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on Electronic Commerce and Intellectual Property

Developing Countries and Electronic Commerce

*Electronic Commerce in Latin America and the Caribbean:
Opportunities and Challenges*

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Introduction

Distinguished guests, colleagues, Ladies and Gentlemen, I am deeply honored by the invitation issued to me by the Director General to be part of this major conference on Electronic commerce. I am especially moved by the fact that I have been asked to share with you the eCommerce experience of the developing countries on the other half of the globe, Barbados, my own country falling within that classification.

It is a task that I readily accepted.

During the 1994 Miami Summit of the Americas, Internet connectivity was declared a priority for the region. By the time the Free Trade Area of the Americas (FTAA) process was launched, electronic commerce had already become a medium that attracted considerable attention from the participating countries in the Hemisphere as a new medium for the conduct of international trade. As a consequence, The Trade Ministers of the 34 countries in the hemisphere decided that the subject of electronic commerce should be provided with a forum of its own.

Accordingly the Joint Government-Private Sector Committee of Experts on Electronic Commerce was established at the launch of negotiations in 1998.

The unique composition of the Joint Government-Private Sector Committee of Experts on Electronic Commerce stems from a recognition that there are important stakes for governments and private sector entities alike in creating a predictable multilateral framework in which electronic commerce can flourish in a way that will increase the welfare of all the citizens in the Hemisphere.

The mandate of the committee required that we

“examine eCommerce (issues) with a view towards identifying the environment that will allow eCommerce to benefit (all) the countries of the hemisphere”.

This mandate comes from a recognition that as a region, the Americas have many things in common but there are also many respects in which we differ.

The mandate equally comes from a recognition of the important role that eCommerce will play in hastening the Hemisphere’s integration into a unified, regional market. It is an inescapable fact that in order to realize the full benefits of the establishment of a Free Trade Area, all countries in the hemisphere, both developed and developing, must be fully equipped to access the world of eCommerce.

The work programme of the committee required us to study the issues as they relate to the countries of the region and particularly, to study the Internet readiness of the countries in the hemisphere. On the question of the Internet readiness in the hemisphere, the committee commissioned a study by the OAS to assist us in making some reasonable assessment of the state of

play. The data gathered clearly demonstrates the gap between the developing countries and the developed.

I do not mean to suggest that from one developing country to another that differences will not also be seen. However, even those among us who are somewhat ahead, are still far behind the obvious leaders. There are 34 countries in the Free Trade Area and it would be dangerous to generalize . The countries are in many different stages of development. Our experiences in terms of opportunities and challenges of electronic commerce are therefore quite different.

However, I speak in this forum from the point of view that while there is tremendous optimism in the region about eCommerce, we must also be conscious of the difficulties which lie in the way of realizing the goal of eCommerce for all.

In South America and the Caribbean, as elsewhere, Internet based Electronic Commerce is daily touted as the new way of doing business that will transform, improve and expand the realm of traditional commerce, both domestic and international. The Internet has created great expectations for developing and emerging economies to participate in an increasingly global digital economy.

The opportunities of eCommerce for the regions developing countries.

Evidence available to date indicates that the economic sectors that have benefited the most from the introduction of electronic commerce are mostly in the services areas:

- **computer hardware and software**
- **real estate**
- **publishing and information services**
- **finance**
- **Internet services**

- **professional services (legal, engineering, accounting, architecture)**
- **tourism-related services.**

It is expected that much of the growth in electronic commerce in the emerging economies in the region will be driven by the entry of Small and Medium Enterprises (SMEs) into these and other markets.

Many commentators hold the view that for the developing countries in the region, eCommerce holds only advantages.

The dividends are expected to be especially high for the regions smaller companies and economies, which have traditionally been hampered by limited information, high market entry costs and distance from markets. Its use by Small and medium sized enterprises (SMEs) means the elimination of traditional barriers to trade such as the distance from markets and the difference in size between enterprises.

It offers our companies an inexpensive means of soliciting bids, receiving orders, and purchasing goods and tracking sales, in a way that allows our small and medium sized enterprises to reduce overheads and administrative costs, and presents them with the opportunity of broadening their operations.

The opportunities are of course not only available to our corporate entities.

For governments, the development of eCommerce generates substantial investment opportunities in the public and private sector in the areas of technology, training and infrastructure development. I can speak to my own country's experience in this regard and this reference will perhaps demonstrate how Barbados has reaped the benefits of this new phenomenon.

We have actively encouraged the set up of companies in Barbados which develop software solutions.

Several of these companies have, in recent years, set up operations in Barbados and they develop their applications for Fortune 500 companies. These applications are delivered, as you would expect, to their clients via the internet. Our telecommunications infrastructure, which is private sector owned and operated, has been forced to keep pace with the needs of these companies in terms of bandwidth, thereby bringing access to wide bandwidth to all consumers.

