# **Mexico and Latin America:**

# Their Progress in Globalizing Information Services

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by

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#### **ABSTRACT**

Information development in Latin America has evolved, despite the costly economic, social and political adjustments carried out in most countries in the last two decades. New open market policies and technological developments has helped the region to increase their links with the rest of the world. Libraries can now use faster and more reliable telephone services and can acquire computer and network technology with less import barriers. Information demand is assumed to be greater in quality and quantity, due to greater information awareness. An overview of the information globalization progress in Latin America is given in this paper, focusing on Mexico, which is one of the major economies in the region with a leading role in information development.

### 1. THE TIJUANA TO TIERRA DEL FUEGO STRETCH

This paper is an update of a similar one published five years ago?. During this period, Latin America (LA) has made some economic achievements which benefit or will benefit libraries during the next few years, a potential positive effect which has not been documented in the international literature. The economic, social, library and telecommunications developments achieved during this period are discussed in this paper, along with some general demographic data.

Libraries from the Latin American continent share, in general, a similar history and evolution. Their development is shaped by the unique characteristics of 20 countries with homogeneous social, economic and political region. They speak romance languages that are based in Latin, where Spanish is the most spoken language, followed by Portuguese and, to a less extent, French. The predominant religion is Catholic and most of them a similar Iberian Conquest history. A walk through the main plaza of most towns in Latin America is enough to identify the resemblance of Latin cultural traits across the region.

LA is one of the three regions which integrate the American Continent, along with Anglo North America -- The United States and Canada --, and the island countries of The Caribbean. LA expands from Tijuana, the northernmost city on the Mexican border to Patagonia in the Southern tip of Chile, and spreads sidewise to the Caribbean sea to include some Spanish, and French speaking island countries. However, LA is also a preferred term to denominate only Mexico, Central America and South America, leaving out all The Caribbean, even though it includes romance speaking language countries, like Cuba, the Dominican Republic, Puerto Rico, and Haiti. LA Spanish-speaking countries predominate in terms of territory and population even in The Caribbean (See Table X).

### FROM TIJUANA TO TIERRA DEL FUEGO

■Countries 20

■Population 472 million

■Demographic growth 2%

■Languages Spanish, Portuguese, French
■Share similarities History, culture, religion

#### SOCIO-ECONOMIC OVERVIEW

- ■Undergoing economic structural reforms
- ■Market oriented measures
- ■Enjoys economic growth
- ■4.1% expected growth, 1997-2001
- ■Close trade links with Anglo North America
- ■GDP related to size of territory

### 2. SIMILARITIES AND DIFFERENCES

Although it would be difficult and unwise to say that LA library and information development is the same for the whole region, it is right to state that there are more similarities than differences. Libraries from Mexico to the ones from Chile share the same pattern of development, which is permeated by similar social, economic and political characteristics. However, current levels of library development vary from one country to another when considered in absolute terms. There has to be taken into account that library development even within countries is uneven, that is the case of Southern Brazil and Northern Mexico where library development is better than in the rest of the countries. A more striking library difference is between cities and rural towns, where in the latter, libraries are almost none-existent.

Library development in the region has been great in recent years. However, there is still a good way to go. Most of the countries have doubled the number of libraries in the last 15 years. Library development has been significant in the region since the 1960's, when United Nations Education?? (UNESCO), the Organization of American States (OAS) and United States Information Service (USIS) have played an important part to induce governments to support to libraries. An early report, made by the OAS in 1960, estimated that there were around 7,000 libraries in the region [Penna]. Now, 40 years later, it can be estimated that there are probably around 40,000 libraries [Lau]. \*This is a rough figure based on the also estimated library figures of Brazil and Mexico, which are around 19,000 and 11,000 libraries, calculating that both countries account for 75% of the total number of libraries, having the rest of nations about 10,000 libraries.

LA has a population of 421 million inhabitants (?), which is equivalent to 10% of the world's population. Demographic growth has slowed down to around 2% in the last decade, but is still high in some of the less developed nations. Latin Americans are, in general, a young population with the average age of ??. This means that the most needed libraries at the present time are school libraries, since a great percentage of the population are children and young adults. However, libraries targeted to this clientele are just a few and the less developed of all.

