FACTORS AFFECTING ECOMMERCE ADOPTION AMONG HOTEL INDUSTRY IN LIBYA

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ABSTRACT

E-commerce is a profit making transaction strategy that enables faster and wider business transaction from wider contexts of economic value and value creation via internet. Due to the growing demand to enhance the effectiveness of hotel transaction network, this paper reported the factors affecting e-commerce adoption amongst hotels in Libya. These factors represent the constraints, challenges, as well as limitations that prevent the successful adoption of e-commerce based hotel industries in Libya. The policy viability and implementation concerns associated with the adoption of e-commerce application were reported. Our study confirmed that constraints exist and yet there are a lot of potentials; within reach to enhance effectiveness and efficient e-commerce integration into hotel in Libya. The findings of this research could be integrated as a part of Libya’s hotel industry strategic planning that harnesses the potentials of ecommerce by both public and private sectors.

Field of Research: E-commerce, hotel industry, adoption, affecting.

1. Introduction

According to (Tapscott, Lowy, & Ticoll, 1998) e-commerce means carrying out business which involves exchange of information, product and service as well as payment using E-based technologies over the Internet. Syed (2005), opined that by adopting E-commerce within the hotels industry can reduce cost as well as increase market potential and enjoy new business opportunities for the hotel. This assertion is also supported by many other studies like (Alshare, Grandon, & Miller, 2004) who pointed out that this may have an increasing effect on business in whole world. According to Daniel (2003), in 2001 the overall records of business of E-commerce were $474 billion which estimated to increase at a number of $2400 billion by the year 2004. The author also reported that at 2002 the revenue that generated from B2B E-commerce in the world was $823 which increased $1400 billion at the year 2003. This continually increasing figure indicates that now a day's no business whether its multinational hotels or small and medium hotels cannot survive without a E-commerce adoption.

Electronic Commerce or e-commerce has received much attention from governments, businesses and regional organizations or institutions. This importance has been attributed to a few converging factors. These factors include: first, the development of the use of the Internet as a means by which information is disseminated and through which communication and connectivity is enabled. Second, the affordability
of personal computers had increased their computing capability, and the wide use of open standards in the computer software applications [Rogers E.1995]. Third, is supportive legal policy where government and regulatory bodies are collaborating on a wider platform to ensure e-commerce law, policy and regulations are enforced for consumers’ protection (So, Wong, & Sculli, 2005). Lastly, broadband promoting where this year, government had announced ‘Malaysia Broadband Initiative’ to promote high speed broadband service and Malaysians will enjoy Internet surfing speeds from 5 megabits per second (Mbps) to 20Mbps (Faulkner, Foley, Crosland, Young, & Trickett, 2009).

The international business community is harvesting the benefits of Globalization, in terms of cross-continental trades, unified trade organizations and alternatives to non-local consumption (Dunkley, Blankstein, Masheb, & Grilo, 2006) According to Griffith et al. (2006), Internet and e-commerce have shrunk the world and have opened the doors of seamless trading among different countries of the world. This has brought ramifications in the arena of research and more light has been shed on cross-national and cross-cultural Internet marketing.

The ecommerce is considered as an electronic revolution, which is getting bigger and bigger every day. Though Internet serves a lot of purposes, the online shopping is one of the top three activities carried out with the help of Internet, apart from email, chat and web browsing (Castells & Cardoso, 2006). The report further claims that online shopping has over taken the Internet activities such as searching entertainment information and news. (Long et al., 2001) has reported about the evolution of Internet, he claims that in 1991, there were less than 3 million Internet users around the world and there were no symptoms of e-commerce at that time. However by 1999, there was an enormous growth in the number of Internet users, it has been reported that approximately 250 million users were using Internet, of which 63 million users involved in online transactions, which has generated revenue of $110 billion. In the period between 1998 and 1999 the business-to-consumer online sales in the United States has increased by 120% (Shop.org and Boston Consulting Group, 2000). According to a payment association in U.K., in 2001 there were 11 million online shoppers, but in 2006 the volume of online shoppers has escalated by more than 157%, and reached 28 million (Al-maghrabi & Dennis, 2009). The Middle East has also witnessed the growth of e-commerce transactions (19.5 million Internet users) especially in the Gulf States. Online transactions in Saudi Arabia have been increased 100%, from $278 million in 2002 to $556 million in 2005 (Al-Okaili, Krejza, Wang, Woo, & Melhem, 2006). Nevertheless throughout the world, as of the report from 2007, the Internet sales have reached above $1.2 billion and are projected to ascend (Kumar, Rajput, Chakraborty, Agarwal, & Nanavati, 2007) An unpublished study by the Centre for Customer Driven Quality has highlighted the following probable advantages: For a vendor, the price of an in-shop purchaser contact was expected to be $10, the price of a contact by telephone is $5 above all the cost of a on line customer is just $0.01 (Kumar et al., 2007) Similar advantages can also be witnessed in airline industries. According to the International Air Transport Association (IATA), 300 million paper tickets per annum ($10 per ticket) are issued by airlines (Arab News Newspaper, 2007), but at the same time the processing cost of one e-ticket is just $1 (Arab News Daily, 2007).

