

# **e-business initiatives: A comparative study India and Australia**

Dr. Daniel Chandran  
Faculty of Information Technology  
University of Technology, Sydney  
Daniel.chandran@uts.edu.au

## **Abstract:**

Businesses are now engaging in new technology to do business in a more successful way. They face constant pressure to speed up operations and perform efficient and effective services. E-Commerce has the capacity to contribute in performing the tasks beyond national boundaries and time zones. In such a situation, what is the position of the developing countries with limited resources? Can the developing countries meet the challenge? This paper presents some of the issues that are taken in to account in solving such problems. It brings out the issues related to e-Commerce in a developing country like India and compares it with the Australian situation.

**Key words:** e-Commerce, Developed and Developing Countries, Initiatives, Economy, Legislation

## **Introduction**

Businesses are now engaging in electronic channels, particularly the Internet to do business in a more successful way. Electronic commerce (e-Commerce) has the capacity to cross beyond boundaries and time zones to create a global competitive market. The term e-Commerce in a loose sense means doing business over the Internet for selling goods and services which are delivered offline or online. Trades can be between government, businesses or consumers across a network. Due to varying definitions and non-uniform indices, global estimates for e-Commerce can vary from \$300 billion to \$500 billion. It is estimated that for the year 2003, it could vary from \$1000 billion to \$7000 billion.

This paper covers some of the issues facing developing countries at a time when a new business paradigm is sweeping across the world. It attempts to compare developing countries with developed countries in relation to government legislation in relation to e-Commerce, development of telecommunications and economic conditions. India and Australia are taken for the purpose of comparison.

E-commerce will revolutionise the way of doing business. It will lead to a major impact on our life style.

## **Issues in e-Business**

### ***Indian scene***

India with more than a billion population, is the fifth largest economy in the world. With a robust democratic federal system, India has a large market with substantial purchasing power. It has the second largest GDP among developing countries, based on purchasing power parity. Though there are more than 20 languages spoken in India, English is widely used in business and commerce. With 52.21 percent literacy rate, Information Technology sector is at a stage of spectacular growth. It is currently in the midst of Internet revolution. There is a mushrooming of web-based businesses. Major global enterprises are already active in India. The global move towards e-business is sweeping the Indian continent in a big way. The Government of India is working toward a better economic climate for e-business. (2)

### ***Indian Economy***

India exports to the tune of US\$37 billion out of which software exports seem to grow rapidly. According to NASSCOM report (2001), in the year 2000-01, Internet and e-commerce related software and services exports from India are expected to bring in US\$1200 million and rise to US\$3000 million by 2003-04 (2). The Government's recent policies and reforms on foreign collaborations and investments has brought in a new spirit of economic freedom and aimed at stimulating foreign investment. One of the main features of India's economic reforms is the liberal trade policy. Current policies offer a more transparent economic environment. New reforms with regard to E-commerce, ensure a progressive trend in the Indian economy.

External trade has been liberalized through lowering of tariffs and reduction of import controls. The economy has strengthened and as per the reports, the foreign currency assets at the end of January 2000 stood at US\$31.9 billion, up from US\$2.2 billion in March 1991 (1). Several multinationals have established their presence in the Indian market through joint ventures or wholly owned subsidiaries. Some of the leading investors are USA, UK, S. Korea, Mauritius, Japan, Germany, and Australia. Conducive foreign investment environment provides freedom of entry, investment, choice of technology import and export. Special investment and tax incentives are given for exports and certain sectors such as power, electronics and software.

Several encouraging developments have taken place since the launching of liberalisation. There is a renewed confidence and hope that the economy can grow at the sustainable rate of 8% a year, and by 2020 India can be the fourth largest economy with a per capita of \$1500 or so (in terms of today's dollar).

