THE IMPACT OF E-COMMERCE IN Malaysia HOTEL INDUSTRIES CAPABILITIES

Mutia Sobihah Abd Halim
Politeknik Hulu Terengganu
21070 Kuala Berang, Terengganu, Malaysia.
E-mail: teea_76@yahoo.com

Ahmad Munir B. Mohd Salleh @ Embat
W. Abd Aziz B. W. Mohd Amin
Mohamad Saladin B. Muda
Noor Maizura Mohamad Noor
Universiti Malaysia Terengganu
21030 Kuala Terengganu, Terengganu, Malaysia.

ABSTRACT

E-commerce consists of the buying and selling of products or services over electronic system such as the internet and other computer networks. This research proposal aim to analyze the impact of E-commerce in Malaysia hotel industries capabilities. Hotel industry is one of those which are fully beneficial from the E-commerce, which fulfils the customer's needs. The instruments used to measure E-commerce technology resources, E-commerce management skills and business network were adapted from Duncan and Bogucki, (1995), Mata,Fuerst and Barney, (1995), and Gulati, Nohria and Zaheer, (2000). The findings demonstrated that organizational capabilities appeared to have a higher level of E-commerce capabilities with mean value of 3.23 compared to E-commerce benefits 3.22. This research also found E-commerce management skills with mean value 3.23, E-commerce technology resources with mean value 3.22, and E-commerce business network 3.20. Research findings also showed that there is a correlation between organizational capabilities (E-commerce benefits and E-commerce capabilities) with E-commerce technology resources, E-commerce management skills and E-commerce business network variables. The stepwise regression exhibited that E-commerce technology resources is the most dominant predictor of organization capabilities, and E-commerce benefit. Meanwhile, E-commerce management skills, variable appeared to be the most significant factor to influence E-commerce capabilities.

Key Words: E-commerce, E-commerce technology resources, E-commerce management skills and business network.

1. INTRODUCTION

Since 1950, organizations invested money into information technology for increase profit and to improve organization performance. In the year 1980 till 2004 private organization invested in information technology increase from 34% to 50% from total investment (Laudon, 2007). E-commerce is defined as simply buying and selling products or services, transferring information and conducting other business activities over telecommunications networks such as the internet (Pires and Aisbett, 2003). E-commerce use internet and other information technology for support business performance. By using E-Commerce, firms can go global on the information super highway and dramatically improve the way that businesses interact with both their customers and their supplier to make business negotiations faster, cheaper, more personalized, and/or more agile (Garcia-Sanchez, Valencia-Garcia, and Martinez-Bejar, 2005). Within 13 years, since 1995, E-commerce growth with $258 billion and retailing business about $3.6 trillion in United State of America (McKay and Marshall, 2004). In year 2005, E-commerce transaction in Malaysia achieve RM3.7 billion (U.S$1.0 billion) and increase about 81.8% every year. This research to examines the impact of E-commerce technology resources, E-commerce management skills and E-commerce business network on organization capabilities in Malaysia hotel industries.
Problem Statement

There is, however, consensus that many organizations in general, irrespective of size, have not been able to realize the full potential of the values brought about by E-commerce in Malaysia.

Lack of success stories by brick and mortar companies have been identified as a reason why traditional businesses are reluctant to embark in E-Commerce investments. In a study on E-Commerce stimuli and practices among the small and medium enterprises (SMEs) in Malaysia, Ainin and Noor Ismawati (2003) provide empirical support where 79 percent of the respondents cited “not many success stories of e-commerce” as the main barrier to E-Commerce adoption, followed by “not having knowledge in E-Commerce” (72.6 percent), “low internet access among buyers” (72.2 percent), and “lack of knowledge on the potential of E-commerce” (69.6 percent).

Even though many articles discussed the applications and benefits of implementing E-Commerce, only limited academic research exists with a systematic explanation for the effects of E-Commerce on organization capabilities in Tourism Industry focusing on hotels and resorts in Malaysia. Hotel Industries is the larger sector based on information, so E-Commerce can give unique service for increase profit in hotel industries (Yadim, 2007).

Currently, hotel business introduces E-Commerce to various kinds of work such as internet booking, self-plan tour, hotel information providing in terms of location, type, room price and facilitations, e-mail correspondence, raw material purchase to supplies via internet and online payment. All these facilitate more effective operation (Patthanid, 2005).