E-commerce is the concept of conducting trade and retail business online through the use of secure websites. It constitutes the exchange of products and services between businesses, groups and individuals (Lai & Chen, 2006) E-commerce technologies allow for instant access to more data and opportunities than ever before because they extend across the globe and reach people in almost every nation. With the immense networking and telecommunications capabilities of e-commerce, most companies can be very profitable ventures. The ability to promote and sell products and services online allows even the smallest firms to profit with very little capital or overhead (Adams & Kossentini, 2000).
With the latest computerization and IT Internet technology, the future of international business for all personal or commercial investment companies involves e-commerce and all it has to offer. There are three main issues within e-commerce, including immediate access to unlimited information, upgrading of daily business activities due to computerization technology and the opportunities provided by e-commerce that allow for personal or business involvement through the Internet (Wilson, Hutson, & Mujahid, 2008) UNCTAD (2003) argues that in 2001, annual B2B online sales in the United States amounted to $995 billion, or 93.3 percent of all United State e-commerce. Private-sector estimates of the value of B2B trade in the European Union put it at between nearly $185 billion and $200 billion for the year 2002. In the Asia-Pacific region, it grew from about $120 billion in 2002 to around $200 billion in 2003 and $300 billion by 2004.

Many studies in the previous literature have try to explore the factors that affect Ecommerce adoption, but most of these studies provide inconclusive results while some discuss only factors influencing Ecommerce adoption. This study however, will by contribute in these literatures by providing detail review of the factors constraining Ecommerce adoption as well as factors influencing e-commerce adoption amongst the hotel industries in Libya.

However following the introduction which form part of the section one of these study, the remaining section will includes, Factors influencing Ecommerce adoption in the hotel industry, while section three will cover challenges facing Ecommerce adoption in the hotel industry, while section four will includes limitation of Ecommerce adoption and policy intervention. Finally section five will includes conclusion, summary and recommendation.

**Factors influencing Ecommerce adoption in the hotel industry**

Despite intense dispute amongst researchers on the direction of influence between ecommerce adoption, and hotel industry growth, clear understanding is not yet settled. Most of the studies in this perspective suffer from methodological problems of missing variables, conceptual vagueness, and some provide mixed result.

However, one the study that tries to resolvers these controversies of the direction of influence is the work of Radaideh and Salim (2004), who introduced factors of e-commerce adoption decision in a case of hotel industry as shown in Figure 3.2 below. They argue that there are critical factors affecting the adoption of e-commerce by hotels which are classified into two main categories; internal and external factors. Internal factors are within the hotels and external factors are environmental in nature.

Internal factors are IT readiness which refers to the level of IT usage within the hotel. This category includes information and networking security, system interrelation, data conversion, hardware and software compatibility, adequacy of the hotels, IT infrastructure and migration from legacy system (Graham and Cobham, 2006). The second internal factor category refers to the hotel industry financial readiness. Graham and Cobham (2006) argued that financial readiness is reflected by the top management’s willingness to fund an e-commerce adoption project. The major cost of e-commerce adoption is the cost of educating and training management and employees to use e-commerce (Graham and Cobham, 2006). Another concern of the top management is the losses of productivity due to abuse by IT staff readiness factor category refer to the IT and e-commerce literacy level inside the hotel.
Figure 2.1 Factors of e-commerce adoption in hotel industry

Adopted from Radaideh and Salim (2004),

Management support is another important internal factor category, Graham and Cobham (2006) state that this category represents the extent to which the top management recognizes the importance of e-commerce adoption. The recognition is reflected in the support and leadership of top management executives in e-commerce adoption process (Grover, 1993; Thong, 1999; Godenhielm, 1999; Tabor, 2003). The hotel internal culture refers to the collaboration level and style among the different managerial levels and team spirit and dedication to the business processes. Hotel size is one of the main reasons for not adopting e-commerce. Large hotel have more resources and infrastructure to facilitate implementation of e-commerce adoption projects. The anticipated financial and managerial benefits are important factors affecting the adoption decision.

There are several external factor categories to be considered. The first two categories include pressure exerted by competitors on a hotel. Tabor (2003) argues that competitive intensity increases the need for e-commerce adoption by hotels. The competition leads to environmental uncertainty and increases the need and rate of adoption. Allen (2000) emphasized the importance of trust in maintaining productive adoption of e-commerce.

