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The Effect of E-Commerce Usage of Online Business Performance of Hotels

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ABSTRACT

E-commerce is found to be the best technology that enhances business performance of modern organization in the era of information technology. The purpose of this study is to examine the relationships between e-commerce usage and online business performance. The study found that e-commerce usage affects business performance significantly and then help to achieve the desired success from online business. This study also finds that online shoppers with moderate experience in using internet technology have strong intention to use e-commerce for booking accommodation without the need to follow the traditional old way for booking. The study recommends firms working in hospitality industry to increasing the usage of e-commerce by improving their business model in order to get the desired benefit of their business and develop their online business performance. It is highly recommended that To encourage all hotels regardless of the firm size to improve business performance by increasing the usage of e-commerce and implementation latest application for online booking that enhance the experience of customers online from different perspectives such as fast response, easy booking, safe payment portal, trust, and privacy protections.

Keywords: E-commerce usage, Business performance, Online business

1. Introduction

Electronic commerce (e-commerce) is a modern process for trading services and goods via computer networks by using the internet over website as the main media for making payment transaction and trading (Jantarajaturapath & Ussahawanitchkit, 2009; Silveira, 2003).

Today e- commerce is changing the way of doing business throughout the world and provides many new opportunities for not only big organizations but also to small and medium businesses to improve their performance of businesses worldwide without any restrictions and eliminate the barrier of borders. E-commerce is not involving buying and selling products and services only, it covers information for customer inquiry on products and information, price comparison. Therefore, e-commerce has a direct impact on business performance of organization, customers, and suppliers. The rapid change of business environment after the fast development in the internet, computer, and communication technology in last two decades, enable e-commerce to boost significantly to streamline al kind business process, enhance customer service and offer new channel to customers, and expand all types of business fields such as hotels, airlines, auctions, and retailers (Chang, 2003).

People in this century are more and more shifting their shopping trends to the Web, therefore many organizations shifting their business to e-commerce as well to increase the usage to e-commerce and improve their business performance. Today most of businesses in developed and developing countries become less dependent on traditional shopping from physical store, companies are constantly aiming at developing more effective and user-friendly e-commerce applications due to the increased sales volume from online stores, and in recent years, a large number of big, middle and small scale businesses around

the world have felt the necessity to use e-commerce applications and its direct impact on overall business performance (Abdalla, 2009).

Some scholars argue that with the presence of tough global competitions, many e-commerce vendors need for major improvements on their business model by shifting from traditional to online business in order to reach the desired business performance (Qin et al., 2009; Elizabeth et al., 2011; Mascha et al., 2011). However this study suggest that doing online business is not easy task and in order to establish a successful e-commerce website there are many factors determining the success and failure of e-commerce project such as security and trust and other associated factors that increase e-commerce usage. For example, improved usability is definitely one of the key factors to attract more buyers to online stores, but so is trustworthiness.

Different measurements have been proposed in many ways and various contexts over the past decade. In general however, managers have no structured set of criteria upon which to gauge the performance of their e-commerce websites. (DeLone and ly'IcLean 2004; Molla and Licker 2001).

The measurement of website performance has proven to be a difficult task but a must to ensure effective online business performance as it depends on which stakeholder perspective is adopted. It is further complicated by the fact (Palmer 2002) that can it be assessed at different levels (individual and organizational) using different interrelated criteria (Molla and Licker 2001). Therefore multiple, interrelated success dimensions are more likely to capture changes in online business performance than a single item or even a set of technical measures (Segars and Grover 1998) as they only portray one facet of performance (Auger 2005)

2. The Background of the Study

The rapid growth of B2C e-commerce reflects its potential advantages to businesses performance in terms of increased sales, lower costs, and enhances continuous development. Yet many businesses are unwilling to develop their business model by adopting e-commerce or they are disenchanted with e-commerce because of their poor experiences with online business that may not satisfy their expectations

The current study addresses the perspective of the researcher to develop online business performance by increasing the rate of e-commerce usage that can be used to understand what are the main factors and constructs of an effective website. This article is organized in seven sections. The purpose of the study is introduced in the next section where the theoretical overview and perspective of e-commerce usage and business performance are discussed in next section. The analysis of the effect of e-commerce usage on business performance follows the theoretical domain for researcher's perspective.

