



A STUDY ON THE ROLE OF E-COMMERCE TECHNOLOGY IN MANAGEMENT

SKILLS

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Abstract

This study aims to determine the relationship of E-commerce technology resources and management skills on organizational capabilities in the hotel industry in Malaysia and the factors associated with it. Measurement tools for E-commerce technology resources and management skills adapt from Duncan and Bogucki (1995), and Mata, Fuerst & Barney (1995). The findings show the E-commerce capabilities is higher with a mean of 3.23 compared with E-commerce benefit of 3.22. The study also found that E-commerce management skills with a mean of 3.23 and E-commerce technological resources with a mean of 3.22. The study also shows that there is a correlation between the ability of the organization (the Ecommerce benefit and E-commerce capabilities) with variable E-commerce technology resources and management skills. While regression analysis 'stepwise' E-commerce technology resources as the most dominant factor in predicting organizational capabilities and E-commerce benefits. While E-commerce management skills is the most important factor in influencing the E-commerce capabilities. The role of information technology on management theory and practice has been recognized since at least the late 1950s. This article explores the past, present and future of information technology and its impact on management thinking. The article begins with a review and discussion of past predictions about the future of information technology. Next, the role of information technology and its impact on the modern organization and present managerial thinking is discussed. The article concludes with four key predictions regarding information technology and its impact on management in the year 2020: convergence, decentralization, virtuality and commodification.

Keywords: *E-commerce, E-commerce technology resources, E-commerce management skills*



Introduction

Organization is constantly changing in line with global environmental changes. These changes cannot be expected and is formed out of control. This situation demands that each organization is also a change to reduce the gap in environmental changes that occur. Organizations that fail to follow the tide of change that will be left behind in many things. This indirectly affects the individual employee and organizational performance. Since 1950, the organization invests money into information technology to improve profitability and to increase the capacity of the organization. In 1980 and 2004 private sector organizations invest in information technology from 34% to 50% of total investment. E-commerce becomes more important at the end of the 20th century. E-commerce is the buying and selling products or services over electronic systems such as the internet. E-commerce used the internet and other information technology to support business capabilities. In 13 years, since 1995, E-commerce grew by \$258 billion and retail for about U.S. \$3.6 trillion in the United States (McKay and Marshall, 2004). In 2005, E-Commerce transaction in reached RM3.7 billion (U.S. \$ 1.0 billion) increased by approximately 81.8% per year.

All companies today no matter big or small, local and international use of information systems and has spent a significant investment in information technology to achieve key business objectives such as improving the ability of the company (Laudon, 2007). Internet, related technologies and applications should be changed in line with changes in business operations and how the employees work and how information systems to support business processes, decision making, competitive advantages and capabilities (O'Brien, 2007). Today, many aspects of the world market are affected directly or indirectly by the development of information technology. In the 21st century, the world market has been supported by a market system that uses electronic infrastructure. Common knowledge of information technology has no boundaries and can be reached anywhere by anyone accessing the Internet. Trade through the internet has opened a new era in trade relations have also been structuring the entire system in electronic markets that provide opportunities for firms from the third world countries. According to Ng (2000), generally a lot of organizations, regardless of size, are unable to identify the overall potential of the existing values in the Ecommerce.



In developing countries like Malaysia for example, the enterprise has been identified as the main group does not participate in the use of E-commerce. The organizations are identified in Malaysia but it was not a pioneer in the use of E-commerce. The tourism sector will be fast growing and constantly changing with the development of new networks and services. Tourism is one of the pioneer industries successfully adopt the system in a larger scale.

According to Berhanu Beyene & Kibruyisfa Archamyeh (1997), a computerized ordering system via the internet is the best example to describe the electronic market. It has a complete restructuring, and overall industry distribution channels. Not only the airlines that use it as well as the tourism industry supply instruments that allow the flow of processes and offers to services to potential customers around the world. E-commerce is the best medium of instruction is more efficient and flexible. The tourism industry will generate revenues for many countries and attract foreign currency into a country. Tourism market is rapidly growing. 'World Tourism Organization' estimated that by 2020 more than 1.5 billion tourists will travel overseas. Europe will become the most popular tourist destinations. The second is the Asia-Pacific Europe which will be visited up to 397 million tourists. Growth rate percentage stood at 6.5% per annum. The tourism industry showed encouraging growth rates. However, competition is a great situation. As is generally known, the tourism sector can bring in foreign exchange into the economy of a country in rapid time. Thus most developing countries have focused attention on the tourism sector by measuring the development of the tourism sector as the basic issues in the Social Planning and National Development.

