*Shahmir Sivaraj Abdullah
shahmir@uum.edu.my
Haim Hilman
hilman@uum.edu.my
both of Universiti Utara Malaysia, Malaysia
* Corresponding Author

E-Strategy Adoption and Implementation: Re-examining the Concept

Keywords: E-strategy, E-commerce, E-business, Competitive Advantage.

INTRODUCTION

The majority of e-business solutions have focused on individual business improvement programs and strategies (Turban & King, 2012; Cunningham, 2002). Hamel (2002) cites an example where this new approach has both worked and at the same time created disruption within an industry whilst referring to Charles Schwab and Fidelity (both are American financial institutions) have changed the manner which customers deal with their savings resulting in mainstay US banks losing almost half of their market share to new online business models such as them. Robert and Racine (2001) conclude that there is a gap between convention and practice in this new area of commerce. They contend that in order for firms to transform from a conventional business model to an e-business model which is highly dependent on the Internet, firm's need to understand how IT systems are developed and deployed. Unfortunately, to most CEO's this is foreign terrain and the primary area of resource allocation is delegated to a project team with the mandate to develop a miracle plan (Robert and Racine, 2001).

FINDINGS

IT enables firms to achieve operational, tactical and strategic needs more effectively and efficiently (Cooper and Zmud, 1990). Sadly, many technology-centred products and services fail to reach their expected purpose, and some are just abandoned (Burton-Jones and Hubona, 2006). This thought process has meant that an ever increasing number of organizations have begun investing in IT predominantly believing that remaining relevant requires IT investment as well. Herein, is the problem because investments in IT have to be well thought out and must fulfil the strategic needs of the organization which intends to adopt (Laudon, K.J., and Laudon, J.P., 2012).

When decisions on IT investments are not strategically thought out, the inclusion and purchase of new technologies by organisations has not provided the expected returns for firms (Tiernan and Peppard, 2004). It should be noted here that the disappointing returns on investment have in many cases been attributed to the difficulties involved in implementing IT operationally and by far much critically due to a notable lack of understanding of technology and its strategic implications by senior executives within the firm (Laudon, K.C. & Laudon, J.P., 2014; Robert & Racine, 2001).

IT adoption failure is by no means uncommon within firms (Robert and Racine, 2001) especially because of unplanned and slipshod adoption. This usually happens at the implementation phase (Tan & Sutherland, 2004; Legris, Ingham, & Collerette, 2003; Umble, J., Haft & Umble, M., 2003; Rogers, 1995; Sauer, Southon, & Dampney, 1997; Szajna & Scamell, 1993) and ranges from underutilization to outright rejection (Venkatesh and Davis, 2000).

Businesses must learn to appreciate the fact that e-business is the operationalization of the E-strategy that has been identified by the firm to enhance its reach. You cannot adopt an e-business strategy without first identifying the environmental factors that are shaping the business environment (this must happen at the strategic level of the organization), from this a deliberate decision to expand electronically (electronic strategy) which may be through e-commerce or the more expansive e-business models. As stressed above, this strategy needs to be addressed at the highest levels of the firm to negate any resultant technology adoption failure.

The use of strategy in firms to achieve the objectives of the firm is not something that is extraordinary. What is important is that firms recognize that with the ever increasing use of technology the means with which the strategic direction of the firm will be achieved has seen a paradigm shift. This requires that firms seeking to broaden their customer base electronically (through the Internet platform) need to understand E-strategy (Cunningham, 2002).

E-strategy is the adoption of an electronic strategy to achieve the objectives of the firm in its environment with the primary intention of achieving effectiveness. Cunningham (2002) likens E-strategy as a means of developing and changing the manner a firm operates by utilizing e-business tools and techniques as the primary lever.

