



Role of E-Commerce in 21st Century

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Abstract

Technological breakthrough in such areas as fax machines, telephone, video player, audio devices and televisions took many years to commercialize and measure their impacts on business. Compared to these breakthroughs, telecommunications, information communication technology, miniaturization, computers and Internet went through shorter product life styles and achieved widespread diffusion and reformed the nature of business operation and enhanced competitive business environment instantly. This technological advancement has resulted in evolution and innovation of many products, services and business processes. One of them is the emergence of e-commerce or electronic commerce. The Internet has resulted in the emergence of virtual markets with four primary distinctive characteristics, which are real time, shared, open and global. The application of Internet is divided in to three major activities that are publishing corporate information, conducting electronic commerce and business transformation. The greatest feature of the Internet is the absence of intermediaries; the manufacturers are able to sell their product relatively easier to buyers via Internet. E-commerce today is no longer technological issue, but is also a business issue. E-commerce involves a

number of forms, varying level of cost and complexity, depending on business need. For the past few years, across a globe, e-commerce has improved significantly, but some issues remain elusive. The explanatory and conceptual paper presents the ways in which e-commerce give information to the consumers. It further highlights some critical issues in e-commerce, suggestion and future strategies for e-commerce in years to come.

INTRODUCTION

In the past few years, enterprises across the globe have experienced significant changes in their business information system. Huge investments were made in enterprise resource planning system implementations but still they struggle to get timely information that is needed to make effective business decision and to ensure continuous growth of enterprises. Placing "e" in front of any process or function seemed to be the magic prescription for never ending story of success and rapid returns for enterprises. E-business, e-procurement, e-sales, e-payment, e-banking, e-CRM, e-CAD, e-delivery are just a few. Internet, for example is becoming one of the most popular medium in transmitting various data. Users can find any kind of information within a shorter time compared with conventional method that consumes more time.

The emergence of the Internet through out the world has been contributing such a variety medium in doing business as well as people lifestyle. In fact, Internet is the essential prerequisite for the existence of E-commerce. Electronic commerce or e-commerce has been defined as the ability to perform transactions involving the exchange of goods or services between two or more parties using electronic tools and techniques (Yonah, 1997). The explosion of E-commerce has created new phenomena in our lifestyle especially in shopping activities. Consumers can easily buy products or services like magazines and airlines tickets via Internet.

DEFINITION OF ELECTRONIC COMMERCE

Besides the earlier definition by Yonah (1997) in the paper, National Office for the Information Economy defines e-commerce as type of business transaction or interaction in which the participants prepare or conduct business electronically. This covers a wide range of activities, ranging from use of electronic mail (e-mail), through to Internet based sales and transactions and web based marketing. Dr. Roger Clarke, Principal Xamas Consultancy Pt Ltd., Canberra said that electronic business (e-business) is defined as the conduct of business with the assistance of electronic devices and telecommunications tools, whereas electronic commerce (e-commerce) is defined as the conduct of commerce in goods and services via electronic devices and telecommunications tools.

Different people use different terminology such as 'electronic trading' 'electronic procurement' 'electronic purchasing' or 'electronic marketing'. From the above definition, we can conclude that electronic commerce is often used in a much broader sense, to mean essentially the same as 'electronic business'. In other words e-commerce includes purchases of goods, services and other financial transactions in which the interactive process is mediated by information or digital technology at both locationally separate, ends of the interchange. Here 'transactions' include both specification of goods and service required and commitment to buy. E-commerce transaction model can be in terms of business to business (B2B), business to customer (B2C) or customer to customer (C2C).

OBJECTIVE OF THE STUDY

The main obstacle now faced by the policy makers and others is lack of comprehensive indicators about the electronic commerce and clear guidelines and consensus on the definition of e-commerce. Thus, several considerable efforts at the international level like Asia-Pacific Economic Cooperation

(APEC) and European Union (EU) members to work towards globally accepted guidelines and methodologies for measuring the electronic commerce. They have realized the potential social and economic benefits that could derive from e-commerce as well as the importance of having readily available data, which would highlight the role of e-commerce in their economies.

