Determinants Associated with Strategic Design offering E-commerce Prosperity

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Abstract: To date electronic commerce is defined as taking advantage of computer networks to increase performance in an organization. E-commerce can help the organizations to improve their performance through processes such as increasing profit, achieving more market shares, providing better customer service, and improving products delivery system. Electronic commerce is not only the process of ordering products or services through on-line media, but also encompasses different aspects of online communications through which organizations interact with their customers and stakeholders. Strategic design, in this context, plays critical role shaping organization's e-commerce environment. Many organizationstry to proactively build or adopt a proper e-commerce design for their business. Yet, decision-making on implementing successful e-commerce demands good thoughts and plans. This study attempts to develop a strategic design model offering e-commerce success for organizations working under e-environment. The three-leg strategic design model (including e-commerce strategies, strategic alignment, and leadership in organization) is introduced.The correlation and descriptive analysis are conducted to validate the papers' hypotheses and demographic effects. The results of the paper advocated the importance of strategic design model and its elements ensuring the e-commerce success of organizations adopting and working under e-environment. Yet, leadership in organization is revealed to be a major contributory factor out of three elements put to test towards e-commerce success. It is also discovered the impacts of education level, years of experience and e-strategy implementation period on strategic design model towards e-commerce success.A medium-sized sample is used from service organizations to assess the research model.

Key words: E-commerce, E-commerce success, E-strategy, Strategic design.

INTRODUCTION

The growth of electronic commerce is evolved from the rapid development of communications technology and widely consciousness of internet among people all around the world. As the Internet grows so fast, diverse environments are offered for e-commerce and as a result the diverse strategic approaches are required in such areas. Referring to allegations and impacts of internet-enable businesses, those companies plan to run e-commerce ventures must consider that not all e-commerce strategies are suitable for every company (Neil F. Doherty, 2009). In fact, the result of research shows that more than 55% of businesses which just following the fancy appearance of the web fail to measure the business result after applying e-commerce in their organizations (Gartner, 2010). Majority of businesses initiate their e-commerce settings by more emphasizing on success stories and lucrative context of the internet than spending time for the logical approaches to design a well-suited e-commerce strategy through incorporating strategic planning and infrastructure initiatives.

There are many positive and optimism thoughts and implications around the electronic commerce and information technology area where they potentially lead to achieve organizational objectives. At the same time, the possibility of failure and perceived risk especially in context of electronic commerce exist and increase the companies concerns about initiating e-commerce strategies. The e-commerce is considered as infant subject in information technology field, and is still in process of growth towards maturity. As a result, having the wide range of processes, it is impossible to predict when and how the e-commerce will stabilize nor can evaluate and assess ramifications of e-commerce while there is no accurate evidence about number of areas that it may involve (Abukhader, 2008).

The e-commerce is still a technology that in search of strategy for many of businesses. Early research efforts remain closely aligned with the foundation fields of electronic markets and inter-organizational systems. Based on researchers' opinion, more comprehensive research in the area of strategic design, e-commerce infrastructure and e-commerce success is needed to examine specific experiences in large firms who have the potential to become market key players and dramatically posed some impact on their industries. This kind of research studies will help to determine whether e-commerce can lead to gain a competitive advantage edge, a development of brick and mortal business processes, or provide a foundation for structural shift in electronic markets by adopting the Internet technologies. Therefore, it is a fact that e-commerce success and strategies will not be donated in predefined package or with same structure that can be suitable for all businesses and industries(Jinghua Huang, 2009). There are little explorations have been done on this matter, besides few studies

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tested and developed a model for success and failure of e-commerce. The researcher and organizations always face with many questions like why e-commerce succeeds or fails in different industries and situations. Or what factors they should concentrate on to achieve e-commerce success.

There are some comprehensive studies have been done on e-commerce and organization success in western countries. However, the relationship between strategic design and business outcome under the e-commerce has not clearly investigated and it is still ambiguous. In addition, e-commerce web site performance has been considered as top issues and concerns for managers; yet comprehensive research on these issues to support business strategies in e-commerce environment is still scarce. Majority of studies in this field have been done on technical perspective.It is important to determine the link between organization strategic design and e-commerce success in order to its valuable insights which support managers, business development executives and other ecommerce project managers to enhance business performance in the ecommerce environment. They will then be able to fulfill this role by being equipped with knowledge concerning the link between strategic planning and e-commerce success.There are processes towards choosing e-commerce approaches. The complexity of these processes heavily depends on the framework and complexity of functions along the strategic design within organization(Marc J. Schniederjans, 2002). E-commerce plays an important role in both strategic exploration and exploitation in organization. Yet, there are uncertainties about strategic research under e-commerce environment.