### **Growth in Indian Economy**

	1980-90	1990-98
GDP	5.8	6.1
Agriculture (Value Added)	3.1	3.4
Industry ( Value Added)	7.0	6.7
Services (Value Added)	6.9	7.9

**Source :** World Development Report, 1999 / 2000, World Bank

### ***Internet Usage***

India has a strong information-technology sector and improving Internet infrastructure. As per the Nasscom Report, registered online users currently number about 4 million, and it is projected to grow to 23 million in 2003. The National Association of Software and Service Companies (NASSCOM) studied 68 Indian cities predicts that the Internet subscribers in India is expected to grow to 15 million by 2003 from the present level of 1.8 million. The Internet users will also grow to 50 million by December 31, 2003.

### ***Trends in e-Business***

India's Internet market is still in embryonic stage. India appears to be full of promise. The actual e-commerce market remains small. Though India's consumers are hopping on the Net, they are not buying. A study by U.S. research firm Gartner Group (IT) found only 2 percent of the 4.3 million Internet surfers in India has ever made a purchase online.

The trends are in line with global revolution where the Internet has emerged as a tool for conducting business. There is a significant growth in the B2B and B2C segments of e-Business. According to NASSCOM survey, the total value of e-Business transactions in India during 1998-99 was about US\$30 million of which around 90% was contributed by B2B transactions. It is forecasted that the e-Business transactions would be around US\$2325million by 2002.

A number of companies from the western world have targeted India. AltaVista (dossier), Lycos (LCOS) and Yahoo (YHOO) have all launched sites in India. Microsoft has launched the Indian version of msn.co.in. Yahoo (<http://in.yahoo.com/>) has local pages for nearly 20 Indian cities and has made deals with about 40 Indian content companies to provide English-language material.

Other portals include Indiatimes, Rediff, Indiaonline, Indiaseek, eIndia, Indya and IndiaInfo. The western-based portals may not be so well positioned as Internet use moves beyond the English-speaking elite. They need to be more in tune with local customs if they hope to capture a piece of the Indian market. The 25 percent equity in the Videsh Sanchar Nigam Limited (VSNL) sold to Tata Group Company, Panatone in 2002 will bring interesting results to the electronic information users.

### **Potential e-Business areas**

In the B2B segment, some of the areas of distinct opportunity are

- Electronic Bills Presentment and Payment (EBPP)
- Online catalogues
- Transaction and Payment Clearing Houses
- Network services
- Claims Processing Services
- Corporate Portals etc

In the B2C segment,

- Web-based e-commerce retailing services

- shopping malls
- localized and vernacular Graphical User Interfaces

are some of the potential opportunities (2).

## **Sectors for consideration**

### **1 Banking System**

The Indian banking system has a network of over 63,000 branches and supported by a number of national and state level financial institutions. Banks are not fully utilizing the benefits of technology. Computers are used for transactions within its own branches. There is a move to network the branches. Online transactions are available in a few nationalized banks. Foreign banks such as ANZ and City Bank have already introduced ATM facilities for their customers. Services like B-Pay, Fund Transfer and EFTPOS facilities are likely to be introduced in the near future. The credit card market has shown tremendous growth in recent years.

### **2 Telecommunications**

India's telephone network is among the 10 largest networks in the world. Its teledensity has grown from about 1 per cent in 1990 to almost 3 per cent now, with telephone connections growing at a rate of almost 25 to 30 per cent per year over the decade. Because of the availability of adequate economic returns in this area, the private sector is well able to enter the sector. Private sector mobile telephone services are now available in almost all parts of the country. The announcement of the National Telecom Policy 1999 and the consequent changes in policy have rekindled interest in the sector. Domestic long distance services have been opened to the private sector (8). The teledensity is likely to reach 7 by 2005 i.e. 75 million telephone connections and 15 by the year 2010 i.e. 175 million telephone connections. Cellular Mobile Services are becoming popular through out the country.

There is no restriction on the number of Internet Service Providers (ISP). They have been permitted to establish their own international gateways for carrying Internet traffic. They can obtain transmission link on lease from authorized operators.