With the preceding arguments, the paper conceptualizes the role of e-commerce and its sub activities in creating business success. The paper highlights e-commerce milestones in selected countries. The paper further highlights some suggestions and future strategies of e-commerce in specialized industries in years to come. As an explanatory, conceptual, theoretical and descriptive analysis, the paper is expected to benefit a large group of users and instigate further study in the area of electronic commerce.

AN OVERVIEW OF E-COMMERCE

E-commerce is the most important application of the new communication technology. Manufacturers, traders and consumers can now reach the market more quickly and get more information than they could ever before. The electronic commerce has penetrated the businesses in many ways. E-commerce has tremendously reduced the transaction costs allied with purchase, sales, operating, holding inventory and financial cost. The application of e-commerce through development of web site enhances the potential global market and sales revenue, product, potential new customers, services and geographical areas. In terms of non-financial benefits, e-commerce has significantly helped improving human resources and timeliness, quality of services, customers' satisfaction and some other indirect effects.

The imperative of electronic commerce depends on the evaluation and assessment. To evaluate related data on e-commerce is necessary, since it is not readily available. The available data are collected by different agencies using numerous definitions and methodologies used by the collecting group. In the absence of reliable data, policy makers, governing bodies and business communities are unable to take decisions that reflect the changes brought about by the e-commerce. By employing relevant and accurate data on e-commerce, the policy makers and researchers would be able to critically analyze the impact of e-commerce on labor market, market structures and functioning, changes in distribution of goods and services, customers' preferences, changes in global competition. It permits them to take well-framed decisions about the policies and investments in e-commerce related sector.

Research forecasts that e-commerce will account for 86% of worldwide sales of goods and services by the year 2004. The potential for e-commerce is bright, specifically in those markets where buyers and sellers are motivated to reduce costs, increase efficiency and cut delivery time. By 2003, estimated revenues from e-commerce across the globe will be approximately 1.5 trillion dollars. The rate of growth varies due to the development of infrastructure especially in developing countries. Projected Internet users by the end of 2000 are approximately 48% (North America), 22% (Western Europe), 17% (Asia Pacific) and 7% (Middle East/Africa), which of course stimulate further growth of e-commerce (Sussan and Kassira, 2003).

E-COMMERCE ACROSS THE GLOBE

In Malaysia, the rate of development of e-commerce is quite low compared with other developed countries like Australia, United Kingdom and United States. Table 1 shows the value of e-commerce transactions for Malaysia, Australia and United States. As given in Table 1, value of e-commerce transaction across the globe especially in these three countries increase significantly in 1998 to 2000. It reflected the enhancement of awareness towards the importance of e-commerce in today's business. However the value of e-commerce transaction differs in comparison between the countries.

Table 1: Value of E-Commerce Transactions (USD)

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Countries	1998	1999	2000
Malaysia ¹	18.01m	58.89m	164.15m
Australia ²	123.2m	180.6m	1.2b
United States ³	25b	75b	250b

Sources:

1. International Data Corporation, 1999
2. Australia Bureau of Statistics, Household Use of Information Technology Report, 1998
3. Forrester Research Report

While, developed countries like United States and Australia enjoy greater income from doing business electronically, developing countries such Malaysia is gearing up to close the income gap. E-commerce success requires high level of education and technological skills. The transportation, energy and telecommunication infrastructure also plays important role in ensuring e-commerce success. Without them, e-commerce impact cannot reach wider customers. In addition, the supporting services are also needed in achieving success of e-commerce. These services include banks, hardware manufacturers, programmers, access providers, information providers, web designer, market research organization and also higher learning institution.

In the case of Malaysia, several measures have been taken for past several years to support the progress of e-commerce like Multimedia Super Corridor (MSC) projects, establishing Multimedia University and encouraging banking institutions to venture electronic banking transactions. Due to those necessary actions undertaken, it is projected that e-commerce will continue to prosper in Malaysian market. The following Table 2 describes and predicts e-commerce earnings in Malaysia for the year 1997-2004.