Public libraries are better off and are mostly constructed in cities. Six countries excel in achieving greater public library development in the last two decades, that is Argentina, Brazil, Colombia, Cuba, Mexico and Venezuela [Zamora]. Libraries of all types are concentrated basically in cities. LA population has become urban in the last decades, about 60?? percent of the population lives in cities, which may make the provision of information services easier than to small and scattered villages. The region has some of the largest cities of the world, such as Mexico City and Sao Paulo, where, as could be guessed, tend to concentrate the largest number of libraries [quote Zamora's library map]. Although, the population concentration in the urban sprawls may make the provision of library services easier, it is not true for all urban settlements. The outskirts of the cities, where the large migration influx from the country side come to live, lack, in general, information services. Public services, and libraries as part of them, lag behind population growth of the suburban or peripheral settlements. Most new comers are peasants or rural workers with little or no income to contribute to the provision of

social services. Governments are under constant pressure to meet first basic needs, such as food, shelter and education, a fact that leaves library service out.

Academic libraries are the best among all types of libraries in Latin America. These centers, despite the economic recession that the region faced during the '80s, they managed, in most cases, to get through untouched and able to improve their services. Internet is certainly available in most academic libraries, which is not the case for the school or public libraries. University libraries have the best information resources, hire most of the professional librarians, use the latest technology, have the best bibliographic organization, and are housed in the best library facilities. Electronic sources, Internet access and any Hi Tec applications comes first to these libraries than at any other. Special libraries are also well developed. However, their number is smaller that it would be expected in more advanced economies, like Canada. This is probably due to the fact that many of the local companies are subsidiaries of large foreign corporations, which have the research and development units at their overseas headquarters that are normally located in the more developed nations.

#### 3. A SOCIO-ECONOMIC OVERVIEW

In general, the region has enjoyed good economic growth, monetary stability, lower inflation, more manageable debt burdens and greater foreign investment in the last few years. These achievements have been the result of market-oriented and structural reforms of LA economies. Most nations have privatized state industries, lowered trade barriers, and deregulated markets. According to The Economist Intelligence Unit, the region will have an economic growth of 4.1% in average during the next five years [EIU]. However, the upheavals of the Brazilian economy at the end of 1998?? affected this trend, but its quick upturn has put the economy again in the recovery track. These changes have benefited economic growth which have the challenge of improving living standards of important social sectors within each country, and need to provide better conditions for libraries to improve in the short run.

If the world were to be divided into social stratas like society, Latin America would be classified as a middle class continent. Several of LA nations are ranked as the most developed among the developing world, such is the case of Brazil, Chile, Argentina, Mexico and Costa Rica. These countries have a socio-economic development which enables them to have access to good telecommunications and good information services. However, as stated, such middle ground development is not even among the 20? LA countries. A more in depth view of their socio-economic indicators group nations into three tiers of development. The large economies, and geographically large countries, of Brazil and Mexico, followed by Argentina, Chile, Colombia and Venezuela can be grouped in the first tier. The second tier is integrated by the middle-income countries of Costa Rica, Ecuador, Panama, Paraguay, Peru and Uruguay, countries which have a smaller economy and geographical territory. At the lower end, are the smaller and less developed

economies of the Dominican Republic, Guatemala, Honduras ??. These smaller nations have a harder struggle to meet basic needs of the population. Library and information development is closely related to the socio-economic and land mass of countries. Those bigger in GDP and territory also have the larger and better developed libraries, not to mention their telecommunication facilities, as well as Internet access, such is the case of Mexico and Brazil (See Tables X). JESUS

Latin American libraries have been influenced by American libraries, more than from any other part of the world. This is due to the fact that Latin America is an active player in the North American economic hemisphere. Export import trade is closely linked to The United States (US) and Canada. ?% of LA trade is with North America, were the dominant player is the US. Imports have the same pattern. Library development of the region has a strong relation to the economic output and size of the territory of the countries. The continent could be divided into three main groups, large, medium and small where economic output, geographical size and library development tend to correlate. The ones that are large in terms of territory as well large in economic output and in number of libraries, as it is the case of the two other categories. A brief geo-economic description helps to understand why libraries evolve in a similar trend. A summary of the main economic indicators is included in Table 1, where Brazil and Mexico fall in the top Their gross domestic product (GDP) is between 50-75%?? of manufacturing and service sectors for the whole region. In population figures both countries account for 60% and their territory cover 50% of the Latin American continent. The main middle economies are Argentina, Columbia, Venezuela and Chile. The four nations have an important output, but their economy size is so much smaller than those of Mexico and Brazil. Other countries that fall in the middle, but with less economic strength are Peru, Ecuador, Guatemala, the Dominican Republic and Uruguay. Two other nations which fall in this category, but with less relation to their geographic size are Uruguay?? and Guatemala.

