

E-Business and E-Government between Challenges and Opportunities - Case Study Malaysia

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Abstract: electronic business or e-business encompasses a global business, and for achieving its optimum benefits and good returns, active involvement of all countries worldwide, apart from technological progresses and smart partnerships are necessary. Government regulations are vital in the reinvention of the delivery of the valuable and productive service, particularly pertaining to cost, information and knowledge via ict, considering that governments worldwide are currently going through transformation. The obstacles in the e-business efforts and e-government development need to be examined due to the demand for the e-business initiatives implementation in e-growing among developing nations. This study scrutinizes malaysia which is experiencing rapid transformation on the initiatives of e-business and e-government. Future works should explore the citizens' awareness on e-business applications, e-government and the encouragement of cooperation between the government and enterprises to improve the country's current technical infrastructure.

Keywords: e-business, e-government, business opportunities, business challenges.

I. INTRODUCTION

In general, e-business denotes various activities associated with business including E-shopping, e-education as well as e-banking, and these activities involve the application of the Internet, Extranet as well as Intranet [1]. At present time, USA leads the domain of e-business, that is, the country has the highest number of companies that run their business online [2]. Then again, in the domain of e-business, these web sites only grasped 5% of the global population and a quarter (25%) of global purchasing power [3,4,5].

In the context of e-business, communication is crucial. Somehow, among developing countries, they are facing a shortfall in the establishment of contact and in being at par with developed counterparts [6]. Hence, considering a

substantial margin between developed and developing countries, there have been attempts at improving the international infrastructure for information technology (IT) accessibility in e-business [7]. In this regard, the Global Digital Initiative was launched by United Nations Development and Markel Foundation, and this initiative provided assistance to 12 underdeveloped nations in upgrading their IT infrastructure; it had a two-year span [8]. Accordingly, several questions have emerged which have prompted the researcher to carry out this study. The questions are as follows: How to construct a corresponding specific model to integrate a new business for global competition? In developing countries, what is the government's initiative in stimulating e-business? How can initiatives of e-government supplement the renowned e-business models? What are the factors driving the success of e-business models in developing countries and the government? [9,10,11,12].

In essence, e-government encompasses the application of information and communications technology (ICT) (e.g., the Internet) for enhancing the governmental processes. E-government is therefore not a new phenomenon, essentially. Among the initial utilizers of computers are indeed governments. Somehow, the global explosion of the Internet which proficiently assimilates ICT following open standards, in addition to the effort in reforming public administration (i.e., New Public Management) has justified the emergence of fresh interest towards the subject. With e-government, the government arguably has greater efficiency, responsiveness, transparency and legitimacy, while also forming a swiftly expanding market of goods and services alongside countless of novel business prospects.

Notably, e-government may be viewed by some as more than just an attempt at expanding the e-commerce market from business to government, and this might be true to a certain degree. Accordingly, e-commerce encompasses marketing as well as sales using the medium of the Internet. Considering that the institutions of government are involved in the activities of marketing and sales, as buyers and also as sellers, describing e-government applications of e-commerce seems inconsistent. Indeed, governments are involved in business affairs.

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II. METHODOLOGY

The data gathered in this study are of primary data and secondary data. In specific, the primary data were acquired from past works and the extant literatures (i.e., printed journals, electronic or online and newspaper articles, and reading material relating to theory of e-business and e-government. On the other hand, the secondary data were gathered from government sites through the observation of what system is being used by the site and how the system operates.

II. ANALYSIS AND FINDING

Both the Internet and communication are global phenomena. Somehow, it is necessary to have the awareness regarding the local conditions in order allow the examination of the issues as well as hindrances that are currently plaguing developing countries in the context of e-business practices and e-government implementation.

In embracing e-business concept, it is necessary that conventional companies reassess their business models. This is because globalization and substantial technological development have caused consumers to change in regards to their expectations. Accordingly, companies need to come up with outstanding business models, products and services for the consumers, in order to succeed in the increasingly cutthroat environment. Increasingly sophisticated and processing competence of electronic means the driving forces is to be expected to develop rapidly to manage online transactions especially behind the changes in consumer's behavior, with reference to the supply and demand equation as highlighted below.

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The supply side:

- Improvement of product technology through the beneficial application of CAD/CAM and JIT system. Such application transforms outcomes into manufacturing, distribution, efficiency of service, a substantial boost in customization level, and overall increase in selections in product/service to the consumers.
- Enhancement of distribution through the decrease in the inventory of defects while also improving the overall efficacy of logistics and systems of warehousing transport with the application of technology including computer-aided logistics support (CALs), POS, and EDI.

The demand side: A noteworthy transformation regarding the broad nature of behavior and the consumers' demand for products and services from the viewpoint of large scale:

- Growth cut-rate of children born on a global scale,
- Middle-age high-standards societies residing in developed nations including USA and Japan,
- The increase in labor force comprising women in the expansion of the global economies,
- Unending changes in terms of way of life, levels of income and ethnic diversity.

