



Nana Howton

"It is not that we did not know how to invent machinery, but our forefathers knew that, if we set our hearts after such things, we would become slaves and lose our moral fiber. They, therefore, after due deliberation, decided that we should only do what we could with our hands and feet [...] They were, therefore, satisfied with small villages." (Gandhi)

Jason Wardwell

Honor Gunday

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The Government

Historical Background on Government Regulations

It was a common nationalist ground that, in the late 1970s in Brazil, brought together unlikely bedfellows from the right and the left which had been fighting for political control and put the country in the brink of a civil war. Together, they envisioned and put forward the market reserve for computers and new technologies.

The efforts to develop an all-Brazilian computer dated from the late 1960s. The up-and-coming Engineering School at the USP (University of São Paulo) in the early 1970s started the effort to build an all Brazilian computer. The PUC (Catholic University) in Rio de Janeiro put its effort into developing software supported by the Navy and FINEP (the government agency financing research and development.

In 1977, the Brazilian government issued the first Lei da Reserva de Mercado (market reserve policy) to protect its infant computer manufacturing industry. A detailed list of restrictions was issued in the Lei da Informática of 1985. The prohibition of computer imports began.

In order for a Brazilian to bring a computer home from his or her travels abroad, he or she had to reside for at least a year in a foreign country. He or she had to visit a Brazilian Consulate or Embassy, fill out a form listing all the personal items he or she had acquired with their serial numbers. Only one machine per individual was allowed and it had to be a "used" machine in order to be considered part of property acquired during residency abroad. Enforcement was particularly strict if you had been traveling on a tourist visa, while student, faculty and researchers had an easier time getting their list of import of personal used goods approved. The legislation lasted for seven years, untouched.

The policy drew strong protests from the United States government and from large American corporations. But the opposition wasn't only from foreign companies angry at being shut out of the market. It also came from Brazilian companies that complained their access to top technology was being restricted and that such restriction hindered their competitiveness. The problem with this attempt to protect the infant computer manufacturing industry was that there wasn't a computer manufacturing industry. Attracted by the fiscal incentives of the free-trade zone of Manaus - Zona Franca - many of the companies whose only involvement with computers rested on "technical support" for imported goods turned into manufacturers.

In 1982, I interviewed several decision makers and technology professionals on the subject of the market reserve. In one of the interviews, a computer manufacturer from the south accused the free-trade zone of unfair competition. He said that in reality, the free-trade zone, geographically too far away to undergo the inspections imposed on the southern industries, was being used as a disguise to circumvent the Market Reserve Law. Manufacturers were importing computer parts, assembling the machines in the jungle and slapping a "made in Brazil" tag that was the pride of the flag-waving heirs of the dictatorship and of its enemy, the Brazilian left.

This perceived unfair competition was, however, lawful. The Constitution had negative impact on research and development according to southern opinion makers. Researchers in the South, the region where all technological innovations had the best chance to take place, were discouraged by the inflow of products from the North. Unable to have a margin of profit that kept them in business, many abandoned expensive research in exchange for the production of cheap, poorly made machines. Not only was the competition for production unfair, so was the competition for education. The law gave many benefits for industries investing in research and development through universities in the north of the country.

A frustrated researcher, whom I also interviewed in 1982, had moved from a sincere desire to help the national industry to being an IBM employee and scorn the market reserve law. He said a memorable thing: "We are trying to invent the wheel when other countries have already invented the automobile."

The frustration with the goals of the law are understanding. Overall it resulted in the backwardness of Brazil's technology compared to advanced countries. The output from national enterprises was small and consisted of, mostly, low quality computers. Another problem with the law was its broad definition of electronic goods. Not only computers, but anything having an electronic component could fall under the law. The civilian government that replaced the military in the mid-1980s did nothing to invest in research and development. The industry remained limited to assembly of microcomputers with foreign components imported through the Zona Franca.

Supporters, however, can argue that the law enabled Brazilian universities to invest in the education of a larger number of engineers than they would otherwise. According to Christiano German, author of "O Brasil à Caminho da Era da Informática" Brazil has formed "generalist" engineers with no particular specialty but great mobility to move to niches of the developing market where they are most needed, and Brazil's universities have yielded a larger number of graduates in the sector than any other Latin American country.

The banking sector, the only sector able to invest great amounts of money in technology development, saw highly positive results. In the early 1980s, Brazilian tourists abroad often complained about the poor quality of automated banking in Europe and the United States.