Research Question

Specifically, this paper aims to determine the impact of E-commerce technology resources, E-commerce management skills and E-commerce business network on hotel industries capabilities in Malaysia. Therefore issues and questions that arise are summarized as follows:

1. What are the levels of organizational capabilities (E-commerce benefits and E-commerce capabilities), E-commerce technology resources, E-commerce management skills, and E-commerce business network?
2. Are there any relationship between E-commerce technology resources, E-commerce management skills and E-commerce business network and organization capabilities (E-commerce benefits and E-commerce capabilities)?
3. What is the most dominant variable that can influence organization capabilities (E-commerce benefits and E-commerce capabilities)?

Research Objective

The specific objectives are as follows:

1. To identify the levels of organizational capabilities (E-commerce benefits and E-commerce capabilities), E-commerce technology resources, E-commerce management skills, and E-commerce business network;
2. To measure the relationship between organization capabilities (E-commerce benefits and E-commerce capabilities) and independent variables; and
3. To determine the most dominant variable influencing organization capabilities (E-commerce benefits and E-commerce capabilities).

2. LITERATURE REVIEW

E-Commerce

Fisher (2000), Electronic or E-Commerce is simply “the conduct of business transaction using electronic media and communication”. It is characterized by:
E-commerce means any economic activities between at least two persons or businesses conducted on electronic network such as booking, purchasing, negotiating, bidding, paying, advertising, service providing and transactions in other forms, which may occur within a company such as designing, product manufacturing, coordinating, payment transaction. This can be conduct by business to business, business to customer, customer to customer or business to government sector or other kinds, which may late define by the development of E-Commerce (Patthanid, 2005)

Fisher (2000), E-Commerce should be in the mutual interest of both parties to any trade – the buyer and the seller, since it offers a combination of low cost, high reliability, accuracy and high speed. Thus it can affect both the top and bottom lines of the productivity ratio.

(EDI), but a concept that makes use of a variety of tools and technologies. No one technology covers all possible E-commerce applications. Similarly, any technology qualifies as long as it supports the core commercial activities. Electronic support tools have an effect at different levels. Not only can they speed up certain processes that hinge on the processing or dissemination of information, they also permit certain activities to be restructured and re-engineered, or carry out at lower cost, or with greater accuracy and reliability.

These newer forms of E-commerce are used often for business-to-customer relations and transactions, rather than simply (EDI) for business-to-business relations. This offers much bigger numbers, therefore greater penetration, therefore more people want to use it. Fisher (2000)

One great advantage of electronic communications is that it frees agents in the process from the fixed confines of geography. Mobile computing means the people can always be “in touch” and mobile trades people can be” the centre” of information and part of any E-commerce trade (Dunco and Bogucki, 1995)

E-Commerce Technology Resources

Information Technology may lead to sustainable competitive advantage when it is used to create a unique value proposition to customers (Porter, 2001). A firm may have to search for innovative Information Technology Resources to sustain its competitive advantage.

IT technology resources can be defined as a set of tangible resources and intangible services (Dunco and Bogucki, 1995) as Platform technology, Network and telecommunication technologies, Key data, Core data processing applications, The alignment of information strategy plans to business objectives, IT architecture plan and IT skills in IT resource management.

The first four hardware and software components are the basic requirement of IT infrastructure needed to run a firm. The last three components are related to the information strategy plan which allows a firm to be able to respond rapidly and effectively to emergent needs or opportunities.

IT technology resources is a complex set of technological resources developed over time, and it is difficult to codify and describe precisely in written form because it involves planning, processes and interactions within and across the entire value chain of a firm (Cash, McFarlan, McKenney and Applegate, 1992). A firm can implement an IT infrastructure to gain competitive advantage that other rivals cannot imitate because of technological and intangible skills, then IT infrastructure may be viewed as a strategic resources and potential source of sustainable competitive advantage (Niederman, Brancher and Wetherbe, 1991; Weill, 1993)
E-Commerce technology holds great potential because of its ability to integrate, build, and reconfigure with other resources such as managerial skills, business network, information synergy and customer network (Tow, 2004). The contribution of IT to durable competitive advantage depend on “what they are as on how they are used” or in other words, whether E-Commerce technologies can be the sources of competitive advantage depend on how they are used to generate result (Zhang and Lado's, 2001). Researchers (Fay, 2000; Teng and Cummings, 2002), E-commerce technology resource may not have the characteristic of rareness, immobility and inimitability, but it can serve as a complementary resource to increase the strength of other resources and capabilities, and at the same time, reduce the weaknesses and inadequacies of other resources.

