

Market Conditions for Electronic Commerce in East Asia: Multidisciplinary Challenges and the Evolution of Tactical Business Strategies

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Abstract

The growth of information technology (IT) and internet since the last decade of the 20th century has been overwhelming but their true potential and limitations for business applications continues to be challenged. Many business firms, especially the dot coms saw the new economy creating new opportunities for innovative online services. E-business firms mushroomed in numbers and both investors and venture capitalists alike were convinced of their successes. However, the subsequent high-profile failures in both dot coms and other E-business ventures have stripped the new economy of its glamour. What went wrong in spite of growing congenial technological atmosphere for E-businesses is the query analysts and academics continue to ponder since the burst of the dot com bubble. In line with the thoughts that emphasize the need for identifying the causes of the failure of E-businesses, the present paper focuses on some E-business management practices and strategies. A closer look at both successful and failed management practices of E-businesses would help identifying the strength and weaknesses of past strategies. E-business firms in recent times have learnt valuable lessons from the experiences of some pioneer ventures. However, E-business obstacles continue to challenge business firms. Given the significance of learning from the past experiences of E-business

failures, varying market conditions and evolving strategies, the present paper explores some general strategies adopted historically with a particular focus on E-market conditions in East Asian region. The first part of the paper looks at some major E-business challenges faced by different instances of E-business failures. The focus of the second part of the paper shifts into the characteristics of some specific markets in the East Asian region. The second part of the paper will look at the E-business environment in some major markets in the region like China, Hong Kong, Singapore, Malaysia, and Thailand. This part would briefly look at infrastructure, legal regime, policy issues etc., pertaining to E-business environment and the relevant government initiatives to improve the same. Looking at the relative lacuna of the past E-business practices adopted by international E-business firms and the market conditions of the specific East Asian Markets, the third part attempts to identify some tactical strategies for E-business firms in general and the region in particular to meet market conditions. Based on the findings, appropriate conclusions and recommendations would be drawn for specific E-business challenges in order to enable firms gain a competitive advantage.

Keywords: E-business challenges, Dot com failures, East Asian E-markets, E-commerce strategic management.

INTRODUCTION

The growth of information technology (IT) and internet since the last decade of the 20th century has been overwhelming but their true potential and limitations for business applications continues to be challenged. For many, embracing E-business strategy involving IT and internet technologies was more to keep up with the trend than to create value in their business processes. Some early adopters were not sure how their E-business strategy would add value; but nevertheless were convinced of the right direction they were taking. Convinced of the technological leap many firms pumped millions of dollars into E-businesses. Two main categories of E-businesses were the result. Firstly, the advent of Internet had created new forms of Internet based services or the so-called dot coms. Secondly, conventional brick and mortar business firms also opened up online business channels in addition to their more traditional channels. These two main categories of E-businesses involved either “business to business”(b2b) transactions or “business to consumer”(b2c) transactions. Altogether the combination of these categories involving a greater proportion technological component was believed to have created a new economy.

Many business firms, especially the dot coms saw the new economy creating new opportunities for innovative online services. E-business firms mushroomed in numbers and both investors and venture capitalists alike were convinced of their successes. Internet start-ups or online business presence turned out to be the trend of the day. However, the subsequent high-profile failures in both dot coms and other E-business ventures have stripped the new economy of its glamour. Most of the dot coms have not made any profit, some gave up for takeovers or merger bids, while other declared bankruptcies or closed operations.

Even some of the successful traditional business firms who were prompted to open online channels have steered down their online operations. What went wrong in spite of growing congenial technological atmosphere for E-businesses is the query analysts and academics continue to ponder since the burst of the dot com bubble. No doubt a closer look at a range of high profile dot com failures would throw some light.

In line with the thoughts that emphasize the need to identifying the causes of the failure of E-businesses the present paper focuses on some E-business management practices and strategies. A closer look at both successful and failed management practices of E-businesses would help identifying the strength and weaknesses of past strategies. E-business firms in recent times have learnt valuable lessons from the experiences of some pioneer ventures. However, E-business obstacles continue to challenge business firms. Many such challenges are common for all E-markets, however, regional or market specific challenges could co-exist. Learning from past experiences and varied market conditions, refined E-business strategies are evolving, which have greater prospects of success. Given the significance of learning from the past experiences of E-business failures, varying market conditions and evolving strategies, the present paper explores general strategies with a particular focus on E-market conditions in East Asian region.

The first part of the paper looks at some major E-business challenges faced by different instances of E-business failures. This part of the paper is mainly dedicated to identifying different strategies employed by business firms either internationally or regionally and drawbacks or limitations of those strategies that caused failures. Once those strategies and their drawbacks are identified, the focus of the second part of the

paper shifts into the characteristics of some specific markets in the East Asian region. The second part of the paper will look at the E-business environment in some major markets in the region like China, Hong Kong, Singapore, Malaysia, and Thailand [1]. This part would briefly look at infrastructure, legal regime, policy issues etc., pertaining to E-business environment and the relevant government initiatives to improve the same. This part compares and contrasts the environment of the said markets in order to identify their viability for E-business hosting.

The third and final part would flow out of the results of the first and second part of the paper. Looking at the relative lacuna of the past E-business practices adopted by international E-business firms and the market conditions of the specific East Asian Markets, the third part attempts to identify some tactical strategies for E-business firms in general and the region in particular to meet market conditions. The exercise carried out in the three parts would reveal major challenges for the E-business firms targeting East-Asian markets as well as the governments of the said markets. Based on the findings, appropriate conclusions and

recommendations would be drawn for specific E-business challenges in order to enable firms gain a competitive advantage.

PART I: E-BUSINESS BOOM TO E-BUSINESS DOOM

Since E-businesses came into vogue dot coms have been the most attractive forms of business organisations. Figures show that 70% of the technology related venture capital financing of the previous 25 years was given to dot.coms during 1999 and 2000. Moreover, 56% of the technology debuts of the previous 21 years took place in the same 1999-2000 period, most of them adopting an E-business model. The huge interest in E-business investments, however, did not produce the expected returns. Unfortunately, it was discovered that almost three-quarters of those market debutantes were trading at levels below their initial price and barely 10% were expected to stay in business for any length of time [2]. The fall of share prices of the Internet stocks were quite dramatic and many did not make much financial sense. A quick glimpse at Internet stocks and their performance by the turn of the century gives a fair idea of boom-burst cycle of the dot coms.

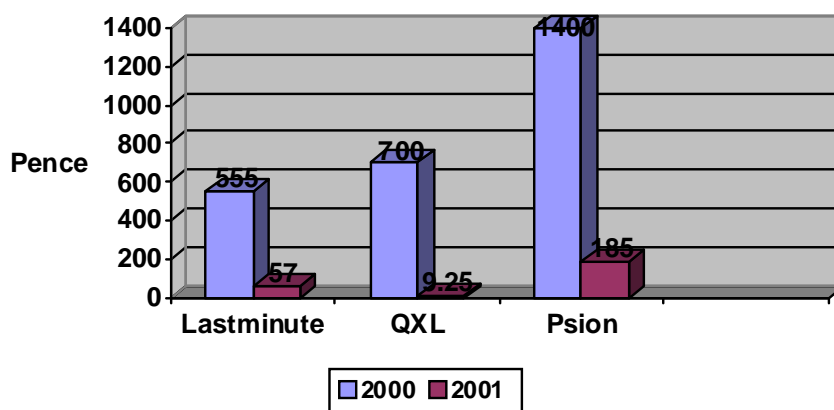


Figure I: Stock performance of some dot coms during 2000-2001.

Source: BBC online [3]

The Shares of the British firm Lastminute.com, which reached as high as 555 pence in the year 2000 lost 90 % of its value to 57 pence in 2001. Online auctioneer firm QXL almost lost 99% of its share value when it slumped from 700 pence in 2000 to 9.25 pence in 2001. Technology firm Psion lost 87% of its share value in the same period [4]. These were the examples of some of a much bigger problem emerging across many markets around the world. The value of the dot com stocks fell sharply at different markets most of them well below their issue price. This trend was in sharp contrast to the high demand for Internet stocks during the dot com boom [5]. The causes for the slump of the dot com stocks were mainly due to their failure to meet performance projections. Ironically, many dot coms even failed to show any profit or at least break even. Often these failures were attributed to the inherent weaknesses of virtual existence of dot coms, in contrast with physical attributes of a conventional business. But the problem was much wider, as failures were not just limited to the dot coms.

Many of the online business divisions of conventional business firms also failed to show much success. For example, popular brands like Disney, Toys R Us etc have failed to establish successfully and had to give up their online ventures. Other popular brands like the CNN, News Corporation, the New York Times and the UK's Daily Express have cut back their Internet operations. This was in spite of some of these firms Internet divisions been projected as high value properties like Disney's Internet division, which was ranked as the eight largest web property, with 20 million individual visitors by the end of 2000. The rate at which the E-business firms have fallen was quite alarming and had since discouraged many other firms who intended to venture or expand E-business operations. A survey by US net monitoring company

Webmergers.com during 2000 had painted a very gloomy picture when it reported that at least 210 internet companies failed in the year 2000. 75% of failed dot coms were in the B2C sector; 55% of shutdowns involved e-commerce companies; 30% involved content companies. The fall of the web based companies also had their social effects as between 12,000 and 15,000 employees lost their jobs during the year [6].