Many companies and organizations try to adopt e-commerce approach in order to gain more share in global economy and retain their competitive edge among other competitors. However, like many other new born fields, e-commerce carries a lot of deficiencies and makes misperception for many organizations (Hua zheng, 2010). The organizational perspective is very important in order to its impact on the nature and focus of research along with business practice under e-commerce setting. Therefore, to achieve the e-commerce success and have a good understanding of an e-commerce model towards an effective and efficient infrastructure for organization, the analysis of organizational perspective factors is necessary. This study strives to develop and test a model, which helps to find success factors in e-commerce environment. This research study tries to certify the issues related to e-commerce, along focusing on factors effecting strategic design of organization and links strategic design to e-commerce success. Rest of this paper is organized into 4 sections. Section 2 discusses the reviewed literature. Section 3 describes the research methodology and framework. Section 4 presents the research analysis and findings. Section 5 involves research conclusion, limitation and future work.

Literature Review:
E-commerceDefinition:

E-commerce is a rising phenomenon that defines the process of purchasing and selling or trading manufacture goods and services, through computer networks like Internet or Intranet (Turban, 2010). E-commerce is frequently recognized as an applicable technology to enable trading. Sometimes, the terms Internet commerce and Web-commerce are swapped with e-commerce, although e-commerce businesses are not limited to the Internet or Web. This overlook to e-commerce because of the other critical non-commercial transactions, information exchanges, and intra-organizational activities was not emphasized as they should. The term e-business has become crucial topic at business strategy. It gets back to transformation and modernizing the value chain activities of an organization via Internet technologies. The view to e-business as simply buying and selling goods on the Internet is still common. Gartner Group has identified a multifaceted form of e-business called e-commerce, which includes mutual and fluid communication of employees, business partners, and customers aims to make benefit of new opportunities provided by the Internet (Holsapple & Singh, 2000).

E-commerce concept can be discussed from two aspects: a narrow view and a broad view. The first e-commerce emphasizes on the business process of e-commerce, but the second explains the leading strategies of e-commerce (Holsapple & Singh, 2000). These views promoters try to extend the current narrow definition of ecommerce by many experts and researchers. They suggest that while the common literature benefits from electronic data interchange (EDI), there is not enough evidence regarding the long-term benefits of using the Internet and Intranets. Therefore, there is a need and extensive view of e-commerce in today's economics.In-line with the aim of this study, e-commerce defined using both of advocated definitions: e-commerce is not only buying and selling over the Internet, but also servicing customers, collaborating with business partners, and conducting electronic transactions within an organization. The extensive frame for e-commerce includes three main parts. The first is a range of e-commerce applications, the latter is the e-commerce infrastructure, including the usual business services infrastructure, the content and data dissemination infrastructure and the information superhighway infrastructure. The last is the necessary technical principles and foundations and municipal policies to maintain both applications and the infrastructure of e-commerce (Minsung Li, 2007). These three parts of e-commerce are interrelated to each other to form a broad system of e-commerce. Therefore, they should receive equal concern and focus because the failure in any of these three areas will influence on the other.

E-commerce Success within Organization:

Internet has become a strong and common communication mechanism to facilitate the processing of business. It has dramatically changed the conduct of business. Information technology (IT) now leads businesses and markets which cause to considerable changes in traditional approaches of business. Firms are trying to comprehend and evaluate the impact of IT so that they can make the right decisions concerning crucial IT investments.The companies' success or failure is recognized based on capability of creating positive profits. So many investigations dedicated to study the e-commerce success, using the D&M model and the communication and ecology theories that secure the model. E-commerce systems success at diverse levels needed to be estimated like in organizational or individual levels. There are some investigations have been done on the e-commerce system itself, others investigated content of the websites and their quality when it presented on the web system. These studies categorized apart from the technical quality of the system in e-commerce. There are some other studies that emphasizing on the applicability of the systems under e-commerce environment(DeLone W. a., 1992; DeLone W. M., 2002). Besides, the studies also focus on assessing the satisfaction level among e-commerce system users and customers when they using that systems (McLean, 2004). Despite the abovementioned studies, a small number of efforts have carried out on the possible impacts and effects of such systems on organizational performance under e-commerce settings.