The IT and E-commerce technology resources are valuable, if they are not easily imitable, if they are heterogeneously distributed across firms, and if they are socially complex, they may be the sources of sustainable competitive advantage (Tow). What is needed is a high level map that combines business direction, technology, processes and human resources into one piece, so that it can serve as a framework for analysis, design and construction of IT architecture (Maglitta, 1994). A firm needs IT skills and experience to integrate the IS plan and IT architecture plan effectively so that the firm can respond efficiently to its business needs.

**E-commerce Management Skills**

A search of E-commerce literature reveals that managerial E-commerce skills include the following attributes (Mata, Fuerst and Barney, 1995):

i. The effective management of information strategy functions
ii. The coordination and interaction with the user community
iii. The ability to integrate IT applications with the business strategies and planning processes
iv. The ability to use IT for operational effectiveness
v. The ability to anticipate the customer needs and create value proposition that others cannot imitate

The managerial ability to coordinate such a complex array of activities associated with the successful E-commerce applications is often a key factor to sustain competitive advantage.

**E-commerce Business Network**

A firm’s network encompasses a set of relationships, both horizontal and vertical, with other firms such as customers, supplier, competitors, and other entities across industries and countries (Gulati, Nohri and Zaheer, 2000).

Business network may be in the form of (Gulati, Nohri and Zaheer, 2000):

i. Strategic alliance
ii. Joint venture
iii. Virtual corporation
iv. Consortium network
v. Equity investment
vi. Licensing
vii. Joint R&D arrangement
viii. Technology swap
ix. Buyer-supplier relationship

Strategic alliances allows firms to go beyond their boundaries, and to gain access to different types of firm-specific assets such as financial, technological, physical, and managerial resources. In other words, a strategic alliance allows a firm to access valuable, rare and inimitable resources that it does not possess previously, and which are critical for sustaining its competitive advantage.
E-Commerce Technology and Organization Capabilities

Organization capabilities is defined as the outputs or results of a firm as measured against its intended outputs. There are different measures of firm performance, such as financial firm performance, market firm performance, employee satisfaction and social responsibility. Among the various forms of firm performance, financial and market firm performance receive a lot of attention of managers and researchers because of their importance in a firm’s survival and success, (Xiao, 2008). Following Venkatraman and Ramanujam (1986), financial performance is defined in terms of profitability, ROI and cash flow from operations.

Information flows facilitated by the communication system can potentially increase the sales volume by reaching customers directly and promptly whenever a new product is introduced, and by tapping into markets that were inaccessible on account of distribution or other infrastructure constraints (Wu, Mahajan, & Balasubramaniam, 2003). The synergistic benefit achieved through an integrated system allow a firm to respond better to customer problems and requests (Rogers et al., 1993).

Many research and empirical studies suggested that E-commerce capability not only increases productivity and efficiency, it also improves the profitability of a firm. "Resources are unique for every firm, whether in its history, by accident, or by design, and the heterogeneity of resources explain the differential in financial performance in firms" (Peteraf, 1993).

The overall organization performance is defined as the firm’s profitability, an economic rents stemming from its business activities (McGahan and Porter, 2002). Firm that possess E-Commerce benefit are likely to achieve above-normal profit (Bharadwaj, 2000).

E-Commerce has an impact on productivity and economic structure. Organization can achieve efficiency and cost effectiveness through the lower fixed costs for establishing and maintaining E-commerce and the higher degree of improvement in unit transaction efficiency through E-Commerce (Wen, 2004). Organization have implemented E-Commerce it helps them pursue internal improvement and achieve a higher level of human resource development, cost reduction, continuous improvement, and organizational efficiency and development (Chang, Jackson, and Grover, 2003).

How to leverage resources in creating and sustaining competitive advantage for a firm has become the central focus for marketing scholars that link various types of market-based assets (Srivasta, shervani, & Fahey, 1998) with the ultimate financial performance of a firm (Srivasta, Fahey, & Christensen, 2001).

3. METHODOLOGY

Conceptual Framework

This conceptual framework based on Powell and Dent Micallef (1997) in retailing industry will be adapt and adopt for this research suitability. Based on review of issues and findings from past research that was formerly discussed in the literature review, independent variable that were proposed for the study is E-Commerce technology resources, E-commerce management skills, and E-commerce business network on organization capabilities (Duncan & Bogucki, 1995; Mata Fuerst & Barney, 1995; Gulati, Nohria & Zaher, 2000). The subsequent outcomes that are expected to occur related to this capabilities include increase E-commerce benefits, and improve E-commerce capabilities.

