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E-Business Readiness and the Potential in Malaysia

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1. Introduction

The advancement in Information and Communication Technology (ICT) has changed the way of business being practiced. With open technology, business model and architecture, the Internet promotes better competition and innovation, it is unlimited and the opportunities are significant. "E-business is exploiting the combined power of the internet and information technology to fundamentally transform key business strategies and processes", a definition from Frank Jones, VP of IBM Corporation. E-readiness described by the Economist Intelligence Unit (EIU) as "the state play of a country's information and communications technology (ICT) infrastructure and the ability of its consumers, businesses and government to use the ICT to their benefits".

Our research is to study the readiness of Malaysia for e-business. The outcome from this research is to predict the future potential of e-business growth in Malaysia and to suggest the suitable new Internet Business Model to Malaysia.

2. Malaysia Background

Malaysia is 329,750 square kilometers in size and located in Southeastern Asia Malaysia is divided into 13 states and 3 federal territories. Malaysia was ranked at 61st out of 177 countries in the Human Development Index 2005.

2.1 Malaysia Current Indicators

Table 1 shows Malaysia Current Indicators for the first half of 2006.

Table1.The Indicators of Malaysia

Item	Year 2006 (1st Half)
Total Population (Million)	26.64
Urban Population	64%
Population Density (Per/K m^2)	80
Age Distribution	
0-14 Years	32.60%
15-64 Years	62.60%
65 Years and Over	4.70%

Source: Department of Statistics Malaysia

2.2 ICT Infrastructure

A country's e-business readiness relies on good infrastructure, security, transparency, innovation and skills. By the end of year 2005, Malaysia will have over 4 millions fixed line telephone subscribers and over 17 millions mobile phones subscribers. Even though telecommunication services are good and readily available in urban centers, the services are only fair in many other rural locations. The mobile network is basically the Global System for Mobile Communications (GSM) technology and for rural areas in eastern Malaysia, a

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code division multiple accesses (CDMA) system is used. Malaysia Multimedia Super Corridor (MSC) is designed to create ICT-related environment with network contains a high-speed link (10 GB/s network). The Demonstrator Application Grand Scheme (DAGS) is aimed at promoting social and economic progress through the innovative use of ICT.

To achieve technological neutrality, the Malaysian Communications and Multimedia Commission (MCMC) have replaced the previous specific service-based licenses system with four types of generic ones:

(1) Network Facilities Provider (NFP)
(2) Network Services Provider (NSP)
(3) Application Services Provider (ASP)
(4) Content Application Services (CAS) [1]

The availability of wire line and wireless communication services, community access centers and networked computers in businesses, schools, and homes is needed. It is also need to come with affordability and reliability of network access, including the cost of service, downtime, the prevalence of sharing access among individuals, a reliability of electrical supply for business-critical computer operations, and the ease of importing and exporting goods and transporting them within Malaysia are necessary.

Table 2 shows the connectivity statistics including the penetration of mobile, Internet and Broadband subscribers in Malaysia.

Table2. Malaysia Connectivity Statistics

Mobile Subscribers Penetration	67%
Internet User Penetration	41%
Broadband Subscriber Penetration	2%

Source: Market Indicators and Forecasts, 2005 estimates.

Malaysia is also enhanced with electronic payment system with the development of financial process exchange, a multi-bank platform enabling online payments to conduct e-commerce transactions.

2.2 Human Capital

Malaysia faces an incredible need for more qualified people who are able to use the network and is interested in it including a quality and participation levels in the education system, with an emphasis on efforts to create and support a knowledge-based society. Malaysia needs to have the culture of local creativity and information sharing within the society together with skills and efficiency of the workforce. Many efforts have been made to increase skilled labor in ICT. Computer in Education (CIE) program introduced to primary and secondary schools, Computer Aided Design (CAD) and Computer Aided Manufacturing (CAM) were also thought in secondary technical school. New programming applications are added into universities education and training curriculum.

2.3 Information Security

Protection of intellectual property is essential to promote e-business. Malaysia relies on standard copyright, personal property, and consumer protection laws. They has also adopted a comprehensive Computer Crimes Act and any online offences fall within the scope of penalty provisions under Malaysia's communications and multimedia regulations to strengthen the legal protections and progress in protecting intellectual property rights, extending the effort to protect privacy, and to put an effective legal framework to address and prosecute computer crimes, authorize digital signatures.

