The Role of E-Business Management in Achieving Efficient Performance in Business for Both the Public and the Private Sectors to Reach the Concept of the Total Quality

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Companies, both the public and the private sectors have been taking advantage of e-business as a modern chance to develop business outcomes, but various organisations have not been implementing this approach rapidly. Different studies are there on the adoption of e-business in established nations, but fewer studies are there about growing nations. The purpose of this research is to answer the following question: Is there any effect of the application of the e-business management in public and private sectors on achieving their concept of total quality.

The shareholders or owners perform an important role in making decisions regarding the adoption of e-business; the major value presented from applying the internet was developed brand and/or product knowledge. The public and the private companies using e-business obtained improvement in business and an expanded geographic extent of performance. The major issues faced were training personnel to perform online and describing which online actions can assist to obtain strategic aims.

Key Words: E-business management, technology, innovation, performance, trade liberalization internet

Introduction

The challenge that public and private companies are facing today, has to do with how they are adopting and adapting new advents that occur in the world of Information Technology and Communication (ICT) business (Högg, and Meckel, 2006). In the case of public and private companies, the adoption of ICT induces a potential saving significant operational costs (estimated at 10%), while access to an expanded demand improved sales prospects. Under these circumstances, a group of advanced companies accessing these benefits can seriously jeopardize the position of competitors do not, and even its viability as a business project.

Making e-business management is the task of Information Technology (IT). The important purpose of making e-business management is to focus the method or how Internet technologies can encourage the companies and present competitive benefits. This can be achieved by the configuration of its accessible resources to fulfil the demands of business market and customers, with the support of Customer Relationship Management (CRM) and Supply Chain Management (SCM) (Laudon, and Traver, 2010).

Organizational performance (OP) is one of the important elements for making effectual e-business management in any company. (OP) comprises information, data and a set or experience regarding the company. So, the company should depend on and implement this source as an important method to perform some of the business tasks efficiently and easily. This research is about the role of e-business management in achieving the efficient performance in business for both public and private sectors to reach the concept of the total quality. This role is focused on businesses which preferably requires approaches to help efficiently using resources for commerce over the Internet. This research includes in its conception models of adoption of e-business management applied internationally, which form the basis of the research (Kapurubandara, 2009).

This research includes studies on e-business management, whose objective was to identify the perceptions and attitudes of public and private sectors with respect to total quality. Later models of adoption of e-business management have been analysed and classified with respect to desired characteristics, in addition to identifying relevant factors to adapt to national circumstances, and be applied to the research
proposed in this article. In addition, the evolution of e-business management has been analysed in the country, identifying growth factors and levels of influence in the organizational structure of the companies involved (Hair, Babin, and Samuel, 2005).

**Adoption of e-business management**

Observing the features defined earlier, e-business management is a suitable method for businesses to develop strategic performance and total quality as virtual actions. This would not require different individuals, and the needed initial investment would not be high, so that the companies have a chance to perform in this new area (Kapurubandara, 2009).

There are many different studies on the adoption of e-business management, which is an organizational development, but not much research on companies that implement this tool. Osterwalder, Pigneur, and Tucci, (2005) stated that public sector is not applying e-business management with the similar pace as their private counterparts. Moreover, different studies concentrate mostly on established nations. According to HAIR, Babin, and Samuel, (2005), “some obtainable public and private sectors in growing nations define a failure or delay on the part of public and private sectors to adopt e-business management and online business technologies. According to Kapurubandara, (2009), “the growing internet diffusion has established e-business a great potential in growing nations.”

According to Hair, Babin, and Samuel, (2005), e-business management is a complicated fusion of commercial system, business tools, and organizational frameworks for the aim of making a high-performance business approach. Due to the modifications in the method that companies manage their performance after using e-business, various strategic directions recommend the implementation of e-business as an organizational development for public and private sectors to sell services and goods in a broader geographic area and develop connections with customers.

Recently, the Internet has become one of the most debated topics in the field of business and marketing in particular. However, to address this matter without being continuous, at present, an easy task for those interested, for the rate of development of e-business management has been extremely rapid in many of its facets, academic research and publications processes remain relatively slow, as it happens in other social sciences (Chaffey, Mayer, and Ellis-Chadwich, 2000).

Sometimes even people find evidence that reflection and detailed study of the marketing through new channels have been overshadowed by the needs of those who should make business decisions in real practice. Moreover studies show sometimes a considerable delay with respect to the practice. Despite this, there has been a stream of theoretical research and scientific debate from several pioneering trials that have addressed the nature of interactivity in e-business management and communication, since they explored ethnographies home - technology interaction.

However, researchers have primarily focused on studying the role of the e-business management as a communication medium. The research remains little formal on the Internet as a distribution channel and its implications for consumers. Furthermore, although a growing number of authors has examined the factors that may influence Internet shopping; most of the investigations are essentially conceptual, which is evidenced by the scarce empirical studies that analyse how consumers behave in virtual buying.

