2.0 LITERATURE REVIEW

2.1 Introduction

The literature review provides insights into the various business models based on the views of various authors.

According to Hal Berghel, in his paper [Yr 2001, Pg 2] entitled Electronic Commerce: Business at the Speed of Sleet, Electronic Commerce may be summarised as,

"a purpose, goal or objective with meaningful content residing on a digital network, having a market niche and some mechanism for measuring success or failure, made up of a transaction or interaction support infrastructure utilising Internet and web technology to integrate and sustain all of the said."

There are many Electronic Commerce business models and the factor that differentiates one model from another is the degree of innovation. The spectrum of business models in the Electronic Commerce marketplace is very broad, ranging from pure-play software providers to market makers bringing together buyers and sellers to advertising-supported-electronic communities, focused on aggregating content and services (B2B E-Marketplace- unpublished source).

2.2 E Business Models

E-stores

In the early days of the Internet economy, Electronic Commerce meant creating a web site and trying to attract consumers by spraying banner ads and reciprocal links around the net, so that when a person searched for a particular word or subject, he or she would be driven to an appropriate site. This is known as web marketing of a company or a shop
or better known as E-store which is done to promote the company and its goods and services and facilitates an easy and cheap way for the company to generate additional revenue, besides being a low cost route for the company to develop a global presence and reducing its cost pertaining to promotions and sales. E-stores are vital for B2B Electronic Commerce but form only a piece of a company's B2B Electronic Commerce strategy (B2B "et al.").

The benefits accruing to the customers can be lower prices compared to prices in traditional stores, wider choices, availability of more information about the product, convenience in selecting, buying and delivery including 24 hour availability.

**Business to Customer (B2C)**
E-Stores are linked directly to back-office applications like Enterprise Resource Planning systems to enable companies to fulfil customer orders more efficiently. Seller revenues are derived from reduced cost, increased sales and possibly advertising. This resulted in mostly commercial business to consumer (B2C) websites known as electronic shops, selling for example flowers (e.g. Fleurop, http://www.fleurop.com) or airline tickets (TISS, http://www.tiss.com; Travelocity, http://www.travelocity.com). The main source of income to sellers is in the reduction of cost [of tender processing, and getting more cost-effective offers] (B2B "et al.").

**Business to Business (B2B)**
In a B2B E-store model, most B2B sales constitute complex products or product groupings, requiring configuration with other products or intricate integration into larger-end products. An E-store typically provides only limited standard pricing structures to online buyers while the majority of B2B sales involve line/tiered contract pricing based on the scope of the involved parties in a business relationship (B2B "et al.").
Electronic Malls

An electronic mall consists of a collection of e-shops, usually enhanced by a common umbrella, for example a well-known brand is enriched by a common guaranteed payment system. An example of an electronic mall is Industry.Net which was formed in 1990 as an electronic 'industry marketplace', providing information about products, services and suppliers for manufacturing and engineering professionals. Subsequently, Industry Inc, the parent company of Industry.Net merged with AT&T News Media and received a great deal of publicity as a model for doing business on the Internet (among others in Fortune and Business Week). However, in early 1997, Nets Inc. filed for bankruptcy under Chapter 11 (US Bankruptcy Code). Next in turn was Perot Systems, buying Industry.Net out of bankruptcy. Perot provided the technical expertise to develop further the concept of an electronic mall. Less than six months later, Industry.Net was sold again, this time to Information Handling Systems Group. IHS Group is a $360 million professional database-publishing company, with industry information in engineering, oil and gas, chemical, publishing and regulatory. It announced that it would take Industry.Net back to its information roots, rather than extending into full transaction support (B2B "et al.").

Perot System's Electronic Commerce group (Timeq) will continue to host and develop the Industry.Net Web site. Industry.Net is intended to become the basis for a new IHS Group company, which will provide both free and pay-per-use information on industrial products and services over the Internet. Industry.Net generates its revenues from supplier membership fees, as well as from Web advertising. 'Selling members' post their catalogues paying anywhere from USD$1,000 to USD$20,000. All information is free and much of it is available without becoming a registered 'buying member'. A simple online registration process provides
additional access to the Business Centres. During the brief alliance with AT&T, subscription fees for business information were also considered (B2B "et al.").

