

The Impact of E-Commerce and Auditing Process in Tourism and Hospitality Sector of Libya.

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Abstract:

The research mainly focuses on the impact of E-commerce to understand how much the phenomena of E-commerce has changed the auditing process and how it affected on work load that is caused on the auditor's work in the tourism and hospitality industry. Travelling and tourism is tremendously growing worldwide and Libya has a significant potential to develop it successfully. The empirical data was primarily collected from accounting companies working in Libya. Auditors, auditing managers, key aids auditors and accountants were targeted as a sample population. Both qualitative and quantitative data analysis methods are being applied in this research paper. The data is calculated utilizing SPSS 20. The results proved that electronic commerce plays important role on having an impact on the work of external auditors working in the accounting businesses throughout of Libya. The paper concludes that it has different affects on the auditors but in overall it has a significant impact on each of the business level strategic areas.

Keywords: E-Commerce, Auditing, Tourism and Hospitality, Libya

INTRODUCTION

One of the most important aspects that businesses have come across today is the E-commerce. 1970s was the decade that had given birth to the E-Commerce. As the credit cards became available to people all over the world, overnight delivery was made possible, and the mail order catalogs began the concept of shopping from home. Since then E-commerce has spread throughout the whole world and has been increasing in a pace that is not controllable. As evidence that the use of e-commerce is increasing and becoming more popular, CMA (Community Management Associates) conducted a reader survey on various topics of interest. The magazine found that “almost 80 percent of the respondents’ companies have a Web site (Martin, 2002)”. It was found that 35 percent of the companies are involved in e-commerce (Demers, 2002). This phenomenon has its own patterns for economy at the global level, in the information age and advanced modern technology in this era where the borders between countries have been erased geography and changed the concept of the determinants of what capital once was. It is as the globalization has been handed over to every single person who owns a computer, smart phone, tablet and such devices. Anyone who has access to the Internet can make use to this emerging technology from any part of the world. This phenomenon called E-commerce gives a freehand to shop or view any product by any business out there in the world that has set up their website on the World Wide Web (Demers, 2002). Internet allows users to connect within seconds and order what they desire. The E-commerce has given advantages to the consumers all over the world but at the same time it has brought in challenges to the businesses one who are running their business on the World Wide Web and to ones who are not running it on World Wide Web because it brings competition. It has given birth to the electronic accounting which all of these have started doing since they started their products and services online. Accountants and Auditors which are working behind the E-commerce are facing challenges which they never tackled before at work. Adapting to these ideas is not easy for them because it changes the way they have been working.

As the tourism industry expands globally, the need for expanding the communication networks to connect the customers and the service providers has increased. Mmanagement of e-commerce considers to be one of the essential tools for promoting and improving sales in the tourism and hospitality sector. The tourism and hospitality industry has always been among the first businesses started to prioritize new technologies where the world wide web has been used as a means for communication widely over the past decades in the tourism and hospitality industry. It has been obvious in directing the tourism sector to expand its markets across the world and it has played a dominant role to increase the industry. The world wide web is a cost effective mean for businesses in the tourism and hospitality sector to directly market their commercial

proposal to a large customer population across the globe. It is also one of the acceptable ways for the customers to collect information and compare between alternatives in an interactive and access easy manner.

LITERATURE REVIEW

1. E-Commerce and Its Concepts in Tourism and Hospitality

This study has been conducted on the impact of information technology on internal auditing process of any organization which it applies to. The study not only researches the impact of the IT on internal auditing but also emphasizes on how the IT is being adopted by organizations all over the world which gives organizations a more controlled environment in preparing auditing processes. Other than these two main topics it also looks upon the effects of IT on internal control of auditing and as well as helps with providing guidelines, practices in the techniques used for evaluation while performing internal auditing in travelling and tourism sector. The change that has come to the organizations such as promoting of operational efficiency and aid decision making through the information systems, electronic data processing also has been discussed widely. And at a point it focuses on the risks and controls from the view of IT as well. The study defines the new era of technology and how it impacts most of the aspects running within the system of accounting and auditing. Developments in new technologies, particularly the popularity of the Internet have forced organizations in the tourism and hospitality industry to appraise their use of technology in managing their business (Namaivayam, Enz & Siguaw, 2000). Today's modern information technology is what has made all this possible for E-commerce to be what it is today. As the E-business activities have started to develop the information technology has made such an incredible platform with perfect network for the sellers and buyers all around the world. At the same time there comes a threat to this whole system which is all based on the computer systems and are very vulnerable. Electronic trade has changed the picture of distribution, sales and marketing. Scholars and experts analyzed in a comprehensive way these changes (Law, Leung and Buhalis, 2009; Line and Runyan, 2012).