The banking technology was transferable to other sectors. Using ATM technology, PROCOM developed the world's most advanced voting machine. A light, easy to use and to transport to far corners of the country, Procom's voting machine has a security system similar to the ATM. Just as a bank is able to limit the amount a client withdraws from his or her account everyday, this machine limits the amount of time a elector can vote in a election to one, reducing electoral fraud. Another advantage is that once the elector has voted for a candidate, his or her picture will pop up on the screen and the voter will be asked to confirm his vote. This takes care of all the disputes over "voter intention," pregnant chads, hanging dimples and other points of dissent raised in the Florida election for example.

Last year, Procom was bought by American company Diebold Inc, the largest ATM provider in the United States. A month later, Diebold shares jumped from 26 to 30 when Procom announced that it had sold \$106 million dollars in voting machines to..Florida.

Thus, local competence is higher than it would have been without the law. However, it hurt competition and consumers ended up paying higher prices and had their access to top-notch technology delayed.

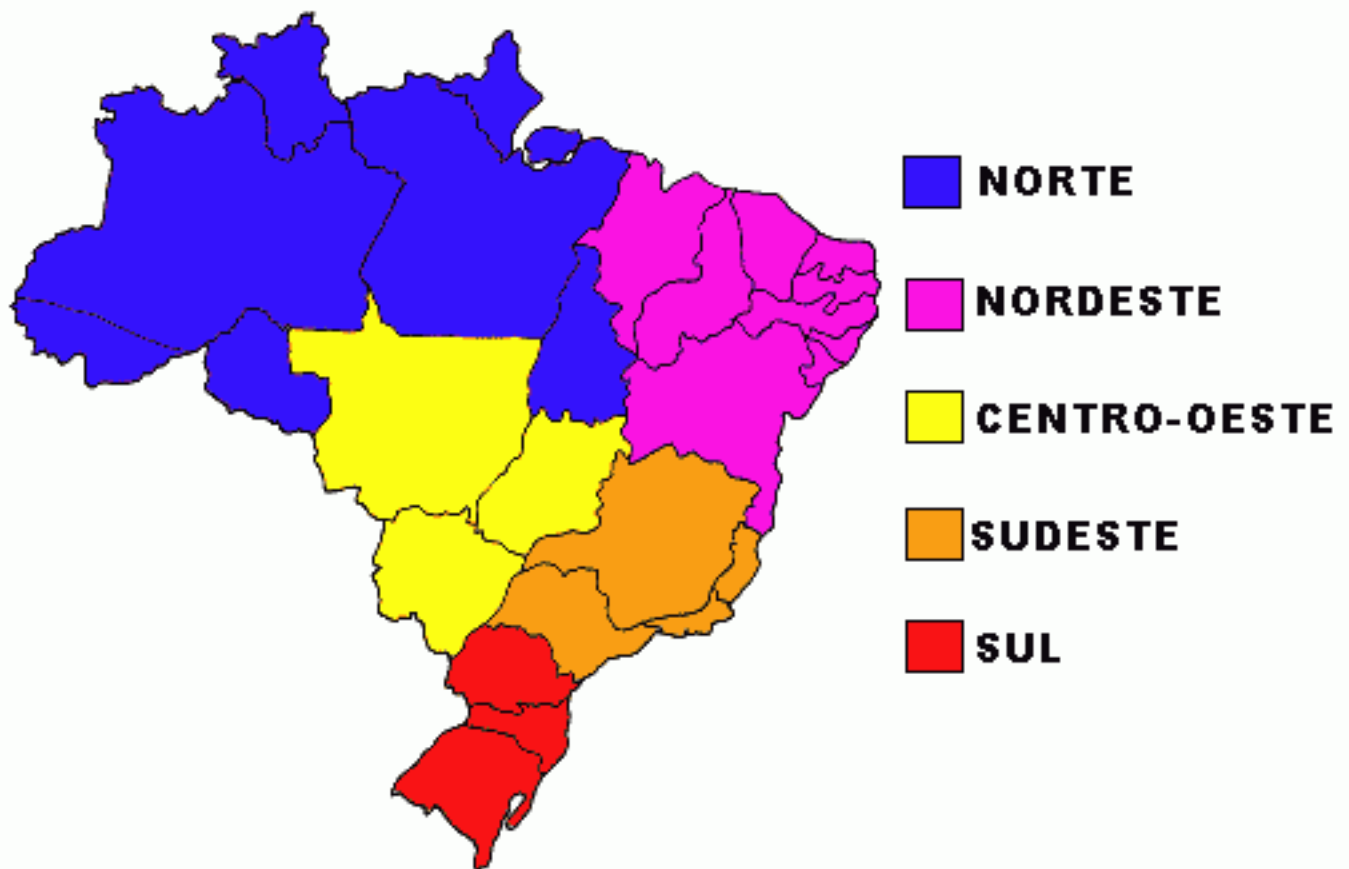
It also exacerbated the tenuous relationship between the north and south. The southern states often accuse the northern states of incompetence and of having a welfare culture.