The dot coms in the Asia did not have a smooth ride either during the same period. By the end of the year 2000 virtually all of Asia's publicly listed dot.coms were trading near all-time lows and the gloom was predicted to persist in the future [7]. Even in markets like Hong Kong where E-business was expected to flourish given its strong E-business infrastructure, internet penetration etc., the performance of many high profile dot coms were quite disappointing. For example, what was considered to be one of Asia's biggest dot.com failures, the Hong Kong online retailer AdMart closed down leaving 334 of its employees redundant. The firm had employed as many as 850 earlier in the year 2000. [8] In China for example, the state media group China Daily reported that nine out of ten Internet start-ups in China went bust in the year 2000 [9]. The wide spread failure of E-business firms around the world involving both dot coms and conventional businesses had raised the curiosity and the necessity of identifying the causes of failures. Identifying the causes of failures is fundamental before we go on to explore how firms overcome the factors causing failures and gain a competitive advantage in E-business.

The causes of failures of E-business firms were more or less similar at different markets although East Asian E-business firms had some additional obstacles like language barriers, strong and diverse cultural factors, etc. So let us first try to identify the

causes of failure of E-business firms in general, which are equally applicable to East Asian E-business firms.

The factors identified for the failure of E-businesses are numerous, however, the primary or fundamental cause could be argued as the lack of viable revenue generating business model in most of the failed E-business firms. The lack of viable or a sustainable revenue-generating model is argued as the fundamental cause because many of the E-business firms failed to generate much revenue out of their online businesses. There was hardly any sign of break-even if not profits. Had there been a sound revenue generating mechanism there would not be a row of E-business collapses in such proximity in time. This was more compelling in the case of dot coms than the conventional business firms. In many dot coms the revenue source was not much from the services they rendered rather they were dependent on other forms of revenue like banner advertisements on their sites or number of clicks or views of their websites, etc.

A review of the instances of the E-business collapses clearly reveals that most of the E-business firms failed had a very short life span. If there were hopes for constant revenue generation, even if the break even was not on immediate sight, many of these collapsed firms would have attempted to survive the tough times and remained in business. A classic example in this regard is Amazon.com, which had not had any profits or break even for a long time, but nevertheless was quite confident that the future held good for the firm. This is mainly because Amazon.com has a stronger revenue-generating model emanating from the services it offers rather than from simple banner advertisements or other sources not related to its core business activity. Amazon could survive the tough times mainly

because of its reliance on its inherently potential revenue generating business model related to its core business activity. In contrast many, dot coms have over estimated the potential of internet as a future media for marketing. They had too much reliance on advertisement revenues and have failed to focus on core competencies or creation of value. When Internet advertisements were in vogue, these dot coms generated some revenue but when the advertisements were down even the meagre source of revenue dried up forcing many to close down.

Lack of constant revenue added up to some of the other negative characters of the E-business firms, especially the dot coms, like the high cash burn characteristics of the E-business firms and increasing lack of confidence of investors to pump more money into these firms. Internet companies had typically a high cash burn rate. The reasons for the high cash burn rates in dot com firms were many. Firstly, the need to establish the presence in the market through marketing and advertising was more since most of these firms were relatively new firms trying to establish an online business. Secondly, it was necessary to invest large amount of money to build the technology platform and keep up with the pace of technology growth. Adding to high cash burn rates was their failure to attract more investments. The new E-business firms failed to attract more investments as the market sentiments on investing on online firms came down quickly. So many online firms failed to receive their second-round funding to keep up in the business. Analysts say the dot.com sector resembled the biotechnology sector in this regard, where initial strong enthusiasm for the industry quickly faded [10]. Altogether financial distress in all forms could be attributed to the primary and fundamental cause of the fall of E-business firms in such a quick succession and proximity in time. Let us now look further

what other practices and strategic flaws have caused failures.

While attempting to identify the rest of the factors leading to the failure of E-business firms it would be systematic if they were grouped under two broad heads. Those factors could be grouped under the broad heads of “internal factors” and “external factors”. Internal factors are mainly those, which were within the control of the firms but have been flawed due to wrong strategy or implementation. External factors are those, which were not within the control of the firms but have to do with market conditions or consumer behaviour. The lack of design of a revenue generating business model would fall into the internal factor leading to failures. Like wise the classic example of an internal factor could be the example of the fall of the Hong Kong based company Admart, which we discussed already. It is said that Admart failed in Hong Kong market because the firm found it was unable to change the old-economy shopping habits of Hong Kong residents [11]. It is true that many E-business firms had realised the lack of enthusiasm of consumers to shop online in their respective geographic or product market. The analysis of the factors under the division of internal and external would help demarcate the roles, which the firms and governments of different geographic markets have to play in order to improve their competitive and comparative advantage respectively [12]. Let us focus on some relevant internal and external factors leading to the failure of E-business firms.

Continuing with the internal factors, many of the E-businesses including Asian E-business firms have considered Internet or online presence as an end in itself rather than as a means to establish a successful E-business. Many E-business firms had a wrong impression that successful E-business strategy was all about building good

websites or using latest technologies. However, they have failed to realize the need to address other challenges, which came along with the online business models. Likewise, many of the E-business firms had wrongly thought that embracing an online business strategy or Internet technology in itself would give them a competitive advantage. However, the major weakness of Internet as a competitive tool was its popularity and relative lack of barriers of adoption, entry, lower operational cost, etc. The concept of ‘first mover’ principle did not hold good in case on Internet as competitors could either easily imitate or secure Internet presence quickly given its attraction and low barriers of entry. The experience of some international firms in adopting effective information technologies in successfully distinguishing their business processes have some times sent wrong signals to other firms that internet would give them similar advantages. However, unlike those information systems of international firms, which were tailor made for their business processes to create value and were protected as an intellectual property or a business secret, Internet was an open technology, which was easy to adopt by all.

Many firms adopted an E-business strategy without realizing to what extent an online business model was suitable to their product market or industry. Many firms blindly followed the trend of creating an online presence without investigating what business processes pertaining to their industry could be transformed online. An online business model did not offer the same value across the board for all the industries or product markets. For some product categories or industries online business models are more suitable than others. Some businesses could be effectively transacted entirely online involving different stages of its processes from initial procurement to ultimate sales. But where as for other

businesses only part of the business process could be carried out effectively online, whereas for other parts only traditional means are more effective. This factor was much apparent in some product categories where consumers were not enthusiastic in shopping online since it would not enable them to have the 'feel factor' of the product. Where as in some other product categories like the digital products online shopping became a preferred channel for shopping. Firms have often failed to realise the limitations of the Internet as a business channel. Internet's potential as an effective business tool depends on its suitability to any given industry or product category. Firms that formulated online business strategies without realising the inherent limitations of Internet and its suitability to their product line have invariably failed.

While many firms were attracted by the Internet technologies and its potential to open up new markets, they have failed to realize the disadvantages or the threats brought along by the Internet. Although Internet had enabled access to new markets, which were not within the reach of many firms, it had tremendously increased the bargaining power of any given consumer. Like the conventional firms, which were, limited to the geographical markets within which they operated the conventional consumer had only limited choice of buying from those firms who operated in that market. But the Internet had opened a floodgate of choices for a modern day consumer who could virtually buy from any firm from any part of the world with out much difficulty. Like wise the advent of Internet had enabled the modern day consumer to be better informed about product information enabling him to distinguish different value added by different brands in a given product category easily. The well-informed modern day consumer would not settle for any thing less than the

best and the firms have to keep up their best in order to stay on top. The Internet technology had also disillusioned the concept of loyal customer or repeat customers as it had become difficult not only to attract customers but also to retain them. The rules of the game have changed considerably online and firms are often forced to give greater discounts, better services etc than ever before. Many of the firms who had adopted an E-business strategy have failed to realize and address the challenges Internet had brought along.

Lack of concrete business strategy was another factor, which had led to the failure of many E-business firms. Many firms considered E-business market place is different from conventional markets and expected the ways in which businesses would be carried out in this new form of business would be different. In the process they had failed to keep up with the fundamentals of conventional businesses like having a concrete business strategy, market positioning, product differentiation, etc. Online firms have attempted to offer range of services with out even testing its commercial viability or marketability, hence ending up just being a good concept but a weak business proposition. Forgetting the business fundamentals online had been one of the factors for some E-business firms.

Another internal factor which lead many E-business firms, especially the conventional business firms who attempted to open online channels, to failure was the inability to blend the online and conventional operations in the right mix. Over enthusiastic about the attractive technological potential offered by the Internet and in a hurry to catch up with the gold rush Internet ignited, many firms have failed to avert channel conflicts arising from adopting online business strategies. Some firms used online operations to substitute inappropriate processes of their

businesses. For example, using online as a marketing channel increasingly in place of conventional marketing channels had proved not to be so effective. Instead online channels proved to be better information disseminators when nicely blended with conventional marketing methods. So many firms failed to get the right blend of on and offline business operations. They have failed to realize that getting the right mix is crucial to derive the best of both worlds. Failure to manage the channel conflicts created by online business strategies was in some cases a major factor for E-business downfall.