Nowadays, success in e-commerce includes both maximizing the return of invested money in e-commerce, and enabling the strategic use of e-commerce to increase competitive advantage or to drive back competitive threat.Determining the key performance indicators to quantify returns on investment is not that easy. Likewise, the vague advantages cannot be easily measure as well. The evaluating of benefits and determining return on investment is complicated but it is necessary for launching e-commerce projects (Manuel Mogollon, 2004). There is a dramatic growth in research findings points to a strong connection between market orientation and better performance. The result shows that companies with market oriented approach compared with non-market oriented approach present better organizational performance. A body of research in United States and European countries shows positive market orientation/performance relationship under e-commerce setting. E-commerce applications are example of explicit classes of Information System (IS), to be exact, Inter- Organizational Information Systems (IOS). E-commerce investments evaluation is as difficult as any other types of IS. There are many enterprises that employ preliminary accounting methods, particularly Return on Investment (ROI) analysis or Cost-Benefit Analysis (CBA) to evaluate the existence of investments. One of the major difficulties in applying any of these financial techniques for measuring e-commerce will be the problem of transmission financial estimates to the elusive, indirect and strategic benefits expected by the implementation of new applications. To overcome this measurement problem, the study can use several quantitative techniques to enable the studying of business processes influenced by an e-commerce investment. Therefore, the study can gain several physical, quantifiable outcomes on the anticipated effects of e-commerce applications on business performance. The results of such investigation can provide and launch IS evaluation methods namely, Return on Investment (ROI) or Cost-Benefit Analysis (CBA).

There is simple argument behind this idea. E-commerce investments are usually division of an extensive business reorganization and do not usually consider alone by themselves, but in which e-commerce plays an explicit role. According to these cases, it is imperative to measure the investment in the larger business modifications than just focusing on investment in IT section. In other words, it is valuable to study the effect of e-commerce through the business process as the fundamental unit of analysis. Many companies emphasis on marketing strategies, for example they just care about higher number of visits to the site (Wan, 2000). This may lead to customer dissatisfaction, which is the exact opposite of the marketing purpose. In addition, the rule of competition is different through internet. The Internet makes fundamental and strategic changes in context of business. Many traditional brick and mortal companies try to adopt e-commerce strategies. To achieve this objective, high level managers must recognize the disruptive nature of e-commerce and able to identify and improves the key performance attributes of e-commerce (Joachim Hafkesbrink, 2010). Demise in understanding the business performance attributes when the company plans for designing e-commerce strategies or developing its business models may make the firm fails towards its objectives.

In successful companies, the aim of using e-commerce is customer satisfaction not using modern technology. They are essentially customer oriented and technology is used to give more credit to the customer. In planning e-commerce strategy asking the right questions is fundamental. These questions should address business objectives which lead to recognition of your company's competencies. The questions about e-commerce relating to how much money you can make from it are not accurate questions. The questions should be about increasing the rank of customer satisfaction, innovations in products and services. Reacting to customer needs provides a better way success than being competitor-centric(Gary Hamel, 1996).

Strategic Design within E-commerce:

Strategic design is defined as a plan and pattern that combines an organization's main purpose, policies and actions into a unified model. A well-planned strategic design brings an organization's resources into a unique

and practical position according to the relative internal abilities and weaknesses, awaited movements in the environment and dependent shifts by intelligent opponents (Hsu, 2011). Strategic design aspect is identified as the key issue which covers business strategies in e-commerce setting, management, and strategic position. The above stated variables were discussed in detail before a conceptual framework was developed. According to the preliminary investigation on e-commerce designing and planning some interesting issues has drawn. Here are some interesting aspects related to strategic design for e-commerce adoption strategy. Step one; create a self-governing e-commerce division; Step two; e-commerce introduction as a communal culture; Step three; emphasizing on its accessible potential; Step four; mixture the e-commerce with the business process; Step five; starts with seven different e-commerce programs; Step six; aim to be an e-commerce leader; and Step seven; accept return on investment as a criterion for selecting e-commerce projects. Altogether, the success rate of e-commerce achievement is deeply dependent on the e-commerce strategic design which covers the above mentioned programs (Joe Peppard, 2004).