3. The Purpose of this Study

The main purpose of this paper is to help businesses dealing with hospitality and booking online for hospitality services to decide if e-commerce is the "right" choice for them to develop their business performance by reviewing the opinions of respondents and previous literatures on this topic. The conclusions and finding learned from this study provide an insights analysis on the impact of e-commerce usage on online business performance through various ways in which e-commerce may be incorporated into a a successful business plan, and to establish e-commerce capabilities that helps firms work in hospitality industry to develop their business performance and increase annual revenues, this paper will investigate the perceived benefits of e-commerce usage to the firms by measuring the improving in business performance, and discussing the problems encountered in implementing or sustaining an e-commerce business.

4. E-Commerce Concepts and Principles

E-commerce is a wide concept with multiple definitions depending on the context and viewpoint. According to E-commerce Europe Association (2011) e-commerce can be defined as "covering any form of business that is executed, using any information and communication technology".

E-commerce does not have a clear-cut definition. One way of defining it, is that, e-commerce or e-business is based on the electronic processing and transmission of data, including text, sound, and video (Silviu et al., 2011), and also defined as "the use of technology to conduct financial transactions online" (Mascha et al., 2011).

E-commerce refers to various online commercial activities focusing on commodity exchanges by electronic means, internet in particular, by companies, factories, enterprises, industrial undertaking and consumers. The literature available on e-commerce and diffusion in developed countries is quite extensive and diverse. Numerous studies have been documented that focus on both B2B and B2C

domains. The extensive analysis available is not only based on major generic themes like models, strategies, technology and social issues, but also covers specific issues like electronic branding, security, trust, e-payment, performance measures and privacy.

Francisco & Rodrigo (2005) state that "e-commerce offers opportunities to dramatically improve the way that businesses interact with both their customers and suppliers, to make business negotiations faster, cheaper, more personalized, and more agile"

E-commerce refers to various online commercial activities focusing on commodity exchanges by electronic means, internet in particular, by companies, factories, enterprises, industrial undertaking and consumers. The following are some definitions given by transnational corporations such as: Intel, IBM and HP respectively (Mascha et al., 2011):

- Intel: E-commerce = electronic market + electronic trade + electronic service
- IBM: E-commerce = information technology + web + business
- HP: E-commerce is a brand new science; it is not at all surprising that there are various definitions about it.

Nissanoff (2006) defines e-commerce as "the buying and selling of products or services over electronic systems such as the internet and other computer networks", while Norazlina, Fauziah, & Siti, (2004) defines e-commerce as "the use of information and communication technologies to economic activities and processes through electronic networks, in order to reduce information related to transaction costs to gain a strategic, information advantage", and he added that e-commerce include quality values such are accuracy and veracity, flexibility, convenience, contract standardization, speed, cost effectiveness.

Fraser, Fraser, & McDonald (2000) define e-commerce as "conducting business transactions over the internet, which includes exchange of information of value in the form of products and services as well as payments, using web-based technologies".

Habibur & Lili (2011) argue that "e-commerce is a modern business method, and they show that e-commerce is part of improving product and service quality, and through improving service delivery times to meet government organizations, manufacturers and consumers demand at the lowest cost that can be provided using e-commerce.

Based on the above the researched fines e-commerce as highly advanced and modern way of doing business transactions via the internet that exceeded the national borders and can communicate buyers and seller through the internet without the need for face to face meeting or following physical trading means.

5. E-commerce Usage

E-commerce applications enable firms from different types of industry to establish their presence in the market at national level and also to extend their economic activities beyond national borders in order to pursue opportunities elsewhere. The usage of e-commerce has the potential to reshape the performance of firms working in the hospitality industry, and effective e-commerce usage enabling price and service-related comparisons in a borderless market environment (Frieden et al., 2006).