Equally important is the fact that these companies have gone on to make a substantial investment into our tertiary education institutions. This ensures that they have a sufficient number of programmers graduating annually with the specific skills needed by this fast developing industry. Barbados holds the view that we cannot realise the benefits of eCommerce unless we have the range of skills necessary to drive the process along.

Some of the developing countries in the region have already grasped the opportunities available in terms of the delivery of educational materials via eCommerce especially to remote areas. This opportunity is of particular importance to our Latin American neighbors.

The islands of the Caribbean have very little in the way of natural resources and those economies which are based on agriculture (bananas, sugar cane) are under assault. What they do have is a well educated labor force. These small island states have therefore started to move towards service based economies. The advent of eCommerce dovetails very nicely with this shift.

Several of the small economies in the region have therefore set their sights on such areas as International Financial Services as the engines which will drive their economies in the new millennium. This kind of service industry does not require much in the way of capital investment, other than in a skilled labor

force. In fact, in the Caribbean, small island states, Barbados, St. Lucia, Dominica and Antigua have already seen the promise which electronic commerce offers in this vital sector in their economies. From offshore banking and other financial services to Internet gambling.

And then there are those areas where we are yet to exploit the potential of eCommerce, such as travel. Nearly 25% of employment in the Caribbean is related to travel and tourism. Datamonitor has predicted that travel will be the largest online data product by year 2002. Online travel transactions should increase to about 35% of the total online sales by then.

More and more, the advertising of many properties online for travel is being adopted by owners who do not have large marketing budgets and it appears that these efforts are proving successful. This is vital to many Caribbean islands for the simple reason that the majority of hotel properties in some islands are small hotels. In fact, it is an approach which is being promoted by many governments as a means to boost their tourism arrivals.

Overall the future for the developing countries in the region seems full of potential. In Latin America, the recent growth of Internet use and electronic Commerce has been among the most rapid in the world. The total number of registered Internet hosts increased in 1998 by over 100% over 1997. In the eleven largest Latin America economies the number of hosts increased at an annual rate of 144% between 1993 and 1997. Latin America at present has about 8 million users and this figure is expected to increase over the next 4 years to somewhere between 20 million and 34 million users.

However we cannot but help asking ourselves, "What do all of these numbers really mean?"

Such rapid increases are in themselves quite positive. However, we must remember that the rest of the world will not be standing still, allowing the developing countries to catch up with them. We can be certain that the rest of the world will also be growing at rapid rates as computer prices continue to drop, as more and more goods and services are offered online thereby wooing more and more users.

As my colleagues on the panel have stated, the developing countries must see eCommerce as a priority area and get involved without delay!

However, there are certain challenges which we must face head on. Time unfortunately will not permit me to do more than give some of them a brief mention.

The Challenges

I mentioned earlier that my committee commissioned the OAS to conduct a study on the Internet readiness of the countries in the Hemisphere. From the countries that provided information, it became clear that Internet use was highest in the countries where the density of telephone use was greater; where the provision of telecommunications services is more competitive, and where the combined costs required to access and use the Internet are lower.

With this in mind, it appears that the most critical factors facing the growth of electronic commerce in the smaller economies of the region are:

- **The relative newness of online commerce in the region;**
- **Lack of modernized infrastructure in the telecommunications industry;**

- **Lack of competitive access to telecommunications and Internet services;**
- **Narrow band width;**
- **Fewer connected computers per capita; and**
- **The inability to ensure secure transactions.**

There is tremendous disparity between the countries of the Western Hemisphere with respect to the state of development of infrastructure and computer use by the populace. For example, the ratio of personal computers in Latin America and the Caribbean is in the region of 5 per 100 inhabitants. In Canada, this figure is 27 per 100 and in the USA, it is 36 per 100.

Another indicator is the number of Internet Service Providers. These numbers range in the hemisphere from 3 in Costa Rica, to 29 in Chile, 380 in Mexico and over 7000 in the USA.

The number of Internet Hosts also demonstrates the disparity. In Canada and the USA over one and a half million hosts were registered as of January, 1999. The largest number of hosts in Latin America and the Caribbean was found in Brazil with a quarter million. Outside of Mexico, Argentina and Chile, fewer than 20,000 hosts were registered in all other countries of the Hemisphere. In the Caribbean, all but one of the countries had less than 500 hosts registered with fewer than 100 in eight countries.

Equally striking is the large degree of difference between the countries in terms of Internet users. In Canada and the USA about one-third of the population uses the Internet on a regular basis. This is to be contrasted with Latin America where Internet Use is currently only among 1 to 1.5 percent of the population.