In addition, an unsatisfactory management in the application of technology in the marketplace will cause failure for companies operating under e-commerce environment (James O'Brien, 2009). So in terms of e-commerce strategic design, there is no general e-commerce strategy for every corporation, business or organization. As such, this study offers an e-commerce strategic design considering both e-commerce benefits and threats. In following the essential parts of e-commerce strategic design for businesses operating on e-environments are discussed.

E-commerce Strategies:

The difficult and various challenges of gaining high level performance in markets are widely recognized by top level managers all around the globe. As a result of these complex situations in nowadays transactions raise needs for a clear understanding of market, customers, and competitors in order to decide the right commerce strategies (Parmerlee, 2000). For companies intend to operate business under e-commerce environment; the same rules in traditional environment must be considered. Business strategy is about complex decisions which help a company to move forward effectively in current and future plan and activities. Strategic choices are influenced deeply by company's external and internal situations. Factors from the external situation should be monitored constantly in order to be able to position the enterprise both offensively and defensively in the future. In view of this argument, forward looking companies should follow modern technology in this digital age. Contemporary ICT such as web–based technologies and standards can be motivated by accessible abilities, brand power or aspiration for gaining new geographical range. There is a factor that influences strategic sets for all businesses in today's economy situation; the quick expand of information, data, and new digital technologies plays an important role in achieving competitive advantage under e-commerce setting.

The effective uses of digital information can determine the industry dominance or bankruptcy. In order to achieve and maintain the competitive advantages company must select and enable the critical items from a compound menu of digital technology offers, which should be according to unique industry drivers, value proposition and business model. It is said that the key to competitive success in the digital economy is integrating company's business and technology to move along the rapid market movement with careful reflections. In this way, company can maximize competitive advantage in company's especial industry space(Turban, 2010). Rowley (2002) indicates that the integration of e-commerce strategies with communal and practical strategies is critical to the success of e-commerce.The larger influence of e-commerce on the whole business, the more important is e-commerce strategy, and the more vital it is for the organization to comprehend and articulate obviously the communications between e-commerce strategy and other strategies (Robert S. Kaplan, 2004). Framing of a business strategy based on Jagannathan's studyrequires several considerations (Sridhar Jagannathan, 2001).

Understanding the industry is the first issue for consideration. A good way to start strategic analysis, especially for a new business, is to apply Porter'' Five Forces Model, which offers a broad perspective on a business. Through this model, we can estimate the average profitability of an industry. The complication of the challenges among IT executives grows significantly when IT breaks in to the core strategy of the firms or industries. General Managers require an exhaustive outline which provides insights about the IT use from the strategic view towards the tactical view to facilitate planning. Industry and competitive analysis (ICA) framework has introduced by Michael Porter and proven to be very successful in this arena. To set up successful strategic design for coping with competing environment and to improve it, companies must comprehend how they work in their industries and how they affect the company in their particular situation (Kenneth Laudon, 2010). Thus, second issues is said to understand their owned companies. A thoughtful management should carry out what is commonly recognized as a SWOT analysis times to times. This exercise could be applied at a company level or broken down to a departmental level, the objective of which is specific, actionable conclusions. A relative analysis against a target competitor or an emerging threat may also prove useful.

Another aspect is to set foundation for strategy change. Strategic analyses by their nature are highly subjective. However, with rigidity and continued exercise, strategic analysis can lead to dynamic alter for the

company. Specially, it is important that the strategic purpose of the company be continuously polished to adapt to changes both internal and external to the company. In every active industry, there is "strategic dissonance" among strategic purpose and strategic action. A comprehending of such disagreement, in the context of the industry and the firm's internal abilities, should lead to the growth of a revised corporate strategy and modified strategic actions. The last issue is effective employment. Creation of a strategy is often easy for firms; however, the difficulties are normally brought in the implementation process. With carful implementation of e-strategy within business, the success rate would increase; however, other factors need to combine within strategic design for organization towards successful business.