To the researcher’s knowledge, there is a gap in research about the factors that contribute to making effective online interactions with customers of a market or a specific geographic area, but the intuition and previous research suggests that perception of security and confidentiality in communications, changing lifestyles, the cost of access and communication via the Internet, among other factors, have important implications for the use of this channel for commercial purposes, and may help explain disparate growth taking place in different areas and countries (Chesbrough, and Rosenbloom, 2002).

After confirming that the theoretical model (base model) was not useful for analysing the evolution of e-business management, it has been decided to define a new model (revised model). A key issue affecting the redefinition of the model lay in the different evolution than the number of users and the volume of business that has taken place in UK. Thus, people have studied the factors related to the penetration of Internet as a communication medium by consumers and, moreover, they have evaluated the indicators related to its use as a commercial distribution channel (OECD, 2005).

**Problems Related to the Measurement of e-Business Management**

The definition of the magnitude under study, ie, electronic commerce raises some issues worth mentioning. Given the diversity of definitions proposed in recent years by a multitude of sources, statistical and other government agencies have recently proposed approaches that provide a
framework for common action, based on the transactions lead exchanges between companies and customers (AMIT R and Zott, 2001).

**Electronic Commerce and e-Business Management**

To investigate the e-business management and electronic commerce, it should be realized precisely what is meant by electronic commerce. In this sense, there are various approaches to consider the concept. In a restrictive sense, the e-commerce comprises only those buying and selling of information, goods and services that are provided through this network. This concept responds to a transactional marketing approach, more focused on isolated exchange in the long-term. However, from the point of view of marketing this concept can be extended to consider systems designed to allow electronic commerce to conduct a wider range of activities during the process of purchase decision.

Thus, e-commerce encompass the whole related to the purchase and sale that is made through the electronic exchange of data over the Internet and considers the long-term determinants that may affect the buyer-seller relationship activities (WADE, Johnston, and McClean, 2004).

This conception of e-commerce, although consistent with the theory of relational exchange and relationship marketing, poses many difficulties for measurement. It is important to consider the multiple interrelationships between performances and physical environments that are undertaken online. Only with respect to the evaluation function, purchase and delivery of the product would have to take into account the many ways in which a website can have a significant role in sales, although these are carried out through other channels, because the Internet would have a real contribution to marketing objectives.

A more restrictive approach, more in keeping with the traditional context with the dominant paradigms in the practice of e-business management, instead facilitates the measurement of e-commerce activities, so it is usually adopted for measuring the phenomenon. Thus, the amount of purchases and sales that have been made through the medium determine the turnover of Internet commerce (OECD, 2005).

**Some Considerations on the Measurement of e-Business Management**

Although a large number of sources that provide information on the magnitude of transactions leading e-commerce in different countries, the data often disagree both on the estimated obtained turnover and its growth forecasts. In part, these differences are due to the difficulties to extrapolate when a phenomenon of very small volumes and experiencing rapid growth is measured, but also that due to different definitions of electronic transactions.

Thus, while estimates upward include exchanges made through communication networks assisted by computer, which may be different from Internet, and incorporate the buying in the formulation of the order, payment and product distribution have been made by non-electronic means, estimates downward only consider commercial transactions entirely and exclusively through the Internet.

In view of the difficulties of international comparisons, the OECD recommends Member States to differentiate between e-commerce and e-business management, made through any computer network communication, Internet and e-commerce (OECD, 2005). In both cases, it is the medium used to transmit the order that determines whether it is an electronic transaction, regardless of the payment system used and the channel to use for the distribution and product delivery (OECD, 2001)

**Theoretical Framework**

Referred to the Information Communication Technology (ICT), the set of technological advances provide the computing, telecommunications and audio-visual technologies. These technologies basically provide information, tools for processing and communication channels. In addition, the e-business management and the use of ICT is defined improve communications and transactions with all persons and / or agencies involved, which can be customers, suppliers, financial institutions, etc (TIGRE, 2006). For purposes of this study, adoption of e-business management is defined as the incorporation in strategic terms, information technology to enable transactions with customers (B2C) and suppliers (B2B). In addition, models are classified into three different approaches complementing each other. The first approach is oriented to the customer / user of the e-business management platform. This user behaviour is analysed, related to the perception people have about online security. The second approach is focused on the company itself. Whereas the third approach is concerned with the oriented development platform e-business management models, which clearly indicate functionality and elements necessary for the implementation of each stage (MISHRA, 2010).
Risk Perceived Model in e-Business Management

The influence of perceived risk is explained by the acquisition of a commitment from a virtual consumer with a purchase, when it has a great confidence and transparency in the transaction, in addition to the transaction itself is maintained within a defined legal framework. According to the model of perceived risk, four types of perceived risks in the context of e-Business Management are identified: Privacy, Security, irrefutable, and all other perceived risks in e-Business Management (Chaffey, Mayer, and Ellis-Chadwick, 2000).