2.4 Government Commitments

ICT development is important in the government's plan for the economy. They attempted to position Malaysia as a regional and global ICT and multimedia hub to attract multinational corporations and increase the competitiveness through the development of MSC. EIU estimates total IT spending in Malaysia is at US$3.3bn in 2005.

The National IT Agenda (NITA) launched on December 1996 to leverage public, private and community sectors, proving the framework for ICT utilization. Malaysia has also commenced the e-Governance Flagship Applications and set up Government IT and Internet Committee (GITIC) to manage ICT initiatives. Priority on promoting the development of an e-society to the community and level the effort to promote ICT access for all the citizens, and demonstrate progress on e-government to improve E-Readiness is needed.

3. Internet Usage in Malaysia

The total number of home users was 50.2 percent male and 49.8 percent female while the percentage of the population was 51 male and 49 female with no gender divide for the Internet access. The age distribution percentage is shown in figure 2 below. From this, it is noted that over half of the Internet users in Malaysia are below 35 years old.
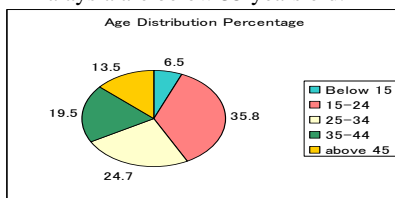

Fig.1. Age Distribution Percentage [2]

The percentage of 5 most popular activities on the internet including the e-mail, educational research, finding information on goods and services, chat-rooms and reading online especially the online newspapers is stated in figure 2.
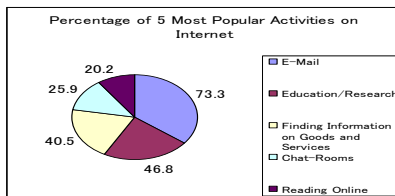

Fig.2. Percentage of 5 Most Popular Activities on the Internet [2]

A global e-commerce study found that the proportion going to buy goods and services online has hardly shifted in the past years. Only about 5 percent of Malaysian users shop online.

According to the Household Use of the Internet Survey 2005, the most popular items purchased by Malaysian users through the Internet is airline ticket for 43.8 percent, books for 15.6 percent followed by music for 6.8 percent. Over 60 percent of the amount spend are less then RM500 (USD140) [2].

4. E-Readiness Ranking

According to the Economist Intelligence Unit's 2006 e-readiness ranking Malaysia was ranked at 33rd out of 68 countries with the score 5.60 (of 10*) and was ranked at 37th with the score 5.43 at the previous year [3].

Malaysia was ranked at 43rd out of 179 countries in the Global E-Government Readiness Report 2005: From E-Government to E-Inclusion by the United Nations and 27th out of 104 countries in the Networked Readiness index Ranking 2004 by World Economic Forum year 2005 [4].

5. The Next Phase

Malaysia will need a grater existence of effective competition among communication and information services providers. Transparency and predictability of regulatory implementation, openness of government, rule of law, and general business risk including political stability and financial soundness are needed. The openness to financial and personal participation by foreign investors in ICT businesses, and the ability of the financial system to support electronic transactions is also a must. Furthermore, with the adoption of broadband wireless technology such as Wifi and WiMax in the future will bring Malaysia better access to the Internet.

6. Conclusion

Malaysia community has the knowledgeable in ICT and they are willing to change and accept ICT openly. Internet penetration and the connectivity, and the uptake of broadband in Malaysia are still considered poor Penetration between urban and rural area still has a big gap. The intensity now must be focused on continuous technology, infrastructure and maintenance. Information security needs to be strengthened. Consumer and business adapted to e-business should be increased, as well as the legal and policy to e-business environment. To encourage Malaysian society to be a part of e-business will require time, resources and continuance efforts from private sector and the government. With these supports, excellent infrastructure and modern telecommunication network, Malaysia will be in a better position to rain ICT benefits and become competitive in the new economy. The potential for online shopping within Malaysia will be completely recognized.

7. References

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