The tourism sector is indicated as the one sector that has experienced the influential impact of the Internet. Tourism have businesses found out new ways of exploring and expand their channels of distribution to reach target travellers in more efficient and effective ways (European Commission, 2004). These findings have direct implication for managing tourism e-business in the Mideterranean region, a long haul destination, which traditionally sources a major part of its international tourism business from the EU. Studies such as those by Warden and Williams (2003), Anckar and Walden (2001), Collins et al (2003), Gulledge (2000), Buhalis and Main (1998), Lubbe (2002), Blackburn and Athayde (2000) and Grattan, Brown and Horgan (1998), amongst others indicate that the use of ICT in the tourism and hospitality industry is increasing and for sustainability in this sector, there will need to be an increasing demand for staff who are competent in adapting, implementing and managing ICT as part of their normal business activities. The technology-organization-environment framework introduced by Tornatzky and Fleischer (1990) provides a convincing theoretical rationale for considering the importance of contextual factors in the adoption of e-commerce based technologies. The framework groups the significant contexts into three classes: (i) the organizational context (ii) the technological context and (iii) the environmental context. This framework has been applied across several information technology domains over the past decade (Zhu et al, 2002). Several authors have found considerable support for the framework in their studies. Notable ones amongst them are Mukhopadhyay et al. (1995), Kuan and Chau (2001), Zhu et al (2002). In most of these empirical studies, the specific factors identified within the three contexts have varied. These variations were reflective of the organizational or market contexts in which these studies were conducted. In this study, certain variables unique to the tourism industry are chosen to represent contextual factors that are thought to be influencing the usage rate for e-commerce. Overall, the main focus of these studies is to analyze and explain the main outcomes of rapid use of e-commerce in the travel and tourism industry. Both these streams have highlighted the variations in the use of internet across destinations and across enterprises and tried to explain these variations from different perspectives. The factors considered in this research are classified into three major groups: (i) practice of E-Commerce auditing process (ii) evaluation of auditors and (iii) relation of auditor's skills, knowledge and qualification to E-Commerce. The study attempts to see the

impact of these factors on the intensity of e-commerce and auditing usage in the tourism and hospitality industry in Libya.

2. Tourism in Libya as a Factor of Economy

The nation's situation during the year 2013 had turned so bad that it had caused the nation to go in a recession which it did not see coming. Libya's oil production was damaged in a very negative way which caused the nation to fall deep and the recovery seemed hopeless. In 2013 the oil production had bumped up to 1 million barrels per day from 0.5 billion barrels per day. But again in year 2014 the production dropped back down to 0.5 due to security breaches at the production sites. The recession caused the nation's GDP to drop less than half of what it was before (Libya, 2015). The war events that caused the oil production to drop also had impact on the tourism in the country. According to the Libyan General Board for Tourism the number of tourists who visited Libya in 2006 has reached 125,480 tourists. The new developments aimed to attract 1.5 million visitors by 2012 with an eventual estimate of 10 million tourists a year. But with the war in the region and after that turmoil transformed Libya as less attractive destination.

THE STUDY METHODOLOGY

A. Universe and Sample

The research is to be carried out on the accounting companies located in Libya. 20 different firms were randomly contacted out of which 15 responded to participate in the survey. Total of 150 participants are chosen from the firms for population size of the research. Surveys were passed out but only 120 surveys were returned filled. The volunteers which filled the survey included accountants, assistant auditors, senior auditors and auditor's managers.

The study was conducted through a questionnaire survey and been based on the different variables which been tested with the dependent variables. The questionnaire had 2 sections, one consisting of general information about the interviewee and the second related to their views about different aspect on impact of various independent variables on the e-commerce. Available measuring scales are Nominal, Ordinal and Interval. Ordinal scales are used to analyze the data of this research since the ordinal scales the values are organized according to their significance and importance. Ordinal scales are used to represent values which are non-numeric, like satisfaction and dissatisfaction. The numbers (1, 2, 3, 4, and 5).