Based on comprehensive review of issues and findings from past research that was formerly discussed in the literature review, independent variables that were proposed for the study encompassed E-commerce technology resources, E-commerce management skill, and E-commerce business network, while organization capabilities as the dependent variable. E-commerce benefits and E-commerce capabilities were also included under the organization capabilities variable.
Hypothesis Testing

The relationship between E-commerce technology resources, E-commerce management skills, and E-commerce business network with organization capabilities that were conceptualized for the present study needed to be tested whether they do in fact hold truth. The specific hypotheses of the study are as follows:

H1: There is a significant relationship between E-commerce technology resources and organization capabilities (H1a: E-commerce benefits, H1b: E-commerce capabilities)

H2: There is a significant relationship between E-commerce management skills and organization capabilities (H2a: E-commerce benefits, H2b: E-commerce capabilities)

H3: There is a significant relationship between E-commerce business network and organization capabilities (H3a: E-commerce benefits, H3b: E-commerce capabilities)

Survey Instrument

A set of questionnaires for this study contained five main sections, comprising 1) Demographic Variables 2) E-commerce technology resources 3) E-commerce management skills 4) E-commerce business network, and 5) Organization capabilities. Except for demographic variables, a five-point Likert Scale was applied for all items E-commerce technology resources, E-commerce management skills, E-commerce business network, and organization capabilities.

Section A: Demographic variables
This section kept track on the personal information of respondents. This section also contain organization background which comprised gender status, age level and highest educational level. The total number of questions under demographic variable was 13 items.

Section B: E-Commerce Technology Resources
The next Section B highlights the E-commerce technology resources. Consisting of 8 Items, this variable was adapted from Duncan and Bogucki (1995).

Section C: E-Commerce Management Skills
The next Section C highlights the E-commerce management skills. Consisting of 7 Items, this variable was adapted from Mata, Fuerst and Barney (1995).
Section D: E-Commerce Business Network
The next Section D highlights the E-commerce technology resources. Consisting of 8 Items, this variable was adapted from Gulati, Nohria and Zaheer (2000).

Section E: Organization Capabilities
The next Section E highlights the organization capabilities. Consisting of 17 Items, this variable was adapted from Chu Jan Tow (2004).

Scope of the Study
The present study attempted to examine from the perspective of hotels and resorts in Malaysia since not much study about E-Commerce was done in this sector in Malaysia. The total number of population for this study was 563 hotels and resorts under the Ministry of Tourism Malaysia and is divided into three (3) categories 1) the island and beach accommodation, 2) travel and nature and 3) hotel in the city. To conduct this study, 217 hotels and resorts have been selected as a sample with using random sampling technique from all three types of accommodation with the status of three (3) stars below, and four (4) stars above. These hotels and resorts were chosen because of their involvement in E-Commerce initiatives. The total number of population for this study was 563 hotels and resorts. Referring to Krecjie and Morgan (1970), for the population size of 563, the minimum sample size required for the study was about 217 respondents. The key informant for data collection, which relies on one (1) person to provide information about a collective setting. The key informants were deemed especially qualified because of their position, experience and specialized knowledge (Ventkatraman, 1989). Since this study will investigate E-commerce, and organization capabilities, senior E-commerce or IT manager is the appropriate key informants. All the data will be analyze with using SPSS/PC version 11.5.

From 217 questionnaires distributed to the respondents, all questionnaires have been completed and returned.

4. RESEARCH FINDINGS

Reliability Analysis
Reliability analysis is the degree to which any reliable or consistent measure (Trochim, 2001). Alpha reliability is usually used to determine the consistency. As depicted in Table 1 below, organization capabilities had the highest reliability rate with Cronbach Alpha of 0.73, whereas E-commerce technology resources, E-commerce management skills, and E-commerce Business network showed between 0.68 and 0.73. Given these result, all variables were reviewed to have adequate levels of internal consistency since they meet the recommended standard of 0.60 (Sekaran, 2003)

Table 1: Reliability Analysis (N=217)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of Item</th>
<th>Alpha Cronbach</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-commerce Technology Resources</td>
<td>8</td>
<td>0.6896</td>
</tr>
<tr>
<td>E-commerce Management Skills</td>
<td>7</td>
<td>0.6842</td>
</tr>
<tr>
<td>E-commerce Business Network</td>
<td>8</td>
<td>0.7184</td>
</tr>
<tr>
<td>Organization Capabilities</td>
<td>17</td>
<td>0.7308</td>
</tr>
</tbody>
</table>