E-commerce is the conduct of business over an Internet platform and particularly the web (Chaudhury and Kuilboer, 2002). This was rather restrictive as the over simplification of the meaning of e-commerce has further evolved since then. A more inclusive definition by Turban and King (2012), which is more reflective of the OECD (2013) summation state that e-commerce is the mechanism of purchasing, retailing, or swapping products, services, or exchanging any information via a network whilst e-business can be said to be more holistic version which includes not only the purchasing and retailing of goods and services but is inclusive of the servicing of customers, collaborating with the firm's partners, and carrying out network based transactions within the firm.

The advent of e-commerce has changed a business's functional areas and their primary tasks. E-commerce has attracted significant attention in this millennium. This attention has required a need to look at strategies (Varshney & Vetter, 2002; Kalakota & Robinson, 2000; Afshar, Khaksar, Paghaleh and Kachardas, 2011).

E-commerce will change the way competitive intelligence will be gathered and influence how small businesses could benefit from such a tool (Cronin, Overfelt, Fouchereaux, Manzvanzvike, Cha and Sona, 1994). It is common knowledge that they have been proven right by the sheer number of Internet based firms that exist today. Examples vary from Amazon.com and Priceline.com to Zalora.com.my in Malaysia.

E-business includes all processes that a firm utilizes (usually employing a computer network) to conduct its operations (Kroenke (2014); Baltzan & Phillips (2014); Laudon, K.P. & Laudon, J.C. (2013); Stair & Reynolds (2013); Haag & Cummings (2012). A more comprehensive definition would be the culmination of a firm's transformation activities and it's delivery through the use of technology thereby adding value to its customers so as to enhance the customer experience within the confines of the digital economy (Turban and King, 2002).

Where e-commerce links the firm with its suppliers and retailers and its customers, e-business takes it further by enabling the firm to carry out this action and linking it to the internal processes of the firm in the fulfilment process (Haag and Cummings, 2013). What is meant here is that information and communication technology (ICT) is used to enhance the operations of the firm with the intended outcome of providing value to the customer (Laudon, K.P and Laudon, J.C., 2012). An all-encompassing definition is provided by Holsapple and Singh (2000) which was gathered from an array of diverse printed and electronic, as well as academic and managerial sources which comprised the five views of e-business which included trading, information exchange, activity, effects, and the value-chain. E-business is the approach used to achieve business goals where (computer-based or networked) technology is used for exchanging information and thereby enabling or facilitating the rendering of activities within the value chain or the supply chain which includes the ability to support decision making support that supports these activities (Haag & Cummings, 2012, Ha & Stoel, 2009; Holsapple & Singh, 2000).

The processes that are needed to enhance the firm's e-business capability require covering the full spectrum of operations from procurement and production to the delivery of the finished product or services. This must also include the payment mechanisms in place and the electronic links between suppliers and retailers (Kroenke, 2014; Baltzan & Phillips, 2014; Stair & Reynolds, 2013).

Only efficient and effective companies succeed where competition is intense and in most cases are very rough and tumble. Competitive advantage is achieved by the ability of businesses to enhance their shareholder value by forcing the firm's managers to identify, formulate and implement the relevant strategies required to outperform their competition or rivals. They also state that strategy must be viewed as a tool that organizations needs to win and link it to competitive advantage or in other words to establish its presence in competitive rivalry. They also believe that this will allow a firm to be placed in a unique position of being a winner or survivor.

David (2009) emphasizes the need for addressing the external and internal environments within the operating environment suggesting that strategic management is a process involving formulation, implementation and evaluation of the actions taken which will ensure that the firm will achieve its stated objectives. It is often said that strategic management is usually for overall operations of the firm with a view towards quarterly, biannual or annual achievements.

This point on competitive advantage is extremely important for businesses. Haag and Cummings (2013) strongly point out that successful businesses in order to gain competitive advantage and be successful must define the nature of products or services and distinctly know who your customers are, understand their needs and how they perceive your products and services. The authors clearly state that it is the customer who should be targeted especially in the B2C environment where businesses must formulate effective business strategies based on the value the firm expects their customers to place on them. Value here is meant to be the influence a firm can impart upon the customer to choose their product or service. E-strategy and its adoption straddle all businesses, business models, industries from the very small to the very large multi-nationals. A representation of these links is given in Figure 1 below.