The model of perceived risk used in the study design, is considered of vital importance:
- Perceived risk in e-Business Management: The most important thing in online selling is that people feel confident in any purchase. From this it follows that the challenge that the company faces is providing the tools to ensure both security and privacy.
- Perceived risk products and services: Many of the constraints that ensure that online sales do not get include the fact that consumers do not observe what they are getting. As evidence, in UK there is not yet a culture that allows online sales on par with other developed countries (DEITEL, 2004).

Technology Acceptance Model (TAM)

Companies that have not been innovated in the adoption of e-Business Management should consider the factors that determine the acceptance of technology. There are models to study consumer behaviour, derived from the theory of diffusion of Innovation in Rogers, which analysed the perception about the use of an innovation and the effects it brings. From these studies the TAM model adapted a model derived from TAM adaptation technology, which analyses the attitudes and behaviour related to the use of technology acceptance arises (Kalakota, and Robinson, 2002).

TAM predicts acceptance adapted for use based on two behaviours: Perceived Ease of Use and Perceived Usefulness, both determinants of intention to individual use of e-Business Management.

Perceived Ease of Use: The information systems are perceived in a lower or higher level of complexity depending on the likelihood of adoption and use.

Perceived Usefulness: Consumers could adopt e-Business Management if their perception of online business gives utility over traditional means, and improves business desires. In short, leading to the analysis of these models is to identify the main factors people should consider an organization in its business relationship with customers and / or suppliers (TEECE, 2009) as follows:

Trust: building trust in visitors is the best method to ensure commercial traffic on the website, and to increase customer’s loyalty. The most effective approach is to understand the generation of trust as a process of reducing uncertainty.

Privacy and Security: to make commercial transactions over the Internet, the key aspects that must be understood about the security systems are confidentiality, reliability, integrity and authentication of data.

Risk: from the point of view of the consumer, an acceptable level of confidence is present in an online business represents the most important point to counter the perceived risk by making an e-Business Management. Considering that online consumers will never feel completely secure when making a purchase, as it is not done on the spot. Precisely, traders will produce consumer confidence where there is a high level of perceived risk in a transaction. The most significant is a purchase and unfavourable results are received in the event that it fails (HAIR, Babin, and Samuel, 2005).

Focus –Enterprise: Considering the public and the private sectors, making the models studied include internal and external factors, as the following:

Internal Factors

There must be a structure to provide the necessary complete confidence for e-business management to be an important factor in the long term business guarantees. Thus, according to this model of adoption of e-business management, and with reference to the organizational factors in making another model should be adapted with the following conclusions (Epstein, 2000):

First, the incorporation of new technology must be a business and technical support, preferably given by updated technology resources (computers, constant connection, security of transactions, etc), giving companies the ability to grow to a “possible” steady increase in the sale of products and services through network. In addition, the importance of skills in e-business management makes the incorporation of technologies in public and private sectors according to a level of independence from external entities.

As to how the public and the private sectors adapt to any innovation that is present, consider how innovation will change the habits of any company wishing to adopt e-business management. Therefore, all the factors that public and private sectors should consider are: perceived relative advantage, compatibility, complexity, observe-ability and traceability. Thus, according to evidence in research studies analyzed here nationwide and innovation
factors identified in UK public and private sectors, the following is derived (LÜBECK, Wittmann, and Battistella, 2012):

**Perceived Relative Advantage:** This factor is related to the perceived benefits that a company may have in the process of opening their business to the e-business management. Public and private sectors perceive the usefulness of the Internet to achieve an improvement in business, referenced in that over 55% of public and the private sectors use it basically to find information for business. As the e-business management itself, only 18.4 % of companies recognize the advantage of e-commerce to sell their products and / or services to find new profitable opportunities to advance quality and productivity reason (Tidd, Bessant, and Pavitt, 2005).

**Complexity:** Is defined here as the perceived difficulty for Public and private sectors to adopt e-business management. As accurately Innovation Model, the company does not have sufficient capacity to efficiently solve in the world of new technology, will not be ready to start trading its products online. So, it could be inferred that in most cases only the segment of public and private sectors may be prepared to make adoption decisions, leaving only businesses to use the net to search information.

**Compatibility:** Is defined as the ability of a company to link the introduction of the Internet in its current business process. Public and private sectors are technically able to produce a product or service and deliver it to customers, but are administratively very poor in the management of resources (HÖGG, and Meckel, 2006).

