomplete questionnaires were identified and discarded. Therefore, 72 were found to be valid and used for the final analysis. So, the analysis was made based on 72 successfully responded questionnaires and done in line with the research questions and objectives set in the proposal and it is presented in the form of descriptive and inferential statistics.

Table 4.1: Response Rate

<u>Target Population</u>	<u>105</u>	
Questioners	Response Rate	
	Number	Percentage
Recommended Sample Size	83	100%
Distributed	81	97.6%
Fail to distributed	2	2.4%
Collected	74	89.2%
<u>Appropriately filled</u>	<u>72</u>	<u>86.8%</u>
Discarded	2	2.4%

4.3. Reliability Analysis

All items are responded to a Likert scale of 1-5, where 5 = Strongly agree and 1 = Strongly disagree. Cronbach's alpha is most commonly used when you want to assess the internal consistency of a questionnaire (or survey) that is made up of multiple Likert-type scales and items. Cronbach's alpha can be interpreted as a correlation coefficient, it ranges in value from 0 to 1 (Coakes and Steed, 2007). The closer value of reliability coefficient to 1.0 are better and the result of reliabilities that are less than 0.6 is considered being poor (Saunders, Lewis and Thornhill 2012).

Reliability test has been conducted to make sure the instrument used in the study is reliable. The elements under analysis are the forty four elements with the additional three e-commerce adoption measurement instrument. As we can see from table 4.2 below, The cronbach's alpha for the general instrument is found to be 0.934 and cronbach's alpha for each the two groups of variables, POER variables and PEER variables are shown in table 4.3 below. All the values have an alpha value above 0.7 which is in the acceptable range.

Table 4.2: Reliability Statistics of the General Instruments

Reliability Statistics	
Cronbach's Alpha	N of Items
0.934	47

Table 4.3: Reliability Statistics of Variables

Variable	Number of Items	Cronbach's Alpha Result (α)		
Awareness	7	0.737	POER(internal) 34 Items 0.900	Overall (General Items) 47 Items
Human resources	2	0.781		
Business resources	6	0.763		
Technological resources.	6	0.77		
Commitment	5	0.757		
Governance	8	0.714		
Government e-readiness	2	0.733	PEER(external) 10 Items 0.809	.934
Market forces e-readiness	4	0.762		
Support industries e-readiness	4	0.719		
E-commerce Adoption	3	0.716	3 Items 0.716	
Total	47			

4.4. Demographic Characteristics of the Respondent's

From the data presented in table 4.4 below, the majorities (76.4%) of the respondents were male and the remaining (23.6%) of the respondents were female. Likewise as explained in the table above, the majorities (52.8%) of the respondents were between age group of 30-40 years old followed by age group of above 40 years accounted for (26.4%) and the remaining (20.8%) were between the age of 20 and 30years.

Regarding educational level of the respondents, the above table depicts that the majority (45.8%) of the respondents were first degree holders, 29.2 % were College diploma holders and nearly (10%) of the respondents are MA/M.Sc. holders and the remaining 15 % are TVET and other special certificates. Therefore, the educational background of most respondents is appropriate to understand and answer the research questions.

Table 4.4: Demographic Information of Respondents

Demographic Variable	Value	Frequency	Percentage
Sex	Male	55	76.4
	Female	17	23.6
	Total	72	100
Age	Between 20 and 30 years	15	20,8
	Between 30 to 40 years	38	52,8
	Between 40 and 55	19	26,4
	Total	72	100,0
Level of Education	TVET Certified	9	12,5
	College Diploma	21	29,2
	First Degree	33	45,8
	Masters and Above	7	9,7
	Others	2	2,8
	Total	72	100,0
Hotel Industry Related Work Experience of Respondent	1-3 years	17	23,6
	4-5 years	24	33,3
	above 5 years	31	43,1
	Total	72	100,0
Date when the Hotel is Established	Within last five years	10	13,9
	Within last ten tears	56	77,8
	Within last fifteen years	3	4,2
	Before 20 years	3	4,2
	Total	72	100,0

Table 4.5: Current E-commerce Status of Hotels as evaluated by respondents

Current E-commerce Status of Hotels	Number	percentage
Static Web, which is publishing basic company information on the web without any interactivity	21	20,8
Interactive web presence, which is accepting queries, e-mail; and form entry from users	26	50,0
Transitive web, which is online selling and purchasing of products and services including customer service	18	25,0
Web site which integrates suppliers, customers and other support and partners' systems	7	4,2
Total	72	100,0

4.5. Descriptive Statistics

The analysis was made on one dependent variable and nine explanatory variables. The dependent variable was e-commerce adoption and the explanatory variables were awareness, human resource, business resource, technology resource, governance, commitment, market forces e-readiness, government e-readiness and supporting industries e-readiness. These factors were the most critical parts of the conceptual framework and basic research variables of this paper. For the analysis of all these variables, mean and standard deviation is used. Particularly mean value of the respondents has considered as an important indicator to the extent of each factor in determining e-commerce adoption and group mean was calculated and used.

In order to specify the relative importance of the questionnaire items and to highlight the degree of adoption of e-commerce activities and to determine the values of variables at the organizational level at hotels, an ordinal scale was developed to give meaning to the arithmetic mean. The relative importance of the items calculated according to the following formula: (The Maximum limit of the likert scale (5)–The Minimum limit the likert scale (1)) the number of required measurements (3). The result (1.33) is then added to each scale (Al-Dmour, Nweira, & Al-Dmour, 2017). Then Scale of Relative Importance of questionnaire items is given to be:

- 1 – 2.33 Low/poor
- 2.34 – 3.67 Average/moderate and

- 3.68 – 5 High.

The mean (M) and the standard deviation (SD) of the result of the descriptive statistics of items of awareness is shown in the table 4.6 below.

Table 4.6: Descriptive Statistics for the Awareness Variable

Items	Mean	SD
Our organization is aware of e-commerce implementations of our partner organizations	4,03	,750
Our organization is aware of our competitors' e-commerce and e-business implementations	4,03	,750
Our business recognizes the opportunities and threats enabled by e-commerce	4,07	,738
Our organization understands e-commerce business models that can be applicable to our business	4,00	,732
We understand the potential benefits of e-commerce to our business	3,97	,750
Our organization has thought about whether or not e-commerce has impacts on the way business is to be conducted in our industry	3,96	,759
Our organization has considered whether or not businesses in our industry that fail to adopt e-commerce and e-business would be at a competitive disadvantage	3,92	,727

The mean (M) and the standard deviation (SD) of the result of the descriptive statistics of items of human resource is shown in the table 4.7 below.

Table 4.7: Descriptive Statistics for the Human Resources Variable

Items	Mean	SD
Most of our employees are computer literate	4,03	,750
Most of our employees have unrestricted access to computers	4,08	,727

The mean (M) and the standard deviation (SD) of the result of the descriptive statistics of items of business resource is shown in the table 4.8 below.

Table 4.8: Descriptive Statistics for the Business Resources Variable

Items	Mean	SD
Our people are open and trusting with one another	3,98	,735
Communication is very open in our organization	4,02	,735
Our organization exhibits a culture of enterprise wide information sharing	4,07	,716
We have a policy that encourages grass roots e-commerce initiatives	3,95	,718
Failure can be tolerated in our organization	3,97	,727
Our organization is capable of dealing with rapid changes	3,99	,744

The mean (M) and the standard deviation (SD) of the result of the descriptive statistics of items of technology resource is shown in the table 4.9 below.

Table 4.9 Descriptive Statistics for the Technology Resources Variable

Items	Mean	SD
We have sufficient experience with network based applications	4,07	,738
We have sufficient business resources to implement e-commerce	4,06	,710
Our organization is well computerized with LAN and WAN	4,03	,750
We have high bandwidth connectivity to the Internet	4,01	,741
Our existing systems are flexible	4,04	,740
Our existing systems are customizable to our customers' needs	4,08	,746

The mean (M) and the standard deviation (SD) of the result of the descriptive statistics of items of commitment is shown in the table 4.10 below.