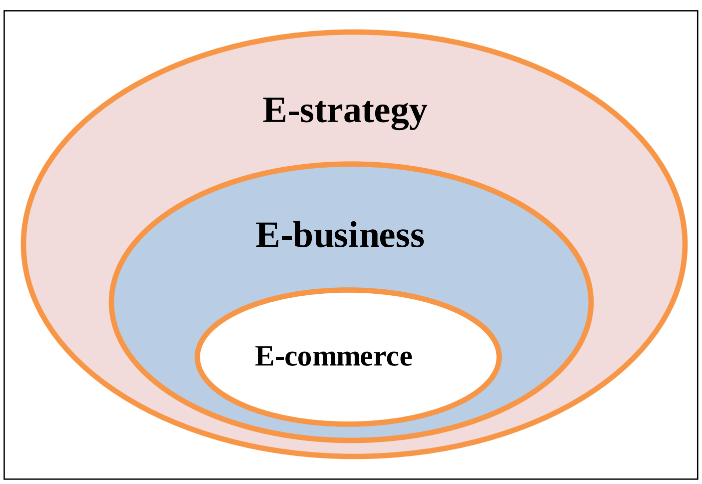

Figure 1: Relationship between E-strategy, E-business and E-commerce

This perspective is widely accepted especially with regards to the strategic thinking process of organizations and the implementation of such strategies can be measured by their performance or the end results of an activity (Wheelen and Hunger, 2010). This may also be implied towards the adoption of E-strategy. It will be useful and highly significant to establish whether the adoption of the E-strategy was done because 'others' are doing it or has it been done deliberately to improve and expand the customer base of the organization to enhance its effectiveness and lastly to see if it has been successful. Mintzberg, Lampel, Quinn & Ghoshal (2003) reinforce this when they contend that strategy is merely a plan and a deliberate predetermined line of action with a set of guidelines effectively intended to handle a situation.

They espouse two key characteristics in that it is made in advance to the actions it is applied on and it is deliberately and purposefully acted upon. The importance of IT in achieving strategic goals of the organisation was highlighted by Konsynski and McFarlan (1990) and further expanded with the inclusion of a definition by Keen (1991) which emphasized the present need to use IT to gain competitive advantage because IT according to him has transcended its traditional unseen role and has evolved into a more dynamic strategic role incorporating the capability to not only support chosen business strategies, but being able to drive the creation of new strategic business initiatives.

The delivery of the postulated strategy by an organization through electronic means is E-strategy. As mentioned earlier, E-strategy encompasses a multitude of applications from e-government to e-business. A brief outline of the flow and application of the discussions above is provided in Figure 1 below which includes an example of what a firm has to do to take advantage of an available opportunity. The conventional strategic management process is drawn from Wheelen and Hunger (2010), Abdullah (2006), Parnell (2008) and Harrison and John (2008). The same process is also detailed by other authors such as Hill and Jones (2012), David (2009), Pearce and Robinson (2009) and most other prominent strategic management authors. The process and actions that the firm needs to do however, is presented by this author with an example of the appropriate actions that must be taken by the firm in order to achieve (in this case) the growth strategy of the firm. The growth here is designed to happen through electronic means (thereby E-strategy) and how it may morph into an e-business model to be decided by the firm.

Figure 2 on the next page presents a view of E-strategy and its implementation that is driven by the environment. The opportunity here has been drawn from the external environment (high Internet penetration rate and high computer literacy among consumers). This then lends to the appropriate corporate level strategy (grand strategy) to be adopted. In this case a growth strategy for the firm could be adopted and this is to be achieved electronically (E-strategy).