Developing countries also have developed their tourism sector. Tourism is a global movement, in which the global information, global communication, service and product line is needed. Therefore, using E-commerce, information that is shared more easily, cost effectively and more importantly can be accessed on-line for the bodies which come under the tourism organizations such as hospitality. This is the reason why the information can be accessed on-line that can promote and ensure the success of E-commerce in the hotel sector. Now the hotel has introduced E-commerce in the various forms of work such as online, self-exploration, information about hotels, locations, types of rooms, prices rooms and facilities available, e-mail, purchase of raw materials



from suppliers through the Internet and online payment. All these facilities will enhance the operation of hotels. In the year 2005, E-commerce transactions reached RM3.7 billion (U.S. \$ 1.0 billion) and it moved up 81.8% from year to year. B2B transactions grew from RM7.7 billion in 2004 to RM29.3 billion. While B2C transactions grew from RM3.4 billion to RM7.4 billion. In a period of 5 years from 2006 to 2010 the value of E-commerce transactions are expected to increase by an average of 27% per year .

E-commerce has the power, especially in the tourism industry in general that particular hotel. This can supply information easily together with payment via online. This research is to identify the effect of implemented E-commerce capabilities and organizational culture has an impact on performance of organizations in the tourism industry and focuses on the hotel industry.

Problem Statement

Many organizations regardless of industry type or size, is still not clear about the advantages brought by the E-commerce in Malaysia. Lack of success stories by the "click and mortar" company has been identified as a reason why the traditional business refuses to start investing in E-commerce. In the study of stimulus E-commerce and practices among Small and Medium Industries (SMIs) in Malaysia, and Noor Ainin Ismawati (2003) provide empirical support in which 79 percent of respondents said "not many success stories of E-Commerce" as a barrier key to apply the E-Commerce, followed by "do not have knowledge in E-Commerce" (72.6 percent), "Internet Access lowest among buyers" (72.2 percent), and "lack of knowledge about the potential of E-Commerce" (69.6 percent) . Chow (2000) found that only 20.5% of organizations involved in the travel get involved in E-Commerce because of the lack of success stories and information on the effect of E-commerce in the ability of organizations. While many articles discuss the applications and benefits using the E-commerce, but academic studies with a systematic explanation of the effect of technological resources and management skills E-commerce on the ability of organizations in tourism and hospitality sector in particular is limited. The extent of using E-commerce in the ability and give affect the hotel industry yet to be identified.



Research Objectives

The study is to identify the impact of E-commerce in the hospitality sector in influencing the ability of their organizations. Thus the objective of the study is as follows:

1. To identify the levels of organizational capabilities (E-commerce benefits and E-commerce capabilities), E-commerce technology resources and E-commerce management skills;
2. To determine the relationship between organizational capabilities (E-commerce benefits and Ecommerce capabilities) and independent variables, and
3. To determine the most dominant variables that affects the organization's capabilities (E-commerce benefits and E-commerce capabilities)

Collection of Data

The present paper is totally based on secondary data. The data was drawn from various sources which have been duly acknowledged. The secondary data relating to net resources study of the past literatures about the technology sector, related research papers and journals. The annual reports and the sector reports published by regulatory bodies facilitated the study, especially in understanding the role of technology on commerce and management.

Methodology

The present paper is totally based on secondary data. The data was drawn from various sources which have been duly acknowledged. The methodology for this present paper is purely Descriptive and Analytical way of analysis of the collected data from the various sources.

Observation and data analysis

The data was analyzed and presented are as follows has been customized by Chu Jan Tow (2008) will be used and modified to follow conformity assessment. Based on the issues and income rather than loose talk of studies in the review found that the work does not rely variable reserved for this study is that the sources of E-commerce technology resources and management skills to the maintenance of E-commerce on organization capabilities (Duncan & Bogucki,1995; Fuerst &

Barney, 1995). Decisions are expected to take effect is to raise the excess E-commerce, and increase of E-commerce capabilities.

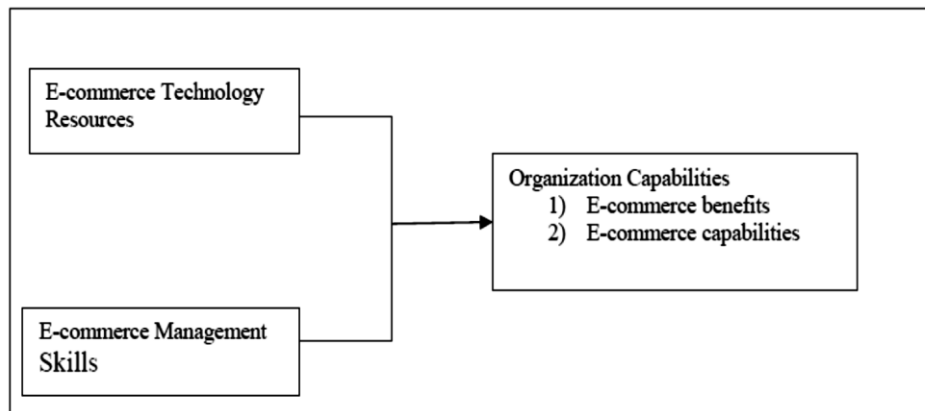


Figure 1: Conceptual Framework

A set of questionnaires for this study consists of five main sections, consisting of

- 1) Demographic variables
- 2) E-commerce technology resources
- 3) E-commerce management skills, and
- 4) Organization capabilities.