While these firms failed to get the right blend, some failed by the misconception that online and conventional operations are different and cannot be blended together. The classic example in this regard cited is Barnes & Noble, which in order to tap online consumers as well as to compete with firms like Amazon.com, established Barnesandnoble.com. However, it had a fundamental strategic flaw as the online unit was established as a completely separate division and a separate company. The main incentive to start it as a separate business unit was to gain freedom from the existing organisation in order to speed up decision making, maintain a high degree of flexibility, create an entrepreneurial culture, tap into the vast pool of capital available etc. However, Barnesandnoble.com had ended up struggling as in February 2000, its stock price fell to an all-time low of 7.5\$, down more than 50% from its offering price of 18\$. Also the previous month its CEO Jonathan Bulkeley resigned after only a year on the job. Critics conclude, "By divorcing its on-line business from its established stores, Barnes & Noble may have actually sacrificed more than it gained. For example, the company forfeited tremendous marketing opportunities by not promoting Barnesandnoble.com in its stores" [13]. By not blending its offline and online

operations, Barnes & Noble had failed to utilize its conventional strength in the market there by losing to players like Amazon.com. Therefore, failing to understand the right role of the online and offline operations of the business process had been one of the important causes of the failure of E-business ventures.

Having seen some of the major heads of internal factors, causing the collapse of the E-business firms let us turn our attention to the external factors. These external factors, as said earlier have been some of the typical challenges that arose with the E-markets or E-consumers, which were hardly within the control of the firms themselves. Most of these external factors were more universal in nature where as some were typically regional. One of the crucial external factors is the "security concerns" of the online transactions. Although online security technologies are getting better and better, during the initial days when E-business was picking up, online transactions remained highly vulnerable for intrusion. Hacking of many of the high profile networks and websites has shot the consumer confidence on online securities quite low. Especially, when it comes to providing personal financial details online, consumers are quite reluctant given the inherent risks. Analysts agree that one of the main factors, which had limited the growth of B2C sector, is the lack of secure online payment methods [14]. E-markets all over the world had faced this challenge and it had been quite difficult to take consumers by confidence. Asian consumers tend to be quite conservative in this regard given the fact that they have not yet been exposed to momentum of online shopping habits like their US or European counterparts. The lack of totally secure online technologies has been one of the major factors which discourage consumers from using online payment channels. Given the reluctance to use credit cards takes away

the major advantage online channels offer namely the convenience. This had stripped of the glamour of using online channels in many instances. Therefore, the first set of external factors for E-business failures could be attributed to the lack of secure online technologies and ensuing reluctance of consumers to use online shopping.

The second set of external factors could be discussed under the broad head of legal challenges. Although international legal efforts have been initiated to secure legal recognition for online business transactions, many domestic legal regimes are still at the rudimentary stage. Many governments have introduced some amendments to the existing legislation or some basic laws relating to E-business. However, those legal efforts are not comprehensive enough to address all the legal obstacles of E-business [15]. Most of the legal efforts are confined to the efforts of securing evidential recognition of electronic documents. Governments have not realized that securing legal recognition of online transactions is hardly enough to promote E-businesses. Especially, when it relates to the external challenges, which are not within the control of the individual E-business firms like the lack of online security, vulnerability of average online consumers etc., the role of the legal regimes in boosting consumer confidence is crucial in many markets. Legal insensitivity to many of the E-business challenges has been another set of external factor, which proved to be an obstacle for E-business successes.

Lack of awareness or consumer education has also proved to be an obstacle for E-business growth. Many of the concerns of online shopping arose out of ignorance and consumer organisations have failed to educate public on good and bad online shopping habits. In many markets including the East Asian markets there are no strong consumer movements. The role of educating

the consumers, protecting the rights of the consumers etc., has not been effectively carried out by the governments either. American consumers are more comfortable with online shopping because they were better educated about their rights, the up and down sides of online shopping etc., which had encouraged them to shop online more than consumers of other markets. The role of American consumer protection organisations is commendable in this regard. Therefore, lack of consumer awareness and protection of their rights had also been an obstacle for E-business growth, particularly in East Asian markets.

Finally, the other external factors like extent of internet penetration, telecommunications infrastructure, technology diffusion, cultural factors, etc of individual markets could all be grouped under one broad head market conditions. Lack of congenial market conditions for E-business in many markets has proved to be a strong obstacle for E-business in many countries. Some cultures could have more resistance to adopt online shopping habits than others. Also if the Internet penetration rate is not high or is growing slowly the expansion of E-business could be relatively slow. In some markets telecom infrastructure or online technologies are not sophisticated, often discouraging consumers to shop online, given the lack of speed or ability to browse multimedia contents. Therefore, inappropriate market conditions for E-business in some markets have proved to be major obstacle for E-business growth.

Having seen some external factors obstructing E-business growth one can easily realize that these factors are not very much within the control of the firms themselves to tackle. However, one has to realize that E-business failures could not be attributed to any specific internal or external factors we have discussed above. Rather, it was the

combination of internal factors adding up to some of the external factors of the geographical markets which the firms targeted, that had lead to the failures. Therefore, a dynamic E-business strategy should address all the relevant E-business challenges both internal and external, in order to gain a competitive advantage, which we would analyse in Part III after discussing E-business market condition in some East Asian region markets in the next part.

PART II: E-BUSINESS ENVIRONMENT IN EAST ASIAN REGION

The term E-business environment is used in this paper in a broader connotation in order to include all relevant factors which would have an influence on the performance of E-business in a given domestic market [16] We will explore some of those factors which constitute the E-business environment in five markets on focus namely China, Hong Kong, Malaysia, Singapore and Thailand. Since these markets vary from each other in terms of size, economic conditions, infrastructure, population, Internet penetration, legal and political system etc., the study of these markets is expected to reveal a reasonably good picture of the East Asian market in general. Although such analysis could give a cross section of the region, the caveat remains that each individual market conditions are unique and no sweeping conclusions could be reached based on the study of some samples from the region.

Before we go on to look at the above said individual markets it would be worthwhile to look at the study made by the Economist Intelligent Unit (“EIU study”) [17] on different markets around the world as to their E-business preparedness. Although the EIU study was not focussed on the East Asian region specifically, it included many markets, if not all, from the region.

The Five markets we focus in this paper were also studied. An analyses of the EIU study would not only reveal how some of the markets we focus have faired but also would reveal what parameters the EIU study had considered in reaching its ranking of these markets. Therefore, a closer look at the EIU study on E-business preparedness would be quite relevant for our foregoing analyses. The EIU study on the E-business readiness had been carried out on 60 different countries around the world in order to identify the relative preparedness of these markets for E-business. The study looked at two main sets of parameters, namely the ‘general business environment’ and the ‘connectivity’. In studying the general business environment EIU studied seventy different parameters, which were not E-business specific. The connectivity factor was studied using a specific methodology taking into account the state of existing telephone network, dial up costs literacy rates etc. The final E-business readiness ranking was made based on the average score in both the fields of general business environment and connectivity.

Among the sixty countries studied United States topped the list by scoring a rating of 8.69 in general business environment heading and a rating of 9 in the connectivity heading, making an average of 8.8 as the E-business readiness rating. This conclusion could substantiate our argument that US consumers have better adapted to an E-business culture than their East Asian counterparts [18]. However, that is not what we intend to verify in the EIU study. Instead let us compare how the five markets have faired in the ranking in comparison with each other. Among the five markets which we focus, Singapore had the relatively the highest ranking followed by Hong Kong, Thailand, Malaysia and China. Singapore was ranked 8th in the study with an 8.55 rating in the business environment and a

rating of 8 in the connectivity making an average of 8.3 in the E-business readiness rating. Hong Kong followed closely by securing a 9th rank in the study with a 8.52 rating in the business environment and a rating of 8 in the connectivity making an average of 8.3 [19] in the E-business readiness rating. Thailand was placed 28 in the list with a 7.27 rating in general business environment and a rating of 5 in connectivity

adding up to an average of 6.1 rating in the E-business readiness. Malaysia was ranked 32 with a general business environment rating of 6.91 and a connectivity rating of 5 adding up to an average of 6 in E-business readiness rating. China was ranked way below at rank 51 with a general business environment rating of 5.88 and a connectivity rating of 3 adding up to an average of 4.4 in E-business readiness rating.

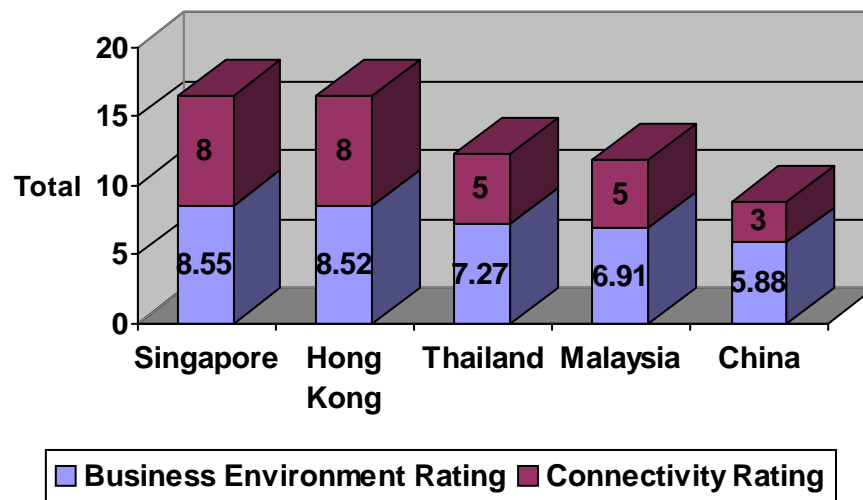


Figure II: E-business Readiness of Some East Asian Markets

Source: Economic Intelligence Unit, The Economist [20]

The EIU study, although gives a systematic ranking of different markets the completeness or extent of relevance of the study with regard to the ‘E-business’ in particular could be doubtful. This criticism could emanate because of the reason that the study had utilized EIU’s regular country forecasting studies substantially which probes into the general business environment of different markets and not specifically E-business environment. For example, with regard to the regulatory environment, study looked at general legal environment of a given market and not the legal regime governing E-business in particular. Utilising such general information with out studying the regulatory environment of E-business and using the same to arrive at the E-

business preparedness ranking of different markets could be subjected to criticism. Apart from the business environment ranking part of the study, even the connectivity part of the study was not as comprehensive as it could have been. While studying connectivity EIU had looked at the countries’ communication infrastructure, telephone density, Internet access and demographic factors [21]. However, the failure to look at issues pertaining to online technology like usage of internet, digital signatures, online payment methods, consumer attitude towards online shopping, etc could still challenge the completeness of the purpose of the connectivity part of the study. In spite of these limitations EIU study could be taken as a bench mark to those

parameters studied and for other relevant parameters, one has to look at different sources or studies.