Descriptive Statistics

Mean scores for variables
The mean scores were computed to answer research objective 1: To identify the levels of organizational capabilities (E-commerce benefits and E-commerce capabilities), E-commerce
technology resources, E-commerce management skills, and E-commerce business network. As can be seen in Table 2 below, the majority of organization capabilities appeared to have higher levels of E-commerce capabilities (mean=3.23), as compared to E-commerce benefit (mean=3.22). Additionally, E-commerce management skills (mean=3.23, SD=0.3938), E-commerce technology resources (mean=3.22, SD=0.3632), and E-commerce business network (mean=3.20, SD=0.3838).

Table 2: Summary of Mean Score Analysis

<table>
<thead>
<tr>
<th>Perception</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization Capabilities</td>
<td>3.21</td>
<td>0.3174</td>
</tr>
<tr>
<td>- The E-commerce Capabilities</td>
<td>3.23</td>
<td>0.3406</td>
</tr>
<tr>
<td>- The E-commerce Benefits</td>
<td>3.22</td>
<td>0.3346</td>
</tr>
<tr>
<td>E-commerce Management Skills</td>
<td>3.23</td>
<td>0.3938</td>
</tr>
<tr>
<td>E-commerce Technology Resources</td>
<td>3.22</td>
<td>0.3632</td>
</tr>
<tr>
<td>E-commerce Business Network</td>
<td>3.20</td>
<td>0.3838</td>
</tr>
</tbody>
</table>

Bivariate correlation analysis

The Pearson’s Correlation was conducted to answer research objective 2: To measure the relationship between organization capabilities (E-commerce benefits, and E-commerce capabilities) with E-commerce technology resources, E-commerce management skills, and E-commerce business network, and to test all hypotheses related to that. As illustrated in Table 3, the findings of correlation analysis had shown significantly positive relationships between organizations capabilities with (E-commerce benefits, and E-commerce capabilities) with E-commerce management skills, E-commerce technology resources, and E-commerce business network variables (p < 0.01). These results evidently supported the hypotheses H1, H1a, H1b, H2, H2a, H2b, H3, H3a, and H3b.

Table 3: Summary of the Relationship between Dependent and Independent Variables

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Org. Capabilities</th>
<th>EC Benefits</th>
<th>EC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.946**</td>
<td>0.983**</td>
<td>0.938**</td>
</tr>
<tr>
<td></td>
<td>0.820**</td>
<td></td>
<td>0.978**</td>
</tr>
<tr>
<td></td>
<td>0.774**</td>
<td></td>
<td>0.969**</td>
</tr>
</tbody>
</table>

Note. ** p < 0.01 level (2-tailed), * p< 0.05 level (2-tailed).

Multiple regression analysis with stepwise procedure

The multiple regression analysis with stepwise procedure was conducted to answer research objective 3: To determine the most dominant variable that influences organization capabilities.

The Most Dominant Variable That Influences Organization Capabilities

Organization Capabilities with E-commerce technology resources, E-commerce management skills, and E-commerce business network.

As depicted in Table 4 below, only E-commerce technology resources, and E-commerce business network had stated significant influence on organization capabilities. E-commerce
technology resources was discovered to be the most dominant predictor of organization capabilities ($\beta=1.612, p<0.01$), and E-commerce business network ($\beta=-0.671, p<0.01$). Together, these two variables stated R2 value of 0.902, suggesting that 90.2% of the variance in capabilities can be explained by them.

Table 4

*Stepwise Regression of Organization Capabilities (N=217)*

<table>
<thead>
<tr>
<th>Model</th>
<th>Sig. Value</th>
<th>R2</th>
<th>Adjusted R2</th>
<th>Unstand. Beta</th>
<th>Stand. Beta</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td></td>
<td>.895</td>
<td>.895</td>
<td>0.557</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>8.903</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC Technology Resources</td>
<td>42.824</td>
<td>.000**</td>
<td>0.827</td>
<td>.946</td>
<td></td>
</tr>
<tr>
<td>Model 2</td>
<td></td>
<td>.902</td>
<td>.901</td>
<td>0.462</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>7.044</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC Technology Resources</td>
<td>9.220</td>
<td>.000**</td>
<td>0.409</td>
<td>1.612</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC Business Network</td>
<td>- 3.837</td>
<td>.000**</td>
<td>- 0.555</td>
<td>- .671</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* ** $p < 0.01$ level (2-tailed), * $p < 0.05$ level (2-tailed).