Table 2:E-commerce Revenues Projection In Malaysia (1997-2004)

Year	Revenue (USD million)
1997	6.31
1998	18.01
1999	58.89
2000*	164.15
2001*	426.72
2002*	993.68
2003*	2,066.40
2004*	3,469.85

* Projections

Source:

Malaysian Business, April 2000

Meanwhile, developed countries such United States continues to enjoy the success of electronic commerce. It seems that e-commerce development in United States does not been affected by a number of crisis beginning September 11, 2001, downturn of economics and Iraq War. According to the most recent studies carried out by Forrester Research and Institute for Supply Management (ISM) indicated significant growing of purchasing activities by enterprises using Internet. For instance, average amount of indirect goods and services purchasing via Internet has progressed from 8.3% (Quarter 1, 2002) to 10.5% at then of the year. This momentum resumes till second quarter of 2003. The similar pattern was also found for purchasing of direct goods and services for the same time period. The following Table 3 summarized the indication.

Table 3
Average Amount of Purchasing Done Via The Internet
(as a % of total company purchasing)

Period	Indirect Goods/Services	Direct Goods/Services
Quarter 1, 2002	8.3%	5.7%
Quarter 2, 2002	8.7%	6.6%
Quarter 3, 2002	9.0%	6.5%

Quarter 4, 2002	10.5%	9.4%
Quarter 1, 2003	11.0%	10.0%
Quarter 2, 2003	11.0%	11.7%

Source:

Forrester Research, Institute of Supply Management (ISM), January and July, 2003

A report by the Department of Commerce, USA acknowledged the increased use of Internet for commercial activity. In September 2001, 21% of the USA population was using the Internet to make purchase and 8% was using it for online banking as against 13% of both activities in 2000. The Department of Commerce found that 36% of the population used the Internet to search for product or service information in September 2001, an increase of 10% compared to the preceding year.

In addition, United States government has introduced friendly policy and cost guidelines that promotes e-commerce growth. For instance, The USA Department of Trade in 1998 announced the standard transaction costs for some selected e-commerce activities (refer exhibit 1). From the exhibit, it is clearly crystal that US government help to boost e-commerce by charging higher cost for transaction done via conventional and traditional method like booking flight tickets through travel agent. This additional cost is expected to change consumer behavior and choice of means for doing business from the common ways to the latest and more attractive style, that is by electronic devices.

Exhibit 1
Transaction Cost Published By The US Department of Trade (1998)

Airline ticket reservation

Travel Agent	\$8.00
Internet	\$1.00

Insurance product

Traditional agent	\$ 400- \$ 700
Internet	\$ 250 -\$ 300

Bank costs per transaction

Branch	\$1.070
Telephone	\$0.502
ATM	\$0.270
Proprietor online system	\$0.015
Internet	\$0.010

E-PROCUREMENT

E-procurement or e-purchasing is a user-friendly, Internet-based purchasing system that offers electronic buying order processing and enhanced administrative functions to buyers that results in operational efficiencies and potential cost savings. Business enterprise can place orders with suppliers on the website. E-marketplace is an online exchange where multiple vendors and buyers meet at one site for dealing in goods, materials and services. A number of websites have been set up in various industries, but they are going under a process of selection with some business withdrawing from e-marketplace operation or merging with other businesses. E-procurement performs all procurement activities such as requisitioning, purchase order transmission, notification of electronic query, request, response to pre-bidding and receipt of goods and processing thereon. Virtually, all types of products, including books, music CDs, toys, household appliances, clothing, foods and other groceries, jewelries are available for sale on the Internet. The founder and Chief Executive Officers (CEO) of amazon.com estimated that the books sold on the Internet accounted for around 15% of the total books market.

Many people believe that e-purchase benefits only certain quarters like large enterprises and multinational companies with very huge investments can afford to meet such expenses. That assumption is untrue. It can be applied to any enterprises of varied size.

Quoting from the technology research firm, AMR Research, among businesses with more than 10,000 employees, 40% participate in some form of public B2B exchange while among companies with 1,000 to 2,500 employees more than 80% are expected to be doing so within a year or more.