The law gave universities in the north a larger share of the research and development incentives, but no innovations came from the north. The south created what little innovation came about during this period. Those incentives, coupled with the incentives given to the Zona Franca, was seen as throwing pearls to the swine. Thus, what began as a nationalist effort ended up as a regional dispute.

The Government

Regionalism: North and South

Brazil is a federation, with twenty-six states and a federal district, Brasilia. States are far from having the level of independence achieved by their American counterparts. For administrative purposes, the states are divided into five regions: North, Northeast, Midwest, South and Southeast as shown on the map below:



This division is taken in consideration when setting federal policies. An example, is the minimum age which is set higher in the southern regions than in the northern regions.

The table below provides a quick overview of the specific characteristics of these regions:

	North	Northeast	Midwest	South	Southeast
States (in numbers)	7	9	3 + DF	3	4
Territory(as % of country)	45	18	19	7	11
Population(in millions)	8	46	11	24	69
Population Density (per km2)	2.92	28.73	6.51	40.74	72.26
Economy(Basic Activities)	Gold, iron, diamonds, manganese, latex, wood	Cotton, oil	Cattle, eco-tourism	Rice,soy, beans, pine, coal, cattle	Coffe, cane, orange, iron, oil, manganese

Note that of the country's 158 million inhabitants, over 93 million live in the south and southeast regions, a whopping 59.24% spread over only 17.61% of the country's territory.

The Southeast region is highly industrialized and produces over half of the country's manufactured goods and heavy industrial output. Combined with the South region, it produces most of the country's agriculture harvest. The two regions are often addressed as a single region, "the marvelous south," as songwriters and immigrants from the other regions call it.

The large population and economic importance of the regions, however, do not translate into political power because the political alliances in the Senate often occur on regional lines. Pork-barrel politics have led to the natural alliance of the poorest regions against the powerful southern regions.

With states sending three senators to Brasilia and the federal district sending one, the math is obvious: It's a 58 to 21 whipping of the Southern senators.

Thus, it is not surprising that the laws pertaining to the computer industry, have included incentives for industries to move their headquarters to the northern regions. For example, according to Jornal da Ciência, following the "Lei da Informática" of 1991, companies producing computer monitors and cell phones in the Zona Franca were exempt from paying import taxes on components necessary to build their products, while companies outside the area had to pay import taxes valued at 88 percent of the product price.

Last year, senators from São Paulo fought furiously against provisions of a new law that lingered in the Senate for over 14 months. Many senators excused themselves from work to prevent quorum that the Northern senators, especially those from Amazonas, needed to approve their version of the law.

Though the concerns of the southern regions are legitimate, the debates often go beyond economic lines and move to class and ethnic lines. The population in the southern states is richer, lighter-skinned, and better educated. The fact that the south has a better industrial complex and the north is dependent on natural resources makes the relationship and discourse among them very much like that between the developed nations and the so-called Third World.

The Government

Current Government Regulations

Despite regional disagreement on the new "Lei da Informática," it eventually passed. Lei 10.176, as it is bureaucratically known, was signed by the president into law on January 11, 2001, replacing Law 8.248, of October 23, 1991. The new law offered the following incentives:

Date	Reduction of IPI (Excise Tax)	Minimum Investment
2001-2004	95%	5%
2005	90%	5%
2006-2009	85%	5%

This new law expanded the reductions in the excise tax (paid over the value of the product and collected by the federal government) offered in the previous law. The law required that the minimum investment of five percent be used early in the year for which the company files its corporate tax with the deductions allowed by the law. Of the five percent figure, 2.3 percent must be distributed as follow:

1. toward research and development in partnership with national research centers: at least percent
2. toward research and development in partnership with national research centers, in Central and Northern regions : at least 0.8 percent
3. toward the National Fund for Scientific Development: at least 0.5 percent

Article 10 of the new law was vetoed by the president. It specified that any state having industries which had received incentives in the previous two years, could not benefit from the incentives detailed in the new law. São Paulo, the targeted state lobbied, its most famous son, president Fernando Henrique Cardoso, to veto the article.