The choice of the type of E-strategy to be employed may be e-commerce or the more comprehensive e-business depending on the objectives of the firm. For instance if the choice is e-commerce then the customer experience will be paramount and the resources of the firm need to be mobilized to achieve this. The various applications of e-commerce such as B2B, B2C or C2C would all be options. If e-business is to be adopted then the same modes can be utilized but the internal processes of the firm need to be enhanced. The choice of business level or competitive strategy as proposed by Porter (1998) to be adopted would be either competing based on cost, differentiation or focus. The choice or mode of E-strategy to be employed would either be e-business or e-commerce depending on the capability of the firm to incorporate the infrastructure that is required.

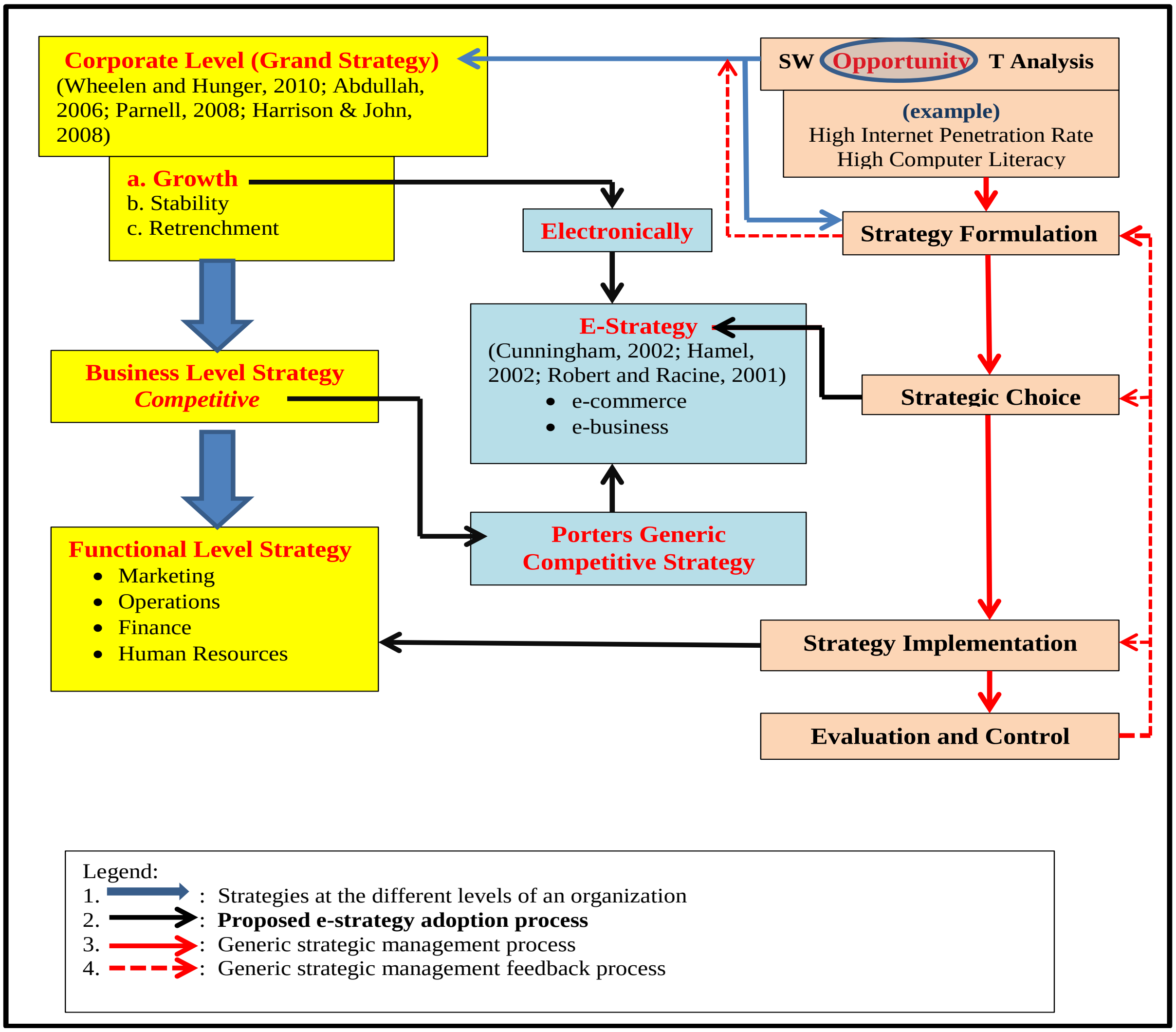

Figure 2: Generic Framework for E-strategy Implementation

Finally the operational level strategies for product or service delivery by businesses must be identified so that the E-strategy that has been adopted will come to fruition. The firm needs to deal with customer-focused processes including all aspects of promotion and marketing, delivering over the web, payment and purchase order processing, and online support for the customers. This must also include internal management actions or processes which enhance efficiency and other employee based services when dealing with customers, employee training, firm wide information-sharing etc. (Kroenke, 2014; Baltzan & Phillips, 2014; Stair & Reynolds, 2013).

CONCLUSION

The primary reason that an understanding of the concept of E-strategy is so important is because when it is addressed at the strategic level then the importance that can be accorded to it will become more focussed. This will also enable the resources of the firm to be better identified, planned and employed to achieve the objectives of the firm. The tendency to just adopt e-business by any firm without a proper understanding of this concept might lead to losses for the firm as IT investment is quite expensive. In most cases such investment is usually capital expenditure which requires appropriate returns. When such a plan is implemented and directed from the very top of the firm then the employees within the firm will understand the importance of carrying it out effectively.