E-purchase benefits enterprises by cutting a labor costs and improves efficiency by reducing human errors. To reduce errors further, enterprises must not allow purchasing by a single person every time. The benefits obtained by the e-procurement system should not be lost due to maverick purchasing. Since in e-purchase, the transactions conducted are more transparent both within the enterprise and with the suppliers. However, some of the suppliers are not very well equipped with it. E-procurement involves displaying the catalog and other information such as inventory and supplier mark up, are shared with others, which few suppliers are reluctant to do so.

The benefits should not only be to the buyers. It should be balanced with the buyer and the supplier. The purchasing should not be shifted from old to new suppliers. Reliability and the level of service must be enhanced. The relationship and trust that has been developed over a period of time cannot be ignored. The Canadian National Railway Company once had more than 75 000 items in its online catalogs that saved it \$10 million in procurement costs. For smaller purchases, the staff used to search paper catalog which did not have the required information and moreover other processes were done through phone, fax and mail services before. The initial teething problems such as issuing multiple requisition orders were resolved and soon the system went live for all suppliers. E-procurement helped in getting better prices from suppliers.

After a trial of six months, the railroad company was able to reduce the cost of processing from an average \$50 per order to \$4 electronically. The company got larger discounts for bulk-buying and other purchases. The usage of online catalog can help the employees to check the items, which are purchased often. E-procurement focuses on the increasing integration of suppliers' procurement network. It supports all business partners in shortening process chains, speeding up the flow of information and exploiting potential for innovation. Procurement markets are already networked worldwide. A successful procurement system will depend on how well the network functions across the boundaries.

E-SALES

One of the ways to measure the companies' performance is by comparing the total revenue with that of previous period, with same industry, with competitors and with other economic resources, which produces the cash flows. A sale is important component of any trading. Performance is always measured with what you put in and what you get back. According to survey of executives, conducted in USA, 46% of retailers cite sales as the primary metric the use to measure a web sites performance and about one in four said they focus on profits. To e-business, the enterprise should always monitor the customer demand and changes in the market and global developments. Internet is as an avenue for tracking customer demand and customers inventories as well as for sourcing materials, knowing the customers demand for inventory on a real time basis is very difficult. Integrating online and offline systems will become increasingly important for retailers who are focused on driving consumers into their stores with purchase intent. The above survey revealed that while only 31% of retailers already provide visibility of store inventory on their web sites, another 23% expect to offer this capability within the next two years.

A well-developed and integrated web sites connected to their back offices is a requirement to improve the revenue. As the web site has not been properly linked, an order placed by customer could not be attended to and after a considerable delay sold out information was passed on to the customer. Certainly this affects the customer relations. But this system involves some cost, but the benefit is more than the cost spent. An order management and fulfillment software suited for business to business as well as business to customer transactions. The software can do allocation of inventory as an order is being taken online, or inform a customer about an item much be back-ordered and give the customer an estimated shipping date for the back-order. It also confirms the order placed and shipping details to the customer.

The web customers are increasing year after year in spite of uncertainties in global economy. Recent reports say that Internet sales were up in USA by 18% for the quarter ending in July. Some stores improved its Internet sales but stores sales however down by 14%. Even 1-800 flowers.com reported an increase of 33% in revenues compared to the immediate previous period. The results say even though there is an increase in Internet business, it is certainly to some extent at the cost of orders place through other sources such as telephone, stores and by e-mail.

CRITICAL ISSUES IN E-COMMERCE

The two critical issues hampering e-commerce growth are securities and tax environment. As we discussed above, there are two kinds of goods delivery methods after customers put an order via electronic commerce transaction. One through mail or courier and another one is through online itself. The main concern to tax authority is through online. For instance, Mr. X resides in Mumbai bought a Zorro X Play station Software version 5.0 from United States by downloading online from the particular software company. All payments and delivery made through online. In this case, there is no intermediary such as courier officers or customs department at the point of entry (etc airport, port).