Strategic Alignment:

Systems activities link the whole organization together in order to have a good strategic alignment between the activities and customer value opportunities. Firms that improve activity systems with positive strategic alignment provide better customer value. IS/IT strategies should be improved among the context of the broaderbusinessareas and throughout the processes of strategic planning within organizations. Only with this approach, investment in information systems and technology within a firm can be guided to achieve the business goals(Lynn E. Davis, 2009). In order to activelyemploy IT within a firm, IT and business integration need to be explored as in many studies of strategic management such as (John Ward, 2002) presented. View concerning the importance of IT potential for gaining speed strategy in business was further supported by (HEATHER A. SMITH, 2007). Companies should comprehend that information technology applications alter the basis of e-economic competitive environment. As a result, the profit can be earned in both products and markets, besides through solutions, services and the information assets that driving them. We should not make distinction between business strategy and digital information when the competitive profit assured through information assets and enabled via smart technology solutions such as ecommerce. Company's old and new technologies are necessary to its competitive success. The company must interpret how information assets influence the management of the interrelationships through strategy, brand identity, knowledge-enhanced processes, integrated business processes and advanced information systems.

The advantages of improvement in business planning (BP) and information system planning (ISP) mixture have been stressed by Sass and Keefe (C. Joseph Sass, 1988). These studies indicates that larger extent of BP-ISP mixture helps to guarantee that the IS is supported in each level through recognizing critical application. Although many researchers have stressed the importance of BP-ISP integration, very few tried to link BP-ISP integration to performance measure. Instead, researchers stressed on conceptual and organizational issues, for example Powell evaluates the relationship between IT and business strategy over time (John Ward, 2002).Companies must take on four essential factors for success in business at the start of an e-commerce implementation design (Michael L. Kreindler, 2004; Hannu Kärkkäinen, 2011). These four factors are adhered as follows:1- Track the possibility of satisfying requirements; 2- Analyze requirements; 3- Adjust the optimality criteria; and 4- Allocate satisfiers to requirements.

In many cases, when an enterprise has initiated its e-commerce strategy and alignment, the subjected enterprise required to improve the technological foundation and infrastructure to support its strategies. For instance, accessing to billing service through online platform, security assurance and consideration, and careful infrastructure design are the cornerstones of successful business working under e-commerce environment. Having the technology alone cannot unravel the business problems or bring competitive advantageous for the organization. The organization and business owners should first provide a foundation to integrate available technologies in context of the organization. The technology must be set align with the management ability and organizational culture existed among the employees with diverse philosophies. The new technology also requires a clear definition and dissemination throughout the organization. In following, last contributor for strategic design for organization is discussed.

Leadership in Organization:

Leadership is a concept that usually dealing with environmental changes in order to the altering nature of the new commercial world which gets more and more important today. Extensive changes are required to carry on and compete effectively in this new ICT environment. Large changes need strong leadership in digital area. The integration of telecommunications, computers, the Internet, and one global marketplace has increased the speed of modification through the last 10 years (Kotter, 2008).The role of leader is really critical in this environment which is constantly changing. Technological Leaders against the managers are creating the vision and taking their organizations into the changes. The changes created by the Internet and e-commerce are very large and unexpected. Customer satisfaction needs several strategic dimensions in new organizational environment (Daniel Goleman, 2001). The new environment is going towards customer-oriented thinking; management support and powerful leadership; the effective communication with customers; and the deployment of IT. Dell Computer's market-driven e-commerce strategy is an example for setting corporate culture that has led the firm to have a powerful place in the global personal computer market. The company's improvement and

financial performance are notable. The management team has built a culture and developed processes for being market oriented.

A business is considered as market oriented when the costumers are the focal point of a company. Additionally, company's culture is committed to the non-stop formation of customer value. Market orientation engages the employment of better organizational abilities based on continual corporate culture in understanding and satisfying customers (Parmerlee, 2000). Lack of market orientation causes the failure of so many online-based companies. Their Web sites failed to satisfy customers' needs. According to "PewResearchCenter" in 2009, most of internet surfers are teenagers. In order to attract these target market to the company's web sites, the web site design should be directed towards their needs/wants before they could commit any purchase via the Internet(PewResearchCenter, 2009).The adoption of any new technology inevitably brings about change but e-commerce is significantly different in that it completely shifts global business into a fast pace electronic environment. In this fast moving world the old notions of management are totally unsuccessful. The results of a review on leadership indicate that organizations which have successfully included e-commerce in their strategies have showed a unique approach. The outcomes exhibited that inside the most successful organizations, leaders had a distinctive skill that facilitated the changes.