Culture which explain the complete way of life of the society play a significant role in Ecommerce adoption, because it has been considered as a critical factor affecting e-commerce adoption (Ranganathan, 2003). Furthermore, customer pressure on the hotel to adopt e-commerce is also considered an important category. They stated that the industry to which the hotel belongs affects the adoption decision. The nature of government equally, is among the most important factor groups affecting e-commerce adoption. Ranganathan, (2003) rightly argues that government needs to build
knowledge and set standards. Policies and regulations are also important factors at the local and global stages.

Radaideh and Salim (2004) explained the main factors affecting e-commerce adoption among the hotel in developing countries but did not develop a solution for e-commerce adoption. Another matter to be addressed is that they separated the external and internal factors as different issues where in reality these two factors are interrelated, for example IT readiness depends on the external and internal factors together and cannot benefit the organization if one is used without the other.

E-commerce challenges in the hotel industry in Libya

The Internet does not only deal with money, but also with large databases, full of vital and sometimes top secret information that hotel, organizations and governments have within their own environment. Also, the Internet can be easily characterized as an FDI (Foreign Direct Investment) tool. Hotels apply different strategies of how to enter a foreign market, expand their operations and become multinationals. Hotel does that in order to create a competitive advantage over other hotels, such hotel gain competitive advantage by exploiting new resource; low labor-costs, cheap raw materials, the country’s infrastructure, communication channels, legislation, etc.

The revolution of e-commerce brings along some challenges, not only for the hotels, but for governments as well. These challenges can influence at a microeconomic and macroeconomic environment level. E-commerce and e-business require a complete change of the business structure. Hotels going digital need to consider restructuring their entire business or even creating a new one, they need to implement new management processes, changes in their business culture and follow different procedures for managing their employees. Also, they need to create a new structure for information systems, networked processing functions and most importantly, they will need to change their entire business strategy (Chaffy, 2002; Laudon and Traver, 2003).

All E-businesses, in order to co-ordinate their online transactions and business activities as well as the potential linkage with other hotels within its industry, need to build a very strong IT infrastructure. IT infrastructure has the power to connect the hotel with infrastructures of other organizations while bringing down barriers and creating a new ‘business global village’ (Chaffey, 2007). However, digital firms have to select the most suitable Internet technology that is compatible with their business processes and data structures. There are different kinds of hardware and software tools that can be used for different business applications. Therefore, the firm must choose the right set of technologies for its IT infrastructure (Laudon & Traver, 2007). Moreover, technology is constantly upgrading and introduces new systems, applications and hardware. A hotel has to keep up with the technology pace in order to create well functioning business processes among customers and suppliers via the Internet. This requires the reconstruction of information architectures and IT infrastructures.

According to Mitchell et al., (2004) there are five basic problems that stand in the way of implementing these new changes.

- **Loss of management control**: The end users are becoming more independent, capable of collecting, storing and handle software. This occurs due to the lack of a single, central point where the need of management can occur.

- **Connectivity and application integration**: A hotel needs to upgrade its IT infrastructure in order to have compatible networks and standards and eliminate connectivity problems.
Organizational change requirements: The old organization structure has to be changed to be compatible with the new IT infrastructure in order to be more effective and uniform.

Hidden costs of enterprise computing: Some unexpected costs and expected savings that did not occur are generating problems. These costs are generated from hardware and software installations, maintenance costs, labour costs etc.

Scalability, reliability, and security: The increased load of data transactions and storage as well as the traffic of applications such as audio, streaming video and graphics, drive managers to develop strategies to manage those issues.

This is done to primarily take advantage of lower labor and raw material costs (Kao & Decou, 2003). Therefore, Governments must bring down the different barriers that impact on ecommerce, such as taxation, extensive regulation and censorship; and allow e-commerce to grow up in an environment driven by markets. Also, governments should support the creation of a legal framework for doing hotel business on the Internet (United States Government, 2004). Additionally, e-commerce will open the market for highly skilled workers. From the expansion of e-commerce this demand will increase and it will significantly change the labor market. All the skilled workers that are living in countries significantly change the labor market. All the skilled workers that are living in countries that cannot comply with the salary and technology requirements will migrate to more developed countries that can easily accommodate their needs and demands (United States Government, 2004).

Problems of Ecommerce implementation in the Hotel industry in Libya

The complexity in the present day hotel business transaction is confronted with myriad of weaknesses and conditions that requires the collaboration of information technology system to improve the quality of business transaction at profitable scale and lesser risk (Zhang & Fang, 2009). Information technology-based transaction otherwise known as e-commerce enables instant access across the globe however; the success of e-commerce lies much on the effective functioning of telecommunication infrastructure.