According to Epstein (2004), increased website usage leads to increased sales, improvement in sales and cost savings, all ultimately leading to profitability. While Huizingh (2002) argues that the number of visitors is a more convincing measure of website performance than website sales as customers might be informed online and complete the purchase offline. The technology competence an important factor for e-commerce usage. In our opinion, most rural and small town businesses would benefit from having a website (Salwani et at., 2009). Consumers increasingly rely on the Internet for information, and a website is a relatively inexpensive way to present information on a business' products, hours, location, phone number, and sales. E-Commerce is, however, much more than maintaining an informational website, and the e-commerce related components and services (e.g., shopping carts, fraud protection, SEO, EDI, analytics software) may add more to the firm's costs than they contribute to profits. That is, e-commerce may not be a profit maximizing business strategy for a firm if the cost of implementing e-commerce exceeds the increase in net revenues or decrease in operating and marketing costs attributable to e-commerce (OECD. 2001).

Online technology however, enables the collection of large amounts of detailed data on visitor traffic and activities on websites. Such data offers a plethora of metrics from which companies should carefully choose measures for different purposes (Phippen et al., 2004).

There are many tools that provide various statistics about website usage (for example, Google analytics, Live STATS.XSF). However such tools provide only raw metrics and are of little benefit to businesses (Hong 2007; Phippen et al. 2004). In addition, even though web metrics may be capable of

extracting interesting website usage patterns and could indicate how users are actually using the website, a limitation to business performance is still lacking (Hahn and Kauffman 2001). Firms that implement ecommerce in their business model need to convert these raw metrics into meaningful information that can be used in evaluating their online business performance of their websites (Ahmad et al., 2011).

In this section we investigate the impact of e-commerce usage on the business performance. The study suggests that "e-commerce usage has a positive influence on business performance", therefore the study investigates this suggestion through the following phrases:

5.1. Percentage of Sales to Businesses Conducted Online

We asked the participants about their opinion with regard to the percentage of sales in their business place.

The results showed that (0 strongly disagree, 2 disagree, 18 neutral, 167 agree, 113 strongly agree). The results statistics is shown in Figure-1 below:

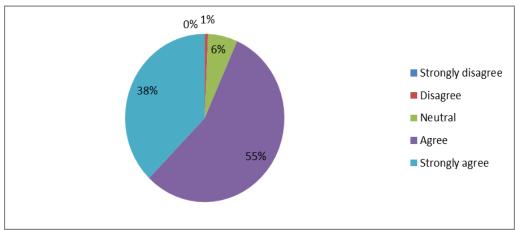


Figure-1. The Percentage of sales to businesses conducted online

Figure-1 above shows that the vast majorities (92%) of participants agree and strongly agree that adopting e-commerce by their hotels will increase the percentage of sales. The mean (4.30>4) shows that the study population is highly agree and emphasize on the importance of e-commerce to increase the sales volume of hospitality industry. In addition to that, standard deviation value (0.610) is small, which means that the opinion's of participants cluster very close near to the mean value.

5.2. Percentage of Sales to Consumers Conducted Online

We asked the participants about their opinion with regard to the percentage of online shopper's usage to e-commerce website of hotels, and its impact on sales volume.

The results showed that (0 strongly disagree, 0 disagree, 19 neutral, 176 agree, 105 strongly agree). The results statistics is shown in Figure-2 below:

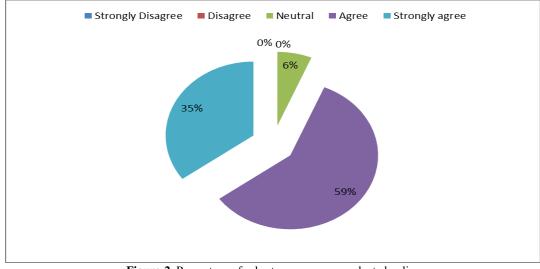


Figure-2. Percentage of sales to consumers conducted online

The result shown in Figure-2 above is identical with the previous question and indicates that both user seller and buyer in e-commerce contribute to increase the sales volume through effective usage to e-commerce. The mean equal to 4.28 and a small standard deviation 0.576, this shows the certainty of participants is high. Therefore, the study confirms the conclusion about this phrase.

5.3. Percentage of Customer Services Conducted Online

We asked the participants about their view with regard to the percentage of customer services online and its impact on e-commerce usage by the consumers.