Table 4.10: Descriptive Statistics for the Commitment Variable

Items	Mean	SD
Our business has a clear vision on e-commerce	4,07	,738
Our vision of e-commerce activities is widely communicated and understood throughout our company	3,97	,712
Our e-commerce implementations are strategy-led	4,03	,731
All our e-commerce initiatives have champions	4,03	,731
Senior management champions our e-commerce initiatives and implementations	4,08	,727

The mean (M) and the standard deviation (SD) of the result of the descriptive statistics of items of governance is shown in the table 4.11 below.

Table 4.11 : Descriptive Statistics for the Governance Variable

Items	Mean	SD
Roles, responsibilities and accountability are clearly defined within each e-commerce initiative	4,00	,712
e-commerce accountability is extracted via on-going responsibility	4,01	,760
Decision-making authority has been clearly assigned for all e-commerce initiatives	4,01	,760
We thoroughly analyze the possible changes to be caused in our organization, suppliers, partners, and customers as a result of each e-commerce implementation	4,00	,732
We follow a systematic process for managing change issues as a result of e-commerce implementations	4,00	,751
We define a business case for each e-commerce implementation or initiative	4,04	,740
We have clearly defined metrics for assessing the impact of our e-commerce initiatives	3,99	,722
Our employees at all levels support our e-commerce initiatives	4,03	,750

The mean (M) and the standard deviation (SD) of the result of the descriptive statistics of items of market force e-readiness is shown in the table 4.12 below.

Table 4.12: Descriptive Statistics for the Market Force E-readiness Variable

Items	Mean	SD
We believe that our customers are ready to do business on the Internet	4,00	,732
We believe that our business partners are ready to conduct business on the Internet	4,00	,751

The mean (M) and the standard deviation (SD) of the result of the descriptive statistics of items of government e-readiness is shown in the table 4.13 below.

Table 4.13: Descriptive Statistics for the Government E-readiness Variable

Items	Mean	SD
We believe that there are effective laws to protect consumer privacy	4,01	,741
We believe that there are effective laws to combat cyber crime	4,08	,727
We believe that the legal environment is conducive to conduct business on the Internet	4,07	,757
The government demonstrates strong commitment to promote e-commerce	4,10	,754

The mean (M) and the standard deviation (SD) of the result of the descriptive statistics of items of supporting industries e-readiness is shown in the table 4.14 below.

Table 4.14: Descriptive Statistics for the Supporting Industries E-readiness Variable

Items	Mean	SD
The telecom facilities are reliable and efficient to support e-commerce and eBusiness	4,08	,727
The technology facility of commercial and financial sector is capable of handle ecommerce transactions	4,03	,750
Secure electronic transaction (SET) and/or secure electronic commerce environment (SCCE) services are easily available and affordable	4,01	,741
We feel that there is efficient and affordable support from the local IT industry to support our move to the internet	4,08	,727

As we can see from the table 4.15 below, the mean (M) and the standard deviation (SD) of the result of the descriptive statistics of factors is found to be: Awareness 4.09 and 0.59 respectively, human resource 3.99 and 0.46 respectively, business resource 3.54 and 0.65 respectively, technology resource 4.00 and 0.503 respectively, commitment 4.04 and 0.518 respectively, governance 4.01 and 0.429 respectively, market forces e-readiness 4.00 and 0.666 respectively, government e-readiness 4.07 and 0.555 respectively and supporting industries e-readiness 4.05 and 0.54 respectively

Table 4.15: Descriptive Statistics Cumulative to the Variables

Variables	Mean	Std. Deviation
E-commerce Adoption	4,0188	,58904
Awareness	3,9957	,46213
Human Resource	3,5417	,65408
Business Resource	4,0000	,49016
Technology Resource	4,0486	,50329
Commitment	4,0361	,51821
Governance	4,0124	,42880
Market force E-readiness	4,0000	,66608
Government E-readiness	4,0660	,55506
Supporting Industries E-readiness	4,0521	,54213

4.6. Correlation

The result of inferential statistics in the table 4.16 below reveals that five of the factors namely awareness, human resource, technology resource, commitment, and supporting industries e-readiness had strong positive relationship with e-commerce adoption with their respective correlation coefficient values of 0.719, 0.790, 0.810, 0.822, and 0.883. Similarly, business resource and government e-readiness had revealed moderate positive relationship with e-commerce adoption with their respective correlation coefficient values 0.460 and 0.571. Whereas the remaining two factors namely governance and market forces e-readiness had positive but relatively weak relationship with e-commerce adoption with their respective correlation coefficient values of 0.178 and 0.174.

Table 4.16: Correlation Matrix

Variables	Correlations									
	EAD	AW	HR	BR	TR	CM	GO	MR	GR	SR
EAD	1									
AW	,719** ,000	1								
HR	,790** ,000	,861** ,000	1							
BR	,460** ,000	,431** ,000	,468** ,000	1						
TR	,810** ,000	,695** ,000	,704** ,000	,377** ,001	1					
CM	,822** ,000	,679** ,000	,793** ,000	,521** ,000	,658** ,000	1				
GO	,178 ,134	,144 ,226	,159 ,182	,267* ,023	,129 ,281	,239* ,043	1			
MR	,174 ,144	,128 ,284	,145 ,223	,306** ,009	,178 ,134	,224 ,058	,875** ,000	1		
GR	,571** ,000	,314** ,007	,497** ,000	,297* ,011	,394** ,001	,633** ,000	,062 ,606	,067 ,578	1	
SR	,883** ,000	,747** ,000	,892** ,000	,452** ,000	,744** ,000	,840** ,000	,191 ,108	,195 ,101	,755** ,000	1

Key: EAD= E-commerce Adoption, AW=Awareness, HR=Human resource, BR=Business resource, TR=Technology resource, GO=Governance, CM=Commitment, MR=Market forces E-Readiness, GR=Government E-Readiness, SR=supporting industries E-Readiness

4.7. Multiple Regressions

Multiple regression analysis is a statistical tool used to adopt when the researcher has one dependent variable which is presumed to be a function of two or more independent variables. The objective of this analysis is to make a prediction about the dependent variable based on its covariance with all the concerned independent variables (Hair, 2010). Before implementation of multiple regression analysis, the satisfaction of multicollinearity, normality, autocorrelation and heteroscedasticity tests were conducted on the data.

4.7.1. Assumptions Testing

4.7.1.1. Multicollinearity Test

Multicollinearity refers to correlation among the explanatory variables. Multicollinearity test is one of the tests to be done before implementation of multiple regressions. Often explanatory variables are mutually correlated. If the correlation between two variables is high, it may lead to problems. To detect multicollinearity, variance inflation factor (VIF) or its reciprocal which is Tolerance were used for this research. According to (Field, 2009), value of VIF below 10 and value of tolerance above 0.1 is considered to be acceptable. Table 4.17 below depicts the absence of multicollinearity among dependent variables.

Table 4.17: Melticollinearity Test

Explanatory Variables	Collinearity Statistics	
	Tolerance	VIF
Awareness	,220	4,548
Human Resource	,910	1.1004
Business Resource	,668	1,496
Technology Resource	,343	2,917
Commitment	,249	4,012
Governance	,223	4,481
Market Force E-readiness	,218	4,591
Goverment E-readiness	,205	4,869
Supporting Industries E-readiness	,5162	1.9373

