CHAPTER 2

E-Commerce and Economic Growth
The new economic paradigm, according to which new information and communication technologies (ICT) would deliver ever-higher rates of inflation-free growth, seemed to be among the first victims of the dotcom crash. But even after the crash, e-commerce has continued to grow.

While e-commerce clearly has a positive impact on the business sector, doubts have been raised about its impact on macroeconomic growth, and productivity growth in particular.

In previous technological revolutions, productivity gains have in the long run helped to improve living standards - one of the main goals of development. The US, which leads the world in IT and e-commerce, has had an impressive economic performance, particularly in terms of productivity growth, since 1995.

Much of the acceleration in productivity growth is structural and attributable to changes induced by ICT and the Internet, through improvements in all aspects of corporate organization, production, finance, marketing and logistics. According to UNCTAD, ICT will continue to support rapid productivity growth, citing several reasons: the cost of computing power is expected to keep falling steeply for several years; most enterprises are still learning how to reorganize themselves in order to benefit fully from the Internet; and even if productivity growth does not maintain its recent phenomenal pace in the United States, the rest of the world has a lot of catching up to do in the application of ICT to business.

But there will be no productivity growth for many developing countries if they fail to catch up technologically with the industrialized world, as the Report shows. To assess the broader economic impact of e-commerce and the ramifications of developing countries' catching up or not, UNCTAD has conducted a quantitative analysis based on two scenarios: one in which developing countries fall behind technologically, and one in which they catch up with developed countries. The analysis is centred on cost savings and assumes that e-commerce can reduce costs of services, particularly in retail and wholesale trade, transport, and financial and business services.

Cost savings in services are simulated through a productivity growth scenario, which allows for the analysis of such macroeconomic variables as GDP, welfare, wages and terms of trade. The analysis is a unique application of a computable general equilibrium (CGE) model to e-commerce at the global level.

Under the first scenario developed countries would have welfare gains of $117 billion, while the developing world would lose welfare of $726 million. The Asian region, on the other hand, would gain $802 million, largely attributable to the transport services sector. Besides welfare and GDP losses, developing countries would also experience a reduction in wages and deteriorating.

The value of ICT for development lies not so much in the share of the global economy that this sector may come to represent, but in the changes that ICT will introduce in the functioning of enterprises across the economies that assimilate them. If developing countries were to catch up with developed countries in productivity, they would increase output, wages and welfare. A 1% productivity growth in the services sector in Asia, for example, would result in welfare gains of $12 billion, GDP growth of
0.4%, a wage increase of 0.4% and a 2- to-3% growth in services exports. By reducing costs, increasing efficiency, reducing time and distances, e-commerce could thus become an important tool for development.

If the Internet is only a 'space' - cyberspace - it is a space without borders in which private international law has no meaning, since the rules of private international law are made in order to deal with different legal systems and borders. Among the thorny issues raised by the advent of the Internet and e-commerce. Privacy and consumer protection are also problematic, given the lack of international agreements and of transborder or dispute settlement mechanisms designed specifically for electronic transactions. E-commerce currently operates in a tax- and duty-free environment, in an unclear legal and regulatory framework - a situation calling for urgent intergovernmental cooperation to clarify the situation. Income taxation largely depends on whether a business has permanent establishment (PE) in a country or not.

OECD countries have agreed that a website by itself cannot constitute PE, while a web server can, if it is owned by a business that carries on business through the server. However, "proposals by OECD countries have given scant consideration to developing countries' concerns in the field of e-commerce taxation", according to the Report, which also notes the "major differences" between EU and US approaches to international taxation rules on e-commerce.

As to consumption taxes, such as VAT or sales tax, there is a growing tendency to apply taxation in the place of consumption. This would actually work in favour of developing countries, as most of them rely heavily on such taxes for their government budgets and will be net importers of e-commerce in the medium term.

Although no customs duties are currently imposed on electronic transmissions, this is much discussed at the WTO, with a number of countries advocating a tariff-free environment for e-commerce and others expressing concern about possible revenue losses if products previously subject to customs duties are imported duty-free.

Potential fiscal losses on border tariffs and other duties imposed on digital imports could total $8 billion worldwide. While on average this is less than 1% of total government revenue, tariff losses would be much greater in developing countries.

**B2B e-markets, e-finance flourishing**

Business-to-business (B2B) e-markets, which have already outstripped business-to-consumer (B2C) e-commerce in volume, are expected to play an even more pivotal role in future, becoming the single largest component of B2B by 2004. Online B2B sales in the US are forecast to reach $3 trillion by 2004, of which an estimated $1.5 trillion will be via B2B e-markets.

The highest growth in B2B e-markets will likely be in such sectors as computing and electronics, utilities, motor vehicles, petrochemicals and paper, office products and food and agriculture. These markets will also undergo consolidation, the formation of strategic alliances and greater focus on the provision of differentiated and specialized products and services.
Online financial operations - which make it possible to handle huge financial operations and related payments traffic both nationally and cross-border at a fraction of the former costs and time - are also experiencing explosive growth, according to the Report. Current forecasts suggest double-digit growth rates for e-finance over the next few years.