The EIU study referred had been carried out during the year 2000 and we need to update our analysis with more recent data relating some of the E-business environment indicators in the East Asian markets of our focus. A much relevant recent data set in this regard is consistently generated by the International Telecommunication Union (ITU). Although an analysis at a much broader level with various ITU data relevant telecommunication infrastructure in general could be carried out, due to limitation in space, this paper primarily analyzes the data set relevant to internet indicators [22] only confined to the East Asian markets of our focus. Three main indicators related to the internet are studied in the ITU data set, which directly influences E-business environment in the markets of

our focus. The three indicators related to internet are the extent of Personal Computers (PC) penetration [23], the extent of internet hosting [24], and the extent of internet usage [25]. Each of the indicators for every country is provided in two dimensions namely the total numbers and the average numbers for every 100 or 10,000 persons. Apart from the individual countries the data set also provides regional, world totals and averages for each of these dimensions. A comparison of the relevant data for the East Asian markets of our focus provides an updated picture. First let us focus on how these five markets have fared against the regional totals. The analysis of the following three tables provides clear picture with regard to the number of PC users, internet hosting and internet users vis a vis the regional total. This analysis not only enables to understand the position of these markets regionally but also the position against each other as a regional player.

Table I: Total number of PC users as a percentage of Asian Regional Total

	China	Hong Kong	Malaysia	Singapore	Thailand
2001	18.80%	1.96%	2.26%	1.58%	1.51%
2002	22.91%	1.85%	2.32%	1.67%	1.59%
2003	NA	NA	NA	NA	NA

Source: International Telecommunication Union (ITU) [26]

Table II: Total number of internet hosting as a percentage of Asian Regional Total

	China	Hong Kong	Malaysia	Singapore	Thailand
2001	0.83%	3.59%	0.68%	1.83%	0.67%
2002	1.17%	2.97%	0.64%	2.53%	0.75%
2003	0.88%	3.25%	0.59%	2.66%	0.57%

Source: International Telecommunication Union (ITU) [27]

Table III: Total number of internet users as a percentage of Asian Regional Total

	China	Hong Kong	Malaysia	Singapore	Thailand
2001	22.39%	1.73%	4.22%	1.13%	2.35%
2002	27.98%	1.38%	3.71%	0.99%	2.27%
2003	32.66%	1.32%	3.57%	NA	2.48%

Source: International Telecommunication Union (ITU) [28]

From the tables above a clear picture emerges as to the size of some related activities in the countries of our focus. It is essential to realize that the percentages calculated are in relation to the total of the broader Asian region and not just East Asia alone. This is mainly the reason why the percentages of some are relatively low. In spite of that it is interesting to note that some of the small markets like Hong Kong and Singapore have relatively high percentages in areas like internet hosting [29]. This is a clear sign of the potential of these markets to act as regional E-business hubs. Similarly, the data relating to China reveals the growing significance of its market for E-business. Especially, in terms of number of PC and internet users, they have steadily

grown over the period of focus even though other markets have shown a slump or less variation. This could be attributed to the sheer size of the Chinese market which is yet to be fully exploited. The indicators discussed were presented as to their over all numbers in the relevant markets, which mainly helped to understand their position in the region in general. Now let us look closer at one of these indicators namely internet users in order to understand the internet penetration in these markets. Figure III reveals a clear picture of the extent of internet usage in these markets by providing the users per 10, 000 inhabitants in each of those markets, which will help comparing them better with one another.

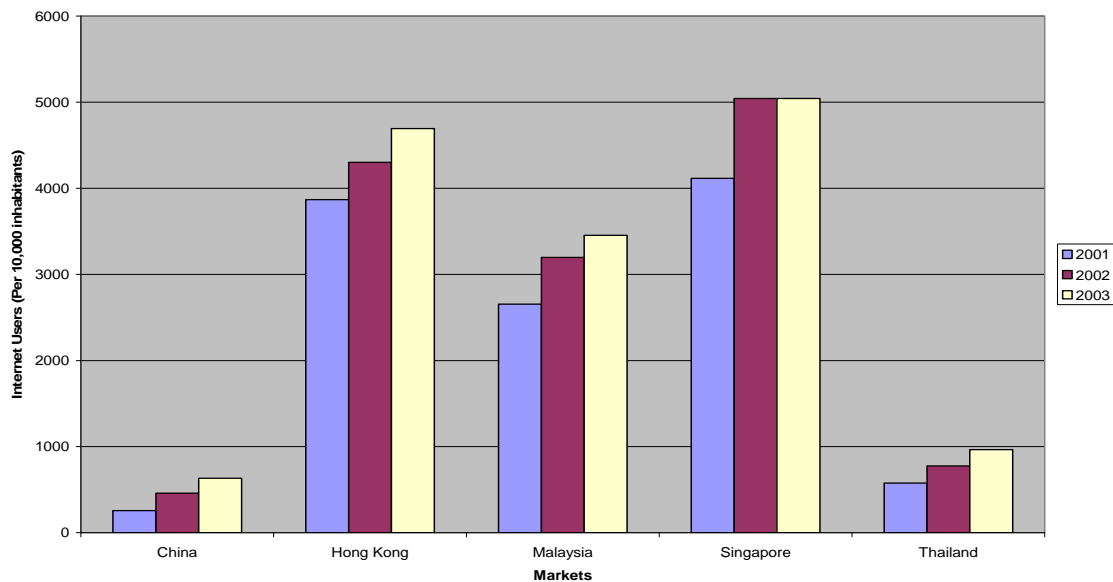


Figure III: Internet Users per 10,000 Inhabitants during 2001-2003

Source: International Telecommunication Union (ITU) [30]

A cursory look at Figure III provides different trends in the markets of our focus, some of which calls attention. The lower numbers with regard to China could be attributed to the huge size of its population. However, between Thailand and Malaysia there is a disparity in growth in spite of apparent similarity between these markets.

At this juncture, it is also interesting to note that EIU study discussed above ranked Thailand above Malaysia. Similarly, Singapore had managed to maintain a relatively higher rate of internet penetration than Hong Kong, even though Hong Kong was marginally better than Singapore with regard to the overall number of internet users

as a percentage of Asian Regional Total as we saw in Table III. In spite of these variations, it is interesting to note all markets excluding China, had managed to maintain their internet user figures in this regard higher than the average of the Asian region in general.

Apart from the data of ITU, it would be possible to analyse other data relating to the E-business environment in the markets of our focus. However, other sources are quite fragmented and limitation of the scope of this paper does not allow further elaboration in a comparative way [31]. Therefore, let us now look at some relevant E-business developments in the five East Asian markets individually. Space prevents a detailed or systematic discussion of each of these markets. Therefore, they are discussed in brief before we venture into the final part to look at some of the successful E-business strategies which are evolving in the light of early E-business failures.

China:

In China, the infrastructure for E-business is relatively weak given its vast geographic market and population, however, the same is growing rapidly. The China Internet Network Information Center (CINIC) survey [32] in 2001 suggested that there are around 8,920,000 computer hosts in China, among them, 1,410,000 are connected through leased lines and 7,510,000 are through dial-up connections. The survey also reveals that there are around 22,500,000 Internet users [33] in China among who 3,640,000 use leased line connections, 15,430,000 are dial-up users and 3,430,000 uses both. Apart from computers, people also used other devices like mobile terminals and information electrical appliance, which amount to 920,000. The survey also provides some interesting findings for E-business firms. Out of the population surveyed the services that were most frequently used were

email 95.07%, search engine 66.76%, software downloading and uploading 50.56%, information acquiring 44.65%, online chatting 37.53%, newsgroup 19.33%, online pager 24.64%, free personal website hosting 15.58%, online game and entertainment 18.94%, stock trading and information retrieval 10.86%, online shopping and trading 12.54%, IP telephone 6.58%, online payment 2.72%, other services 7.12%. From these findings it is quite clear that Internet is used as a tool for communication or information retrieval than as a business or shopping channel. Online shopping and trading reveal a very low percentage at 12.54 and other relevant trend namely online payment is even relatively low. This survey is quite useful in understanding how Internet still remains as a limited B2C channel in China.