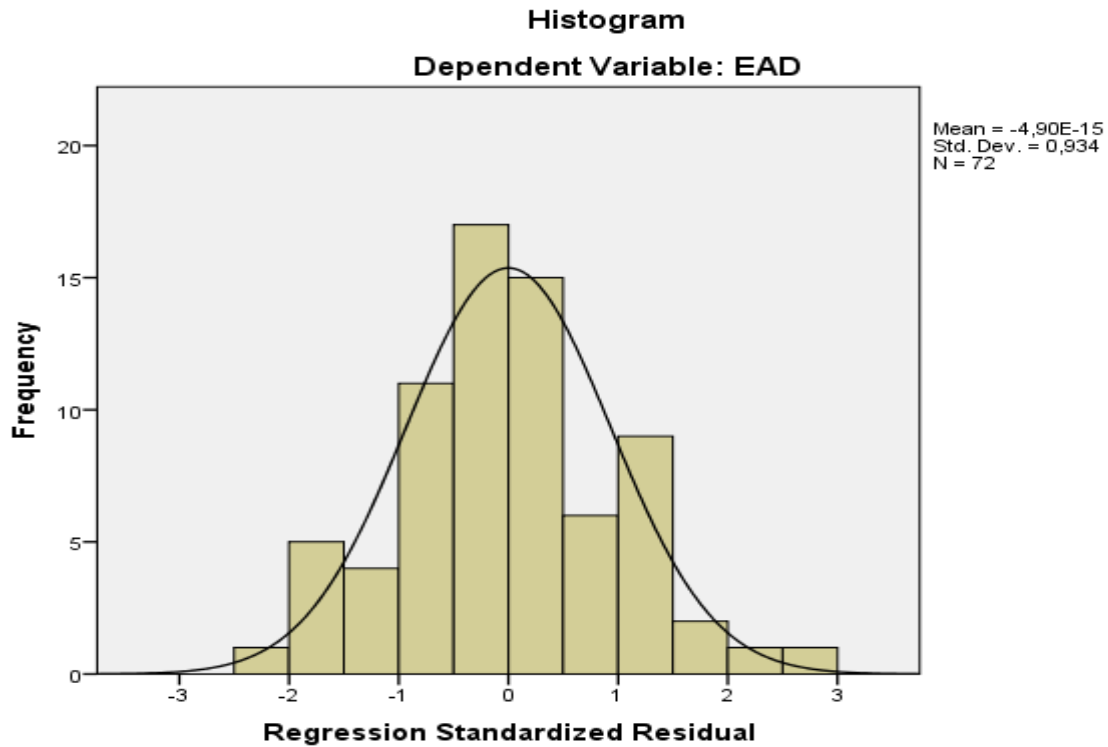
4.7.1.2. Normality Test

The second test which was done before multiple regressions is test for the normality of the data. Regression requires the independent variables in the analysis to be normally distributed. This study used skewness and kurtosis to show normality of the data. As proposed by (Field, 2005), skewness values within an absolute value of less than 2 and kurtosis values within an absolute value less than 7 is generally acceptable. As we can see from the table 4.18 below the assumption of normality of data in this study is found to be acceptable. The symmetrical, bell-shaped curve of residuals in the figure 4.1 below shows that the data seems to follow a normal distribution.

Table 4.18: Normality Test

Variables	Mean	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
AW	3,9957	,039	,283	-,733	,559
HR	3,5417	-,080	,283	-,864	,559
BR	4,0000	,155	,283	,364	,559
TR	4,0486	,172	,283	-,267	,559
CM	4,0361	,080	,283	-,187	,559
GO	4,0124	-,008	,283	-,130	,559
MR	4,0000	,037	,283	-,941	,559
GR	4,0660	,030	,283	-,449	,559
SR	4,0521	-,020	,283	-,238	,559
Valid N (listwise) 72					

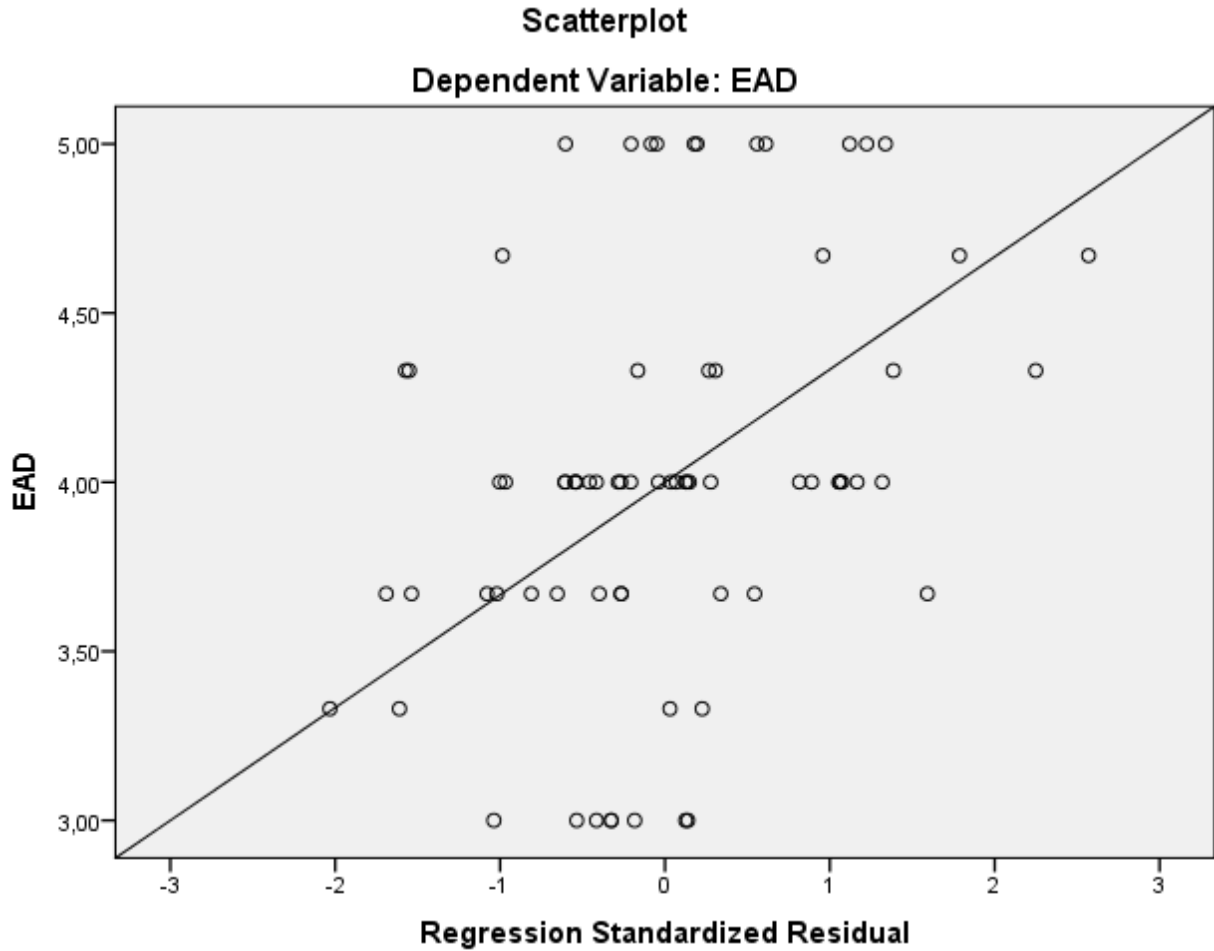
Figure 4.1: Bell Shaped Curve to Depict Normality of the Data



4.7.1.3. Homscedastisity

Testing for the absence of heteroscedasticity is the third to be done as a prerequisite to multiple regressions. It refers to the variability in scores for explanatory variables should be similar at all values of the explanatory variable. This means that the residuals are normally distributed, and that the residuals have constant variance. In this study, we used a graphical method to depict no heteroscedasticity. The scatter plot below should show a fairly even rectangular shape along its length. This indicates that the assumption of no heteroscedasticity is nearly met.

Figure 4.2: **Homoscedasticity Test**



4.7.1.4. Autocorrelation Test

It refers a systematic correlation exists between one observation of the error term and another error term. It is be more difficult to get accurate estimates of the standard errors of the coefficients, if there is an autocorrelation. In this study Durbin Watson test was used. Value of Durbin Watson between 1.5 and 2.5 is considered to be. In the model summery below, it can be shown that the Durbin Watson test value is 2.200 which is in the acceptable range. This can depict the absence of correlation between error terms.

4.7.2. Regression Results

4.7.2.1. Regression Model Summary

Table 4.19: Regression Model Summary

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,933 ^a	,871	,852	,22648	2,200
a. Predictors: (Constant), SR, GO, BR, TR, AW, CM, GR, MR, HR					
b. Dependent Variable: EAD					

This model contains some important information; *R*, *R square*, *Adjusted R square* and *Standard error of the estimate*. In this model, Adjusted R square value is 0.852 which suggests that the predictors are good at predicting e-commerce adoption and the difference between R and R square is 0.062 (0.933-0.871) which implies if the model were derived from population rather than the sample as it accounts for 6.1 % less variance in the result.