B. Hypothesis- Research Questions

The variables will be measured based on the following hypothesis:

- H1- There is a significant statistical at 0.05 levels between E-Commerce and current skills, knowledge and qualification of Libyan auditors in Libya.
- H2- There is a significant statistical at 0.05 levels between E-Commerce and the audit report in Libya.
- H3- There is a significant statistical at 0.05 levels between E-information systems and the quality of audit evidences and documentation process in Libya.
- H4- There is a significant statistical at 0.05 levels between E-Commerce and the risks of audit process in Libya.
- H5- There is a significant statistical difference at 0.05 levels among respondents in regard the impact of E-Commerce on the external auditor work due to personal information's and Data's in Libya.

C. Statistical analysis tools

Both qualitative and quantitative data analysis methods are being applied in this research paper. The data is calculated utilizing SPSS 20. Following tools will be utilized in order to do test analysis on the hypothesis;

- i. Kolmogorov-Smirnov test of normality

- ii. Cronbach’s Alpha for reliability statistics
 - iii. Frequency and descriptive Analysis
 - iv. Parametric Tests, which include one-sample T-Test, Independent Samples T-Test. Analysis of variance).
- Kolmogorov-Smirnov test of normality has been used to test normality. Table 1 represents the Kolmogorov-Smirnov test. It indicates that p-value of each field which is greater than 0.05, which is the level of significance where each field is normally distributed. Thus the non-parametric tests will be the source of deriving statistical data analysis.

Table 1. Kolmogorov-Smirnov test

Field	Kolmogorov-Smirnov	
	Statistic	P-value
Current skills, knowledge and qualification of Libyan auditors in E-Commerce	0.972	0.278
The impact of using E-Commerce on the Audit Report	1.316	0.069
The impact of electronic information systems on the quality of audit Evidence & documentation process	0.788	0.583
The risks of audit process related to E Commerce systems	0.852	0.461
All statements of the questionnaire	0.961	0.327

Kolmogorov-Smirnov Test shows that all the P-values are greater than the value of $P = 0.05$, which shows that they are normally distributed.

- Cronbach’s Coefficient Alpha

Table 2 shows the results calculated using Cronbach’s Alpha test for each variable in the questionnaire compared with the rest of the questionnaire. For our list of independent variables, values of Cronbach’s Alpha were between 0.561 and 0.806. This is considered as high; according to these results it ensures that the reliability of each portion of the questionnaire. Cronbach’s Alpha gave the value of 0.855 for the whole questionnaire this is the indication that the whole questionnaire is reliable.

Table 2: Cronbach's Alpha for each field of the questionnaire

No.	Field	Cronbach's Alpha
1.	Current skills, knowledge and qualification of Libyan auditors in E-Commerce	0.801
2.	The impact of using E-Commerce on the Audit Report	0.566
3.	The impact of electronic information systems on the quality of audit Evidence & documentation process	0.788
4.	The risks of audit process related to E-Commerce Systems	0.682
All paragraphs of the questionnaire		0.857

DATA ANALYSIS AND DISCUSSION

The results here are based on the information collected through sampling by selecting various auditing firms in the country along with the e-commerce businesses. Various types of data were essential to derive these results. The general data was collected related to individual’s age, qualification, and specialization, number

of years of experience, work trainings and job description. The data was analyzed against the hypothesis statements.

Table 3. General Data Table

Age	
Criteria	%
Less than 30 years	22.5
30 – Less than 40 years	50.0
40 – Less than 50 years	22.5
50 years and more	5.0
Total	100.0
Qualification	
High School diploma	23.4
B.Sc.	55.8
M.Sc.	20.0
Ph.D.	0.8
Total	100.0
Specialization	
Accounting	75.9
Financial and Banking	10.8
Economy	2.5
Other	10.8
Total	100.0
Job Description	
Accountant	64.2
Assistant Auditor	8.3
Senior Auditor	16.7
Audit Manager	7.5
Other	3.3
Total	100.0
Years of Experience in Auditing Field	
Less than 5 years	42.5
5 – Less than 10 years	31.7
More than 10 years	25.8
Total	100.0
Numbers of Times that Audited on E-Commerce Processes	
Never	58.3
Less than 5 times	27.5
5 – Less than 10 times	8.4
More than 10 times	5.8
Total	100.0

Hypothesis No.1: "There is significant statistical at 0.05 levels between E Commerce and current skills, knowledge and qualification of Libyan auditors"

Table 4. Means and Test Values for “Current Skills, Knowledge and qualification of Libyan auditors in E-commerce