### **3 Other initiatives**

- The Government has enacted the Information Technology Bill, 1999 (which *inter alia* provides legal recognition to digital signatures and electronic contracts)
- The Ministry of Finance has set up a committee to work on the required amendments in tax legislation, since the current tax laws do not envisage an e-Business situation
- The Government proposes to liberalise the tax and regulatory framework for venture capital funds, thus paving the way for increased venture capital funding to e-Business ventures
- The new Telecom Policy, 1999 has permitted ISPs to set up international gateways. Recently the Department of Telecommunications has granted licenses to various ISPs to set up international gateways, thereby paving the way for increased bandwidth and speedier internet access
- The Government has set up an Information Technology Ministry to promote the internet, e-Business and knowledge based industries
- The Government has prioritized the enactment of cyber laws, amend tax legislation and protecting intellectual property rights (prevention of piracy, cyber-squatting etc.)

### **4 Venture Capital**

The growth of e-Business has also seen growth in allied sectors such as Venture Capital Funding. Several large Venture Capital Funds including e-Ventures, Chrysalis Capital, Draper International, Walden Nikko and Infinity Ventures have made strategic investments in e-business ventures in India.

## 5 *Information Technology Act, 2000*

The Indian government continues to place the IT industry high on its list of economic priorities. Law on information technology has taken a foothold in India with the introduction of the Information Technology Act, 2000. Along with the Act, other Indian laws have also been amended, such as the Indian Penal Code, the Indian Evidence Act, and the Reserve Bank of India Act to reflect the changes brought about by the IT sector.

The IT Bill 2000 passed by the Indian Parliament took effect in October 2000. It is the 12<sup>th</sup> country in the world to pass a cyber law. The Act provides legal recognition for transactions carried out by means of electronic data interchange and other means of electronic communication, commonly referred to as "electronic commerce", which involve the use of alternatives to paper-based methods of communication and storage of information, to facilitate electronic filing of documents with the Government agencies. The Act, will create an environment conducive for the safe and secure e-business. The law enables the users to buy over the Internet through credit cards without the fear of misuse. The current Act is not imposing tax on e-Commerce transactions. There is a push for five year "zero tax" moratorium on e-commerce transactions.

This legislation provides improved security for enterprises engaged in e-Commerce and complements parallel efforts to attract IT-related investment and to promote Indian IT companies in overseas markets.

### **Highlights of the legislation**

- Legal recognition has been given to electronic records and digital signatures. Digital signatures can now be used to authenticate an electronic record
- Electronic forms, issue or grant of license, permit, sanction or approval, and receipt or payment can now be effected by means of electronic forms
- Rules have been set down for attribution, acknowledgment of receipt, time and place of despatch and receipt of electronic records
- The Government appointed controller would be responsible for licensing all certificate authorities and for setting down the requirements for such authorities. It will also act as a repository for all public keys and digital signature certificates
- The Government will establish one or more Cyber Regulations Appellate Tribunal that will have the same powers as are vested in a civil court
- The Government will get significant powers to access computer systems and data for the purposes of investigation, and the law specifies severe penalties for a range of cyber-crimes, including imprisonment or with fine or with both
- A Cyber Regulations Advisory Committee will advise in framing the regulations under this Act

The law reduces risks associated with e-business to a great extent. It is to be understood that it is not a complete regulatory solution for e-commerce. Overall, the legislation represents a considerable step forward in a developing environment. Practical difficulties can emerge around issues such as the speed and flexibility of government approval processes, and the practicalities of government control of both domestic and overseas certificate authorities. Each enterprise involved in electronic transactions must investigate how the law applies to its specific operations. Legislation covering electronic funds transfer and payments, digital copyright, online taxation and consumer protection is still absent.

## **Opportunities and Hurdles**

Considering the areas where rapid growth is witnessed in e-Commerce, India needs to put in efforts to introduce e-commerce solutions in the areas such as:

- On-line banking
- On-line stock trading
- Professional services
- Legal services
- On-line travel services
- Health care services
- Internet shopping malls

The domestic market seems to be a strong potential for providing e-commerce solutions. The Government's initiatives in cable TV sector is likely to contribute in increasing of internet subscribers and users from the current 2 million Internet subscriber population to 50 to 120 million users in 2008. It is expected that e-business transaction are expected to exceed Rs. 40000 million in 2003-04 (2).