**Third (3rd) Party Market Place**

Another emerging business model that is suitable, if companies wish to leave Web marketing to a third party, is the third-party marketplace. The third-party marketplace is an additional, online channel to other existing channels, including physical outlets. They offer users an interface to the suppliers' product catalogues. Several or all of the additional features, such as branding, payment, logistics, ordering and ultimately, the full-scale implementation of secure transactions are added to third-party marketplaces (B2B "et al.").

According to tradenex.com, a B2B portal,

"an electronic marketplace is an online trading environment that enables business organisations to buy, sell and collaborate with other companies for increased savings and profits. It's usually user-friendly and comprehensive enough to provide the necessary information required for prompt decision-making (www.tradenex.com).

The definition of an Electronic Commerce marketplace or electronic marketplace sourced from a research report by International Data Corporation ("IDC") [asiaEP.com July 2000 Pg 2] is as follows:

"An electronic marketplace is an Internet based broker of goods or services in a community of many buyers and many sellers which attempts to establish a level playing field for buyers and sellers and does not let the interests of one group predominate. It has open criteria for entry; any buyer or seller that meets the criteria can participate. Moreover, the electronic marketplace itself does not
take physical possession of the goods and services being traded; it only facilitates the exchange by matching buyers and seller. The electronic marketplace thus resembles the town markets that still exist in many countries, at which buyers and sellers gather to exchange goods and services, whose criteria for participation are relatively liberal, and in which no participant has the ability to dominate the structure of the market.

The electronic marketplace business model has potential for manifold combinations that can individually enhance global merchandising in an era of more open and liberalised markets as it is an enhancement to the closed network or extract Electronic Commerce marketplaces (www.asiaEP.com).

A diagrammatic view of an electronic marketplace is illustrated as follows:
Revenues can be generated on the basis of a one-off membership fee, services fees or a percentage of transaction values. Examples of third-party marketplace providers in maintenance, repair and operations products are Citius and Tradezone (http://tradezone.onyx.net). An interesting 3rd party E-Commerce marketplace in retail is the Internet Megastore project, which is being piloted in food/groceries and furniture retail chains and as an enhancement of physical shopping malls (Timmers "et al" Pg 39). The chain or mall manager sets up an online version of the set of shops, with support for online ordering and payment where appropriate. Each shop owner can enhance the basic Web site and product offer with his or her own promotion and brand enhancement (B2B-"et al").

The Internet Megastore project is an example of a neutral Electronic Commerce marketplace. Electronic Commerce marketplace can be defined into three broad categories, being Electronic Commerce marketplaces which are controlled by the sellers, buyers or neutral parties (B2B-"et al").

2.3 Third Party Driven Electronic Marketplace

A neutral Electronic Commerce marketplace is set-up by third party intermediaries, which host sellers/ merchants who have a strong knowledge of an industry and its business process. Third party exchanges are increasingly joining forces with lead players in a given industry and also being funded by the lead players.
Supplier Driven Electronic Marketplaces

Supplier-driven or seller-driven electronic marketplace is a concept whereby large suppliers take up an active role in forming electronic marketplaces. Successful examples of this business model are Dell, Cisco, Intel and IBM. The sites with this model may be sustained as long as the vendor has a superb reputation in the market and group of loyal customers.

Buyer Driven Electronic Marketplaces

This is probably the most conventional electronic marketplace concept with Electronic Data Interchange trading communities being formed by large organisations. Under this model a buyer opens an electronic marketplace on its own server and invites potential suppliers to bid on the
announced request for quotations. The model offers a greater opportunity to committed suppliers. Buyer driven electronic marketplaces attempt to increase supply chain efficiencies and boost revenue.