Also the survey revealed some of the major problems pertaining to Internet, which could prove to be obstacles for E-business. 46.41% of the population surveyed felt that slow access speed most serious problem, 20.83% felt the main problem was high price, 6.41 % expressed the main problem was insufficient Chinese information, unable to protect personal privacy was felt to be the main problem by 4.02%, hard to use (i.e. require many computer skills) was the concern of 5.42%, while 3.35% expressed poor ISP service quality 3.35% as the major problem, a small number of 1.88% even felt that there was no gain from accessing the Internet and 11.68% expressed other problems [34]. China has also strengthened its legal regime governing E-businesses by passing a series of Internet related legislation since internet came into vogue, a discussion of which here is restricted by space [35].

Hong Kong:

Hong Kong E-market and consumer usage of Internet gives a promising picture even though there are instances of some high

profile E-business failures like Admart, which we discussed earlier. The EIU's report on doing E-business with Hong Kong predicted that industry estimates suggested that the total value of products and services transacted over the Internet in Hong Kong would increase from US\$60m in 1998 to US\$1.3bn in 2002 and US\$2.4bn in 2003. Internet infrastructure is quite impressive in Hong Kong as by 1999 there were already 130 ISPs, 1.7 million Cable TV subscribers, for every 100 people there were 56.7 main phone lines making it a 3.9 million lines in total, total mobile phone subscribers were 3.9m making it 56.8 mobile phones every 100 persons, paging amounted to a total of 331,800 making it 4.9 people every 100 persons [36]. Hong Kong has enacted the Electronic Transactions Ordinance (Cap 553) in January 2000, which seeks to give legal recognition to electronic transactions and thereby securing legal recognition for E-business. Hong Kong government has also introduced an E-business strategy called Digital 21 in order to assist the local companies to embrace E-business. Also developed are projects like the 'Cyber Port' intending to promote Hong Kong as an IT hub.

Malaysia:

Malaysian telecom infrastructure is growing rapidly and is a good sign for E-business platform. Some of the relevant platforms include, telephone connections, mobile phones, cable TV subscriptions and pagers. Malaysia has 3 major local ISPs. Cable TV subscribers are around 177,000. The main phone lines are around 4.8m or in other words Per 100 people there are 21.2 phones. Cell phones penetration is 12.5 phones every 100 persons amounting to a total of 2.8 million subscribers. Paging subscribers total around 132,300, which amounts only 0.58 pagers per 100 people [37]. One of the highlights of the E-business efforts in Malaysia is the Multimedia Super

Corridor (MSC) project, which is a publicly funded IT industrial park, intended to encourage multimedia corporations to locate their businesses and research and development facilities in Malaysia. B2C Growth is said to have been the strongest in Malaysia while B2B transactions have been slower to develop [38]. The Malaysian government is actively involved in promoting E-business. It is creating a regulatory environment that will help speed the development of the Internet and its associated high-technology industries. Government efforts have been the main factor in bringing into being the Multimedia Super Corridor (MSC) project. The government had also introduced relevant legislation like the Computer Crimes Act (CCA) in 1997, Digital Signatures Act (DSA), Convergence and Multimedia Act (CMA) and the Communications and Multimedia Commission Act (CMCA) in 1998 to facilitate the growth of the Internet. The proponents believe that not only the MSC and the recently enacted legislation but also Malaysia's vision for prospective cyber legislation, contribute to attraction of its e-business market [39].

Singapore:

Singapore government has been instrumental in developing the country's congenial E-business environment. The government had contributed by not only formulating effective IT oriented policies but also projects like Singapore ONE in order to create knowledge-based industries that will add to the territories competitiveness. Singapore's Internet related infrastructure is one of the best in the East Asian region. According to the EIU study by 1999 it had 6 ISPs, number of people online were 460,000, cable TV subscribers were 217,000, main phone lines totalled at 1.9 million making it 58.9 telephone lines per 100 persons, 1.3 million mobile phone users were there which accounted to 45 mobile phones every 100

person and paging subscribers were 1.2 million which showed a relatively high proportion of pagers at 37.2 pagers every 100 persons [40]. Singapore government like the Hong Kong government is also encouraging local businesses to adopt E-business and provides good assistance. The Infocomm Development Authority (IDA) had set up a help desk for companies planning to set up online businesses one-stop assistance and provides guidance on e-commerce policy.

Thailand:

Thailand has been showing consistent interest in developing its E-business markets. In 2001 Thailand was further poised to improve its comparative advantage by new policies and programs relating to E-business. Thailand new Prime Minister Thaksin Shinawatra who was elected in April 2001 proposed new IT development policy with seven key elements. [41]. The first element was to develop basic infrastructure and to stimulate the development of networking infrastructure such as cable TV, wireless communications and the Internet to facilitate widespread use of IT among the population by giving them equal access to new technology and the Internet. The second element of the IT policy unveiled was the establishment of an e-commerce infrastructure, along with the development of suitable taxation measures to boost the emergence of new dotcom businesses. The policy was much encouraging to start-ups given the widespread instances of E-business failures around the world. The plan was to offer tax exemptions and Board of Investment incentives to Internet start-up companies, in order to enable them build their businesses during the first four years of existence and until they are strong enough to go on their own. The policy also intended to set up a new bank to support e-commerce. Apart from infrastructure and e-commerce development, more attention is to be paid in

creating sufficient IT human resources in the country. There were also plans to develop the microelectronics industry by providing a free-trade zone for the sector and to promote an open source platform for local software developers.

In spite of a strong policy framework contemplating to improve the E-business environment the legal regime governing E-business remained quite weak in Thailand. The country had been lagging in having a dynamic legal regime pertaining to E-business [42]. There have been considerable delays passing new E-commerce related legislation in Thailand and because of the delays it was feared that more business confidence would be destroyed [43]. The country's deputy chief justice of the Central Intellectual Property and International Trade Court, Pornpetch Wichitcholchai, was quoted to be optimistic when he said that the number of e-transactions would most likely rise once the law was in place. He also emphasised the need to draft related laws such as the computer crime and privacy laws as soon as possible. The earlier Prime Minister Chuan Leekpai was also said to have felt that e-commerce laws were important since they not only boost confidence in electronic transactions, but were also part of the e-commerce infrastructure [44]. In spite of the realization of the significance of the E-business legal regime Thailand had been relatively slow in reacting to the calls [45].

PART III: EVOLUTION OF E-BUSINESS STRATEGIES

The analyses in part I and II revealed some major challenges of E-business, both internal and external to a business firms and how some markets and their governments in East Asian region have attempted to improve their E-business environment. By the turn of the century business firms which adopted E-

business methods have faced difficult times and as revealed in part I there were a spate of dot com failures. However, since the dot com bubble is said to have burst, many international business firms as well as firms in East Asia region have tried to address the causes of failures and draw appropriate business strategies to overcome the same. In this part let us see how some of the evolving E-business strategies could be effective solutions for the problems faced by the E-business firms. The strategies discussed address the core of the problem of E-business failures and suggest appropriate improvements. The strategies discussed are either conceived by academic experts or time tested by international firms in general and East Asian firms in particular. Many of the problems as we have seen in part I, are common to all firms although some of the problems could be unique and specific to East Asian region. The strategies [46] are discussed more from the perspective of the relevant E-business challenge and therefore, appropriate modifications in approach are called for before applying them to specific markets.

Although the dot com bubble is said to have burst and there are unprecedented instances of E-business failures, firms with effective strategies have survived. For example, e-bay.com has become one of the outstanding performers in E-business in recent times. E-bay has not only turned profitable quite early than other standard performers like Amazon.com but also had out beaten expected profit level predictions. Like wise, it had not only sustained during the peak period of E-business troubles and failures in 2000 but also had shown profits during the same time [47]. Showing success in 2000 the company continued to remain profitable subsequently. The subsequent results released in April 2001 showed that its profits topped expectations by almost 40%. Moreover, in the first three months of the

year, E-bay generated profits of \$21 million, which was more than 10 times the profit of \$1.8m during the same period in 2000 [48]. Successful firms like E-bay have apparently addressed different E-business challenges quite effectively in contrast to many firms who did not have an effective strategy. Before we go on to address effective strategies to specific E-business challenges, which we discussed in Part I, let us, look at the some of the more general and fundamental strategic issues in E-business.

Success for firms like E-bay, although, could be attributed to different factors like strategic planning, effective business/revenue models, unique and differentiated products or services, etc., the fundamental difference was in getting the right mix of technology and the firm specific advantages. Many firms had relied so much on technology believing that investing in latest information technology would bring in positive results naturally. The excess reliance on technology with out understanding its limitation and real potential, had led to frustrations in many ventures. Technology had its own limitations as it could support some business processed better than others. The firms who drew this demarcation well could understand the real potential of technology and engaged it to support only those processes, which became more efficient or gave the firm a competitive advantage. Given the fact that Internet technology was relatively easier to adopt and imitate by competitors, getting the right mix of technology and business processes is a crucial step in formulating an E-business strategy.

An effective E-business strategy should introduce technology to create the right link and interface of business processes across the entire value chain of a firm. Such links supported by technology should enable best optimisation of resources and enhance

performance of the value chain. Strategically aligning operations with technology not only improves the performance but also creates competitive advantage, which is not easy to imitate. Therefore, getting the right mix of the technology and operations is a crucial part of a successful E-business strategy. For example, when many firms were cutting down on IT spending due to the state of E-business failures, some firms in Asia increased or maintained their spending on IT. One such firm was Singapore-based CWT Distribution, which announced in 2001 that it would maintain an IT budget similar to previous year's in spite of a possible slowdown in many Asian economies due to an anticipated US recession. According to Patrick Chua, assistant GM, Information Systems, CWT Distribution: "In CWT, we believe that a strong IT unit capable of implementing innovative, effective and cutting edge IT solutions is the best weapon an organisation can have to weather an economic decline [49]." The main intention of CWT was to advance business-to-business tools in order to shorten lead-time and wring excess inventory out of existing processes. Such a clear identification of processes that could be better supported by IT is what is crucial in an E-business strategy. The importance of getting the right mix of technology and business processes shows that the advent of Internet or other related IT had not changed the significance of business fundamentals.