Some of strategy designing consultant groups focuses on change to be able to continue in current economy area. One of the recommended changes is through e-commerce programs. The important role of great leaders is to put a clear vision and strategic route for e-commerce in the company. This vision and strategic route for e-commerce must enable the organization to compete and survive in the long term. The leaders should make the vital success characteristics clear and inspire the shared values of their people to reach the organization vision (Lubbe, 2004). Although it is very important to have clear vision and strategic direction, it is not enough for companies work under e-commerce environment. Thus, many companies fail to translate the vision and strategic design into measurable results for the different divisions, departments or strategic business units. For the success the leaders of divisions should discuss the expected outcomes on measurable terms in a specific way. Key performance indicators should be plan for every action to achieve the ultimate strategic design. In addition, leaders and people should come to an agreement for better cooperation. Without such an agreement, the vision and strategic design for e-commerce is not practical and implementable for the firm or organization. A practical approach which focuses on prevention of shortcoming is more efficient than waiting for things to get out of control such as missed targets in sales via e-commerce.

Research Methodology:

The core interest of the researcher is to conduct a study on elements affecting the success rate of e-commerce; thus, the only thing that the researcher has to consider is to develop a conceptual framework as the result of findings based on review of relevant literature as done before. The developed conceptual framework becomes the driver for ensuing research appropriate path. The study analyzed the relationship between two main dimensions of the research study; the rate of e-commerce success and strategic design elements. By categorizing these two dimensions, the study can have observable and measurable elements to test its hypotheses. The research framework is presented in Figure 1.
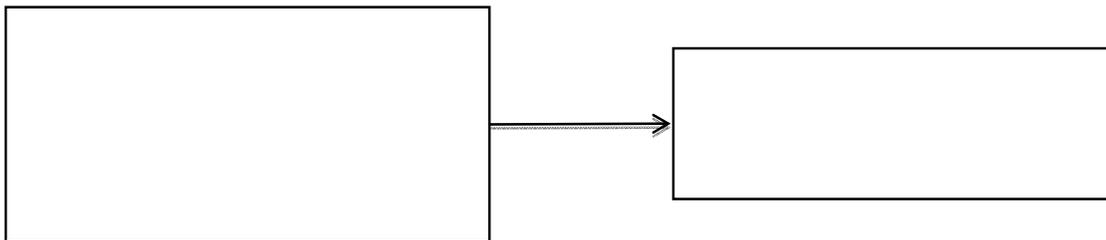

Fig. 1: Research Conceptual Framework

According to the framework, strategic design involves e-commerce strategies, strategic alignment, and leadership in organization as independent variables to predict the rate of e-commerce success within organization working under e-environment. There are three hypotheses developed for this study; H1- there is positive and strong correlation between e-commerce strategies and e-commerce success; H2- there is positive and strong correlation between strategic alignment and e-commerce success; and H3- there is positive and strong correlation between leadership in organization and e-commerce success.

Once the research design has been firmed up, the process of collecting relevant data by adopting cross-sectional studies is pursued and data analyzed with an aim of interpreting the results of findings. Although there are some intervention in the process of administering questionnaire and collecting data by adopting cross-sectional approach, the interference of researcher in this system is minimal when we compared it with causal

studies and longitudinal approach(Sekaran, 2003). Referring to the concept of studies with hypothesis testing approach, they usually strive to describe the nature of certain relationships, or to found the significant differences that exist among different groups of the sample. They can also identify the independence of two or more factors in a specific situation. So, hypothesis-testing approach was taken for this research.However, regarding to natural scientists, this research methodology have criticized for its lack of control, generalizability, and replicability. Hence, as a result of choosing this research methodology, the study decided to follow adhered specific procedures to deliberately improve the control, generalizability, and replicability of the research study. For instance, the research follow procedures such as following a tightly constructed script of questions, using a wide variety of subjects, and defining and explaining terms carefully to subjects.