**The Most Dominant Variable That Influences E-commerce Benefits**

E-commerce benefit with E-commerce technology resources, E-commerce management skills, and E-commerce business network.

As depicted in Table 5 below, E-commerce technology resources, E-commerce management skills, and E-commerce business network had stated significant influence on E-commerce benefit. E-commerce technology resources was discovered to be the most dominant predictor of E-commerce benefit ($\beta=1.141, p<0.01$), followed by E-commerce management skills ($\beta=0.230, p<0.01$), and E-commerce business network ($\beta=-0.338, p<0.01$). Together, these three variables stated R2 value of 0.970, suggesting that 97% of the variance in organization capabilities can be explained by them.

Table 5: *Stepwise Regression of E-commerce Benefits (N=217)*

<table>
<thead>
<tr>
<th>Model</th>
<th>Sig. Value</th>
<th>R2</th>
<th>Adjusted R2</th>
<th>Unstand. Beta</th>
<th>Stand. Beta</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td></td>
<td>.966</td>
<td>.965</td>
<td>0.303</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>8.022</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC Technology Resources</td>
<td>77.591</td>
<td>.000**</td>
<td>0.905</td>
<td>.983</td>
<td></td>
</tr>
<tr>
<td>Model 2</td>
<td></td>
<td>.968</td>
<td>.968</td>
<td>0.237</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>6.058</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC Technology Resources</td>
<td>14.318</td>
<td>.000**</td>
<td>1.308</td>
<td>1.419</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC Business Network</td>
<td>- 4.440</td>
<td>.000**</td>
<td>- 0.384</td>
<td>- .440</td>
<td></td>
</tr>
</tbody>
</table>
Model 3                                           .970                 .969 
Constant                                             0.288                  0.288 
6.788 .000                                             1.051                  1.141 
EC Technology Resources                                8.277 .000**               -0.339                -0.338 
EC Business Network                                    3.915 .000**                .195                   .230 
EC Management Skills                                    2.855 .005**

Note. ** p < 0.01 level (2-tailed), * p< 0.05 level (2-tailed).

The Most Dominant Variable That Influences E-commerce Capabilities

E-commerce capabilities with E-commerce technology resources, E-commerce management skills, and E-commerce business network.

As depicted in Table 6 below, only E-commerce management skills and E-commerce business network had shown significant influence on E-commerce capabilities. E-commerce management skills appeared to be the most dominant predictor of E-commerce capabilities (β=1.419, p<0.01), and E-commerce business network (β= -0.613, p<0.01). Together, these two variables stated R2 value of 0.688, indicating that 68.8% of the variance in E-commerce capabilities can be explained by them.

Table 6: Stepwise Regression of E-commerce Capabilities (N=217)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sig. Value</th>
<th>R2</th>
<th>Adjusted R2</th>
<th>Unstand. Beta</th>
<th>Stand. Beta</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>.000</td>
<td>.672</td>
<td>.670</td>
<td>0.943</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC Management skills</td>
<td>.000**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.975</td>
<td>.000**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 2</td>
<td>.000</td>
<td>.688</td>
<td>.685</td>
<td>1.012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC Management skills</td>
<td>.000**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.811</td>
<td>.000**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC Business Network</td>
<td></td>
<td></td>
<td>-0.544</td>
<td>- 0.613</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 3.373</td>
<td>.001**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. CONCLUSION

In conclusion, the present study reports on the investigation of the relationship between E-commerce technology resources, E-commerce management skills and E-commerce business network with organization capabilities. Congruent with previous studies by Tow (2004) and Bharadwaj (2000), the findings demonstrated the significant relationship E-commerce technology resources, E-commerce management skills, and E-commerce business network with organization capabilities (E-commerce benefit and E-commerce capabilities). Of all the predictor’s variables, E-commerce technology resources appeared to be the most dominant variable in influencing organization capabilities. These findings had imposed potential implications for management to review for future plans in order for them to increase organization capabilities. The wider the scope of the organization activities, the more likely...
it is for the firms to use E-commerce (Dewan and Kraemer, 2000). Referring to the results, it is therefore suggested for management to consistency create value through their willingness to invest in the E-commerce technology resources such as hardware and software and E-commerce management skills such as employee training. It provides useful guides to the click and mortar companies to evaluate their current E-commerce usage and to determine the areas that need to be re-engineered in the process to increase organization capabilities.

REFERENCES