Technology is only an enabler and firms need to actually build upon other business fundamentals through out their value chain from production to ultimate sales and services. The need to build up strong business fundamentals is not confined to traditional forms of businesses but also Internet start-ups or dot coms. Many Internet start-ups believed that their form of business was different from traditional businesses and new rules of the game apply. But such a

belief proved to be untrue forcing many to close down or reengineer their business processes. Therefore, the fundamental part of any successful E-business strategy is correct embedding of IT and Internet technology at appropriate levels of business processes. Having looked at this more general rule, let us now shift our attention to specific issues or challenges facing E-business firms and how they could overcome the same.

One of the pertinent problems of E-business we identified in Part I was the lack of effective revenue generating business models and the accompanying high cash burn rate of many dot coms. Many firms have revenue or business models, which could be effective in the long run but to sustain the very model the firms are in need to burn out high amounts of cash. This is a serious problem for dot coms worldwide and firms need to address this problem as one of the priority areas in order to sustain in business until reaching profitability. The solution could come either by boosting the flow of revenue or by cutting down spending. Boosting immediate revenue flows had not proved easy for many firms, however, many are confident that they would break even or reach profitability in a foreseeable future. In the mean while venture capitalists confidence is low to meet the highly needed cash supply. In these circumstances many E-business firms have resorted to more sensible way of spending their money and cutting down costs as main strategies in reaching profitability.

Asian E-business firms are no exception in this regard. For example, Sohu.com, one of China's top three Internet portals, had not attained profitability for a long time. It continued to post losses. In spite of deepening losses Sohu posed impressive growth in both revenues and market share. In the first quarter of 2001 its revenues were up 13 percent from the previous quarter. In the

same period its user base had increased by 6.3 million making it to a total of 18.7 million. Curiosity arises as how Sohu could gain revenue growth and market share in spite of its deepening losses? Sohu's strong performance growth and its confidence to reach profitability in a couple of years could be attributed to its strategy on agenda, which is in line with balancing of revenue and costs. The core of Sohu's strategy to reach the profitability goal is through "continued revenue growth and intelligent spending controls" [50]. Sohu's plans to address spending controls was to cut down its monthly cash burn rate for the second quarter of 2001 to \$1.4 million compared with a monthly cash burn rate of \$1.5 million in the first quarter. Also Sohu decided bring down its planned capital spending in the year 2001 by about 12 percent to \$5.3 million. The experience of Sohu exemplifies that the combination of intelligent spending and increasing revenue flows are crucial for the E-business firms to sustain and aim for profits in East Asia. A balanced long term approach for East Asian markets have always proved to be effective in the light of the response of consumers, which is relatively slower than their north American or European counterparts.

Another area where E-business firms need to concentrate is their marketing strategies. Studies show that a poorly constructed marketing strategy is one of the leading causes of death among dot-coms [51]. Space limits the discussion of all the issues relating to online marketing strategy. So let us just take up one arm of marketing namely 'promotions'. Often times E-business firms get their promotion strategies wrong as they find it difficult to ascertain the consumer behaviour in online market place. Many promotional strategies have been ineffective, as they had either failed to reach the right set of consumers or have failed to create an impact on the consumers. E-

business firms have also had the misconception that online firms need to be mainly promoted online only. However, there are lots of limitations in online as a media to promote products or services. Some of the popular methods of online promotional activities like banner advertisements pop up advertisement, cash incentives for clicks, e-mail promotions etc have failed to provide sufficient results in East Asia. Language, cultural barriers, use of internet for limited purposes, limitations in bandwidth to receive high graphic commercials etc have left online commercials ineffective in many East Asian markets. In East Asia, unlike other media like TV or newspaper, online promotions could not effectively reach target groups or segments [52]. Most of these methods have failed to catch the attention of the right segment, which a given E-business firm is targeting at. Since online as a media has inherent limitations in designing or carrying segment targeted promotions in East Asia, E-business firms have to be really cautious in formulating their promotional strategies.

One of the evolving E-business strategies among firms around the world, including E-business firms in East Asia is the concept of collaborative commerce. Given the turbulence of E-businesses and dot com failures business firms are increasingly realising the need to collaborate with firms whose services could supplement their business models. E-business firms have realized that it is not easy to build on all required areas of expertise in house. It would be more efficient for these firms to develop the core capabilities and to collaborate for the rest with firms who are strong in other areas. One of the classic examples in this regard is the announcement of collaborative strategy between Amazon and Toys R Us. Amazon and Toys R Us decide to enter into collaborative commerce in order to share each other's strength to overcome their

respective weaknesses. Amazon.com had agreed with Toys R Us to sell toys and baby products on the Internet. Building on its strength Amazon would take care of the online part of the business, creating the web site, warehousing products and deliver them to customers. The main reason of the strategic partnership was the problems faced by both on different areas of expertise during the past. Toys R Us's E-business venture toysrus.com had not been quite successful since its launch against other online toys firms like E-toys.com. Moreover, toysrus.com had realized the lack of its expertise in E-business during the Christmas 1999 business season. Toysrus.com failed to deliver thousands of its orders on time to US customers and the Federal Trade Commission fined the company \$350,000. Likewise, during the same season Amazon.com got its buying (procurement) wrong and due to that was left with big amount of unsold toys [53]. The end result was that Amazon had to lose \$39million on total sales of \$95million. The collaboration is expected to remove each other's weaknesses through the other party's strengths. For Amazon its strength lies in online operations like processing orders, delivery etc but had no expertise to deal with the intricacies of trend-driven markets like toys. Toys R Us on the other hand had apparent weaknesses in online order processing including delivery. At the same time it has greater expertise in other fields like spotting the trends in the toy industry, buying the toys, setting prices and managing the inventory.

Such collaborative commerce strategies are not only evolving in B2C E-businesses but also in B2B E-businesses. Also this trend is not limited to western firms like Amazon or Toys R Us but also in East Asian firms. Let us see on quick example B2B collaboration in the East Asian region before we go to the next strategy. For example, MeetChina.com, an operator of internet trade

portals in East Asia is a classic example in this region. Collaborative commerce has been a major E-business strategy of MeetChina in most of the markets in East Asia. Towards the end of 2000 it announced plans to form a joint venture (JV) with Thailand.com, a website for information and services. The joint venture was conceived to build upon the E-business strength of both the companies. The JV was expected to open cross border trade capacity for MeetChina with some 20,000 active export companies in Thailand, and expand Thailand.com from a content provider to a business to business (B2B) trading site [54]. Thailand.com also was expected to get access to MeetChina.com's registered buyers and a trade community that includes logistics, trade finance and insurance players. Collaborative commerce could be an effective E-business strategy to address different E-business problems today. One good example is the need to cut down costs and make intelligent spending. Collaborative commerce would enable E-business firms to spend their limited resources on their core capabilities and save on other areas. Concentrating spending on the core areas built upon firm specific competitive advantage very well. Using the increased strength in the core areas, firms can look around for the right partner to collaborate with. Given its inherent strength to address many of the modern day E-business challenges, collaborative commerce is evolving as a popular E-business strategy among many firms including the ones in East Asian region.

The probe into evolving E-business strategies could be further extended to other interesting areas like building unique E-business models [55], which are difficult to imitate, adopting an E-business quality services strategy [56], etc which are fast evolving in the region to meet growing challenges. Moreover, E-business firms need

to adopt a range of tactical strategies in order to address the diverse social and legal environment [57] in the East Asian region. But space prevents further discussion on strategic trend in E-business. Therefore, let us conclude the foregoing analyses by discussing the broader category of E-business strategy, emanating from external factors or E-business environment in the markets.

One of the major strategic challenges facing the E-business firms today is the challenge emanating from external factors, which are not quite within the control of the firms. As we have seen in Part I of our analyses they include lack of consumer confidence in online transactions, lack of safe payment methods, lack of effective legal regime, cultural factors, infrastructure limitations etc. Such external challenges are quite common in East Asian markets. Although many of these external factors challenging the E-businesses are not within the control of the business firms, circumventing the same with strategic planning is one of the most important strategic challenges today. The analysis in part II reveals that market conditions vary from market to market and ideal conditions for E-business do not always exist. In such circumstances E-business firms have to strategically tackle the external factors instead of succumbing to the ensuing challenges. Let us briefly look into how E-business firms are strategically taking up some of these challenges generally, which will be equally applicable to East Asian markets. Security fear and lack of secure online technologies is a major challenge facing E-business firms, but many have tried to overcome the same through innovative means. Firstly, some have adopted techniques to replace the usage of credit card online through electronic money or e-purse etc [58]. This is more of a conceptual solution and still could be with practical

usage constraints. Firms need to address the fundamental reasons behind the hesitation to use credit cards online. There are various reasons why a consumer might hesitate to use his credit card online. Consumers hesitate because the credit card numbers could be tapped by others and may miss use it. Many consumers hesitate because of the anonymity of online firms and they are worried to disclose the credit card details even to the firm they are dealing with. This is particularly relevant in East Asia where consumers are known to patronize known businesses than unknown. This often fails to close a sales and consumers look for the products they intend to buy in conventional stores. If E-business firms need to address these fundamental concerns they should over and above technical solutions like E-currency, encrypted web forms etc., be innovative in finding parallel solutions. These parallel solutions should supplement technical solutions in order to win consumer confidence. This is highly crucial in East Asian markets.