![Diagram of Buyer Driven Marketplace]

Figure 2.4: Buyer Driven Marketplace (B2B-"et al")

2.6 Value-Chain Integrator

Another business model is the value chain integrator, which focuses on integrating multiple steps of the value chain, with potential to exploit the information flow between those steps as further added value. Revenues come from consultancy fees or possibly transaction fees. The value chain integrator such as TRANS2000 by www.Marshall.net offers its customers added value from transaction information, which is provided through its extranet solutions such as PartnerNet and MarshallNet (Timmers "et al"). Many third-party marketplace integrators are moving in the direction of value-chain integration.

Conversely, buyers can build complete, multi-vendor procurement solutions in one centralised location, improving supply-chain management and speeding execution of material purchasing. GM, Ford and Daimler Chrysler decided to join forces to form a single inclusion mega exchange for the automotive. They can also choose purchasing options such as
auctions that feature real-time electronic bidding environment to drive down the cost of acquiring materials (B2B-"et al").

2.7 Buyer-driven Electronic Marketplaces

A whole range of new information services are emerging, to add value to the huge amounts of data available on the open networks or coming from integrated business operations, such as information search, e.g. Yahoo (http://www.yahoo.com), customer profiling, business opportunities brokerage, investment advice etc. Information and consultancy may have to be paid for either through subscription or on a pay-per-use basis, although advertising schemes are also common. For example, Excite, an information portal, relies on advertising for 75 percent of its income.

2.8 Commodities Business Model

Another type of business model is known as the commodities business model. Commodities marketplaces will replace some of today's inefficient markets that protect profit margins through asymmetric information, inefficient spot markets and excess product auctions. For suppliers participating in commodity marketplaces, marketing will radically evolve, and price hedging and capacity management and sales will become core success factors. This business model is currently in place for various types of commodities such as Soya bean etc.

2.9 Advertising model

The web advertising model is an extension of the traditional media broadcasting mode. The broadcaster, in this case, a website, provides content (usually, but not necessarily for free) and services (like e-mail, chat and forums) mixed with advertising messages from the banner ads.
The banner ads may be the major or sole source of revenue for the broadcaster. The broadcaster may be a content creator or a distributor of content created elsewhere. The advertising model only works when the volume of traffic is large or highly specialized.

Advertising models can take a number of forms as well. Some examples are such as the generalised model, which is driven by generic or diversified content or services (example are search engines and directories like Excite, Altavista and Yahoo) which has high volume that makes advertising profitable and permits further diversification of site services. Whereas in the specialised portal, volume is less important and therefore caters to advertising that attracts specialised audience such as golfers or movie buffs. Other examples would be the free models and the bargains discounter models which refer to models that give users something for free such as web services, internet access, free hardware and electronic greeting cards, amongst others and typically sell goods at or below cost price and seeks to make a profit largely through attracting high volume (B2B-"et al").

2.10 Specialty/unique product/service provider

Another type of business model is one that provides specialty or unique products or services. An example of the special category is the trust services provided by certification authorities and electronic notaries and other trusted third parties. These services charge subscription fees combined with one-off service fees, with software sales and consultancy as additional sources of revenue. Example of trust service providers are Verisign (http://www.verisign.com), Belsign (http://www.belsign.be) and many others. Many consultancy and market research companies are now offering commercial business information services via the Internet (Timmers "et al" Pg 40).
The most significant step in the evolution of B2B electronic channels had been the proliferation of extranet technology. Extranets are a critical piece to a company electronic channel strategy as it enables companies to manage all aspects of their complex sales over the Internet, including interaction with traditional channel partners such as independent sales representatives and distributors. According to a Merill Lynch study (B2B “et al.” Pg 7), 80% of the USD 158 billion B2B Electronic Commerce 1999, transactions were executed via dedicated extranets.

Extranets will lead as a channel for B2B Electronic Commerce because they directly address the way most B2B transactions will take place. Merill Lynch estimates that 80% of B2B Electronic Commerce transactions by 2003 will be transacted over extranets as they involve high security and provide a controlled environment for companies to conduct Electronic Commerce transactions (B2B-“et al”).