Some of the perceived hurdles to the growth of e-Business are:

- Use of personal computers is quite low. Currently the figure stands at 3.6 computers per thousand people
- Internet connectivity. At the end of 1999, there were approximately 3.2 million PCs and only about 9 percent have Internet connectivity
- The current telecom infrastructure does not support high bandwidth access
- The actual e-Commerce market remains small. Only 2 percent of the Internet surfers has ever made a purchase online
- Online advertising is not adequate
- The western-based portals need to be more in tune with local customs if they hope to capture the Indian market

## **Australian scene**

### **Australian culture in general**

The general culture of business and business practices is now changing to stay in line with the advancing technology of e-Commerce. This affects in turn the general economic culture of the customer. Businesses are now presenting options, some forced, to alter the general way of life. The introduction of e-banking, online payments, shopping and ordering across the Internet, now offers the end user the avenues of shopping not from the local supermarket, but literally from anywhere around the world.

Even though the Australian sector is generally cautious about the investment of time, money, and the needed financial resources needed (Jones, 1998), and the end user is somewhat not totally confident with the Internet and e-commerce, there is a swelling in the electronic revolution, which is influencing the many different cultures of both the individual and businesses in Australia.

### **Internet and e-Business**

During the 12 months to November 2000, 9.2 million adults, or 66% of all adults in Australia, used a computer. 6.9 million adults, or 50% of all adults in Australia, accessed the Internet (ABS). It is expected to be 60% of the population by 2005. There were 603 ISPs in Australia supplying Internet access services to 4.3 million active subscribers at the end of September quarter 2001. Of the 4.3 million Internet subscribers, there were 3.7 million Household subscribers and 544,000 Business and government subscribers. At the end of the September quarter 2001, there were 56,000 more Household Internet subscribers and 36,000 more Business and government Internet subscribers than at the end of the June quarter 2001 (ABS).

Homes, offices, educational institutions, businesses and others across the nations use Internet and it will no longer be seen as a new technology, but a business, information and communication channel.

At the end of June 2000, 28% of businesses with access to the Internet were engaged in activities associated with selling goods or services to customers.

Over a third (36%) of businesses with Internet access were using on-line banking facilities.

For most industries, the proportion of businesses selling over the Internet exceeded or equaled the proportion buying. The estimated total value of sales/orders received by businesses via the Internet for the year ending 30 June 2000 was \$5.1b. While Internet commerce accounted for only a very small proportion of total sales/orders, it was dominated by B2B transactions (ABS).

The Internet has become an integral part of life for a rising number of people. Though Australia's adoption to e-business is behind the US and possibly Europe at the initial stages, Australian business has now accepted the Internet is not a fad but moreover a business tool that has become an integral component of business strategy. This can be seen in the ever expanding B2B and B2C markets. B2B sector is the largest in the Australian market.

The Internet now offers businesses the opportunity to expand their products and services into a truly global market. The Australian Government is encouraging the e-Commerce activities and works with all state governments to reduce the barriers and adapt to the technology based business opportunities.

The Australian e-market is estimated to be worth US\$75 billion by 2005. The B2B market will experience much stronger growth than B2C. Anderson Consulting, in their review of electronic commerce, indicated that 80% of the Australian business leaders were of the understanding that e-commerce would revolutionize the way business would be conducted in the following five years (Anderson Consulting, 1999). At the national level down to small business, e-commerce is creating new cultures in business practices. The e-Commerce revenue generates new trading opportunities, provides opportunities to substantially reduce costs and overheads, and introduces new supply and distribution methodologies (Muecke, 2000). e-Commerce now provides the avenues for business to generate sustainable economic growth and employment, via the new business opportunities available in the new markets.

### **Devices**

Australia has one of the highest PC penetration rates in the world. It is the most popular device used to access the Internet. Though PC will remain as the main Internet access device, mobile Internet users will grow considerably. The future of e-Commerce in Australia looks optimistic with more businesses entering into this arena.

A major issue seems to be the lack of industry-specific standards. Currently there are several versions of XML available. Business will look for such standards that will make their solution easy to integrate into other systems.