Data for this study were gathered from the IT Managers, Business Development Managers and those senior managers who contribute in e-commerce deployment within an enterprise in Kelang valley, Malaysia. To achieve an accurate result and non-biased judgment from respondents, the study informed the participants about the e-commerce function and how it performs in organization before and after the e-commerce implemented. This study targeted business development managers as the most knowledgeable participants when the key performance metrics and the impact of e-commerce on business operation become concern. As mentioned above, the study selected questionnaire survey as a main instrument for conducting the research investigation. To design and form a questionnaire, a long and careful process is demanded for any type of research studies. The study believes that a questionnaire must be considered as a powerful evaluation tool when comes to quantitative method of research. Thus, the study strived to begin the design of questionnaire with collecting information to understand the potential capabilities and the ways that a questionnaire can help researcher towards the research objectives. There are many forms of questionnaires which allow collection of subjective and objective data by means of two main open or closed-end question formats. In Recent computer terminals, the task of gathering and extracting valuable material has been made more efficiently. Nonetheless, in terms of a questionnaire the quality is deeply depend on its contained questions. To consider a questionnaire as a good research tool, many guidelines and criteria must be met first. Most of these criteria deal with a comprehensible and free of bias questions in general. There is a careful review and analysis will be needed to eliminate even minor mistakes in questionnaire that may cause excessive changes in meaning and interpretation of questions. As long as these guidelines are followed by the researcher, the questionnaire is said to be a powerful and economic evaluation tool for the research study (Donald Ary, 1990).

Research Analysis and Results:

To analyze the collected data, various statistical packages available in market, yet SPSS Version 20 was selected for this study in view of its flexibility, user-friendliness and functionality. To start, the demographic analysis of the participants has been investigated by the study. Table 1 presents descriptive analysis of participants for different categories.

Table 1: Participants' Demographic Analysis

	Frequency	Percentage
Gender of Participants		
Male	109	87.2
Female	16	12.8
Education Level		
Certified or other qualification	11	8.8
Degree or Equivalent	29	23.2
Master or Equivalent	51	40.8
PHD	34	27.2
Position in Organization		
Vice President or Deputy	57	45.6
Senior/Junior Manager	52	41.6
Executive or Equivalent	16	12.8
Years of Experience		
Less than 5 years	34	27.2
Between 5 to 15 years	42	33.6
More than 15 years	49	39.2
E-Strategy Implementation Period		
Not specified	11	8.8
Less than 5 years	52	41.6
Between 5 to 15 years	55	44.0
Above 15 years	7	5.6

The Table 1 shows that 109 people from the sample size were male equivalents to 87.2 percent of total participation; while only 12.8 percent or 16 participants were females. Although the numbers of males in this study were more than of females', there is no significant difference between two gender groups in terms of e-commerce success. This is inferred from T-test results with the value of 0.818greater than 0.05.There are four

categories of education level designed for this study. From the results presented in Table 1, 51 people or 40.8 percent of respondents were master holders; 34 or 27.2 percent of participants were PHD holders; 29 or 23.2 percent of participants were degree holders; and only 11 or 8.8 percent of respondents were certified or hold other qualifications. The cross-tabulation result between education level and e-commerce success rate shows the close association between two variables which means education level is not independent from e-commerce success rate.

In terms of position in organization, 57 or 45.6 percent of participants were vice president or deputy; 52 or 41.6 percent of participants were senior/junior managers; and 16 or 12.8 percent of participants were executive or equivalent. The cross-tabulation result between position and e-commerce success rate indicate no strong association between two variables. The level of respondents' experience was also tested in this study. As from Table 1, 49 or 39.2 percent of respondents from the sample size had above 15 years of experience; while 42 or 33.6 percent of participants had between 5 to 15 years of experience, followed by 34 (27.2 percent) had less than 5 years of experience. The cross-tabulation test also indicated dependency of experience level and e-commerce success.

The last category within demographic profile is e-strategy implementation period which is really important toward e-commerce success. Only 7 or 5.6 percent of participants reported e-strategy implementation for above 15 years in their organization. 55 or 44 percent of participants reported e-strategy implementation for between 5 to 15 years; while 52 or 41.6 percent reported e-strategy implementation for less than 5 years in their organization. 11 or 8.8 percent reported not specified e-strategy implementation period for their organization. From these results, it can be revealed that the Malaysian industry in its preliminary e-strategy and e-commerce implementation within its organizations. The next section presents the Mean, Standard Deviation, and correlation between the strategic design elements and success level of e-commerce.