On the other hand, Miss Y also resides in Mumbai purchased the same software, but she wishes to get the software in compact disc (CD) form through courier. If this situation occurs, the Indian tax authority will go for Miss Y but not Mr. X. It means that if someone buys a digital product from other countries and full settlement done through Internet inclusive the payment and delivery, he or she will not be taxed. Traditional tax principle in most of the countries were developed when a transactions involves an identifiable party established in a physical location which delivers goods or services to an identifiable customers. The concept of 'permanent establishment (PE) is used in many tax regulations will typically determine whether or not the transactions or operation constitute a taxable presence in the country concerned.

In the era of e-commerce, there are often no face-to-face customer contacts; there may be no employees or human intervention and no identifiable physical location for either the seller or the customer. Thus, in e-commerce transaction, the analysis of PE becomes less clear. Other examples of e-commerce which could possibly erode the tax base are computer software which can be purchased and transferred electronically to the user's personal computer, magazines and postcards which can be transferred digitally and securities trading, which is currently offered by some stocks brokerage firms through the web sites that permit customers to trade share.

The study by Grayson (1998) indicated that if there were no tax in e-commerce, the higher income group of customers who always transact via e-commerce would enjoy high tax saving in long run. As a result, fairness and equity will not be achieved. In addition, a statistic published by Wall Street Journal in 1998 evidenced that in United States of America, 80% of households which annual income exceed USD 100,000 possess personal computer, whereas only 25% of households with annual income less than USD 30,000 possess personal computer. Web Week Magazine (1998) revealed that the most popular group transact through Internet come from at least USD 60,000 annual income earners (Palil and Abdul Rahman, 2003). These two publications in other way support the findings from Grayson (1998).

The second critical aspect of e-commerce is security. Lack of security is the leading barrier to widespread commerce on the Internet due to the inherent openness of the web (Wen, 2001). The lack of security is experienced in several ways such as unauthorized use of corporate network, packet sniffing, data modification, unregistered transactions, eavesdropping, repudiation and spoofing. The threats and attacks to Internet based enterprises have included such Yahoo, E-trade and Amazon.com (Sussan and Kassira, 2003). These threats and attacks deteriorated the three main aspects of security that are confidentiality, integrity and availability of data. The absence of these three elements causes lack of confidence for wider customers doing business electronically.

However, some necessary actions have been taken to cushion the lack of security in e-commerce like the introduction of new protocol version 6 (Ipv6), a \$100 million initiative by USA government. The new protocol will address the areas of confidentiality, data integrity, non-repudiation and selective application of services. A number of multinational companies like NTT (Japan), Sun, Nortel, 3Com have already got the new version of Ipv6, whereas Cisco and Microsoft have it in prototype. The limitations of the new protocol vary from the need of higher bandwidth and some current wireless providers do not support Ipv6. In addition, the new protocol is too costly and the return is expected to yield after three to five years (Wen, 2001).

SUGGESTIONS FOR IMPROVEMENT

The know how of logistic e-commerce enterprises provide new competencies from which to develop future sustainable competitive disadvantage. The greatest drivers for the future will be duration of relationships, type of contracts conducted and the geographic distribution of customers and vendors (Delfman, 2002). To achieve more efficient e-logistics and e-fulfillment, it is desirable to have a trading environment in which there is perfect information about goods and services as regards their description, origins and destinations, and cost for different origins and destinations. Sellers and buyers should be able to monitor and track goods at every point along the way from the supplier to the consumer. All stakeholders should be able to check on the Internet the availability and status of orders. All this can be achieved if trade information is simplified, automated and fully harmonized in all countries and all restrictive government export/import regulations and practices are eliminated. It also requires sophisticated supply chain management systems for compelling and enabling global end to end monitoring of trade information. To achieve these abroad objectives and also to take into account the special problems of developing countries, it is recommended that governments, the international community and the private sector corporate promote the following specific measures:

[a] Taking advantage of the great potential provided by Internet technology in order to capture, transfer and monitor trade information over network of supply chains in an open fashion.

[b] Automating customs declaration systems in order to develop customs to customs information exchange and thereby provide a basis for elimination of unnecessary export/import requirements, which can instead be replaced by fully integrated international transactions.