In this regard, privacy becomes the focal point where rights of individual and public safety are highly crucial, resulting in consumers experiencing high level of stress.

In the conventional models of business, supply and demand are progressively being substituted with e-business and sophisticated electronic models that are more innovative, particularly in the context of developed countries. Accordingly, e-business is construable as the integration of processes and infrastructure of business, and knowledge in human resources and entrepreneurship for the formation of a superior model of business. In this context, the notion "Superior" is associated with the generation of goods and services to consumers in less time at less cost, while the consumers from all over the world can purchase goods or services at the time of their convenience.

Indisputably, e-business is now the customary method for companies globally in running their business, especially those heavily involved in transactions that need numerous functions including technical and marketing know-how, publicity expertise, and customer affairs. Among the product and/or services provided by ICT technology include education, services of banking and finance, printing and publishing, manufacturing as well as retail.

Initially, the Internet did not allow people to pay bills, send cash and cheques, request for loans, open bank accounts, apply for securities and home mortgage, manage asset and perform day-to-day business. Then, smart cards and digital cash were introduced as the initiatives that offer easy transactions. In the context of developed countries, e.g., Europe and USA, there have been a fast progression in business services and models, allowing payments to be made using the Internet and on any computer apparatus with digital support. In other words, consumers could enjoy these benefits through the internet.

E-government comprises an approach employed by the government in using and operating ICT particularly the Internet applications for the purpose of making available to both people and businesses the accessibility to information as well as services. Furthermore, in making available the opportunity to partake in the process of institutions and democracy, transactions between government and business (G2B), government and citizen (G2C), Government to Employee (G2E), between units and different government levels, have been made available.

Importantly, e-government is more than just government Web pages, e-mail, or service conveyance. This owes to the fact that e-government is more than just digital accessibility to information, licensing or e-payment. As indicated in Harris (2015), it is crucial that e-government also incorporates the corresponding provision while also rebuilding the style of the organization of social and political power as below:

- To grant the citizens the entitlement in employing government information,
- The endowment of government services to citizens,
- The provision of an access for the processing of government information between citizens and firms with government,

- To provide assistance to the citizen's involvement in government, and
- To generate digital democracy among citizens.

The role played by governments in e-business is illustrated in Figure 1. Accordingly, it is to promote the initiatives of e-business in the economy, and it entails assistance in regards to the provision that is associated with the infrastructure, skills growth and constructive policies such as rules and regulations and taxes, which facilitate e-business expansion. In the context of Malaysia, the process of facilitation is aimed at the generation of the initiatives of e-business under the multimedia super corridor plan.

In the context of Malaysia, it is expected that the government will actively partake in the initiative of e-business. In this regard, the solutions of e-procurement are employed when dealing with suppliers. Accordingly, a project called E-perolehan is employed.

E-perolehan encompasses the e-procurement system that eases the activities of purchases made by the Government of Malaysia, through the clearing up of activities of procurement. The system which runs on electronic data exchange process (EDI) provides a platform that suppliers can use in showcasing their products on the WWW. It also allows reception, management, processing of purchase orders, and receipt of payment from agencies of government through the Internet.

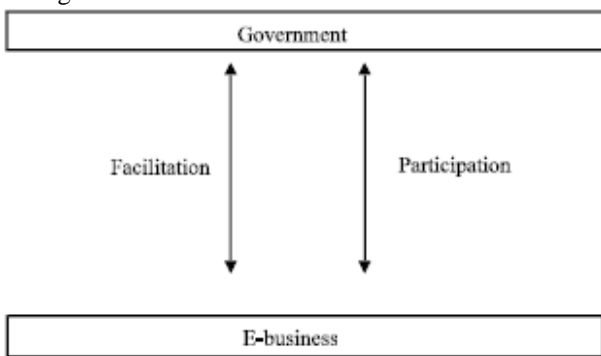


Figure 1: Government and E-business

The unstable work nature inside the environments is displayed in Figure 2. Additionally, the main lessons from the framework are accorded. As the first step, governments and businesses globally, attained the inside-out approach to business and government services. Here, companies place their manufactured products on the market. For businesses, the government proposes various services so that these businesses could partake in transactions (e.g., purchase via the conventional mechanisms with considerably low level of channels on/default online used terms of distribution).