4.7.2.2. ANOVA

Table 4.20: ANOVA

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	21,455	9	2,384	46,475	,000 ^b
	Residual	3,180	62	,051		
	Total	24,635	71			
a. Dependent Variable: EAD						
b. Predictors: (Constant), SR, GO, BR, TR, AW, CM, GR, MR, HR						

The above ANOVA table shows that the significance value of the F-statistics is 0.000 less than 0.05 which means that the variation explained by the model is not due by chance and the combination of variables significantly predicts the dependent variable.

4.7.2.3. Régression Coefficients

Table 4.21 : Régression Coefficient

Regression Coefficients					
Variables	Unstandardized Coefficients		Standardized Coefficients	.032t	Sig.
	B	Std. Error	Beta		
(Constant)	-,626	,450		-1,391	,169
AW	,032	,124	,025	,256	,799
HR	,352	,136	,391	2,585	,012
BR	,057	,067	,047	,844	,402
TR	,296	,091	,253	3,239	,002
CM	,322	,104	,283	3,096	,003
GO	,077	,132	,056	,579	,564
MR	,105	,086	,118	1,213	,230
GR	,293	,107	,276	2,737	,008
SR	1,072	,218	,987	4,910	,000

Based on multiple linear regression analysis, the above table reveals the impact of each determining factors in e-commerce adoption and their significance. Most social science researchers use p value of 0.05 as cut point to decide statistical significance of a relationship between dependent and independent variables (Vanderstoep and Johnston, 2009). Accordingly the significant level $p < 0.05$ is used for this study. Among the internal factors Human resource, Commitment and, Technology resource had beta values 0.352, 0.322 and 0.296 respectively and p value $< 5\%$ which shows that they are significantly contribution to e-commerce adoption in the hotel industry of Ethiopia. Similarly, among the external factors Supporting industries E-Readiness and Government E-Readiness had beta values 1.072 and 0.293 respectively p value < 0.05 (5%) which also shows that they are significantly contribution to e-commerce adoption in the hotel industry of Addis Ababa.

Whereas, beta values of the remaining internal factors namely Awareness, Business resource and Governance were 0.032, 0.057 and 0.077 respectively and their p values 0.799, 0.402 and 0.564 which was all greater than 0.05(5%) which shows that these three factors are not statistically significant to predict the model. Likewise, from the external factors the beta and the p value of

market forces E-Readiness 0.105 and 0.230 respectively was greater than 0.05(5%) which also shows that this factor is not statistically significant to predict the model.

4.7.3 Regression Equation

From the above regression results the following equation could be derived:

$$EAD = \beta_0 + \beta_1 AW_i + \beta_2 HR_i + \beta_3 BR_i + \beta_4 TR_i + \beta_5 CM_i + \beta_6 GO_i + \beta_7 MR_i + \beta_8 GR_i + \beta_9 SR_i + \epsilon_i,$$

Where:

EAD= E-commerce Adoption, AW=Awareness, HR=Human resource, BR=Business resource, TR=Technology resource, GO=Governance, CM=Commitment, MR=Market forces E-Readiness, GR=Government E-Readiness, SR=supporting industries E-Readiness and ϵ_i = error term at time i.

The meanings of the product of the coefficients with their respective explanatory variables are interpreted as:

- β_0 (the constant) refers to ecommerce adoption in the absence of all the mentioned determent factors
- $\beta_1 AW_i$ refers to the partial change in the adoption of ecommerce due to a unit change in awareness where all other things remain constant.
- $\beta_2 HR_i$ refers to the partial change in the adoption of ecommerce due to a unit change in human resource where all other things remain constant.
- $\beta_3 BR_i$ refers to the partial change in the adoption of ecommerce due to a unit change in business resources where all other things remain constant.
- $\beta_4 TR_i$ refers to the partial change in the adoption of ecommerce due to a unit change in technology resources where all other things remain constant.
- $\beta_5 CM_i$ refers to the partial change in the adoption of ecommerce due to a unit change in organizational commitment where all other things remain constant.
- $\beta_6 GO_i$ refers to the partial change in the adoption of ecommerce due to a unit change in Governance where all other things remain constant.

- β_7MR_i refers to the partial change in the adoption of ecommerce due to a unit change in market force e- readiness where all other things remain constant.
- β_8GR_i refers to the partial change in the adoption of ecommerce due to a unit change in Government e-readiness where all other things remain constant.
- β_9SR refers to the partial change in the adoption of ecommerce due to a unit change in supporting industries e-readiness where all other things remain constant.

Regression Equation could be:

$$EAD = -.626 + 0.032AW_i + 0.352HR_i + 0.057BR_i + 0.296TR_i + 0.322CM_i + 0.077GO_i + 0.105MR_i + 0.293GR_i + 1.072SR + \epsilon_i$$

The positive or negative sign in the equation above reflects the direction of correlation between variables. If the sign is positive, it means the increase of independent variable scores can affect the increase of dependent variable scores and vice versa. The negative sign, in contrast, means that the decrease of independent variable scores has an impact on the increase of dependent variable scores and vice versa. Then, the value of regression coefficients reflects the value of the decreasing or increasing of variables.

4.8 Discussion

This section discusses the hypotheses testing result regarding the factors that influence the adoption of e-commerce in the hotel industry of Addis Ababa. There are nine factors proposed in this study as the determinant factors of e-commerce adoption. As it is presented in chapter two, this study has got two major hypothesis that are farther expand to nine separate hypothesis which are connected to each of the nine explanatory variables under consideration. These are
Hypothesis H1: Awareness contributes significantly to the adoption of e-commerce in the hotel industry of Addis Ababa.

Hypothesis H2: Human resources contribute significantly to the adoption of e-commerce in the hotel industry of Addis Ababa.

Hypothesis H3: Business resources contribute significantly to the adoption of e-commerce in the hotel industry of Addis Ababa.

Hypothesis H4: Technological resources contribute significantly to the adoption of ecommerce in the hotel industry of Addis Ababa.

Hypothesis H5: Commitment contributes significantly to the adoption of ecommerce in the hotel industry of Addis Ababa.

Hypothesis H6: Governance contributes significantly to the adoption of e-commerce in the hotel industry of Addis Ababa.

Hypothesis H7: Government e-readiness contributes significantly to the adoption of e-commerce in the hotel industry of Addis Ababa.

Hypothesis H8: Market forces e-readiness contributes significantly to the adoption of e-commerce in the hotel industry of Addis Ababa.

Hypothesis H9: Support industries e-readiness contributes significantly to the adoption of e-commerce in the hotel industry of Addis Ababa.

As it is shown in regression coefficient table 4.21 above, among the six internal factors Human resource, Commitment and Technology resource have beta values of 0.352, 0.322 and 0.296 respectively and p values 0.012, 0.002, and 0.003 which is less than 0.05 (5%) and shows that they are significantly contribution to e-commerce adoption in the hotel industry of Addis Ababa. Hence, H2, H4 and H5 are confirmed. Whereas the p values of the remaining three internal factors namely Awareness, Business resource and Governance are $> 5\%$ which shows statistically insignificant. Hence, H1, H3 and H6 are not supported.

Similarly, among the external factors supporting industries E-Readiness and Government E-Readiness have beta values of 1.072 and 0.293 respectively and p values of 0.002 and 0.003 which are less than 0.05 (5%) which also shows that they are significantly contribution to e-commerce adoption in the hotel industry of Addis Ababa. Hence H8 and H9 are fully supported. Whereas, the beta value of and the p value of market forces E-Readiness are 0.105 and 0.230 respectively. Here, the p value is greater than 0.05(5%) which shows that this factor is not statistically significant. Hence, H7 is not supported.