The results showed that (0 strongly disagree, 0 disagree, 20 neutral, 172 agree, 108 strongly agree). The results statistics is shown in Figure-3 below:

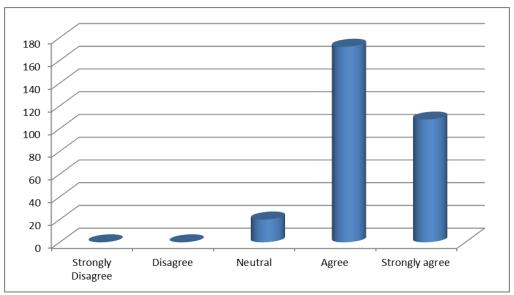


Figure-3. Percentage of customer services conducted online

The result shows that the majority of participants agrees and strongly agrees that good customer service increase the usage of e-commerce. The mean value equal to (4.29) which means that the majority of opinions (93.3%) either agree or strongly agree and confirms the importance of customer service on the number of visits and usage of e-commerce, while standard deviation very small (0.58), and this means that the study population cluster very close to the mean value (strongly agree).

Companies that sell goods and services online need to make an effort to build value-laden relationships with customers. In other words, a company must look at what customers need and value, and provide it accordingly. Companies that do not provide this expected value will likely lose their customers to a competitor (Kaylene et al., 2008). In addition to that the tourism industry expands globally, hotels expanding their business online need for expanding their communication networks and customer service as well (Hoontrakul & Sahadev, 2005) and the improvements in customer service can have a significant impact on customer loyalty. In groceries, a one point improvement in customer service satisfaction yielding a significant increase in implied retention rates.

5.4. Percentage of Purchases Conducted Online

We asked the participants about their view with regard to the percentage of procurement online and its impact on e-commerce usage by the consumers.

The results showed that (0 strongly disagree, 0 disagree, 23 neutral, 184 agree, 93 strongly agree). The results statistics is shown in Figure-4 below:

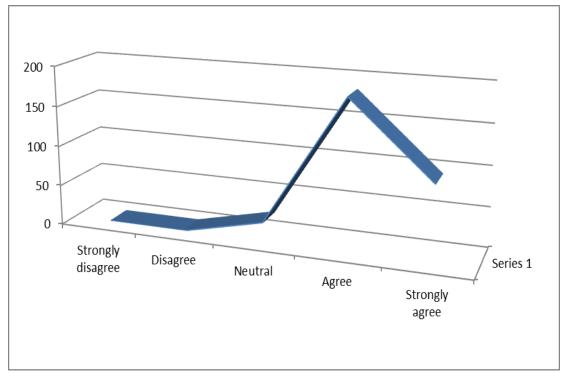


Figure-4. Percentage of procurement conducted online

The result shows that the majority of participants agrees and strongly agrees. The mean value equal to (4.23) which means that the majority of opinions (91.3%) and standard deviation very small (0.57), and this means that the study population cluster very close to the mean value (strongly agree).

6. Business Performance

The business performance comprises the actual output or results of an organization as measured against its intended outputs (or goals and objectives). According to Richard et al. (2009) organizational performance encompasses three specific areas of firm outcomes: (a) financial performance (profits, return on assets, return on investment, etc.); (b) product market performance (sales, market share, etc.); and (c) shareholder return (total shareholder return, economic value added, etc.). The term Organizational effectiveness is broader. Specialists in many fields are concerned with organizational performance including strategic planners, operations, finance, legal, and organizational development.

E-commerce is growing up very fast all over the world and become important issues in many studies. The tourism industry is the second largest contributor to the economy after the manufacturing sector. Therefore e-commerce cannot be excluded as this technology has huge impact on tourism industry (Mutia, 2014).

Effective web-based selling requires businesses to have a sound knowledge of how to measure the performance of their website as part of their management practices. Clear, useful measurements that capture website performance have enabled businesses to improve strategies and operations as part of their evaluation effort. The website is an increasingly important sales channel (sometimes a company's sole interface) linking the business and its customers. However, the measurement of website performance is neither simple nor straight forward as it is multidimensional in nature. The different perspectives, website user, owner and designer may add other layers of complexity to the construct measurements. Whilst the user and the designer perspectives are well advanced in the literature, there is a relative dearth of scholarly studies that address the owner's needs. The provision of such a perspective may enhance an owner's ability to increase returns and benefits from their online activity.

In the following section we investigate the relationship between business performance and e-commerce usage and evaluate the suggestion of the researcher that that "e-commerce usage has a positive influence on Business performance".