### **e-Commerce Policies**

The Australian Government has earned an international reputation for leading the way in the development of electronic commerce policies that benefit consumers and businesses. Throughout 1998-99, the Government played a significant role in the development of the OECD Guidelines for Consumer Protection in the Context of e-Commerce, which provides guidance for businesses around the world.

In 1999, an Expert Group that was appointed developed *Building Consumer Sovereignty in Electronic Commerce: A Best Practice Model for Business*, which when released in 2000, was one of the world's first self-regulatory responses to the OECD Guidelines. The Expert Group continues to meet regularly to advise on the Australian e-Commerce Best Practice Model and to look at other issues affecting consumers and businesses engaging in e-commerce.

## **e-Commerce Legislation**

The Federal Government passed the *Electronic Transactions Act* in 1999.

The Act provides framework that:

- (a) recognises the importance of the information economy to the future economic and social prosperity of Australia; and
- (b) facilitates the use of electronic transactions; and
- (c) promotes business and community confidence in the use of electronic transactions; and
- (d) enables business and the community to use electronic communications in their dealings with government.

The following list shows Commonwealth, State and Territory legislation that has provisions for, or proposed amendments to create provisions for electronic commerce.

### ***Secure Electronic Transactions***

A New Tax System (Australian Business Number) Act 1999 (Cth)

Electronic Transactions Act 1999 (Cth) (EM)  
Electronic Transactions Act 2000 (NSW)  
Electronic Transactions Act 2000 (Vic)  
Electronic Transactions Act 2000 (Tas)  
Electronic Transactions Act 2000 (SA)  
Electronic Transactions Act 2000 (ACT)  
Electronic Transactions Act 2000 (NT)  
Electronic Transactions Act 2001 (Qld)

The Australian Computer Society (ACS) has called on Australia's State and Territory Governments to follow the lead set by NSW and Victoria in introducing legislation mirroring the Federal Government's Electronic Transactions Law. A predictable legal framework would make Australia very attractive to legitimate e-businesses. The combination of the federal and state legislations will have a significant impact in establishing Australia at the forefront of the global e-commerce sector.

### **Findings and Conclusion**

In the global situation, e-Commerce is reaching a mass overcoming some of the hurdles, in particular the old security scare. In India, liberalization in the tax and regulatory framework for venture capital funds is likely to boost venture capital investment in e-Business. The growth in Internet connectivity is expected to increase through cable TV. There is tremendous potential envisaged in the B2B and B2C segments, with B2B segment likely to be the dominating factor. The bandwidth issue is likely to be solved early. The existing bandwidth available to India is likely to be utilized completely. (2)

Other issues that are still restricting the development are:

- Level of telecommunications development and internet use are crucial factors in propelling the growth of e-Commerce
- Attitudes of people in relation to
  - Payments
  - Buying and selling goods and services online
  - Money circulation
  - Social and cultural aspects, both business and work cultures
- Risks and fears



The Challenge is with a low telephone penetration, high level of illiteracy, low Internet uses and low uses of credit cards, can India effectively participate in the global electronic market place? It is possible if the following strategies could be employed:

- Raising e-commerce awareness
  - Campaigns to raise awareness
  - Identify the target audiences
  - Organizing awareness seminars
  - Publicity through media
- Enhance consumer confidence
  - Through media publicity, encryption ...
- Improve network infrastructure
  - Network penetration in rural India
- Adapt e-commerce technology
  - Use of Standardized technologies

Australia is recognized as one of the most developed Internet markets in the Asia Pacific region. The ABS survey found that the largest barrier to utilising IT, is simply that the business perceives that the technology is not suited to the nature of the business. Australia's Internet market will continue to expand and develop with a steady growth in Internet users and spending on e-Commerce. With the deep mobile phone penetration, more users will access Internet in the days to come. Supermarkets such as Coles and Woolworths have already commenced their sales through the Internet. But the consumers are still concerned about

- Providing credit card details
- Dealing with merchants who are not known to them
- Not seeing the product before they are purchased
- Returning the products that are not to their expectations

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