Innovation is the key for creating such parallel solutions. Firms have already started looking for range of payment solutions. Payment arrangements with local reputed banks in the target market are bound to be more convincing for the consumers in that market than any payment transactions in internet. Consumers would be less hesitant to use the cyber banking facilities of a local bank to transfer money to a sellers account in the same bank than paying through online to an unknown firm or a bank. This is because many cyber banking facilities promises that any transfer made to other account holders in the same bank could be easily traced. Also the very fact that the online vendor or seller has an account in the local reputable bank would make consumers feel more comfortable since it is like transferring their monthly electrical or gas bills to the local companies. The fundamental factor in play

here is building reputation and the ensuing confidence building. This is the key element E-business firms had to build upon in their strategies. Such confidence building measures through growth in reputation would go a long way in not only addressing online payment problems but also other challenges of E-business.

Majority of the E-business challenges could be traced to the anonymity nature of the web and the E-business transactions from the perspective of the consumers. Many firms try to improve their brand awareness but they fail to realise that the anonymity raises more from the nature of the web and its transaction itself. Such anonymity feeling of the consumers cannot be removed by simple brand awareness but could be effectively addressed through reputation and confidence building measures. As seen already international E-business firms could create confidence building measures by tying up with local reputable organizations, in form of collaborative commerce or to a lesser bondage like arrangements with local banks, delivery firms, etc. The anonymity feeling of the consumers could be effectively removed when they realize that someone locally is involved in the sales process and could be accountable if something goes wrong either in the payment, delivery, product or service.

E-business firms have to localize at least some part of the transaction still retaining the major part online. The fine blend of online part of the transaction with offline, localised part of the transaction would be more successful than offering the complete transaction entirely online. Therefore, confidence and reputation building measures through innovative methods to remove or reduce anonymity factor is fundamental for E-business strategies to effectively address external E-business challenges in East Asia.

Before we go to the concluding part of this paper let us see one example in this regard in East Asian region. Although many of the collaborative commerce in the East Asian region could be seen as good examples of firms trying to build confidence and trust for local consumers in the target market, the example discussed here is more of an effort of a public organization. Recently, the Infocomm Development Authority of Singapore (IDA), together with relevant government agencies, had identified a four-pronged approach to building trust and confidence in conducting e-commerce [59], realizing the significance of those factors. IDA plans to achieve it through establishing a secure environment; establishing confidence in E-business; building user confidence and raising user awareness. There are plans to introduce online escrow services which majority of respondents of the consultation carried out by IDA agreed would boost the level of trust between buyers and sellers. Also the plan includes issuance of trust marks. Much of the feedback of the IDA consultation indicated that trust marks would serve to instil greater user confidence in e-commerce transactions. The government of Singapore also plans work in close partnership with the industry to implement an effective trust mark program in Singapore. The example of IDA's efforts clearly shows that confidence and trust building measures are keys to E-business strategies in East Asian region as well.

Apart from some specific strategies mentioned above, it is also critical for E-business firms operating in East Asian markets to take cognizance of the continued changes in market conditions and overall environment. Since most of the East Asian markets have been slowly adapting themselves to various needs relating to the development of E-business, it is highly critical to continuously gauge the adequacy

of individual tactical E-business strategies to be successful in East Asian markets [60].

Conclusion

The analysis of E-business challenges and evolving E-business strategies clearly drives home one strong conclusion that there is a greater need for both the E-business firms as well as the governments of East Asian markets to co-operate in facing the challenge. Tracing E-business challenges to internal and external factors in an E-business environment are quite helpful in understanding the respective roles of government and business firms in East Asia. E-business firms in East Asia need to design their E-business strategies by being innovative in tackling both internal and external factors in order to gain a competitive advantage in E-business. Moreover, E-business firms need to realize that East Asian E-market place is all about changes and the nimbleness to be responsive to rapid market developments is fundamental to remain competitive. Effective change management and responsiveness to changing market conditions in East Asia in themselves could be transformed as tools for gaining and retaining competitive advantage.

At the same time many of the East Asian markets are said to have great potential for E-business domestically as well as internationally. The governments of these markets need to understand major challenges and should strive to improve the E-business environment including infrastructure, legal frame work, consumer education etc., in order to gain a comparative advantage over their Asian neighbours as well as other international markets. No doubt many of the E-business firms internationally as well as in the East Asian region have faced adverse market conditions in recent times and many firms have failed miserably. But in spite of the tough times and spate of failures, the

shakeout of E-business firms is creating a much healthier environment in different industry. The E-business doom had helped driving weak business models and non committed, badly managed firms out of the market and is helping to bring in much-needed consolidation in different industry sectors or E-business. This would transform the E-business competitive environment in East Asia into a much healthier one. Therefore, the E-business firms who could sustain their businesses during the E-business doom with effective E-business strategies would benefit from the resulting consolidation and healthier competition. East Asian E-business markets have tremendous potential in taking a major chunk of the projected multi billion dollar market in Asia-Pacific region and to make the best out of it, international E-business firms as well as local firms need to address local challenges effectively on top of those, which are dogging the E-business internationally. Successful E-business strategies would be those, which are so designed to effectively address the combination of domestic, regional, and international E-business challenges. Therefore, firms with effective E-business strategies, which have an international outlook but local responsiveness, are bound gain competitive advantage and succeed in the East Asian E-business markets.

References

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- [3] See BBC, (22 February 2001), "Dot.coms ripe for takeover" *BBC News Online*, accessed at <http://news.bbc.co.uk/hi/english/business/newsid_1183000/1183908.stm>
- [4] *Ibid.*
- [5] For example, Internet stocks were of high demand even in Asian markets like Hong Kong where investors showed greater interests in dot coms. The high demand for dot com shares was much apparent when Hong Kong based Tom.com made its public issue during February 2000 when investors in Hong Kong queued up in lengths to submit their share forms. Since then dot com shares have crashed in Hang Seng index as in any other indexes around the world. See for an interesting cases study on Tom.Com as an example for valuation of an Asian internet company, Jeffrey F.Rayport and Bernard J. Jaworski, *Cases in E-commerce*, (New York: McGraw Hill), 2002 at p 458.
- [6] See Webmergers.com, (3 January 2001), *Year 2000 Dot Com Shutdowns: A Webmergers.com Special Report*, accessed at <http://www.webmergers.com/editorial/010201_shutdownreport.php>.
- [7] See (17 December 2000), "Asian dot.com gloom to persist through 2001", accessed at <<http://dailynews.muzi.com/cgi/lateline/news.cgi?l=english&a=express&p=1031131>>.
- [8] See *ibid.*
- [9] See BBC (3 September 2000), "Chinese internet firms struggle" *BBC News Online*, accessed at <http://news.bbc.co.uk/hi/english/business/newsid_908000/908701.stm>.
- [10] See Orla Ryan, (1 August 2000), "Dot.com money too tight to mention" *BBC News Online*, accessed at <http://news.bbc.co.uk/hi/english/business/newsid_861000/861226.stm>.
- [11] See *supra* n.7.
- [12] Part II of this article analyses the role of the governments of some of the East Asian markets in improving the comparative advantage of their respective E-business markets. While Part III makes recommendations for further improvisation in the roles of both the governments as well as the E-business firms themselves in improving their comparative and competitive advantages respectively.
- [13] Ranjay Gulati and Jason Garino, "Get the Right Mix of Bricks and Clicks", *Harvard Business Review*, (May/Jun 2000), p. 107.
- [14] "Any company hoping to profit from consumer e-commerce becoming big business is aware that the most serious barrier to its success is the extreme reluctance of customers to release their financial details into cyberspace." See The Economist "Feeling insecure: making online payments more secure", *The Economist* (28 October 2000), p. 73.
- [15] For example, several Asian countries are mainly said to have enacted legislation aimed at regulating the business activities on internet, whereby resolving some uncertainties involved in doing business online and the liability of ISPs. See Mark Lubbock and Louise Krosch, *E-commerce: Doing Business Electronically*, (London: The Stationary Office), 2000, p.69.
- [16] Apart from the geographical e-market environment, it is also important to take