### 4. INFORMATION USERS

Library users in the region are mainly from the urban middle to upper classes. They are young, usually from elementary schools to universities. The general population does not normally demand libraries, since adults from lower income stratas lack reading skills because of their limited years of schooling. On the other hand, the average citizen has the belief that libraries are for students and not for adults, this is probably due to the fact that public libraries are a recent development in most countries. Users of public libraries are usually school children and teenagers of junior and high schools, whose demand is great. Public libraries have a great user demand because they fill the gap of school libraries which hardly exist in most countries. Mexico has, to give an example, more than 100,000 elementary schools but has fewer than 5,000 school libraries, which means that there is less than one library per ten elementary schools. The lack of school libraries influences the way public libraries are managed which focus their services to meet the demand of the young population and to a less extent to needs of adult patrons.

How many newspapers are published electronically? You can find journals as well as newsletters on Internet. There are about 16,000 journals, according to the ISSN agency. However, it could be estimated that there are at least twice as much, because it is common that journals lack the ISSN number. The number of newspapers is about 1,000. Some of them are national newspapers that cover most of the countries where they are published.

### 5. ASSOCIATIONS AND LIBRARY EDUCATION

It is estimated that there are about 30,000 librarians in LA? Brazil accounts with two thirds of them [Zamora], followed by Argentina and Mexico which has about 3,000??. As it could be expected, countries with more library professionals are those with more library schools. There are 73? library schools in the 19 LA countries. Brazil has 31 schools and Argentina 13, followed by Mexico with 7 and Colombia with 4. The rest have, in general, one [Zamora]. The two countries without a library school in 1990 were Haiti and Honduras.

In general, there seems to be a shortage of librarians in most countries, except by Brazil and Argentina. Mexico with a population beyond 95 million and the second largest number of libraries has 3,000 professionals with a library degree?? (ver ponfor98). This is a limitation for a sound library and information development, although the difference in number of librarians between Brazil and Mexico does not seem to have affected library growth in the latter. Although there is no comparative study on the subject, it could be said that both countries have similar information development. A possible explanation is that professionals from other disciplines have stepped up to organize libraries.

Librarians have 82 library associations, according to study carried out by Zamora in 1993-4 (X). Countries with more associations were, again, Brazil, Mexico and Argentina; the first two record the oldest library associations, founded in 1938 and 1956 (?). The largest associations, that is more than 1,000 members, are in Argentina, Brazil, Cuba and Chile. The rest of the LA countries have smaller bodies, some of them even below 20 members.

### 6. TELECOMMUNICATIONS: GLOBAL REACH

LA is considered one of the world's hottest regions in telecommunication infrastructure growth. It is estimated that telephone lines will increase in 32 million to reach over 70 million main lines by the year 2000. Cellular subscribers, on the other hand, are about 24 million. This growth enables LA to potentially improve information services provision and sets the pace for Internet growth in libraries. At the present, it is estimated that there are between 5.5 and 8 million cybernauts, but these figures are predicted to increase to 34 million in three years by Nazca S&S. Use of Internet increased 788% between 1995 and 1997, and is expected to grow

50% per year in the near future. Web pages are estimated in 150,000 with a predicted increase of 500,000 by year 2001. The telecommunications improvements, plus the rapid computer network expansion, are creating an information infra-structure which will be among the most advanced the world. Internet use, such as creation of web pages, is creating a synergy between Hispanics from The United States and Latin Americans, their input in Internet sites benefits the region, as it is true on the other way around.

Internet growth will shape a new LA in information terms. The integrating of different telecommunications technology makes North-South and South-South Communication a reality in most parts of the region. The easiness and the almost free delivery of a message makes possible that South American librarians have their Caribbean or North American counterparts at the reach of their fingertips. The impact of Internet in libraries is a highly positive one. They can now have a Global Reach and access information services of remote vendors, as well as being able to deliver their own national data resources to the world community. An example is the increasing number of LA libraries to join OCLC network, where cataloguing data transfer between both regions is becoming now a reality.