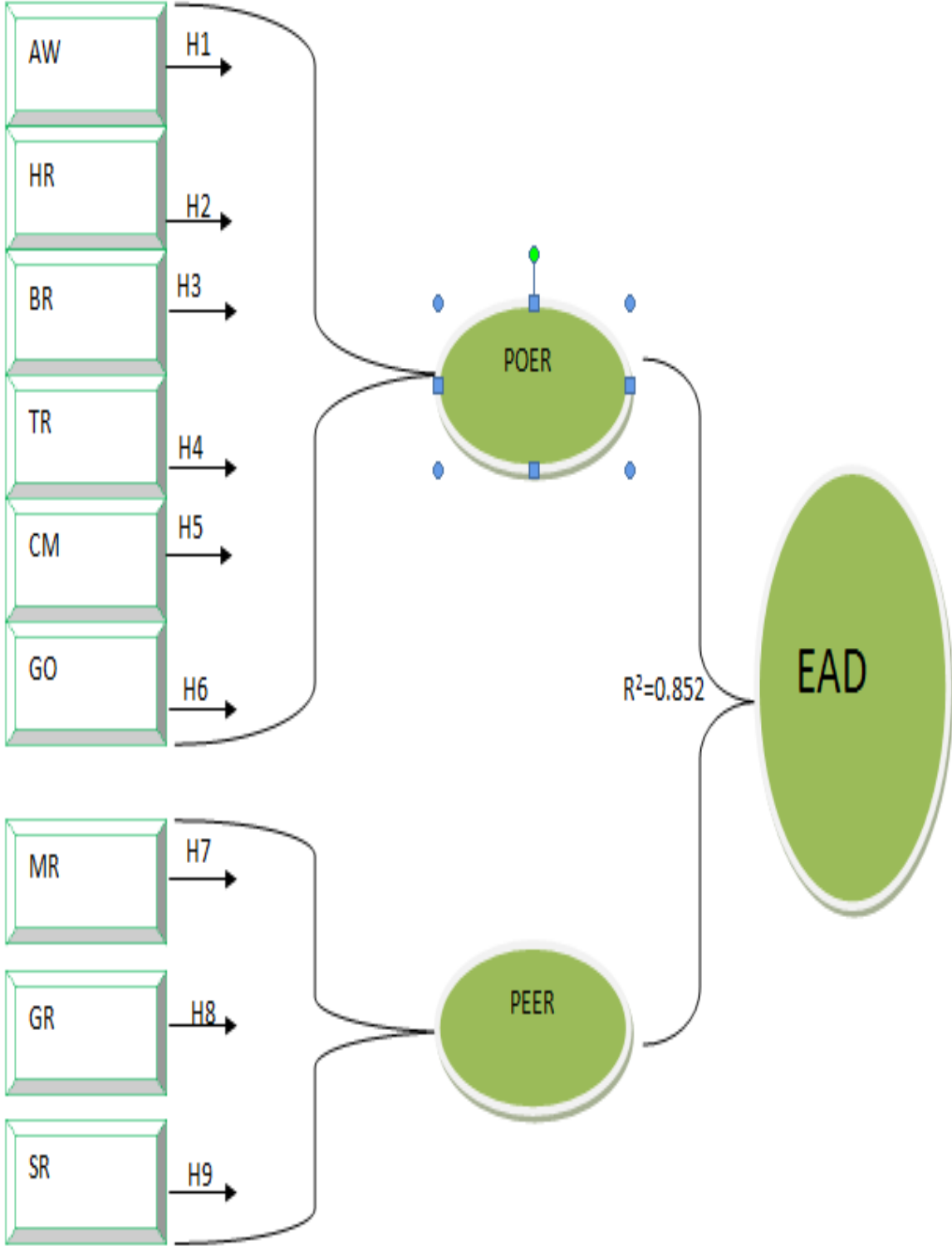
The model in the above subtopic illustrates that when all independent variables are held at zero or constant, the value of the magnitude of e-commerce adoption in the hotel industry of Addis Ababa would be -0.626. However, holding other factors constant, a unit increase in awareness would lead to a 0.032 increase in the magnitude of e-commerce adoption in the hotel industry of Addis Ababa; a unit increase in human resource would lead to a 0.352 increase in the magnitude of e-commerce adoption in the hotel industry of Addis Ababa; a unit increase in business

resources would lead to a 0.057 increase in the magnitude of e-commerce adoption in the hotel industry of Addis Ababa; a unit increase in technology resource would lead to a 0.296 increase in the magnitude of e-commerce adoption in the hotel industry of Addis Ababa; a unit increase in commitment would lead to a 0.322 increase in the magnitude of e-commerce adoption in the hotel industry of Addis Ababa; a unit increase in governance would lead to a 0.077 increase in the magnitude of e-commerce adoption in the hotel industry of Addis Ababa; a unit increase in market force e-readiness would lead to a 0.105 increase in the magnitude of e-commerce adoption in the hotel industry of Addis Ababa; a unit increase in government e-readiness would lead to a 0.293 increase in the magnitude of e-commerce adoption in the hotel industry of Addis Ababa; a unit increase in supporting industries e-readiness would lead to a 1.072 increase in the magnitude of e-commerce adoption in the hotel industry of Addis Ababa.

The above results confirm that the nine independent variables under consideration contribute individually and jointly to the magnitude of e-commerce adoption in the hotel industry of Addis Ababa. The result is consistent with previous findings by (Looi, 2005), (Molla and Licker, 2005) & Lavin and Fotoh, 2006).

4.9. Conceptual Framework

Figure 4.3: Conceptual Framework Derived from the Result



CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

In this chapter, a summary of the major findings of the study, the conclusions inferred from the findings, recommendations for future e-commerce adoption initiatives are presented.

5.1 Summary

This study is conducted to investigate the determining factors that affect the adoption of e-commerce in the hotel industry of Addis Ababa. To identify the various factors affecting the adoption of E-commerce, several former research results which were conducted locally and internationally were thoroughly reviewed. Moreover, various e-commerce adoption models and their outcomes on previous research works are analyzed.

In this study, quantitative method is used. As the objective of the research is to investigate determining factors of e-commerce adoption in the hotel industry, quantitative method is believed to be more appropriate to measure the impact of the affecting factors both the magnitude as well as the detections of the impact. Data is collected using structured questionnaire. The standard questionnaire is developed based on Molla, & Licker (2005). It was a five point Likert scale questionnaire ranging from strongly disagree, disagree, neutral, agree and strongly agree. The questionnaires are distributed to managers, owners, and/or their delegates. A reliability test is conducted using Cronbachalpth to measure the internal consistency of the data items even though previous studies show the reliability of the items Validity test is done to measures whether an instrument actually measures what it is supposed measure.

The analysis is made on one dependent variable and nine explanatory variables. The dependent variable of the analysis is e-commerce adoption and the explanatory variables are awareness, human resource, business resource, technology resource, governance, commitment, market forces e-readiness, government e-readiness and supporting industries e-readiness. These factors are the most critical parts of the conceptual framework and basic research variables of this paper. For the analysis of all these variables, mean and standard deviation is used. Particularly mean value of the respondents has considered as an important indicator to the extent of each factor in determining e-commerce adoption and group mean was calculated and used.

In order to specify the relative importance of the questionnaire items to highlight the degree of adoption of e-commerce activities and to determine the values of variables at the organizational level at hotels, an ordinal scale is developed to give meaning to the arithmetic mean. In this regard scale of relative importance of questionnaire items are labeled like 1 – 2.33 as Low/poor, 2.34 – 3.67 as Average/moderate and 3.68 – 5 High.

Data analysis is done using SPSS version 24 as well as Microsoft Excel 2007. The result of descriptive statistics of factors determining the adoption of e-commerce in the hotel industry of Addis Ababa shows that responses are nearly above the upper bound of the average score which is 3.67. The mean (M) and the standard deviation (SD) of the result of the descriptive statistics of factors is found to be: Awareness 4.09 and 0.59 respectively, human resource 3.99 and 0.46 respectively, business resource 3.54 and 0.65 respectively, technology resource 4.00 and 0.503 respectively, commitment 4.04 and 0.518 respectively, governance 4.01 and 0.429 respectively, market forces e-readiness 4.00 and 0.666 respectively, government e-readiness 4.07 and 0.555 respectively and supporting industries e-readiness 4.05 and 0.54 respectively

The result of inferential statistics reveals five of the factors namely awareness, human resource, technology resource, commitment, and supporting industries e-readiness have strong positive relationship with e-commerce adoption with their respective correlation coefficient values of 0.719, 0.790, 0.810, 0.822, and 0.883. Business resource and government e-readiness reveals moderate positive relationship with e-commerce adoption with their respective correlation coefficient values 0.460 and 0.571. The remaining two factors governance and market forces e-readiness have positive but relatively weak relationship with e-commerce adoption with their respective correlation coefficient values of 0.178 and 0.174.