6.1. The Implementation of E-Commerce Increase Customer Retention Rate

In the past decade, e-commerce has been known as one of the most important means of doing business in the global market due to the cost and time saving, and also increases the number of loyal customers beyond domestic borders (Hengameh et al., 2012), hence the study examines the impact of e-commerce on business performance through increasing customer retention rate.

We asked the participants whether implementation of e-commerce increase customer loyalty and retention as well as the time the stay online in hotel website. The results shows that (0 strongly disagree, 3 disagree, 9 neutral, 89 agree, 202 strongly agree). The results statistics is shown in Figure-5.below:

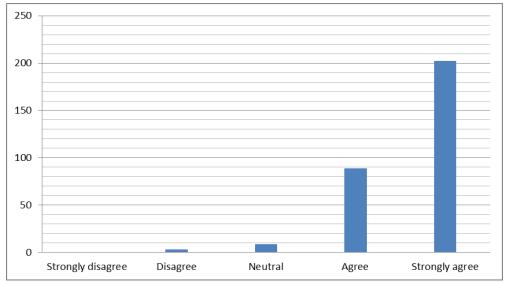


Figure-5. implementation of e-commerce and its impact on customer retention rate

As shown in the chart above, there is a big increase in participants' percentage those who agree or strongly agree with this phrase. The result shows that the vast majority of participants agrees or strongly agrees that implementing e-commerce in hospitality industry in Libya will convert to success through acquiring loyal customers. The mean value equal to (4.622) and small standard deviation (0.596), means the certainty and assurance of participants is high and confirm the conclusion of the study.

6.2. In Your Opinion Implementation of E-Commerce Increase Sales Growth

We asked the participants about their opinions with regard to the impact of implementation of ecommerce on increasing the profits of the company. The results showed that (0 strongly disagree, 3 disagree, 9 neutral, 103 agree, 185 strongly agree). The results statistics is shown in Figure-6 below:

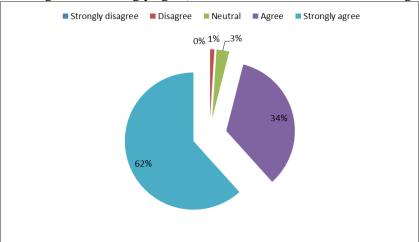


Figure-6. The relationship between e-commerce implementation and sales growth

As shown from the chart above, the majority of participants are either agree 34.3%) or strongly agree (61.7%) on the impact of e-commerce implementation on growth of sales by company. The majority of participants confirmed that adopting e-commerce is reflected positively on sales growth of hotels and hospitality revenue in general. The mean equal to 4.56 and small standard deviation 0.605, means the certainty and assurance of participants is high and confirm the conclusion of the study.

6.3. In Your Opinion Implementation of E-Commerce Increase Profitability

Most of firms those implemented e-commerce successfully enjoyed high profit due to the great advantages and revenues of e-commerce. The participants' answers show that (3 strongly disagree, 0 disagree, 9 neutral, 88 agree, 200 strongly agree), and represented in Figure-7 below:

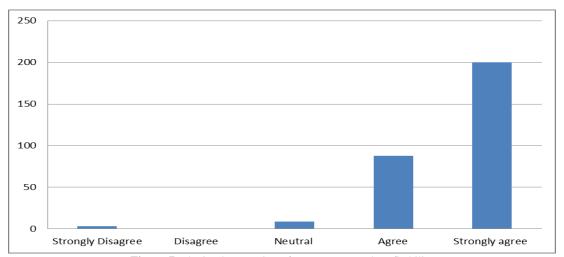


Figure-7. The implementation of e-commerce and profitability

As shown from the chart above, the majority of participants are either agree (29.3%) or strongly agree (66.7%) on the impact of e-commerce implementation on the profit level of the company. The majority of participants confirmed that adopting e-commerce is reflected positively on the profit of the company. This result shows that hospitality enterprises are expected to achieve significant benefits by way of growth in sales and profits through the increasing utilization of the internet technology through implementing e-commerce (Hoontrakul & Sahadev, 2005). The mean equal to 4.60 and small standard deviation 0.648, means the certainty and assurance of participants is high and confirm the conclusion of the study.