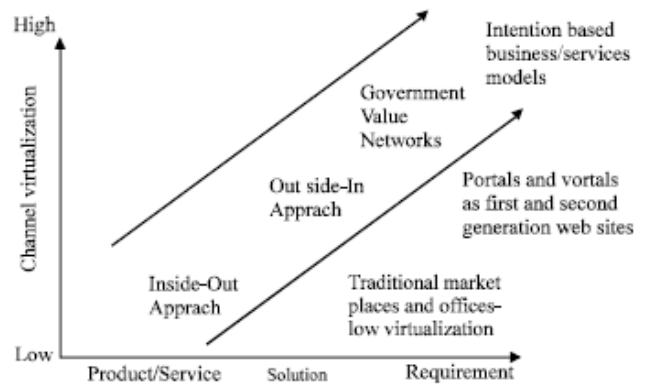


Figure 2: Fluctuation of Business environments

The demand for products and government services on the products that were available in places were traditional markets. Consequently, in the approach of external hardware, there is considerable wave of marketing and selling grounded upon on what is wanted by consumers because for a solution in the product, they produce what is being considered by the customers. Accordingly, the initial and ensuing creation of Internet portals is for the provision of numerous services to companies and the society on the whole, and this has led to the introduction of Portals and Vortals (Vertical Portals). Given the demand of customers, products and services offered on the internet are aimed at increasing the convenience of buyers, and simultaneously this can be part of solution to the daily problems.

The succeeding e-business wave will increase the levels of efficiency and convenience. Here, all involved parties in the supply chain are addressed in order to fulfil the needs of each customer, the basis of the intention of the gates are developing. For managers, their challenging task is in assuring the opposition reaction to obtain the correct information on the intents of the customers.

Likewise, the predecessor is obliged to react to the changing nature of the business sector, necessitating governments to act in cyberspace. Additionally, value-added service needs to be generated to increase the strategic partnership with the companies. Hence, the path towards the notion of Government Value Networks (GVNs) can be enclosed. In this regard, the predecessor is expected to have more aptitude in the consecutively flow of information and transactions. GVN intensifies the foundation of all business models, governments and their counterparts and partake in intents in accordance to business and service models including the procurement business system to the Malaysian Government by way of E-perolehan (E- purchase).

It is crucial that integrated architecture of e-business could react to the changing competitive forces. For the attainment of future success and for the generation of flexible as well as scalable structural design of e-business and e-government, the following need be taken into account:

- The accomplishment of overall firm performance of the highest level.
- The creation of application of e-business and e-government with minimal training or cultural change.

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- The creation of faster applications.
- The enhancement of customer service and the quality of the general operations using the integrated company divisions.
- The technological improvement on the business objectives/Government.

In the regards to e-business and e-government landscape in Malaysia; it began with the launch of Multiple Super Corridor (MSC) Media Project in 1996 by the fourth and seventh Prime Minister of the country, Tun Dr. Mahathir Mohammad. MSC focuses on accentuating the landscape of e-business and e-government in the country, corresponding to the country's aspired Vision 2020 that aims to turn Malaysia into a developed nation.

Then again, in the same year, Malaysia loses its competitive advantage over other developing countries within the region. Accordingly, the government was primarily concentrating on significant growths in manufacturing which was expected to generate 7% annually. Manufacturing indeed took over the first rank of 38% of GDP in mid-1990. In this regard, the state needs to completely develop by 2020, with the projection that the citizens will earn on average 10,500 \$ US. This has led to the establishment of Maritime Safety Committee in 1996 with the purpose of promoting the wages of the Malaysians that are comparable to those of developed nations. Hence, alternate strategy and initiative of economic progress are necessitated.

The long-term strategic initiative of MSC (1996-2020) encompasses cooperation between the government that functions as the chief designer of vision and private sector which plays the role as the primary initiative for its operation. MSC was established as an alternate economic growth while providing assurance that Malaysia is in line with other nations globally. MSC is in fact Malaysia's effort in adapting to the IT revolution.

MSC encompasses a corridor covering the area of 15x50 kilometers. Its coverage begins from the Kuala Lumpur City Centre (North domain) to the new Kuala Lumpur International Airport (KLIA) (South domain). Such coverage provides ICT initiatives which attract the corridor leading ICT for the governance of the multimedia industries, international corporations, while managing research and development, and developing novel products and technologies. For domestic entrepreneurs, MSC provides the most conducive environment for growth that these entrepreneurs could transform into global companies, resulting in the opportunities to series of benefits.

Within MSC, there are 7 primary domains or leading applications as follows: e-Business, e-government, identification card (MyKad), international students' card (i-Kad), R&D cluster, Smart school, Technopreneur Development, and Telehealth.

In the context of the initiatives of e-government in Malaysia, the Malaysian Administrative Modernization and Management Planning Unit (MAMPU) initiated the 9th strategy, i.e., public sector plan initiatives of ICT, for the purpose of facilitating all agencies of government to operate in an integrated electronic environment. Accordingly, there are 9 strategic initiatives namely: Community Business Portal, e-learning, citizen-centered Gate, Government

employees to the gate site, Income Tax Online, Integrated Financial Management System, Land and real estate system, Local government system, and Social Mail Services.