[c] Harmonizing and improving the classification of commodity tariffs, and facilitating the identification of individual consignment.

[d] Providing investment resources especially for customers' administrations in order to upgrade their efficiency.

[e]Harmonizing and simplifying trade facilitation regulations and procedures, and in particular encouraging greater harmonization of customs procedures through the wide adoption and implementation of the revised Kyoto Convention on the Simplification and Harmonization of Customs Procedures.

[f]Promoting cooperation between authorities of exporting and importing countries in order to provide verification and compatibility in trade information. In this context, the International Trade Prototype (ITP) project developed by the United Kingdom and the United States customs administrations could provide a model to be developed at the international level. The international community should give support to further development of the project.

[g]Encouraging greater transparency in trade processing activities and taking measures to reduce corruption and other forms of malpractice in customs administration.

[h]Promoting partnership between developing country logistics service providers and developed country logistics services providers that are applying e-logistics systems.

[i]Providing technical cooperation program to developing countries that support e-logistics, for example in customs, transportation services, cargo terminals and related services.

In pursuing greater height of e-procurement, Kevin Williams, purchasing specialist for a major cable network in Bristol, Connecticut, identifies nine steps for developing an e-procurement strategy. It is advisable enterprise adopting e-commerce to follow the recommended approach of implementing e-procurement, which as below:-

[a]Identify the supply change management needs of the organization.

[b]Determine the scope of work.

[c]Perform the Request For Proposal (RFP), Request For Information (RFI), and/or Request for Quotation (RFQ) process.

[d]Identify the major suppliers of e-procurement systems.

[e]Narrow the list of suppliers to a possible few, based on their ability to meet the organization's needs.

[f]Select a supplier who best meets the needs of the organization as well as the choice that the supply manager feels most comfortable with.

[g]Discuss with the supplier the objectives of e-procurement system and the necessary features to achieve those goals.

[h]Commit to working with suppliers based on their ability to meet the needs of the organization's business and e-procurement strategy.

[i]Move forward with the project by preparing the organization's employees and suppliers for the new purchasing process.

Security of the network is an area wherein much emphasis has to be given for e-procurement success. It can be done by creating security at the interfaces of network such as standardized code for identification of materials and services. The responsibilities include initiating and executing cross enterprise optimization programs in purchasing and logistics, developing uniform conventions within the company, controlling cross enterprise purchasing activities and providing key figures and ensuring compliance with legal and internal requirements.

The websites of the enterprise must have in addition to other access options, such as register suppliers to participate in the marketplace of the company, which may further have different options such as free registration and non-free registration of suppliers. This free registration process meets the basic requirements that are prerequisites for all business relationships. Once the registration is made, the suppliers become the registered suppliers of the enterprise and they can be allowed for further communication. The registration provides the suppliers to access information about the structure of purchasing, supplier profiles, and IT tools, download documents and responding queries. The registration also allows them to obtain the market share or purchase volume in the material fields relevant to suppliers and the supplier grading evaluation compared with competitors, worldwide communication, availability of information of past and future e-bidding and e-auctions.

CONCLUSIONS

E-business models can benefit from inline communities that are sustaining significant collaborative relationships despite geographical diversity of membership. Meanwhile, e-commerce focuses primarily on enterprise's customers, e-business enlarges the connectivity of the enterprises to include their suppliers, employees and potential investors or partners. The expanded connectivity makes e-business solutions much more prominent compared to e-commerce. As e-business and e-commerce

continue to progress, legal issues, security weaknesses and taxation environment remain problematic for future prosperity. While, security aspect is expected to improve such as introduction of new protocol like Ipv6 and it is within enterprise control, tax and legal aspect beyond enterprise's discretion as it involves government intervention and global commitments for more standardized definition and regimes.

While e-business is still in its early development stage in many countries, the experience to date has been positive. In many countries, the collected indicators have highlighted a number of barriers to a wide implementation of e-business, providing government with keys to future policy development. They have also pointed to the areas of commerce, the need for training and security, a key aspect when related to the actual conduct of commercial transactions, especially for small and medium enterprises and individuals.