	Item	Mean	Test value	P-value (Sig.)
1.	The auditor has appropriate knowledge about the Internet and IT	2.17	25.069	0.000*
2.	The auditor has the ability to understand the impact of the firm business in e-commerce on the financial data's	2.33	26.505	0.000*
3.	The auditor has the ability to understand the impact of technique used for e-commerce on the data	2.20	25.158	0.000*
4.	The auditor has the ability to understand the firm look for managing of electronic errors	2.47	25.866	0.000*
5.	The auditor has the ability to evaluate electronic audit manual	2.56	26.855	0.000*
6.	The auditor has the ability to determine the extent, the nature and timing of audit procedures	2.28	25.514	0.000*
7.	The auditor has the ability to understand the risks involved in electronic commerce practices	2.18	25.088	0.000*
8.	There auditor has the ability to determine the extent of the required procedures for auditing in the e-commerce environment	2.21	26.963	0.000*
9.	There is an urgent need to attend a program, rehabilitation and training on auditing of e-commerce methods	2.03	18.219	0.000
10.	The international professional versions of auditing profession are viewed regarding e-commerce	2.82	30.990	0.000*
11.	Considered the audit of internal control procedures process for e-commerce companies are complex	2.61	29.112	0.000*

Hypotheses No.2: "There is significant statistical at 0.05 levels between E-Commerce and the audit report".

Table 5. Means and Test values for “The impact of using E -commerce on the Auditing report.

	Item	Mean	Test value	P-value (Sig.)
1.	When preparing the auditor's report, taking into account the nature of e-commerce processes?	2.27	26.629	0.000*
2.	The electronic information systems is used in the preparation of the annual financial statements at the audit process	2.22	24.989	0.000*
3.	When preparing the external auditor's report, the information technology is used for firms practicing e-commerce	2.29	27.011	0.000*
4.	Falls to the external auditor's full responsibility to determine whether the financial data's are agrees with electronic financial data's	2.09	23.619	0.000*
5.	From the problems facing the auditing profession: difficult to express an opinion about fairness of the financial statements in preparing the independent auditor's report in e-commerce environment	2.69	9.986	0.000*

Hypotheses No.3: "There is significant statistical at 0.05 levels between E-information systems and the quality of audit evidences and documentation process"

Table 6. Means and Test values for “The impact of electronic information Systems on the quality of audit evidence and documentation process”

	Item	Mean	Test value	P-value (Sig.)
1.	Evidences and procedures of audit process is documented when reviewing operations in e-commerce	2.12	24.525	0.000*
2.	E-commerce systems is used in gathering evidence process	2.42	30.246	0.000*
3.	When gathering evidence for e-commerce process, deviations are calculated in the cost for the audit process functions	2.72	25.961	0.000*
4.	Electronic programs is used in preparing notes forms and documents	2.21	27.249	0.000*
5.	E-commerce systems is used in documenting the client's accounting system	2.24	26.525	0.000*
6.	The use of electronic information systems in the audit process works to improve the auditor ability and rehabilitation on prepare evidence of high quality	1.93	24.759	0.000*
7.	There is impact for using e-commerce systems on the auditor ability in obtaining on evidence to the appropriate timing of an item being audited	2.27	22.614	0.000*
8.	The e-sites consider documents can be invoked	2.41	24.589	0.000*

Hypotheses No.4: "There is significant statistical at 0.05 levels between E-Commerce and the risks of audit process".

Table 7. Means and Test values for “The risks of audit process related to E-Commerce systems

	Item	Mean	Test value	P-value (Sig.)
1.	E-commerce systems is used in assessing audit risks related to e-commerce processes	2.14	27.191	0.000*
2.	External auditor is able to audit the financial statements data's for commerce processes, and meet its challenges in the light of his current skills	2.29	24.713	0.000*
3.	The need for high skills and external expertise in order to use the computer in the application is one of the most important risk audit process in e-commerce systems	2.16	26.055	0.000*
4.	From the risks facing by the external auditor planning and assessment audit work risks for e-commerce process	2.43	26.829	0.000*
5.	The use of e-commerce systems in the audit process leads to reliance Increasingly on devices and programs abilities, which reduces the innovation and creativity of the external auditor	2.36	25.350	0.076

CONCLUSION

As the hypotheses have been tested, it is concluded that all the aspects of the E-commerce processes have a high impact on the auditing process in Libya. Skills, knowledge and qualification of the auditors on E-commerce have a high impact on the auditing process of E-commerce. The evolution of e-commerce, using a public network like the internet as a technological infra-structure to support the implementation of the information and communication channel, has produced a huge impact on what concerns the implementation of internal control systems and the information systems' auditing practices when the commercial transactions are done electronically. In the present paper it is suggested that 86.50 percent of the sample participants agreed with it. Additionally, E-commerce does have an impact on the external auditor's report due to their work is to be done on the same auditing systems which are used by the organization and is applied to them as well.