The Internet banking segment is slated to expand 25% annually, as compared to 3% for the overall banking industry. In developed countries, half of all banking and 80% of all brokerage activities are expected to go online.

For emerging economies, the figures range from 30% for e-banking to 40% for e-brokerage. But financial service providers, especially from developing and transition economies, will have to address the high initial costs and technological complexity of establishing online payments before they can hope for "e-finance preparedness", warns the UNCTAD e-commerce report. The technology still cannot cope with the needs of high-value and micro-payments in B2B and B2C alike.

Online payments and e-financing technologies are at an early stage of standardization, with the industry still choosing between competing models and solutions. Promises of "Net-only" banking and payment solutions becoming a "killer application" are proving highly exaggerated, but banks and other traditional financial services providers are under pressure to adopt aggressive Internet strategies and rapidly increase their online services.

No economic sector has been subject to more far-fetched growth forecasts or sweeping statements about a bright future than e-commerce. Venture capitalists, financial analysts and the public in general have blindly used these inflated numbers to take decisions on investments in start-up companies and the stock market - often with disastrous results.

E-commerce data are largely provided by private sector companies, which regularly publish reports on the latest developments in e-commerce, including short- to medium-term growth estimates. Unfortunately, the numbers differ considerably, depending on which methodologies, definitions and indicators are used. Estimates of global B2B e-commerce last year, for example, range from $200 billion to $604 billion.

**e-Commerce Strategies in Malaysia**

Electronic commerce or e-commerce is recognized as an important agenda for Malaysia to start moving into the new Economy. Malaysia sees e-commerce as the new way to do business through the digital network. E-commerce will enable. Malaysian businesses to create new value, raise the level of productivity, increase competitiveness in export markets and facilitate new type of business process for reaching customers in the world.

In the 7th Malaysia Plan, ICT was recognized as a strategic tool to support the growth of the economy. The Plan targeted the development process of ICT and promoted extensive application to the public. In the 8th Malaysia Plan, e-commerce was specifically mentioned for the first time. Like any other technology, ICT can have positive or negative effects. ICT can aggravate the rich-poor gap but it also presents
possible solutions to many problems. If properly harnessed, ICT can improve standard of living more quickly and more dramatically than any other time in history. It has therefore become compelling for a managed process in using ICT for positive development.

To better understand the fundamental technological changes and how it can improve the quality of life, the National IT Council (NITC) was established in 1994. The NITC acts as a think tank and an advisor to the government and is the key initiator of programmes and strategies aimed at creating an information rich society.

The work of the NITC is guided by the National IT Agenda (NITA), a strategic framework for IT programme development at the federal, state and local government levels involving the participation with the private, non-government and voluntary sectors.

The Government of Malaysia has already initiated efforts to lay the foundation for e-commerce in the country. The government in consultation with the private sector has initiated a legal and regulatory framework of cyber laws and intellectual property laws to create a predictable environment for the implementation of e-commerce. Six cyber laws have been enacted. They are the Digital Signature Act 1997, the Copyright (amendment) Act 1997, the Computer Crimes Act 1997, the Telemedicine Act 1997, the Communications and Multimedia Act 1998 and the Communications and Multimedia Commission Act 1998. A bill on personal data protection is pending and efforts to harmonise existing laws and regulations with cyber laws are on going.

Malaysia has established a clear set of policy objectives that takes into account the ramifications of the convergence of telecommunications, computing and broadcasting. Reforms were undertaken by putting in place an enabling legislation, that is, the Communications and Multimedia Act 1998 and establishing a new independent regulatory agency for the convergent industry, which is the Malaysian Communications and Multimedia Commission.

The Communications and Multimedia Act 1998 provides the necessary policies to regulate, facilitate and nurture the development of the communications and multimedia industry, the growth of which is needed to support e-commerce.

The "Growth with Equity" development strategy has been successful in maintaining balanced development for over 30 years in the country. However, socio-economic inequities still exist and may be magnified if the development of ICT is not constructively managed. The government has set aside allocations to fund special programmes to address the digital divide such as community internet centres for rural folks and computing infrastructure to rural schools. In addition, the government has set up a Universal Service Fund to finance the cost of building basic infrastructure and internet access to rural and other underserved areas.

The adoption of ICT by the government in providing services to the public is a catalyst for greater use of ICT in the country. The public is encouraged to use ICT to access government information, transact services and make payments through various
electronic delivery channels provided by the government. For the business community, an e-enabled government helps reduce their cost of doing business.

To accelerate uptake of e-commerce, the government is also making efforts to convince the non-ICT sectors, especially the small medium sized enterprises, which made up more than 84% of all enterprises to use more ICT products and services in their business. Besides increasing productivity and competitiveness in the non-ICT sectors, greater ICT use by non-ICT sectors will increase output in the ICT sector itself.

Malaysia participates at regional and international fora to discuss e-commerce and e-commerce related matters such as the WTO, APEC and ASEAN. Participation gives the country the opportunity to influence the development of international guidelines and new practices. The country also participates in cross border e-commerce projects such as the pilot projects for the exchange of customs EDI messages among customs authorities in Asia.