Who is on the net in Latin America and the Caribbean?

It is clear that the use of computers and Internet services at present is primarily available of the upper income groups of society in Latin America and the Caribbean. This is seen when you consider that in Bolivia, the average price of a computer is given to be \$700.00. This is two-thirds of the per capita annual income of the average Bolivian or 8 months earnings. This can be compared with an average cost of a computer in Canada at \$1,500.00. That figure represents one twelfth of the per capita income annual of the average Canadian or 1 months pay.

Purchase cost is not the only factor in influencing the cost of Internet access. The monthly cost of Internet access must be added to the cost of equipment and connection, and ranges widely in the hemisphere. In addition to the fixed monthly costs of Internet access, the telecommunications operators in many countries in the hemisphere levy additional variable charges on use of the telephone lines, on a per minute basis. The slower the Internet connection, the higher the charges for the user. This necessarily reduces the time that users spend online, which in turn hampers them from engaging in meaningful eCommerce activity.

Speed of Internet connection is in turn a function of the efficiency of the telecommunications infrastructure, particularly the bandwidth for access, and the amount of information that can be carried across the network at any point in time. The total cost to the user is therefore a combination of both the fixed and variable components, and tends to be considerably higher on an average per capita income basis in Latin America and the Caribbean.

From this you can readily see that cost of access is a major obstacle to the growth of eCommerce in the developing countries in the region.

Some studies do show that the profile of Internet users in Latin America and the Caribbean does not differ drastically from the profile of the average user in North America and Europe. These profiles indicate that the users are on average, wealthy and educated, as well as urban and male. However, I hold the view that the comparably lower standard of living seen in the developing countries in the region serves to keep the numbers of Internet users very low in comparison. The percentages of Internet users per capita support this conclusion.

The implications of this profile are important in terms of the size of the consumer market that companies are able to reach on-line, and the type of products they are likely to sell.

Infrastructure

A shortage of modern telecommunications infrastructure is another notable obstacle to the diffusion of the internet in some parts of Latin America and the Caribbean. Countries are responding to this through an array of policies:

- **By directly investing in the expansion of telecommunications networks;**
- **By opening up the telecommunications market to competition and ending state monopolies in this sector;**
- **By attracting fresh investments from the private sector.**

It is therefore anticipated that as the network upgrades and expansions are completed, they will result in lower costs of access as well as improved services.

Another development which stands likely to ease the access problems in developing countries, has been the advent and relatively rapid commercial diffusion of satellite and wireless telecommunications.

Adequacy of legal frame works

It is a fact that emerging economies have difficulties responding rapidly to the demands of new technologies. This slow response time is seen especially in the question of the suitability of our legal norms for eCommerce. Many of the countries in the region have laws in force which contemplated nothing beyond paper-based commercial activity. Accordingly, their legal frameworks will need to be modernized before they can operate fully in this new medium.

This process of modernization of laws will see those countries enacting laws to take into account the requirements of today's digital contracts. It is essential for us that we create a legal framework which allows us to span international boundaries rather than one which is only nationally based.

Payment issues

A small percentage of the populations in the developing countries use credit cards, with many regarding even traditional banking institutions with distrust or suspicion. Apart from this, there may also exist prohibitions on using credit cards for transactions involving foreign payments. The unavailability of online payment facilities means that most Latin American consumers are using the Internet at present for information collection purposes only. Even the businesses in the region appear to be using Internet technologies for purposes of marketing and internal communications rather than commercial transactions. Firms deriving income primarily from electronic are still rare in the region, although this is changing.

All of the countries in the hemisphere have launched into the world of electronic commerce. Many have adopted wide ranging initiatives and programs to promote that growth of Internet use and electronic commerce, while many others have these under consideration. One of the common approaches is the adoption of the concept of "universal service" as the basis of their telecommunications policy, with the objective of providing total

telecom coverage, especially to those in rural and remote communities. Governments are hoping to accomplish this through legislative and regulatory reform; others by introducing competition in local, long distance and international markets for telephony and the improvement of the quality and diversity of telecom services.

Programs to guarantee interconnection and interoperability with global information technology networks are underway in several of our developing countries. Internet access is being promoted not only through the use of personal computers, but also through community-based centres such as public libraries, schools and adult community centres.

Programs to increase public access to the internet have been started by both governments and private sector partners in countries throughout Latin America and the Caribbean. It is important to remember that both the private sector and the public sector have integral roles to play in the development of the climate for eCommerce.

Concluding statement

The march of technology is inexorable. We of the developing world alone can decide if we will be at the forefront of if we will play follow the leader, as we have so often done in the past. With eCommerce the old established rules change and for the first time the technology may itself provide a level playing field for all nations.

What we make of it is up to us!!

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