Except for demographic variables, five-point Likert Scale is used for all sources of E-commerce technology resources, E-commerce management skills and organization capabilities.

Part A: Demographic Variables

This Part in respect of personal information from respondents. This section also contains background of respondent gender status, age and highest educational level. Total the questions below demographic variables are 13 items.

Part B: E-commerce technology resources

The next section B on the E-commerce technology resources. Consists of eight questions, the variable is adapted from Duncan and Bogucki (1995).

Part C: E-commerce Management Skills

The next section C on E-commerce management skills. Consists of seven questions, this variable was adapted from the eyes, Fuerst and Barney (1995).



Part D: Organizational Capabilities

This research attempts to examine from the perspective of hotels and resorts in because not many studies on E-commerce is done in the sector. The population in this study is 563 hotels and resorts and accommodation is divided into three (3) categories

- 1) Islands and beaches,
- 2) Travel and nature, and
- 3) Stay in the city.

For this study, 217 hotels and resorts have been chosen as a sample using simple random sampling technique from three types of accommodation with the status of three (3) stars below, and four (4) stars and above. Hotels and resorts are selected for their involvement in E-commerce initiatives. Total population of this study is 563 hotels and resorts. Referring to Krecjie and Morgan (1970), to measure the population of 563, the minimum required sample size for this study is approximately 217 respondents. The informant for data collection, depend on one (1) person to provide information about the collective procedure. The provider information is considered highly qualified for their position, experience and specialized knowledge (Ventkatraman, 1989). Because this study will investigate the E-commerce, and organizational capabilities, E-commerce Executive or Information Technology Executive is a provider of appropriate information.

Finding of the study

Reliability is the degree to which any reliable or consistent measure (Trochim, 2001). Alpha reliability is usually used to determine the consistency. Table 1 below shows a list of Alpha reliability values for potential sources of E-commerce technology resources, E-commerce management skills and organizational capabilities. Given these results, all variables were reviewed to have adequate levels of internal consistency since they meet the recommended standard of 0.60. Mean score is to answer the first research objective 1: To identify the levels of organizational capabilities (E-commerce benefits and E-commerce capabilities), E-commerce technology resources and E-commerce management skills. Pearson's correlation was performed to answer the second research objective: To measure the relationship between organizational capabilities (the E-



commerce benefits and E-commerce capabilities) and independent variables. Referring to Table 3, the results of correlation analysis showed a significant positive relationship between organizational capabilities (E-commerce benefits, and E-commerce capabilities) with Variable E-commerce management skills and E-commerce technology resources,

Conclusion

In conclusion, this study reports the effect of the relationship between E-commerce technology resources and E-commerce management skills with the organization capabilities. The findings obtained showed that in line with the previous research by Tow (2004) and Bharadwaj (2000), the findings show the relationship of E-commerce technology resources and E-commerce management skills, organizational capabilities (Ecommerce benefits and E-commerce capabilities). Among all the variables, E-commerce technology resources are the most dominant variable affecting the organizational capabilities. The findings can be used by management to review future plans so that they can increase the capacity of the organization. For the organizations that do business globally allows the organizations to use the E-commerce(Council and Kraemer, 2000). Referring to the results of the study, it is recommended to the management consistently in their willingness to invest in the E-commerce technology resources and E-commerce management skills such as employee training This provides a useful guide to the 'Click and Mortar "to evaluate the use of E-commerce when they use the E-commerce in enhancing organizational capabilities.

REFERENCES

- i. Ainin, S. & Noor Ismawati, J. 2003, 'E-Commerce Stimuli And Practices In Malaysia', Proceedings Of 7thPacific Asia Conference On Information system (Pacis), Adelaide.
- ii. Barney J. B. 1995, 'Looking inside for competitive advantage'. Academic of Management, vol. 9, no. 4.
- iii. Bharadwaj, A.S. 2000, 'A Resource-Based Perspective on Information Technology Capability and FirmPerformance: An Empirical Investigation', MIS Quarterly, vol. 24,
- iv. Duncan N.B, 1995, ' Capturing Flexibility Of information technology Infrastructure: A Study Of Resource
- v. Characteristic and Their Measure,' Journal Of Management Information Systems, vol.12, no. 2, pp. 37-57.



- vi. Fay, J. 2000. 'The Resource-based View of the Firm: Some Stumbling-blocks on the Road to Understanding Sustainable Competitive Advantage', Journal of European Industrial Training.
- vii. Fisher, M. 2000, 'Using E-Commerce To Deliver High Productivity.' MCB University Press vol. 49, no. 2, pp. 59-62.
- viii. Kenneth C. Laudon, Jane P. Laudon, 2007, Management information system, 10th ed., Pearson.
- ix. Maglitta, J. 1994, 'One on one', Michael Hammer. Computerworld [On-line]. Available at <http://www.computerworld.com/cwi/story/>.
- x. McKay, J. & Marshall, P. 2004, Strategic Management of e-Business, John Wiley & Sons, Brisbane
- xi. Management science, vol. 48, no. 7, pp. 834-851.