Electronic Commerce tends to encompass both B2B and B2C. In its simplest definition a B2B process is any business process between two companies that uses digital technology. The term can represent functions that provide information, or facilitate transactions, or execute transactions or completely integrate shared business processes into separate, existing Enterprise Resource Planning (ERP) systems. Some of these functions will incorporate processes as various as digital invoicing inventory management, electronic payment and auctioning finished products. The digital technology usually supersedes functions previously performed by proprietary Electronic Data Interchange or paper based systems, for the reason that packet-based TCP/IP technology is faster, cheaper and easier to modify and expand according to changing market dynamics.
2.11 B2B Exchanges

There are as many different types of B2B solutions as there are business processes. However, the flagship applications in the B2B market, simply by virtue of the density of the processes and the customers they serve and the complexity of their solutions, are the B2B exchanges. B2B exchanges effectively are service hubs dedicated to a particular market, providing all the players in that market with the opportunity to digitally communicate with each other. B2B exchanges can deliver market specific information by providing access to industry directories, product databases, discussion forums, articles and industry specific bulletin boards. They can also act as a matchmaker between multiple buyers and suppliers through the use of auctions and reverse auctions. When there is the requisite amount of compatibility between the systems involved, the exchange can actually execute transactions between members who wish to buy and sell, and at its highest end, the exchange becomes a market specific hub capable of dynamically integrating multiple supply chains and partners on demand. An illustration of a B2B Marketplace is available on Annexure 1.

On the Internet, B2B also known as e-biz, is the exchange of products, services, or information between businesses rather than between businesses and consumers. B2B Web sites can be sorted into:

Company Web sites, since the target audience for many company Web sites is other companies and their employees. Company sites can be thought of as round-the-clock mini-trade exhibits. Sometimes a company Web site serves as the entrance to an exclusive extranet available only to customers or registered site users. Some company Web sites sell directly from the site, effectively e-tailing to other businesses.
Product supply and procurement exchanges, where a company's purchasing agent can shop for supplies from vendors, request proposals, and, in some cases, bid to make a purchase at a desired price. Sometimes referred to as e-procurement sites, some serve a range of industries and others focus on a niche market.

Specialized or vertical industry portals which provide a "subWeb" of information, product listings, discussion groups, and other features. These vertical portal sites have a broader purpose than the procurement sites (although they may also support buying and selling).

Brokering sites that act as an intermediary between someone wanting a product or service and potential providers. Equipment leasing is an example.

Information sites (sometimes known as infomediary), which provide information about a particular industry for its companies and their employees. These include specialized search sites and trade and industry standards organization sites (www.whatis.techtarget.com). This model is adopted by organisations that collect data about consumers and their buying habits and carefully analyse this information to be used to target marketing campaigns, whereby this information will then be sold to other businesses. An infomediary may offer users free Internet access or free hardware in exchange for detailed information about their surfing and purchasing habits. The infomediary model can also work in other direction such as providing the consumers with useful information about the web sites in a market segment that justifies their money (www.whatis "et al").

Many B2B sites may seem to fall into more than one of these groups. Models for B2B sites are still evolving. Another type of B2B enterprise is
software for building B2B Web sites, including site building tools and templates, database, and methodologies as well as transaction software.

Although early interest centred on the growth of retailing on the Internet (sometimes called e-tailing), forecasts are that B2B revenue will far exceed business-to-consumers (B2C) revenue in the near future. According to studies published in early 2000, the money volume of B2B exceeds that of e-tailing by 10 to 1. Over the next five years, B2B is expected to have a compound annual growth of 41%. The Gartner Group estimates B2B revenue worldwide to be $7.29 trillion dollars by 2004 (www.whatis "et al"). In early 2000, the volume of investment in B2B by venture capitalists was reported to be accelerating sharply although profitable B2B sites were not yet easy to find.