The result of regression analysis reveals that supporting industries E-Readiness, human resource, commitment and, technology resource and government E-Readiness have beta values 1.072, 0.352, 0.322, 0.296 and 0.293 respectively with their descending order and p values < 0.05 which shows that they are significantly contribution to e-commerce adoption in the hotel industry of Addis Ababa. In the contrary, beta values of the remaining factors namely market forces e-readiness awareness, business resource and governance are 0.105, 0.032, 0.057 and 0.077 respectively and their respective p values 0.230, 0.799, 0.402 and 0.564 which is all greater than 0.05(5%) which shows that these three factors are not statistically significant to predict the

model. The model summary reveals that the proportion of the variation in e-commerce Adoption is explained by the nine explanatory collectively are 85.2% and the remaining 14.8% of the variance is explained by other variables.

5.2 Conclusion

In this study, nine factors that would potentially affect e-commerce adoption are identified through literature review. These are awareness, human resource, business resource, technology resource, governance, commitment, market forces e-readiness, government e-readiness and supporting industries e-readiness.

As we can see from the results of analysis, among the six internal factors Human resource, Commitment and, Technology resource have contributed strongly and positively to e-commerce adoption in the hotel industry of Addis Ababa. Similarly, among the external factors Supporting industries E-Readiness and Government E-Readiness have contributed strongly and positively to e-commerce adoption in the hotel industry of Addis Ababa. Whereas, the contribution of three of the internal factors namely Awareness, Business resource and Governance and one external factor namely market forces E-Readiness are not supported by the analysis.

5.3. Recommendations

Although the findings of this study provides a few important investigative information regarding e-commerce adoption factors, further work should be done in order to examine the impacts of other factors and their result using the various other models. Due to the rapid growth and expansion of ICT, e- commerce had become a necessity than a choice. The potential benefit of e-commerce made its' implementation an obligation to success in every business sectors.

The result of the study reveals the impact of supporting industries e- readiness and human resource are among driving factor that affects e-commerce adoption. Some literatures are also listing these two factors as indicators of e-commerce. Some also argue that the index of e-commerce is fall into either relating to telecommunications infrastructure available in a country or to skills and training of the population using the infrastructure. Financial institutions, information technology industries are also among major supporting industries.

With regard to telecom industry, in Ethiopia, the telecom industry is under monopolistic control of the government. This indirectly controls the practice of e-commerce. The telecom industries need to grow with sufficient speed to cope with the demands of e-commerce, protection of consumers' privacy, protection of intellectual property. Financial institutions, which are also categorized under supporting industries, need to work in collaboration with telecom industries as well as the government. Otherwise it becomes a hindering factor instead of motivating e-commerce adoption.

Human resource is one the key resources of in any organization. As the result of this study, it is also one of the factors that strongly affect the adoption of e-commerce. The education and training systems and facilities need to be dynamic to adjust themselves with the dynamic nature of the innovation and technology so that they can cope with the demand of e-commerce.

Organizational commitment is also an important factor that affects e-commerce adoption. The senior manager need to champion and should have clear vision to go together the dynamic nature of the electronic community so that they can keep on getting competitive advantage throughout the life of the business. An organization also need to own the appropriate technology resources on time and should continue to update the technology at hand.

Government e-readiness is also a key to successes in the adoption of e-commerce. Rules and regulation need to consider the practices of e-commerce. Effective laws that can protect the business environment with the practicing of e-commerce should be declared and implemented and also continually updated.

Further Research Areas

This research could be extended to further investigation of other factors affecting e-commerce adoption. The investigation of the factors included in this study could also be farther investigated using the various adoption models other than the one implemented in this study. Analysis techniques have their own strength and weakness. This research could have been extended using analysis techniques other than multiple regression analysis like fuzzy-set qualitative comparative analysis. Another researcher could extend this study focusing on the customer perspectives of the e-commerce adoption factors.

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APPENDIX A

Instruments /Questionnaire and interview guide/



ADDISS ABABA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

DEPARTEMENT OF MANAGEMENT

MBA Program in Management

(Questionnaire to sample Hotel Administrators)

Dear Respondent,

First of all, I would like to thank you for your willingness to participate in this study. The questionnaire is designed to collect the necessary information to undertake a research on the topic “Determinants of e-commerce adoption in the hotel Industry of Ethiopia” for the partial fulfillment of the requirements for the degree of Masters of Business Administration (MBA) at Addis Ababa University. The main objective of this research is to assess Factors affecting the adoption of e-commerce in the hotel Industry of Addis Ababa.

Please, answer each question by making a tick mark (✓) to the option that you choose inside the given box or write your answer on the blank space provided. Your genuine responses are quite vital for the success of this study. Finally, I would like to confirm you that all the information you provide in this questionnaire have be strictly confidential and have exclusively be used for this research purpose only.

NB. No need of writing your name.

Thank you very much ahead for your cooperation!!!

Researcher’s Name: Desalegn Kidane Basha.

Address: Cell phone: +251 66829782,e- mail:desalegnkidaneb@gmail.com

Part- I. General Information of the Respondent

A. Sex: 1. Male 2. Female

B. Age: Years.

C. What is the highest educational level you attained?

- | | |
|---|--|
| 1. Basic education (Grade 1-8) <input type="checkbox"/> | 2. High School (Grade 9-12) <input type="checkbox"/> |
| 3. TVET Certified <input type="checkbox"/> | 4. Diploma <input type="checkbox"/> |
| 5. First Degree <input type="checkbox"/> | 6. Masters and above <input type="checkbox"/> |
| 7. Any other..... | |

D. How long have you worked in Hotel Sector?

- | | |
|--|--|
| 1. Have no experience <input type="checkbox"/> | 2. Less than One year <input type="checkbox"/> |
| 3. 1-3 Years <input type="checkbox"/> | 4. 4-5 years <input type="checkbox"/> |
| 5. More than 5 years <input type="checkbox"/> | |

E. When was your hotel established? (Month...../Year.....)

F. How many employees does your firm have?Fulltimepart time

G. Which one of the following best describes your current e-commerce status? Please choose and tick mark (√) only one of the six option.

Not connected to the Internet, no e-mail	
Connected to the Internet with e-mail but no web site	
Static Web, which is publishing basic company information on the web without any interactivity	
Interactive web presence, which is accepting queries, e-mail; and form entry from users	
Transactive web, which is online selling and purchasing of products and services including customer service	
Integrated web, which is the web site is integrated with suppliers, customers and other back office systems allowing most of the business transactions to be conducted electronically	

Part II) Scale questions.

To what extent do you agree that internet contributes to personalization of your hotel business and customers? Please rate each of the statements by using a rating scale of 1-5.