Also, by year 2004/2005, the government aspired to lead the national level and implement E-courts and E-land (The Star Press, 2003). On the national level, there were approximately 5003 government procurement sites which were to cooperate with 1,500 remaining sites with linkage to the project of e-procurement. It was expected that the project will be reverted to 14 agencies involving over 2000 users in the Generic Office Environment (GOE). Meanwhile, a project of Human Resources Management Information System (HRMIS) was to be run in 10 pilot agencies and later expanded to other agencies at the national level. Accordingly, in the year 2004/2005, among the improved services were as laid down below:

- Investigation and payment services of Road Transport Department (RTD),
- Services of renewal and issuance of licenses RTD drivers,
- Traffic / Royal Malaysian Police Services inquiry call
- Electronic scheduling and test theory
- Services of electricity bill payment

In relation to e-business initiatives matters, the global ranking of Malaysia with respect to its global e-readiness based on e-business framework was at 33rd place in 2004. Then, as reported in the Economist Intelligence Unit (2005), the rank rose to 35th place.

Increasing the global competitiveness of Malaysia following the development of innovative business knowledge economy and architecture, several primary measures were implemented by the policy-makers. Among the measures were the requirement of pre-conditions of e-business development and e-commerce uses in the infrastructure construction for fulfilling the requirements of new economy and skills. In fact, a knowledge-based society was to be established in the principal economic plan for the five-year duration. Another measure is the encouragement and support given to the Malaysian small and medium-sized enterprises (SME's) to partake in collaborative joint ventures with global firms in the relevant activities and partnerships.

In the context of Malaysia, it is highly valuable to have cooperation and smart collaboration between the academic domains and the commercial sector. This owes to the possibility of emergence of issues regarding the development in the creation of prototype models. It is expected that studies from both sides could assist the effort in the generation of a solid foundation of cultivated workforce in the country. As such, the cooperation will promote institutions, both public and private, the sector of business, and higher education as well. Hence, the provision of practical training and curricula will contribute in the knowledge-based economy. In addition, for e-business and e-commerce, the issues of privacy and online transactions security need to be addressed. The public also needs to be made aware of the Cyber laws.



IV. RESULTS:

It appears that in its e-government initiatives, Malaysia has been facing considerable amount of challenges as highlighted below:

- Insufficient infrastructure.
- Low usage of Mykad and I-Kad.
- Lack of partakers among key stakeholders particular citizens, and slow e-government implementation owing to lack of integration.
- Low level of computer possession and low ICT savviness among citizens.
- Obsolete information by the government.
- Non-user-friendly websites which hinder usage to beginners.
- Failure of telehealth owing to management issues and use of unsuitable business model.

Based on the above issues, it is clear that in order to generate knowledgeable society, Malaysia needs to revamp its education sector at all levels.

The implications of the theory and practice:

In attaining successful e-government, there needs to be collaborative efforts from involved parties particularly the public officials, businessmen and citizens. This is because the application of e-government requires the use of new services, information, channels, technologies and skills which will allow interactions among diverse departments, and all these need to be mastered by the involved parties.

E-government encompasses the operations between the following: citizens and government (C2G), business to government (B2G), and Government to government (G2G) contract. For end users, the use of e-government services improves service quality, because not also it is cost-effective, it also shows the actual outcomes of productivity of the government. Accordingly, for the context of developing nations including Malaysia, the success of e-business initiatives is defined as follows:

- Clear delineation of objectives for e-business as well as for e-government initiatives.
- The promotion of SME in the utilization of e-business and e-government.
- The competency of government in streamlining the national educational policies to generate well-versed labor force to support and promote e-business projects.
- The capacity of governments in making investment in infrastructure (e.g., reachable and reasonably priced broadband equipment) for the communities of business.
- Well-versed in the ICT which can streamline the processes of business services and government.

V. CONCLUSIONS

Among developing countries, the establishment of e-business applications and e-government is impacted by several issues. In this regard, there is demand for innovative economy and skills to match the requirement of vast development of infrastructure, with the aim of creating a knowledgeable e-based society within the span of five years.

In the context of Malaysia, projects involving small and medium-sized enterprises (SMEs) should be encouraged. Also, these SMEs should be given support to involve in joint ventures and collaborative partnerships with the Government.

This will assure the success of e-business and e-government establishment. More cooperative works between SMEs and the Government should be considered, such as in the use of e-perolehan. This can lead to the accomplishment of the true value of this system.

Scholars and the business sector should collaborate and be involved in smart partnership considering that there may be problems that may arise during the development of prototype models. Both parties can assist in the formation of well-versed workforce in promotion of public and private institutions, the business sector, and the higher education domain as well. There should also be practical training and curricula to facilitate the establishment of this knowledge-based economy.

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