REFERENCES

- [1] Anckar, B., and P. Walden. 2001 Introducing Web technology in a small peripheral hospitality organization. *International journal of contemporary hospitality management*, 13(5), 241-250.
- [2] Buhalis, D., and R. Main. 1998 Information technology in peripheral small and medium hospitality enterprises: strategic analysis and critical factors. *International journal of contemporary hospitality management* 10(5), 198-202.
- [3] Blackburn, R., and R. Athayde. 2000 Making the connection: the effectiveness of Internet training in small businesses. *Education + Training*, 42 (4/5), 289-298.
- [4] Collins, C., D. Buhalis., and M. Peters. 2003 Enhancing SMTEs' business performance through the Internet and e-learning platforms. *Education + Training* 45 (8/9): 483-494.

- [5] Demers, J. (2002). Reader survey provides insight on CMA's management responsibilities, information interests. *CMA Management*, 76(3). May, 9-10.
- [6] European Commission. 2004 A pocketbook of e-Business Indicators. Luxembourg: Office for Official Publications of the European Communities. <<http://europa.eu.int>> (30 May 2004).
- [7] Gullede, F. 2000 The impact of the Internet on the travel business. Accessed from <unknown Internet site> (12 December 2003).
- [8] Grattan, J., G. Brown., and J. Horgan. 1998 Student C&IT skills development and the learning environment: evaluations and module evolution. *Education +Training* 40 (8): 366-373.
- [9] Kuan K. K. Y and Chau P. Y. K. (2001). A Perception based Model for EDI Adoption in Small Business Using a Technology-Organization-Environment Framework, *Information and Management*, 38, 465-485.
- [10] Linea, N. D., & Runyan, R. C. (2012). Hospitality marketing research: Recent trends and future directions. *International Journal of Hospitality Management*, 31, 477-488.
- [11] Law, R., Leung, R., & Buhalis, D. (2009). Information Technology Applications in Hospitality and Tourism: A Review of Publications from 2005 to 2007. *Journal of Travel & Tourism Marketing*, 26(5), 599-623.
- [12] Lubbe, B. A. 2002 The impact of the World Wide Web on the relationships between airlines and traditional travel arrangements. Proceedings of the 4th annual conference of WWW applications, 4-6 September. University of Stellenbosch. <<http://generalupdate.rau.ac.za/infosci/conf/Wednesday/Lubbe.htm>> (30 March 2004).
- [13] Martin, N.M. (2002). Task-technology fit: Brick and mortar beware? *Journal of American Academy of Business*, 1(2), March, 278-281.
- [14] Mukhopadhyay T., Kekre S., and Kalathur S. (1995). Business Value of Information Technology: A study of Electronic Data Interchange, *MIS Quarterly*, 19(2), 137-156.
- [15] Namasivayam, K., C.ENZ., and J. Siguaw. 2000 How wired are we? The selection and use of New Technology in US Hotels. *Cornell hotel and restaurant administration quarterly*, (December), 40-48.
- [16] Tornatzky, L. G., and Fleisher, M. (1990). *The Process of Technology Innovation*, Lexington, MA: Lexington Books.
- [17] Warden, S., and R. Williams. 2003 Benefits for small medium and micro-enterprises (SMME's) in the Western Cape in the tourism industry for adopting electronic commerce. Proceedings of the 5th annual conference of WWW applications, 10-12 September. Rand Afrikaans University. <<http://generalupdate.rau.ac.za/infosci/conf/Wednesday/warden.htm>> (30 March 2004).
- [18] Zhu K., Kraemer L. K., and Sean Xu (2002). A Cross country Study of Electronic Business Adoption Using the Technology-Organisation-Environment Framework, working paper of the Center for Research on Information Technology and Organisations, University of California, Irvine available at www.crito.uci.edu accessed on 6/10/2014.

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