Latin American library patrons, on the other hand, can now enjoy the access of remote library catalogs, regardless of the country where they may be located. The dream of Simon Bolivar, the libertarian who freed many South American countries from Spanish rule, of having a single LA nation may become true in the years to come. Information users are in the process of reaching their LA colleagues whose language, culture and history are similar if not the same. The number of Internet users is between five and eight million in the region. The largest number of users is in Brazil with 475,000, followed by Mexico with 370,000, Chile with 200,000 and Argentina and Colombia with 170,000 and 120,000 each. At the lower end are the smaller economies that struggle, with limited telecommunication and computer facilities to gain access to Internet, that is the case of Bolivia with 8,000, and Ecuador and Paraguay with 5,000 and 1,000 cybernauts.

Access to Internet by LA population is creating new information awareness. This impact will increase as more citizens gain access. Those who have access to it are becoming world class information seekers, which is a great challenge for libraries. Global touch is quite great, almost any database available in the world is accessible but access to local information is difficult, especially at the county level. Libraries have the challenge to increase gathering and organizing of local information. Users may demand better information, which has the side benefit that know the value of information and can now push governments to support libraries. The progress in networking in the region has been great, fortunately, and this is helping libraries in general. A British research center estimated that there are about 150,000 Web Pages, a figure which puts Latin America in the world map since it has become the prime information source for most people. The number of nodes, it's about 190,000. The growth of Internet focal points has been great, quite

dramatic in the last few years. It is estimated that the region will have and 800 percent growth presence in Internet, which means that the region will double the Internet capacity every two years [Economist]. This forecast will certainly benefit libraries. Now it's quite easy to send a message from Mexico down to Chile. This communication was difficult to achieve a few years ago, even when we faxes available. Fax was the first step in communicating libraries in LA, but they were expensive and billed directly to the library, making their use almost prohibitive. Internet, on the other hand, is almost free for most libraries, since the bill is paid by their parent organizations. As a result, Internet has contributed to increase communication within the region, making it more integrated than ever before.

The number of TV channels as well as TV sets is quite good in most countries, which in a way represents a great negative challenge to libraries, because television arrived before than libraries, and therefore, before reading habits were created in several LA countries. The region began having a good television development in the '70s, at the time when libraries were just evolving. Libraries are to loose the information demand battle with television because schooling is not required to turn on a TV set and to watch a program, while in order to check out a book in the library to read, a user need to have at least elementary school. In some Latin American cities, there are even more local TV channels than bookstores. This contrast tells the advantageous growth of television compared to other most cultural services. The larger countries also have the largest communication infrastructure. Brazil and Mexico, as in most cases, have a great portion of this infrastructure, followed by the rest of the countries of the first group of nations. Libraries have to join efforts with mass media or face it, because the population thinks that television news are the source and probably the only source to get information.

The mid-sized countries also have more or less the same kind of developments as I already stated. Some of the smaller countries within this group have more limited development and struggle to have access to telecommunications, as it is the case of Haiti and Nicaragua.

### 7. CONCLUSION

In conclusion, Latin America has enjoyed economic growth in the last few years, and is expected to continue in this path in the near future. Telecommunications are growing fast and they will grow even faster, at least in the next four years, a development that will offer better telecom links to libraries. Libraries have also improved. However, they still have to achieve a greater progress to meet the demands of all sectors of the population. The region has an excellent global reach in information terms, because Internet makes it quite easy for libraries to access most international electronic sources, but local reach is quite limited. To find and access local data is an almost impossible task in most libraries.

The greatest challenge of libraries is to meet the information demands of the lower income sectors of society and to gather and organize local information. Libraries have also to devote more effort and resources to create information awareness among those who are the decision makers, so that greater improvements are achieved.

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### **APPENDIX**

	LARGE GD	P COUNTRIES	
Countries	Population	Area - '000	<u>GDP</u>
	′000	Square miles	Parity Purchasing
		•	Power
Brazil	154	3,286	1.022 trillion
Brazil Mexico	154 97	3,286 756	1.022 trillion 390 billion
_		•	

Venezuela	22	352	195 billion
Chile	14	2,921	120 billion
Total	361	8 830	2 208 trillion

# MID-SIZE GDP COUNTRIES

Countries	Population ′000	Area '000 (Square miles)	GDP Parity Purchasing Power
Peru	25	496	92 billion
Ecuador	12	105	44 billion
Guatemala	12	42	39 billion
Dominican R.	8	18	29 billion
Uruguay	3	68	24 billion
Total	60	730	228 billion