1= strongly disagree 2=Disagree 3= moderately agree/ disagree 4= Agree 5=strongly agree

Description	1	2	3	4	5
Awareness					
Our organization is aware of e-commerce implementations of our partner organizations					
Our organization is aware of our competitors' e-commerce and e-business implementations					
Our business recognizes the opportunities and threats enabled by e-commerce					
Our organization understands e-commerce business models that can be applicable to our business					
We understand the potential benefits of e-commerce to our business					
Our organization has thought about whether or not e-commerce has impacts on the way business is to be conducted in our industry					
Our organization has considered whether or not businesses in our industry that fail to adopt e-commerce and e-business would be at a competitive disadvantage					
Human Resources					
Most of our employees are computer literate					
Most of our employees have unrestricted access to computers					
Business Resources					
Our people are open and trusting with one another					

Communication is very open in our organization					
Our organization exhibits a culture of enterprise wide information sharing					
We have a policy that encourages grass roots e-commerce initiatives					
Failure can be tolerated in our organization					
Our organization is capable of dealing with rapid changes					
Technological Resources					
We have sufficient experience with network based applications					
We have sufficient business resources to implement e-commerce					
Our organization is well computerized with LAN and WAN					
We have high bandwidth connectivity to the Internet					
Our existing systems are flexible					
Our existing systems are customizable to our customers' needs					
Commitment					
Our business has a clear vision on e-commerce					
Our vision of e-commerce activities is widely communicated and understood throughout our company					
Our e-commerce implementations are strategy-led					
All our e-commerce initiatives have champions					
Senior management champions our e-commerce initiatives and implementations					

Governance					
Roles, responsibilities and accountability are clearly defined within each e-commerce initiative					
e-commerce accountability is extracted via on-going responsibility					
Decision-making authority has been clearly assigned for all e-commerce initiatives					
We thoroughly analyze the possible changes to be caused in our organization, suppliers, partners, and customers as a result of each e-commerce implementation					
We follow a systematic process for managing change issues as a result of e-commerce implementations					
We define a business case for each e-commerce implementation or initiative					
We have clearly defined metrics for assessing the impact of our e-commerce initiatives					
Our employees at all levels support our e-commerce initiatives					
Market Forces E-Readiness					
We believe that our customers are ready to do business on the Internet					
We believe that our business partners are ready to conduct business on the Internet					
Government E-Readiness					
We believe that there are effective laws to protect consumer privacy					
We believe that there are effective laws to combat cyber crime					
We believe that the legal environment is conducive to conduct business on the Internet					
The government demonstrates strong commitment to promote e-commerce					

Supporting Industries E-Readiness					
The telecommunication infrastructure is reliable and efficient to support e-commerce and eBusiness					
The technology infrastructure of commercial and financial institutions is capable of supporting ecommerce Transactions					
We feel that there is efficient and affordable support from the local IT industry to support our move to the internet					
Secure electronic transaction (SET) and/or secure electronic commerce environment (SCCE) services are easily available and affordable					
E-commerce Adoption					
All in All, we believe e-commerce Adoption is feasible in Addis Ababa, with current situation.					
We believe, e-commerce could help us to achieve our organization strategic plan?					
We believe e-commerce adoption is part of technological innovation?					

Thank you for taking time out of your busy schedule to answer this questionnaire!

Appendix B

LIST OF STAR-RATED HOTELS IN ADDIS ABABA

No	NAME OF HOTEL	STAR	No. of Rooms	No. of Beds	TEL NO	E-Mail
1	Sheraton Addis Hotel	5	294	323	011 5171717	reservationsaddisethiopia@luxurycollection.com
2	Capital hotel	5	114	114	011 6 67 2100 0930100714 0911639122 0116672100	sales@capitalhotellandspa.com www.capitalhotellandspa.com
3	Ellele international hotel	5	155	163	0115587777 0911202904 0922728318	info@elillyhotel.com/ info@elillyhotel.com
4	Marriott Executive Hotel	5	108	128	011 518 4600	reservation@marriott.com
5	Radison Blue hotel	5	114	128	0115157600 0115170400 0115544412/13	info.addisababa@radissonblu.com
6	Golden Tulip Hotel	5	90	115	0116183333 0116612828	gm@goldentulipaddisababa.com www.goldentulipaddisababa.com
7	Gatefam Hotel	5	115	130	0116673175 0935402055	info@getfamhotel.com reservation@getfamhotel.com
8	Debredamo hotel	4	102	102	0115509828 0116612630	reservation@debredamohotel.com
9	Dreamliner Hotel	4	96	110	011 467 4000-7	marketingmanager@dreamlinerhotel.com

10	Friendship hotel	4	104	104	0116670201 0116670202	marketing@friendshiphotel.com.et
11	Harmony Hotel	4	150	176	0116183100 0116612389	info@harmonyhotelethiopia.com
12	Intercontinental Hotel	4	151	190	011 550 5066 0115180444 0115540090	reservation@intercontinentaladdis.com
13	Jupiter int. Hotel (kazanchis)	4	102	112	0115527333	info@jupiterinternationalhotel.com
14	Jupiter Int. Hotel (Bole)	4	40	52	0116616969	info@jupiterinternationalhotel.com
15	Momona Hotel	4	60	80	0116672201/07	reservation@momonahotel.com
16	Nazra hotel	4	24	27	0114674465 0114666676	info@nazrahotel.com
17	Nexus hotel	4	66	66	0111112345 0116670067	Info@nexusaddis.com Info@nexushotel.com
18	Saromaria hotel	4	87	87	0116672167/75	info@saromariahotel.com/ reservation@saromariahotel.com stay@saromariahotel.com
19	Sarem International Hotel	4	43	62	011262087/091 1518807	reservation@saremhotel.com
20	Washington hotel	4	70	85	0911855738 0116392183 0116392239	info@washingtonaddis.com/reservations@washingtonaddis.com
21	Tegen Guest Accommodation Hotel	4	32	64	011 618 2870 0116182871	info@tegenhotel.com info(at)tegenhotel.com

22	Addis Regency Hotel	3	33	41	0913141583 0111550000 0911615600	info@addisregency.com
23	Addis View Hotel	3	18	23	0111249766	addisview@ethionet.et
24	Addissinia Hotel	3	60	60	0911511569 0116623634	info@addissiniahotel.com reservation@addissiniahotel.com
25	Caravan hotel	3	37	37	0911522744 0116612297	caravanhotel@caravanaddis.com wwwcarvanaddis.com
26	Aphrodite hotel	3	52	52	0912502256 0115522228	marketing@aphroditeaddis.com/info@aphroditeaddis.com
27	Ararat Hotel	3	94	116	011 6461166	info@ararathotelethiopia.com
28	Beer Garden Inn	3	32	36	0116182595 0116182591	info@beergardeninn.com
29	Beshale Hotel	3	64	80	0116478181/88	Info@beshalehotel.com
30	Ambassador Hotel	3	52	60	0116188284 0118296364	reservation@ambassadorhotelethiopia.com / info@ambassadorhotelethiopia.com
31	Crown Hotel	3	71	110	011 4391444 0114391430/31/ 44/45/46	Info@crownhoteladdis.com/ booking@crownhoteladdis.com
32	Cyan city hotel	3	40	45	0911207900 0911517901 0116622121	info@cyancityhoteladdis.com

33	Embilta Hotel	3	39	49	0112758787/56/57 0922444612 0911219421	info@embilta-hotel.com / embiltahotel@yahoo.com
34	Global Hotel	3	50	70	011 4663906 011 4664766	globalhotel@ethionet.et global hotelaaddisababa@gmail.com
35	Hilton Addis Ababa	3	400	705	011 5170000 011 5518400	reservation.addisababa@hilton.com
36	Kaleb Hotel	3	64	84	011 6622 200	reservation@kalebhotel.com
37	King's Hotel	3	34	54	011 3711300 0911699499	kingshotelethiopia.com
38	Monarch hotel	3	80	80	0116672480/22 0116672472 0118637107	Info@monarchaddis.com
39	Panorama Hotel	3	65	85	0116616070 0911836692	panoramahotel@ethionet.et
40	Sidra hotel	3	26	31	011661 7777 0116618888	info@sidrahotel.com
41	Relience hotel	3	31	38	0116672024 0116672002 0116672069	info@reliancehotelpartment.com
42	Seyonat hotel	3	40	50	0911237070 0116626372 0116629746/44	reservation@hotelsiyonat.com
43	Solo Te hotel	3	35	45	0116670021	info@solotehotel.com