Integration of e-commerce into a functioning hotel organization leads to the restructuring of the entire business setting (Henderson, Storeygard, & Weil, 2009). Other barriers such as payment method, deliveries of finished goods, insecure credit cards billing and insufficient knowledge of the service cost contends with the technological advances in e-commerce adoption (Odedra-Straub, 2003). Insecurity over online transaction determines e-commerce level of acceptance (B. J. Fogg 2003) and has a direct effect on the customer although this varies between individuals or hotles organization (Curtis & Cobham, 2008). E-commerce has been widely known as an ideal tool for transforming business operation, its adoption have been constrained by numerous challenges coupled with scanty research on the possibilities of integrating it into trade system.

Among these challenges include lack of trust on online services, insecurity of personal information, lack of infrastructure and poor knowledge of its operation has contributed to its stunted growth over the past decade (Hemp, 2006). Other limiting factors that hinders e-commerce implementation in the hotel industry in Libya includes high illiteracy rates, low income per capita and lack of reliable payment systems to support online business transactions coupled with cultural influence to online transaction (UNCTAD Secretariat 2003). These barriers collectively impede wider acceptance of e-commerce adoption among many hotels. It is essential that these barriers are tackled to enable successful adopted of e-commerce. Study on the evaluation and assessing of the basic components reveals their weaknesses and strengths.
With the identification of the weaknesses and strengths, the possibilities for better planning and implementation of e-commerce to reap its numerous benefits are (Dandan & Rongqiu, 2009) Based on the needs to overcome the barriers associated with ecommerce adoption, this research work investigates eighteen commonly noted potential barriers from previous literature, especially for economic environment similar to Libya (Zhu, Kraemer, Gurbaxani, & Xu, 2006).

**Government policy intervention on Ecommerce implementation in the hotel industry**

Adoption of e-commerce can potentially boosts the economic state of the Libya by providing convenient, faster and cost effective medium for hotel transaction. Integration of electronic mediums into hotel business processes enhances overall business performance with customizable business outfit that facilitates range of transaction [Anita Rosen 2006]. To promote wider acceptance of e-commerce among the hotel industry, especially hotels in Libya, policy intervention are necessity to reduce the high cost of internet access and to ensure secured network (Straume & Johnson, 2010).

Moreover, e-commerce is an efficient tool for sustainable economic growth however; its primary processes such as the production processes which include procurement, processing of payments ordering and replenishment of stocks; customer focused processes including promotion, sales over the internet, processing of purchase order for customers, payments and customer support. Internal management processes such as employee services, training and recruiting, video-conferencing and internal information sharing could be enhanced through the initiation of appropriate e-commerce based processes.

2. **Methodology**

2.1 **Sample Size**

Sampling design refers to a research plan that indicates. A questionnaire will develop to measure the constructs, this study will depend on items used in the previous researches with necessary modification for those items whenever need to be compatible with context of Libyan’ hotels. The initial questionnaires will pilot test by sending them to a group of firms' sales or marketing managers and academic expertise in measurement theory and questionnaire design. Their suggestion will be used to improve the questionnaire.

The target population for this research consists of hotels in Libyan tourism sector. The sampling frame for this study will be drawn from the list of hotels companies registered with the ministry of tourism in Libya. 200 questionnaires, including a cover letter will be hand deliver to the participants. The questionnaire will be directed to the sales or marketing managers, who is involved in the process relating to e-commerce operations and technology usage. The questionnaire will be made available in English and Arabic language. Respondents will be given the choice to fill in the questionnaire in the language they desire. The study will use Statistical Package for the Social Sciences (SPSS) as primary software for the analysis of data collection.

**Summary Conclusion and Recommendation**

The study has reviewed factors affecting Ecommerce adoption within the hotel industry, by analyzing factors influencing adoption of Ecommerce within the Libyan hotel industry with a diagrammatical illustration of the linkage between the internal and external factors that interplay play to hatch the adoption of Ecommerce in the hotel industry. The study went further to explained the challenges facing Ecommerce adoption, and the limitation associated with it implementation in Libya. The study went.
further to include constraints within the government policy implementation on effective e-commerce adoption and finally the study concludes with summery conclusion and recommendation.

It is the recommendation of this study, for successful implementation of e-commerce adoption certain issues must be taken into cognizance which includes the following:

E-commerce and e-business require a complete change of the business structure. Hotels going digital need to consider restructuring their entire business or even creating a new one. They need to implement new management processes, changes in their business culture and follow different procedures for managing their employees. Also, they need to create a new structure for information systems, networked processing functions and most importantly, they will need to change their entire business strategy (Chaffy, 2002; Laudon and Traver, 2003).

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To promote wider acceptance of e-commerce among the hotel industry, especially hotels in Libya, policy intervention are necessity to reduce the high cost of internet access and to ensure secured network (Michael Johnson 2010).

References