Electronic marketplaces which are a segment of the B2B Electronic Commerce market contributes 5% of the USD 451.6 million B2B market of Malaysia in 2001 (www.asiaEP "et al"). By the end of 2002, IDC forecasts that the electronic marketplace will reach USD 98.2 million by recording a growth of 335%. Furthermore, electronic marketplace revenues in Malaysia will continue to grow significantly by ten-fold over 2001 to 50% of B2B revenue in 2006, or USD 6.8 billion, compounded at 213% per annum (www.asiaEP "et al").

A significant trend is that this growth rate of electronic marketplaces in Malaysia will exceed the growth rate of B2B on the whole which means electronic marketplace will occupy an increasingly larger proportion of the B2B Electronic Commerce revenue.

In 2001, the total business-to-business (B2B) Electronic Commerce revenue in Malaysia amounted to USD 451.6 million, this despite a global economic slowdown (www.asiaEP "et al").
In 2002, B2B revenue in Malaysia will grow exponentially by 117% to reach USD 982.1 million. IDC believes that this market will continue to grow significantly beyond 2002 because with the economic rebound in the 2nd half of the year to at least the 1st half of 2003. Companies will invest more vigorously in technology to achieve higher operational efficiencies, creating a new momentum of demand for Electronic Commerce services (www.asiaEP "et al").

Furthermore, market opening from Asean Free Trade Agreement (AFTA) has already started to impact on mid-term planning for many large organisations, which have local market shares or export market aspirations. Large or small, these enterprises are already investing substantially in cost-effective Internet-based marketing channels in order to quickly position themselves advantageously for post-AFTA market share.

A small but rapidly growing segment of the B2B Electronic Commerce revenue in Malaysia comes from electronic marketplaces. In Malaysia, electronic marketplaces are synonymous with the Electronic Commerce enablers for the SMEs and manufacturing industry, which remain the main stables of economic growth for the country. A breakdown of B2B Electronic Commerce revenues by countries in Asia is available in Annexure 2.

This shows that the Web is still one of the main choices for SMEs to expand their business. This is because, with globalisation and trade becoming more competitive, companies are striving to reap business opportunities and expand their customer base in a shorter period of time.

According to IDC, the strong growth in electronic marketplaces will continue for the next five years, where the revenue will reach USD 6.8
billion in 2006. The strong growth rate in Malaysia is due to several factors:

a) Most local companies, especially SMEs would want to explore the global market. Nonetheless, hamstrung by a lack of overseas contacts and presence, this provides opportunities for established electronic marketplaces to offer their services that enable these companies to promote their products and services quickly and cost-effectively.

b) In 2001 alone, exports from Malaysia accounted for US$88 billion in trade, growing by a Compound Annual Growth Rate (CAGR) of 14% for the past 12 years up to 2001 (MATRADE, 2002). If this rate continues, it will reach US$167 billion by 2006. Comparatively, electronic marketplaces will channel US$6.8 billion of that trade by 2006.

Other SMEs in the region will do the same to try to remain competitive. Hence, it will become a more intense global playing field in which the competitiveness of Malaysian SMEs can be enhanced by promoting their products and services via established electronic marketplaces.

c) Government's strong initiative in promoting Electronic Commerce activities will encourage companies to participate. Electronic marketplace providers like MyBiz.com and asiaEP.com are playing an integral role to help educate SMEs on how to use IT profitably in their business, thereby achieving one of the key constructs to enhance business over electronic marketplaces.

d) Other push factors for Electronic Commerce are the transformation that will be brought to doing business in a lower cost manner and altogether improve efficiency and effectiveness.
e) Corporate Internet adoption has been growing strongly in Asia/Pacific. As more companies get connected to the Internet, the business benefits, which can be derived by leveraging the Internet, are becoming more apparent to top-level executives. As such, the next logical step for many corporations will be to implement or participate in B2B Electronic Commerce initiatives. This holds true not only for large, cash-rich corporations, but also within the SME sector as well. In a December 2000 survey of SMEs in Malaysia alone, 90 percent of those surveyed indicated that the Internet has had a direct impact on their business revenues. Only 10 percent felt that there was no impact by the Internet.