REFERENCES

Abdullah, H,H. (2006) *Pengurusan Strategik: Konsep dan Kes* (2nd ed.). Malaysia: McGraw Hill.

Afshar, A, J., Khaksar, S. M, S., Paghaleh, M, J., & Kachardas, B, P. (2011). The application of electronic commerce among small and medium enterprises: From a business processes view. *International Journal of Business and Social Science. 2*(5), 142-148.

Baltzan, P. & Phillips, A. (2014). *Business driven information systems*. (4th ed.) New York: McGraw Hill.

Burton-Jones, A., & Hubona, G. S. (2006). The mediation of external variables in the technology acceptance model. *Journal of Information and Management, 43*(6), 706-717. doi:10.1016/j.im.2006.03.007

Chaudhury, A., & Kuilboer, J-P. (2002) *E-business and e-commerce infrastructure: Technologies supporting the e-business initiative.* New York: McGraw Hill.

Cunningham, M. J. (2002). *E-strategy*. Oxford, England: Capstone Publishing.

Cooper, R. B. & Zmud, R. W. (1990). Information technology implementation research: A technological diffusion approach. *Management Science, 36*(2), 123–139.

Cronin, B., Overfelt, K., Fouchereaux, K., Manzvanzvike, T., Cha, M., & Sona, E. (1994) The Internet and competitive intelligence: A survey of current practice. *International Journal Information Management, 14*(3), 204-222.

David, F. (2009). *Strategic management concepts* (12th ed.). New Jersey: Prentice Hall.

Ha, S., & Stoel, L. (2009). Consumer e-shopping acceptance: Antecedents in a technology acceptance model. *Journal of Business Research, .62*(5), 565-571.

Haag, S., & Cummings, M. (2012). *Management information systems for the information age.* (9th ed.). New York: McGraw Hill.

Hamel, G. (2002). *Leading the revolution*. Boston: Harvard Business School Press.

Harrison, J. S., & John, C. H. S. (2008). *Foundations in strategic management* (5th ed.). Mason, USA: South-Western Cengage Learning.