# SMALL GDP COUNTRIES

Countries	Population	Area (Square iles)	GDP Parity Purchasing Power / billions
		,	,
Bolivia	8	424	20
Costa Rica	3	20	19
Paraguay	6	157	17
Cuba	11	43	16
Panama	3	29	13
El Salvador	6	8	12
Honduras	6	43	11
Nicaragua	4	51	7
Haiti	7	11	7
Total	54	786	122 billion

# TELECOMM PROGRESS

- ■Telephones32 million
  ■Cellular phones 24 million
- ■Satellites 34

**TELECOMM - LARGE LA COUNTRIES** 

Countries	Teleph ones (000)	Satellites	TV broadcast stations	TVs (000)
Argentina	2,700	2	231	7,165
Brazil Chile	13,426 1,500	3 2	112 131	30,000 2,850
Colombia	1,890	2	33	5,500
Mexico	11,890	5	238	13,100
Venezuela	1,440	1	59	3,300
Total	32 847	15	804	61 915

TELECOMM MID-SIZE COUNTRIES				
■ COUNTRIES	PHONES	SATELLITE	S TV	TV
	′000		BROADCAST	SETS
			STATIONS	1000
■Dominican R	190	1	18	728
■Ecuador	585	1	33	940
■Guatemala	210	1	25	475
■Peru	772	2	140	2,000
■Uruguay	451	2	26	725
∎Total 2,	215	7	242	1,868

TELECOMM - SMALL LA COUNTRIES					
Countries	Telephones	TV	Satellites	TV's	
	′000	Broadcast		′000	
		Stations			
Bolivia	144	43	1	500	
Costa Rica	281,042	18	1	340	
Cuba	430	58	1	2,500	
Haiti	50	4	1	32	
Honduras	105	28	2	400	
El Salvador	116	25	1	475	
Nicaragua	66,810	7	1	260	
Panama	273	23	2	420	
Paraguay	88.730	5	1	370	
Total	1,554.882	211	11	5,297	

# **CYBER PROGRESS**

■Users 5-8 million
■Web pages 150 thousand
■Internet nodes 191,129

■Internet growth 788% between 1995-7

### **GLOBAL REACH**

- ■Internet integrates Latin America
- ■Communication is easier and cheaper
- ■Creates greater information awareness
- ■Makes more information services available
- ■Contributes to have world class information users

### LIBRARY DEVELOPMENT

- ■Countries have made good library progress
- ■Academic libraries are the best
- ■Internet is more used at academic libraries
- ■School and public libraries are scarce
- ■Information is still more paper-based

### LIBRARY PICTURE

■Libraries 40,000
■Librarians 30,000
■LIS Schools 87
■Journals Published 16,000
■Newspapers 1,000

### INFORMATION USERS' BACKGROUND

- ■Middle to upper class
- **■**Urban
- **■**Young
- ■Usually a student or college graduate

# CHALLENGE: INCREASE LOCAL TOUCH

- ■Provide services to the illiterate population
- ■Gather and organize local information
- ■Join efforts or face mass media overpower
- ■Define national information policies
- ■Increase information awareness among population

### **CONCLUSIONS**

- ■Latin America enjoys economic growth
- ■Telecommunications are growing fast
- ■Libraries have improved
- ■Global reach: Internet makes LA libraries part of the world
- ■Local reach: LA libraries require better access to local data
- ■Challenge: how to meet info demands of lower income sectors of society

### 2. OVERVIEW INDICATORS

Number of countries

Income per capita

Population

Open market economies

Number of higher education students

Number of universities

### 4. LIBRARY PICTURE

Titles of book published

Journals

Number of libraries

Library schools

Librarians

Nobel prizes in literature: Gbriela Mistral, Octavio Paz, Pablo Neruda...

### 5. CONTINENTAL PATTERN OF LIBRARY DEVELOPEMENT

Libraries share some development characteristics

School and public libraries are generally underdeveloped

University libraries lead in progress

Open market policies broaden library imports

Telecom new policies increase links with rest of the world

More democratic governments pave way for better libraries

# 6. LIBRARY INTERACTIONS WITH NORTH AMERICA

Classification Systems
Electronic information
Library education influenced by US pattern
Library literature
Electronic information user
Book and journal publishing clients
Library systems
Cooperation and collaboration

# 7. LIBRARY CHALLENGES IN LATIN AMERICA

Attend growing population Increase in education levels

Local touch: provision of local information Global reach: increase international access