Out of the total 90 percent who said it had impacted their market, 58 percent affirmed that it opened up new markets, or increased efficiencies. IDC estimates that 20 percent of all SMEs in Malaysia (IDC estimates that there are more than 300,000 SMEs in Malaysia) are participating in electronic marketplaces today in Malaysia.

By the year 2005, Asia will have B2B transactions in the region of USD$650b, whereas B2B transactions in Europe and US would amount to USD$1300b and USD1950b. Only 20% of employees in Asian companies are connected to the net compared to 65% in the US. However, Asian figures are expected to double in the next 3 years (Presentation in Uni Malaya on B2B in Asia/India by Gaurav Narasimhan).

In the United States alone, corporate adoption of the Internet for sourcing for new suppliers is amazing. Results from an IDC US (eWorld) study in 2001 show that almost 90 percent of top businesses in US have heard of electronic marketplaces and at least 50 percent
are participating as a buyer today. There are tremendous opportunities for a company like asiaEP.com who can help SMEs reach out to this target audience.

f) Although a key benefit for many adopters of B2B will be the reduction in the administrative cost of doing business, the largest gains will be achieved if the Electronic Commerce solution enables companies to share information across the supply chain. Tangible benefits of improved information exchange over the supply chain may include better production planning and improved control of inventory levels. This will require a certain level of integration into the corporate back-end systems.

MyBiz.com with its application services has the opportunity to tap into advanced SME users who are willing to invest in streamlining their supply chain to their existing buyers. A Company like asiaEP, who has gained the SMEs trust, is in a better position to enable supply chain Electronic Commerce than a large multi-national software vendor like SAP or Oracle.

g) One key driver for B2B is the fact that many large, dominant players in specific industries will spend a great deal to implement B2B solutions and then make it mandatory for their suppliers to plug in to their system. This trend was evident during the years when Electronic Data Interchange was being implemented across large organisations in the region. These large electronic procurement portals will co-exist with electronic marketplaces, and will not replace electronic marketplaces. In fact, electronic marketplaces, with its neutrality will offer a more level playing field for both buyers and suppliers, rather than let the interest of the buyer dominate.
h) Like much of the growth of IT and the Internet in the region, government encouragement and policy developments will help SMEs to adopt IT and Electronic Commerce. Although the government won't be a participator in the electronic marketplace revenues to jumpstart the market, its policies such as the SMIDEC Grant will encourage participation.

Despite strong interest in B2B Electronic Commerce, there remain challenges and factors, which could inhibit the growth and adoption of B2B Electronic Commerce. The year 2000 saw some of the most prestigious and largest investments in dot.coms closed, as they were not able to deliver anything close to a payback on the investment (www.asiaEP "et al"). There now exists, a layer of negative sentiments on anything to do with the dot-com phenomenon. Although the negativity has not been as severe with B2B investments, it would be fair to assume that the patience of venture capitalists may no longer be what it once was.

Unfortunately, the failure of dot.coms may have a psychological effect on the way companies perceive Electronic Commerce. Companies that could otherwise benefit from implementing Electronic Commerce solutions may use the experience of ailing dot.coms as an argument against getting involved in any Electronic Commerce-related activities.

Although one could have thought that the Internet had proved itself as reliable, it seems* that security remains a concern among Asian businesses. While the average consumer might have been concerned about the abuse of credit card information, security concerns for businesses may also relate to the fear of third parties getting access to confidential information.
Even though supply chain management relates to sharing and exchange of information across the supply chain, it is still important that outsiders do not gain access to information that does not concern them. Security issues relate not only to the Internet as a medium - but also must take into account the trust that companies put into third parties, e.g. electronic marketplaces. Electronic marketplaces need to guarantee that information will not be leaked to outsiders. As such, this allows better manageability and reliability of the clients' data and information to itself.