**Cost:** Could be defined as the amount of investment required to act independently from outside the company in the world of e-business management authorities which is available only for companies, of which 100 % own computers, and a high percentage of Internet connection. Contrary to this fact, over 40% of businesses do not even have a PC, which influences these companies to seek help from government agencies, in addition to be forced to hire consultants to help selling their products through other intermediaries in the network (Osterwalder, Pigneur, and Tucci, 2005). Consider the factors that are important before making a decision to adopt or not adopt the e-business management becomes paramount according to the results presented in attitude regarding the use of new ICTs.

**External Factors**

Public companies that begin to trade their products on the Internet are more vulnerable to competitive pressure, thus the smaller the number of competitors. In contrast, private companies have already taken part in this great pressure by a stronger openness to new technologies and adaptation strategies of marketing integration.

Moreover, the pressure factor is identified as suppliers in companies that over 30% of private companies are connected to the Internet to improve the management and productivity, by understanding its connected suppliers (Laudon, and Traver, 2010). As indicated by the study, about 55.2% of public companies listed their products and services via the Internet, indicating that the distribution process and purchasing products through the network will become more efficient, while quickly responding to this pressure.

The first stage, “Promotion”, is characterized as the company has a Website that lacks functionality, and only visual information is presented and informative, with few links between the prospective customer and the company (LÜBECK, Wittmann, and Battistella, 2012). Therefore the study proposes that at this early stage the website should consist of static information, which must be consistent with the objectives in a basic business plan, mainly highlighting the image of the company.

In the next step, functionality is added to the website, allowing adding a detailed information system about the products and services offered by the company, this can be the start of a dynamic Website that allows the user knowing more clearly all the resources that the company has made available.

At this stage, providing different levels of information depending on the company’s own characteristics are identified. Note that this difference in levels occurs only with a difference of adding value to every level of functionality (Hair, Babin, and Samuel, 2005).

Finally, the step of processing is characterized because the e-business management reaches the functional maturity that allows online transactions, so there is a constant flow of information between the company, its customers, suppliers and business partners that it may have. Therefore, the addition is necessary for the e-business management to contain elements of information security through the identification and constant updating of individuals and / or institutions that are present in any transaction (Kapurubandara, 2009).

**Conclusions and Recommendations**

The implementation of online business has been broadly revealed in the business context. Though, theoretical methods to this issue concentrate widely on concerns regarding information technology or e-business approaches. A gap has been noticed in the
research about the internal arrangements established through public or private companies in their approaches to apply this method.

The analysis of this study has revealed the main findings with regards to the role of the e-business management in achieving the efficient performance in business for both public and private sectors to reach the concept of the total quality and how technology must be adapted by companies according to the needs. In this research, each step has been represented as a decision process, in which the succession in time of this process depends on the strategy and the functional implementation of the e-business management.

Therefore, the adoption of e-business management is to seek the highest degree of automation expected to interact in the transformation of data to information of strategic importance for companies. In turn, the business structure is a functional dynamism that allows understanding the main strategic guidelines and features needed to level the ability of each company in the evaluation of each step. This means that the model is a transition from a static e-business management to a dynamic character, where information systems are integrated within the company.

The conclusions can be represented by issues like concept of the total quality, strategic planning, technology implementation and information management. As inferred from the present study, public and private sectors usually do not give the necessary importance to terms of total quality, as there is not an innovative culture so far, which affects the ability of firms to interact with the present levels of socioeconomic development in other countries. In most cases, public and private sectors bet their virtual presence to a purely informative one and do not see it as a real integration of virtual business transactions, delaying the incorporation of these interactions into the world trading stage. As for the technological implementation, there is a lack of available technologies in the market, coupled with a shortage of skills in the area. This is an impediment to the adoption of the e-business management that is developing massively nationwide, and with this approach to technology adoption that rates existing countries with which companies are beginning to achieve commercial ties.

Thus, considering the factors that enable the evolution of the virtual presence, elements of trade integration at all levels of business have been discussed in this study. This integration was specified detailing major elements, in order to focus the research on a purely commercial level. However, this study has highlighted some of the most important technological tools to make efficient and effective integration, considering the expected profit from this long-term adoption.

The information management is of a vital importance in this study, since it is presented as an essential part of the research. It highlights elements of information management and knowledge of best management tools applicable to the scope of e-business management. Therefore, a good e-business management will allow both public and private sectors to be able to cope with technological maturity advents. This maturity will be achieved only if information based on a thorough analysis of the theory of innovation and implementation, through a constantly updated knowledge of business Much of the growth at public and private sectors should be encouraged by aid agencies to companies that prioritize technology adoption programs, as well as increased communication between these agencies and companies that have the ability to exist in these new markets.

In short, companies in both public and private sectors must have theoretical amount of information possible to integrate themselves to e-business management, and means along the character study with which the information is handled. Here the theory presented is vital to take a step forward in trade liberalization policies in companies that sees the technological innovation as a source of development and future advantages.

References