The rapid growth in e-business around the world has prompted many to look for better ways of measuring the phenomenon. As more and more countries and international agencies become involved, it is important to develop plans to ensure that there is no unnecessary duplication of efforts and that users have the data necessary for informed decision-making at the earliest possible opportunity. Sellers and buyers should be able to monitor and track goods at every point along the way from the suppliers to the consumers. All stakeholders should be able to check on the Internet the availability and status of orders. All this can be achieved if trade information is simplified, automated and fully harmonized in all countries and all restrictive government trading regulations and practices are eliminated.

REFERENCES

- [1]Kapsoinow, S. April 15,1999.Using fulfillment services for E-commerce. E-commerce Guide URL:<http://www.interney.com>
- [2]Muhammad Talha. 2003. Role of E-commerce in economic growth. Journal of Internet Marketing. URL:<http://www.arraydev.com/commerce/ijm/RoleOfEcommerce.htm>
- [3]E-commerce Management Program .URL:<http://www.ecmtraining.com/sgsu>
- [4]E-commerce Summit .URL:<http://www.e-commerce-summit.com>
- [5]Steve Butler, 2003. B2B eCommerce continues with steady growth. URL:http://www.emarketct.com/articles/show_articles.cfm?id=214
- [6]Mohd Rizal Palil and Mara Ridhuan Che Abdul Rahman.2003, Tax issues in E-commerce: Malaysian tax practitioners' Perspective. Proceeding National Seminar On Accounting Research: Knowledge Creation And Exchange: 154-163
- [7]Aui-Yonah, R. 1997. International taxation of electronic commerce. Tax Law Review 52 (3): 507-505.
- [8]Grayson, M. 1998. The Internet and the erosion of state tax base. The Council of State Government 5: 1-3.
- [9]Arnott,D., Bridgewater, S. 2002. Internet, interaction and implications for marketing. Marketing Intelligence and Planning, 20, 2: 85-95.
- [10]Delfmann, W., Albers, S. Gehring, M. 2002. The impact of electronic commerce on logistics service providers. International Journal of Physical Distribution and Logistics, 32,3: 203-222.
- [11]Eid, R., Trueman, M., Ahmed, A. 2002. A cross-industry review of B2B critical success factors. Internet research: Electronic Networking Applications and Policy, 12,2:110-123.
- [12]Javalgi, R., Ramsey, R. 2001. Strategic issues of e-commerce as an alternative global distribution system. International Marketing Review, 18, 4: 376-391.
- [13]Malhorta, Yogesh. 2002. Enabling knowledge exchanges for e-business communities. Information Strategy, 18, 3: 26-31.
- [14]Martin, Andrew. 2002. The globalisation of Welsh business through the development of managerial competencies and behavioural attitudes in e-business to e-business. Managerial Auditing Journal, 17,6: 333-337.
- [15]Rodgers, J., Yen, D., Chou, D. 2002. Developing e-business: a strategic approach. Information Management and Computer Security, 10,4: 184-192.
- [16]Tetteh, E., Burn, J. 2001. Global strategies for Sme-business: applying the SMALL framework. Logistics Information Management, 14,1/2: 171-180.
- [17]Wen, J., Tarn, M. 2001. The impact of the next generation Internet protocol on e-commerce security. Information Strategy,

17,2: 22-28.

[18]Sussan, A.P., Kassira, R.D. 2003. Globalization and the role of E-commerce. Business Research Yearbook, IABD, 10,7: 211-215.

[19]Muhammad Talha, Subramaniam,R. 2003. E-procurement strategies and applications. E-Business, 4,7:65-69.

[20]UNCTAD. 2002. Building Confidence: Electronic Commerce and Development. United Nation Publication. Sales No. E,001.D.16
Bayles D. 2001. E-commerce logistics and fulfillment; delivering the goods. Upper Saddle River,NJ,USA, Prentice Hall RPT.

[21]Sid, L., Huff, Scott Schneberger, Micahel Wade, Peter Newson and Michael Parent. 2000. McGraw-Hill, Singapore.