Hill, C. W., & Jones, G. R. (2012). *Theory of strategic management* (9th ed.). Canada: South-Western.

Holsapple, C. W., & Singh, M. (2000). Electronic commerce: From a definitional taxonomy toward a knowledge-management view. *Journal of Organizational Computing and Electronic Commerce, 10*(3), 149-170.

Kalakota, R., & Robinson, M. (2000) e-*Business 2.0: Roadmap for success* (2nd ed.). New York: Addison-Wesley.

Keen, P. G. (1991). *Shaping the future: Business design through information technology*. Boston: Harvard Business School Press.

Konsynski, R. B., & McFarlan, W. F. (1990). Information partnerships-shared data, shared scale. *Harvard Business Review, 68*(5), 114-120.

Kroenke, D. (2014). *Using MIS.* (7th ed.). New York: Pearson Publishing.

Legris, P., Ingham, J., & Collerette, P. (2003). Why do people use information technology? A critical review of the technology acceptance model. *Information & Management, 40*(3), 191–204.

Laudon, K, C. & Laudon, J. P. (2014). *Management information systems* (14th ed.). New York: Pearson Publishing.

Laudon, K, C., & Laudon, J, P. (2012). *Management Information Systems: Managing the digital firm* (13th ed.). New York: Pearson Publishing.

Mintzberg, H., Lampel, J., Quinn, J. B., & Ghoshal, S. (2003). *The strategy process* (4th ed.). Upper Saddle River, New Jersey: Prentice Hall.

OECD (2013), Electronic and Mobile Commerce. [Press Release] OECD Digital Economy Papers, No. 228, OECD Publishing. Retrieved from http://dx.doi.org/10.1787/5k437p2gxw6g-en

Parnell, J, A. (2010). Strategic clarity, business strategy and performance. *Journal of Strategy and Management, 3*(1), 304-324.

Parnell, J, A. (2008). *Strategic management: Theory and practice* (3rd ed.). New York: Cengage Learning Custom Publishing.

Pearce, J. A., & Robinson, R. B. (2009). *Strategic management* (11th ed.). New York: McGraw Hill.

Porter, M.E. (1998). *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. New York: Free Press.

Robert, M., & Racine, B. (2001). *E-strategy*. New York: McGraw-Hill.

Rogers, E. M. (1995). Diffusion of Innovation (4th ed.). New York: The Free Press.

Sauer, C., Southon, G., & Dampney, C. N. G. (1997). Fit, Failure, and the House of Horrors: Toward a Configurational Theory of IS Project Failure. In Proceedings of the Eighteenth International Conference on Information Systems (ICIS), Georgia, United States. 349–366.

Stair, R. & Reynolds. G. (2013) *Fundamentals of information systems*. (7th ed.). Boston: Cengage Learning.

Szajna, B., & Scamell, R. W. (1993). The effects of information system user expectations on their performance and perceptions. MIS Quarterly, 17(4), 493–516.

Tan, F. B., & Sutherland, P. (2004). Online consumer trust: A multi-dimensional model. *Journal of Electronic Commerce in Organizations, 2*(3), 40-58.

Turban, E., & King, D. (2012). *E-commerce: Managerial and social networks perspectives,* (7th ed.) New Jersey: Pearson Publishing.

Umble, E. J., Haft, R. R., & Umble, M. M. (2003). Enterprise resource planning: Implementation procedures and critical success factors. *European Journal of Operational Research*, *146*(2), 241–257.

Varshney, U., & Vetter, R. (2002). Mobile commerce: Framework, applications and networking support. Mobile networks and Applications, 7(3), 185-198.

Venkatesh, V., & Davis F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. Management Science, 46(2), 186-204. doi:10.1287/mnsc.46.2.186.11926

Wheelen, T, L., & Hunger, J, D. (2010). *Strategic management and business policy* (11th ed.). New York, USA: Pearson Publishing.