- note of critical e-market factors from an industry specific perspective. It is beyond the scope of the present paper to probe into industry specific e-market factors. For an interesting analysis of such approach in a relatively broader context focusing on digital markets in general see Michael D. Smith, et. al., "Understanding Digital Markets: Review and Assessment" in Erik Brynjolfsson and Brian Kahin, *Understanding the Digital Economy: Data, Tools and Research*, (Cambridge: The MIT Press), 2002, pp.99-136.
- [17] See The Economist Intelligence Unit, (4 May 2000), *E-business Readiness Rankings*, Electronic copy of the report can be found at <<http://www/ebusinessforum.com>>.
- [18] As argued in Part I of this paper.
- [19] Although both Hong Kong and Singapore had the same average score, Hong Kong was ranked after Singapore due to its relatively lower rating in the general business environment.
- [20] See Supra n.17.
- [21] The study defines the parameters studied under the heading 'connectivity'. It says "the connectivity rankings used to calculate the EIU e-business-readiness rankings are based on both a quantitative and qualitative assessment of a country's communications infrastructure--and thus the underlying ability this provides the country to capitalise upon the opportunities presented by the Internet revolution. Connectivity isn't just a measure of "teledensity"--the number of telephones per 100 people. It also addresses just how easy it is for a consumer to access the Internet, taking into account availability, cost, and demographic factors such as literacy rates and education". See supra n.17.
- [22] ITU generated data sets are available from ITU on the headings of basic indicators, internet indicators, main telephone line indicators and mobile subscription indicators. In the present study we confine our analysis to internet indicators only. Source of the data is provided by ITU World Telecommunication Indicators Database <http://www.itu.int/ITU-D/ict>.
- [23] *PC indicators* show the estimated number of Personal Computers both in absolute numbers and in terms of PCs per 100 inhabitants. The figures for PCs come from the annual questionnaire supplemented by other sources. See Technical Notes for Internet Indicators Statistics at <http://www.itu.int>
- [24] In the ITU data set related to the internet the indicator '*Internet hosts*' refers to the number of computers directly connected to the worldwide Internet network. In practice the host computers are identified by a two-digit country code. The number of hosts is assigned to economies based on the country code although this does not necessarily indicate that the host is actually physically located in the economy. Moreover, all other hosts for which there is no country code identification are assigned to the United States. Therefore the number of Internet hosts shown for each country can only be considered an approximation. Data on Internet host computers are from Internet Software Consortium and RIPE (*Réseaux IP Européens*). See Technical Notes for Internet Indicators Statistics at <http://www.itu.int>
- [25] Internet user indication is based on nationally reported data except in some cases where surveys have been carried out. The reported figure for Internet users may refer to only users above a

- certain age. See Technical Notes for Internet Indicators Statistics at <http://www.itu.int>
- [26] See supra n.23
- [27] See supra n.24
- [28] See supra n.25
- [29] Similarly, the markets of Hong Kong and Singapore have also stood apart among other countries of our focus in terms of facilitating a wide variety of access networks and bandwidths. Hong Kong and Singapore are said to have rapidly adapted to different access technologies, when other markets still had more limited options. See Michael Reede, et.al, "Emerging E-markets" in Sed Crest, *E-commerce Asia: Cyberstrategies for Asia's Multi-jurisdictional Environment*, (Hong Kong: Asia Law and Practice), 1999, pp.35-48 at p.47.
- [30] See Supra n.25
- [31] For a relatively short treatment of these five jurisdictions as a part of a larger focus in the region see James K.Ho, *Cyber Tigers: How Companies in Asia can Prosper from E-commerce*, (Singapore: Prentice Hall), 2000, pp. 251-318.
- [32] See China Internet Network Information Center, (January 2001), *Semi-annual Survey Report on the Development of China's Internet*, report available on line at <http://www.cnnic.net.cn/develst/e-cnnic200101.shtml>.
- [33] CNNIC defines Internet users as Chinese citizens who use the Internet at least one hour per week.
- [34] See supra n.32
- [35] For all the relevant Internet and E-business related legislation in China see Jesse T. H. Chang, et. Al. (eds), *China's Internet Policy & Legislation*, (Hong Kong: TransAsia Lawyers), 1999; 2000 update 1; and Vol.II: 2001.
- [36] Source EIU's Pyramid Research. See EIU, *Doing E-business in Hong Kong* accessed at http://www.ebusinessforum.com/index.asp?layout=debi_country_home&country_id=HK&country=Hong+Kong&channelid=6&title=Doing+ebusiness+in+Hong+Kong .
- [37] Data as of 1999 from EIU's Pyramid Research. See EIU, *Doing E-business in Malaysia*, accessed at http://www.ebusinessforum.com/index.asp?layout=debi_country_home&country_id=MY&country=Malaysia&channelid=6&title=Doing+ebusiness+in+Malaysia .
- [38] See *ibid*.
- [39] See Julian Ding, "Doing E-commerce From Malaysia", in Ralph Cunningham, *Asian e-volution: e-business in the new economic climate*, (Hong Kong: Asia Law and Practice), 2001, pp 69-76.
- [40] Data according to EIU's Pyramid Research, See EIU, *Doing E-business in Singapore*, accessed at http://www.ebusinessforum.com/index.asp?layout=debi_country_home&country_id=SG&country=Singapore&channelid=6&title=Doing+ebusiness+in+Singapore.
- [41] See Borisuthiboun Dasaneyavaja, (26 February 2001), "New Thai government faces test over pre-election promises on IT", accessed at <http://www.cmpnetasia.com/ViewArt.cfm?Artid=7293&Catid=2&subcat=20>.
- [42] Previously Thailand had two laws, which were relevant to some aspects of E-transactions namely the Electronic Funds Law and Electronic Signatures Law. They were since then been combined and rewritten as the new E-commerce Law in order to remove concerns about too much government control over electronic commerce and to clarify some of the sections.

- [43] Borisuthiboun Dasaneyavaja, (22 January 2001), "The freeze on Thai e-commerce law", accessed at <<http://www.cmpnetasia.com/ViewArt.cfm?Artid=6735&Catid=9&subcat=93>>.
- [44] *Ibid.*
- [45] Pascale Prud'homme and Hassana Chira-aphakul, "E-Commerce in Thailand: A Slow Awakening" in Tilleke & Gibbins *Thailand: Legal Developments* (Bangkok: Tilleke & Gibbins), August 2001, p.1.
- [46] There are also other interesting works, which suggest management specific strategies for surviving an E-business downturn that range from overhaul of existing management tactics to abandoning the E-business itself. See Colin Barrow, *How to Survive the e-business Downturn*, (Chichester: John Wiley and Sons Ltd), 2000, pp.224.
- [47] See BBC, (19 October 2000), "eBay profits romp", *BBC online*, accessed at <http://news.bbc.co.uk/hi/english/business/newsid_980000/980491.stm>.
- [48] See BBC, (19 April 2001), "eBay results cheer tech sector", *BBC online*, accessed at <http://news.bbc.co.uk/hi/english/business/newsid_1286000/1286109.stm>.
- [49] See Loo Po Li, (12 April 2001), "Asian companies still spending on IT budgets", (9 April 2001), accessed at <<http://www.cmpnetasia.com/ViewArt.cfm?Artid=8411&Catid=2&subcat=20>>
- [50] See, "Sohu.com posts loss but predicts profit by 2003" *South China Morning Post* Thursday, 19 April 2001, B1.
- [51] Kevin Scott and Greg Girard, (12 December 2000), "Failed Dot-Coms Fell Victim to Their Own Lack of Focus", accessed at <<http://www.amrresearch.com/outlook/default.asp?i=131>>.
- [52] According to the findings of the research group IDC the majority of advertisements in this region continued to go into traditional media such as TV, radio and print due to the luke warm response to online advertisements. Therefore, according to Goldman Sachs, business firms are reluctant to adopt online advertisement mainly because online audience has not reached critical mass to warrant the expenditure. In spite of the gloomy picture, still the online advertisements in this region were predicted to increase, which shows the inherent weakness of the strategy. See Seng Li Peng, "Asian Online Advertising To Soar Despite Gloom" *ClickZ News*, April 1, 2002 accessed at http://www.clickz.com/news/article.php/12_1001061
- [53] See. BBC, (11 August 2000), "Amazon, Toys R Us play together", *BBC online*, accessed at <http://news.bbc.co.uk/hi/english/business/newsid_876000/876090.stm>.
- [54] Elaine Leong, (28 November 2000), "MeetChina.com extends reach to Thailand", accessed at <<http://www.financeasia.com/articles/DE52FDAB-C44A-11D4-8C1C0008C72B383C.cfm>>.
- [55] See for the strategy that emphasizes that unique business model is the only source of competitive advantage on the internet discussing the example of Priceline.com S. Chandrasekhar, "Managing in the Market space: The Competitive Advantage of E-Biz", *Business Today*, (7 April 1999), p.116.
- [56] J. Cox and B.G. Dale, "Service Quality and E-Commerce: An Exploratory Analysis", *Managing Service Quality*, Vol 11(2), (2001), pp. 121-131.
- [57] See for a succinct analysis of some pertinent legal issues and strategies

focusing on the region (particularly on Hong Kong), Jaine Canham and CMS Cameron McKenna, "Strategies to Protect Yourself on the Web" in Sed Crest, *E-commerce Asia: Cyberstrategies for Asia's Multi-jurisdictional Environment*, (Hong Kong: Asia Law and Practice), 1999, pp.59-66.

[58] See for the recent strategies in India to replace online credit card usage Dheeraj Kapoor, (16 April 2001), "Dotcoms may Popularise use of E-Currency in India", accessed at <<http://www.cmpnetasia.com/ViewArt.cfm?Artid=8568&catid=3&subcat=26>>.

[59] Elaine Ee, (28 February 2001), "Singapore IDA Builds Trust in E-Commerce" *Singapore.internet.com*, accessed at <<http://singapore.internet.com/article.jsp?sid=692>>.

[60] For a very pertinent emphasis of such a need it is recommended that it is important to have a systematic view of both the broader environment and the specific possible effects. See for a detailed analysis David C Michael and Greg Sutherland, *Asia's Digital Dividends: How Asia-Pacific's Corporations Can Create Value from E-business*, (Singapore: John Wiley and Sons), 2002, pp.174.