Table 2: Correlation, Mean, and Standard Deviation Results

	Mean	SD	1	2	3	4
Gender of Participants	1.13	0.335				
Education Level	2.86	0.919				
Position in Organization	1.67	0.693				
Years of Experience	2.12	0.809				
E-Strategy Implementation Period	2.46	0.736				
E-commerce Success	3.3223	0.84299	1.000			
E-Strategies	3.4240	0.97059	0.566	1.000		
Strategy Alignment	3.3453	0.85697	0.488	0.916	1.000	
Leadership in Organization	3.2840	0.89303	0.586	0.875	0.799	1.000

Correlation test has been conducted to describe the extent and direction of relationship between strategic design elements and success level of e-commerce. The moderate to high range of correlation coefficients has been detected among variables of this study. From Table 2, r = 0.566 shows direct and strong relationship between e-strategies and success level of e-commerce; while r= 0.488 also indicates direct and strong relationship between strategy alignment and success level of e-commerce; followed by r= 0.586 shows as strong same correlation between leadership and success level of e-commerce as other strategic design elements. From this result, efficient strategic design using sub-components (e-strategies, strategy alignment, and leadership) directly and positively associates with level of e-commerce success within organization operation under e-environment which is confirmed the research hypotheses. The coefficients model result is presented in Table 3.

Table 3: Coefficient Results for Research Variables

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.554	.258		6.016	.000
	E-Strategies	.351	.195	.404	1.797	.075
	Strategy-Alignment	-.185	.178	-.188	-1.039	.301
	LeadershipinOrganization	.361	.142	.382	2.547	.012

From Table 3, the P-value for Leadership in organization is 0.012 < 0.05 with B=0.361. It can be inferred that leadership in organization is a major contributory factor out of three independent variables put to test towards achieving e-commerce success for organizations working under e-environment.In terms of goodness of fit of model, the R-square from Linear Multiple Regression Test shows the value of 0.361 which means strategic design elements as independent variables can predict 36.1 percent of variation in dependent variable. Usually it is interpreted as statistically fitwhen more than 20% of dependent variables predicted by independent ones (Long, 1997).

Conclusion, Limitation, and Future Work:

Many specialists and business owners believe that electronic commerce or e-commerce can transform business interface and makes traditional business models outdated. Therefore, considering an e-commerce strategic framework to support business owners, strategic managers, and strategic designers is needed under such environment. This paper aimed to develop such a model towards e-commerce success for organizations. Thus, the strategic design framework involves e-strategies, strategic alignment, and leadership has been developed through literature review support and researchers' cognition on the area. The finding of this study revealed that the importance of proper organization strategic design ensuring the success of organizations adopting and working under e-commerce environment.It is also discovered that the respondents' demographic data such as gender and position in organization are independent from the e-commerce success factor;whereas education level, years of experience and e-strategy implementation period cannot be independent from e-commerce success factor. In general, strategic design combination of three elements namely; e-strategies, strategic alignment, and leadershipdirectly and positively reported in association with ensuring the e-commerce success of organizations.

To describe the limitation of this study, it is enough to mention the e-commerce challenges on the Internet. These challenges involve business issues and technical challenges including security, electronic payment, integration between web technology with the legacy systems connect to backend databases, regulatory environment of the Internet (Cyber law), social impact and technology innovation and adoption. Each of these areas needs to be researched. An organization may have the best model in the designing and implementation of e-commerce; yet if it lacks of participation from consumers and government support/incentives in electronic transaction via the Internet, e-commerce success would not be realized. All relevant moderating variables need to be further studied to enhance the proposed e-commerce model. With the growing interest in e-commerce, no doubt similar work is already underway. It is clear at this point that e-commerce shows great potential for extending of revising business processes and market boundaries, but only where it makes sense and supports business strategy. The paradigm shift to electronic markets has not yet occurred, and may not in its entirety. This market shift would occur only when an equitable balance with strong customer acceptance is reached. E-commerce yields opportunities for companies to improve performance. Successful e-commerce implementations are possible if companies avoid common mistakes. Some aspects of this research may be improved or extended in the future. There is also a need to investigate more on other factors regarding strategic design model that can lead businesses to e-commerce success under e-environment.

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