Relationships and trust drive a great deal of Asian business between buyers and sellers. This relationship and trust factor needs to be captured in some form over Internet B2B platforms. In addition, in a B2B relationship, it is of paramount importance that products are delivered on time. If a business partner does not deliver products that should be used as inputs in the production process or for the maintenance of equipment, this could have dramatic effects on the profitability of the buying company.

Presently, there is a lack of one universally accepted standard for B2B Electronic Commerce. Although there are several versions of XML in existence (or under construction) today, there is no clear winner at present. XML can briefly be described as a possible replacement of the HTML (which is the code by which web pages are constructed) which allow for a legacy systems to communicate freely and exchange data.

XML is a type of cõde, which may serve as a possible replacement for HTML, which is a code in which most Web Pages are constructed.

There will be companies that will wait for the development of industry-specific standards before beginning to implement Electronic Commerce solutions. This is true for implementations both on the buy-side and the sell-side. Companies will need to balance their desire to be among the
early movers with the need to adhere to future standards that may eventually make their solutions easier to integrate into other systems.

As such, investment on research and development to ensure that applications adhere to industry-specific standards are important as electronic marketplaces involve a host of companies, applications, network and system infrastructure. asiaEP.com understands that the importance of keeping abreast with this fast changing technology trends. Therefore a B2B operator will continue to invest in research and development to enhance and ensure that their services and applications are interoperable. It is clear that they do not seek to develop their own Electronic Commerce standard but utilise existing technology standards in order to lower the cost of ownership for SMEs.

Small businesses in Asia/Pacific leverage the Internet in making their businesses more effective by using it to do research and competitive comparisons. However, participation in electronic marketplaces is limited due to the lack of awareness of the business benefits it can offer. The market still requires a great deal of education on the benefits of the electronic marketplace, as compared to just a greater awareness of electronic marketplaces.

It is fair to say that, at the end of the day, companies are little more than the sum of their business processes, and consequently the value of the information that travels across the process network can be extremely high. Digitized B2B processes need to be absolutely secure, thoroughly reliable, and use data of utterly unquestioned integrity. B2B solutions might use Virtual Private Network (VPN) technologies to exploit the Internet as a cost-effective international carrier, in which case the company will have the additional responsibility of thoroughly researching the legal implications of trading across the relevant geographical boundaries. VPN
can be defined as a private network of computers that are at least partially connected by public telephone lines such as LAN (local area network) systems. VPN uses encryption and secure protocols that ensure data transmissions are not interrupted by unauthorized parties.

IDC believes that asiaEP.com has an important business proposition to the market and is a clear example of how home-grown B2B enablers can carve business success in the competitive global Electronic Commerce market by understanding the characteristics and needs of SMEs in Asia (www.asiAEP "et al").

Using enhanced technology solutions, asiaEP.com enables companies to participate in its globally well-established electronic marketplace portal quickly, cost effectively and with minimum risk. With its proprietary search and trade matching technologies, asiaEP.com acts as an electronic gateway to attract buyers resulting in a unique multiplier and cumulative effect to its customers which are mainly SMEs in the manufacturing sector throughout Asia. As such, asiaEP.com with its electronic marketplace provides companies a convenient business stepping stone to reach out to a wider population of external buyers and sellers. This is a strategic role especially when more and more companies are looking to information technology to penetrate new markets by finding buyers and suppliers quickly.

With Malaysia and the region experiencing new economic and consumer buoyancy, electronic marketplaces such as asiaEP.com will play an increasingly significant role in the development of regional and global trade. One important impact of AFTA if not the post-911 recovery, is the accelerated market dependence of intermediaries such as electronic marketplaces, which are able to promote products and services efficiently.
According to IDC's study, asiaEP.com as an established brand has a large market share in the country; this is especially important for electronic marketplaces, one of whose characteristics is to build on brand awareness as a trusted intermediary for international trade or marketing (www.asiaEP "et al").