44	The residence hotel	3	18	21	0115571025 0911503125	info@theresidenceaddis.com
45	Wassamar Hotel	3	66	71	011 6610055/59 0118950489	info@wassamarhotel.com
46	Umma Hotel	3	33	45	0113719445 0911214399 0113728440	request@ummahotels.com
47	Top Ten hotel	3	48	56	0116464449 0116460266	gmanager@toptenethiopia.com
48	Southern Addis Hotel	3	38	38	011 661 0505 011 661 0515	reservation@southernaddishotel.com
49	Zola international hotel	3	24	32	011 673 33 33 0911243966	Hotelzola@yahoo.com Zola hotel.net
50	Abyssinia Renaissance Hotel	3	39	59	0116292485	info@abyssiniarenaissance.com
51	Adotina Hotel	2	32	32	0114674101 0114673939 0913146431	reservation@adottinahotel.com www.adottinahotel.com
52	Astara Hotel	2	45	51	011 6461166 0114160153 0911056912	Astarabusiness.plc@yahoo.com astaraapl@yahoo.com www.haimihotel.com
53	Axum Hotel	2	60	72	011 6613916 0915736296	axum.d@ethionet.et / axum.n@ethionet.et
54	Churchill Hotel	2	53	53	011156 8648 011 111 1212	contactus@churchillhotelddis.com
55	Damu Hotel	2	20	20	0115509828	damuhotel@ethionet.et

36	Kaleb Hotel	3	64	84	011 6622 200	reservation@kalebhotel.com
37	King's Hotel	3	34	54	011 3711300 0911699499	kingshotelethiopia.com
38	Monarch hotel	3	80	80	0116672480/22 0116672472 0118637107	Info@monarchaddis.com
39	Panorama Hotel	3	65	85	0116616070 0911836692	panoramahotel@ethionet.et
40	Sidra hotel	3	26	31	011661 7777 0116618888	info@sidrahotel.com
41	Relience hotel	3	31	38	0116672024 0116672002 0116672069	info@reliancehotelpartment.com
42	Seyonat hotel	3	40	50	0911237070 0116626372 0116629746/44	reservation@hotelsiyonat.com
43	Solo Te hotel	3	35	45	0116670021	info@solotehotel.com
44	The residence hotel	3	18	21	0115571025 0911503125	info@theresidenceaddis.com
45	Wassamar Hotel	3	66	71	011 6610055/59 0118950489	info@wassamarhotel.com
46	Umma Hotel	3	33	45	0113719445 0911214399 0113728440	request@ummahotels.com
47	Top Ten hotel	3	48	56	0116464449 0116460266	gmanager@toptenethiopia.com

48	Southern Addis Hotel	3	38	38	011 661 0505 011 661 0515	reservation@southernaddishotel.com
49	Zola international hotel	3	24	32	011 673 33 33 0911243966	Hotelzola@yahoo.com Zola hotel.net
50	Abyssinia Renaissance Hotel	3	39	59	0116292485	info@abyssinirenaissance.com
51	Adotina Hotel	2	32	32	0114674101 0114673939 0913146431	reservation@adottinahotel.com www.adottinahotel.com
52	Astara Hotel	2	45	51	011 6461166 0114160153 0911056912	Astarabusiness.plc@yahoo.com astaraapl@yahoo.com www.haimihotel.com
53	Axum Hotel	2	60	72	011 6613916 0915736296	axum.d@ethionet.et / axum.n@ethionet.et
54	Churchill Hotel	2	53	53	011156 8648 011 111 1212	contactus@churchillhotelddis.com
55	Damu Hotel	2	20	20	0115509828	damuhotel@ethionet.et
56	Desalegne Hotel No.2	2	28	25	011 6624524 0116183030	rooms@desalegnhotel.com / confrence@desalegnhotel.com
57	Destiny Addis Hotel	2	33	40	0115521795 0911202904	info@destinyaddis.com
58	Edna Addis Hotel	2	33	37	0910646962 0115507003 0115507727	reservation@ednaaddis.com

59	Empire Addis inter. hotel	2	39	39	0116614523 0116614525/25 0116614524	info@empireaddis.com wwwempireaddis.com
60	Lobelia Hotel	2	31	35	251116673850/ 51/52/53 0911692054 0116673854	@hotell0beliaaaddis.com
61	Ghion Hotel	2	190	298	011 5513222 0115510240	info@ghionhotel.com
62	Haimi Apartment hotel	2	28	28	0116161888 0116181834 0116181837	info@haimihotel.com wwwhaimihotel.com
63	Homage hotel	2	20	25	0115516341/09 30033910	info@homagehotel.com /reservation@homagehotel.com
64	Louvera Hotel	2	12	16	011 618 7755	info@louvregrandhotel.com
65	KZ Hotel	2	32	42	011 661 1206 011 662 1607	kzhotel08@yahoo.com
66	Kenenisa Hotel	2	51	51	0911888468	stay@kenenisahotel.com
67	Pacific Hotel	2	45	55	011 645 6371	reservation@pacifichotel.com
68	Queen of Sheba	2	32	56	011 6615400 011 6180000	Queensheba hotel@ethionet.et
69	Ras Amba Hotel	2	25	25	011 1228080	rahot@ethionet.et / rasambahotel@hotmail.com
70	Trinity Hotel	2	21	27	0911620224	info@trinityaddis.com

71	Soramba Hotel	2	87	87	011 1565 633	Sorambahotel@ethionet.et www.sorambahotel.com
72	AG palace hotel	1	19	19	0911405885	agpalacehotel@gmail.com Booking@agpalacehotel.com
73	Ethiopia Hotel	1	110	151	011 5517400 011 5510134	ethhotel@ethionet.et wwwethiopia hotel.et.com
74	Fil wuha hotel enterprise	1	57	57	0115519100 0913923535	
75	Paramount Hotel	1	27	27	0911686970 0114390417 0118401404	etparahotel@ethionet.et
76	Semien Hotel	1	60	65	011 1550067 0911368219 0111551410	info@semienhotel.com wwwsemienhotel.com
77	Three days hotel	1	30	34	011 6612583/82 0911205213	info@3daysINT hotel.com www3days international hotel.com
78	Nardan Hotel	1	25	29	0116635831/16 0116610057	0912926355

Appendix C

LIST OF HOTELS IN ADDIS ABABA WHICH CAN BE GRADED

No	NAME OF HOTEL	No.of Rooms	TEL NO	E-Mail
1	Ramada Addis Hotel	136	0116392029	Info@ramadaaddishotel.com
2	Solish I hotel	32	0911243297	info@solishhotel.com
3	Tirar hotel	40	0115577150	reservation@tirarhotel.com
4	Azemen Hotel	80	0116393131	info@azzemenhotel.com
5	Foyat hotel	55	0116451025	info@foyathotel.com
6	Sifan Adsis Hotel	21	0116672268	cfunaddishotel@gmail.com
7	The Mosaic Hotel	78	0116535367	
8	Bole sky gate hotel	46	0116186058	boleskygatehotel@yahoo.com
9	Nigst tower Hotel	18	0115509770	info@nigsttowers.com
10	Eliana hotel	80	0111262600	info@ellianahotel.com
11	Impress Hotel	22	0116674470	info@impressaddishotel.com
12	Heyday Hotel	36	0114707994	info@heydayhothiopia.com
13	Blue Nest Hotel	27	0115527333	-
14	Magnonia Hotel	86	0116181455	-
15	Nega Bonger Hotel	120	0114708100 0932261491	info@negabonger.com
16	Sapphire Addis Hotel	130	0116393907	info@sappireaddishotel.com
17	Northern Addis	28	0111267070	

	Hotel			
18	Sun land hotel	37	0116672596	0913829280
19	Water fall Hotel	109	0929904722/23	reservation@ watergateaddis.com
20	Affaransis hotel	50	0116629700	
21	Sabon hotel	30	0116393535	info@sabonhotel.com
22	Abyssinia Renaissance Hotel	39	0116292485	info@abyssiniarenaissance.com www. abyssiniarenaissance.com
23	BeAleta Hotel	21	0114708292 +251-114-709585 +251-912-090281	www.bealetahotel.com info@bealetahotel.com
24	Celste Hotel	19	0941457575 0115575838	Hotelcelsteethiopia.com www.hotelcelsteethiopia.com
25	Sheger Royal Hotel		0912345678 0116636426	info@shegerroyalhotel.com.co shegerroyalhotel.com
26	Best western plus	160	011667 5235	011667 5235
27	Yober Hotel		0116884300-3 0977321415	info@yoberhotel.com