7. Conclusions

E-commerce found to be the best technology that enhances business performance of modern organization in the era of information technology. Many firms in developing and developed countries have changed their business model to electronic forms such as e-commerce and related technologies. It is found that hospitality industry is one of the main industries that gain high advantages from the adoption of e-commerce in their business.

The result of this study shows a significant impact on the relationship between E-commerce Usage and Business Performance. Accordingly hotels in any country that provide the utilities and regulate law for e-commerce should consider the important effect of e-commerce usage on business performance, and they must continuously follow up the latest technology development in e-commerce and update their systems in order to maintain their business performance and sustain competitive advantages of e-commerce.

This study also finds that online shoppers with moderate experience in using internet technology have strong intention to use e-commerce for booking accommodation without the need to follow the traditional old way for booking.

The study recommends firms working in hospitality industry to increasing the usage of e-commerce by improving their business model in order to get the desired benefit of their business and develop their business performance. It is highly recommended that To encourage all hotels regardless of the firm size to improve business performance by increasing the usage of e-commerce and implementation latest application for online booking that enhance the experience of customers online from different perspectives such as fast response, easy booking, safe payment portal, trust, and privacy protections.

References

Abdalla Hamed (2009) , E-commerce and Economic Development in Libya, a thesis of master, A thesis submitted to the University of Wales Institute, Cardiff for the degree of Doctor of Philosophy.accessed on 26/9/2014 Information Technology – CIT.

- Ahmad Ghandour, George Benwell , Kenneth R Deans . 2011. Measuring the Performance of e-commerce Websites An Owner's Perspective. Pacific Asia Journal of the Association for Information Systems Vol. 3 No. 1, pp.1-27.
- David L. Barkley, Deborah M. Markley, R. David Lamie. 2007. E-Commerce as A Business Strategy: Lessons Learned From Case Studies of Rural and Small Town Businesses. UCED Working Paper 10-2007-02, EDA University Center for Economic Development, Clemson University, Clemson, South Carolina
- Elizabeth Daniel, Hugh Wilson & Andrew Myers (2011), Adoption of E-Commerce by SMEs in the UK towards a Stage Model, Cranfield School of Management, UK
- Feindt, S., Jeffcoate, J., and Chappell, C. (2004), Identifying Success Factors for Rapid Growth in SME E-commerce, Small Business Economics
- Francisco Garcı'a-Sa'nchez, Rafael Valencia-Garcı'a, Rodrigo Martı'nez-Be'jar. 2005. "An integrated approach for developing e-commerce applications". Expert Systems with Applications 28. Elsevier publishing.
- Fraser, J., Fraser, N. & McDonald, F. 2000, 'The strategic challenge of electronic commerce', Supply Chain Management: An International Journal, vol. 5, no.1, pp. 7-14.
- Jantarajaturapath, Palan Khantong, Sommai. 2011. 200 Management dynamics Computer Subject: Electronic commerce; Technology application; Company business management. European Journal of Management Publisher: International Academy of Business and Economics.
- Mascha, Maureen Francis; Miller, Cathleen L. & Janvrin, Dian J. 2011. The effect of encryption on Internet purchase intent in multiple vendor and product risk setting. Electron Commer Res (2011) 11: 401-419.
- Nissanoff Daniel. 2006. FutureShop: How the New Auction Culture Will Revolutionize the Way We Buy, Sell and Get the Things We Really Want. The Penguin Press
- OECD. 2001. "The Internet and Business Performance." OECD Business and Industry Policy . Forum Report and Proceeding. $https://www.oecd.org/document/1/0,3343,en_2649_34553_1910273_1_1_1_1,00.html.$
- H. Mutia Sobihah, Ahmad Munir B. Mohd Salleh Embat, W. Abd Aziz B. W. Mohd Amin,
- Mohamad Saladin Muda. 2014. The Relationship between E-Commerce Adoption and Organization Performance. International Journal of Business and Management. Canadian Center of Science and Educati
- Qin, Zheng; Shungond, Li; Yi, Han; Jinchun, Dong; Lixiang, Yan; Jun, Qin (2009). Introduction to Commerce, New York: Springer Berlin Heidelberg).
- SilviuVladMirescu, TituMaiorescu University, Bucharest, Romania (2011). The Premises and the Evolution of Electronic Commerce. Journal of knowledge management, economics and information technology