Paulo Souto, a Senator from Bahia (northeast region) who introduced article 10, was accused of putting regional interests above national interests by O Estado the São Paulo, the country's most important newspaper. São Paulo state was the obvious target of the restrictions imposed by the article.

Though the law contains provisions to guarantee investments in the central and northern regions, with 30 percent of the money going exclusively to local universities, Amazonino Mendes, the governor of the state of Amazonas, filed a claim with the Superior Tribunal challenging the constitutionality of the law. His reasoning: incentives distributed among all states violate laws establishing the Free Trade Zone (Zona Franca de Manaus) in his state.

"It's not right that 70 percent of the computer industry is located in São Paulo and only 9 percent in Manaus, he said in an interview on February 2, 2001." This normative approach only fueled more of the differences among the regions. Many argued that article 40 of the Constitution, which gives the Zona Franca its status and thus its incentives, is unconstitutional as it differentiates between states of the union.

As of mid-March 2001, the Supreme Court has yet to rule on the constitutionality of the new law. The Tribunal should settle the disputes over whether companies in the southern region can benefit from the incentives in the new law and should also rule on what qualifies as electronics, which may include computer monitors and cell phones.

In the meantime, some foreign companies wait to decide where to open their headquarters and reap the benefits of the new law. Most of them have an eye on São Paulo state because of its developed infrastructure. For those companies willing to work out of the Zona Franca, the time to invest in Brazil has arrived.

The Government

Government Incentives

In another example of the government's commitment to a new era in computer technology, Associate Press, on January 31, 2001, reported that the government has launched a program to assemble low-cost computers. The University of Minas Gerais state has built a prototype that includes a processor, some basic software, a 14" monitor, a printer, a disk drive and a CD-ROM. It will use the free Linux operating system and government banks will offer low-cost loans (\$10/mo, two-year payments) to 23 million Brazilians who have mobile phones.

The Government

Current Climate for Investors

The new Lei da Informática has settled once and for all that the government's role in the new era, is not to hinder development of the computer industry, but rather to give it all the incentives it can so that the country can leap into the Internet Revolution.

The cheap computer initiative is another example of how the government is determined, this time around, to help the market.

However, one thing is certain: the digital divide will remain, if not grow. On a macro level, the southern regions will retain their power vis-à-vis the poor central and northern regions. Likely, if the law remains as it is, southern regions will continue to be the destination of most of the companies investing in the market. São Paulo has the infrastructure and the underdeveloped regions cannot compete with the southern regions.

On a micro level, though the incentive to computer buyers will certainly inject a new impetus on the Internet expansion in the country, the digital divide will continue. For most of the poor whose access to traditional phone lines was an impossibility because of the high price, access to mobile phones, though cheaper, is still out of their reach

Thus, the poor regions and the poor populations will remain spectators to the Internet revolution where actors remain members of the middle and upper classes and the developed regions.

National problems apart, the time is ripe for foreign investors to enter the market. The government's new approach to foreign investment in the technology sector is a complete turn-around from the beginnings of the computer industry and from the early times of the Internet boom. Choosing where to open a headquarters should be an investor's least concern.

Aside from the abundant incentives, Brazil is the eighth largest economy in the world, and its technology market is wide open. Companies can invest on anything from building infrastructure to manufacturing hardware, developing software and expanding e-commerce. Government is not planning to be in their way.

INFRASTRUCTURE

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Infrastructure

Present/Future Prospects and Obstacles

Expectations from Brazil's Commerce

Brazil will account for 51 percent of the total B2B e-commerce volume by 2005, the firm said. "It's a result of the size of the market and speed with which Brazilian companies are bringing to bear an intense focus on B2B initiatives," said Raphael Duailibi, Brazil market strategies analyst at Yankee [http://www.ecommercetimes.com/perl/story/4602.html#subhead_2-4602]

Ecommerce in Latin America is set to grow from US\$3.6 billion in 2000 to \$66.5 billion in 2004 [Emarketer]

Brazil is well positioned to take advantage of both B2B and business-to-consumer (B2C) e-commerce because of its advanced industrial sector and a large and fairly cohesive consumer market.

Individual/Society-Level problems

-A Latin America wide phenomena applies to Brazil too: wide cash and rare credit card usage in the whole economy offsets some of the advantages of the internet like security and speed. According to the Jupiter research, they developed "escrow-like" solutions to overcome these obstacles.

Country level problems

-Low penetration of technology, infrastructure problems, hard to build brandname awareness.

Infrastructure

Funding

Investment can be divided up into two different types

Major conglomerates building out an online channel

The country's Internet revolution was led by an unlikely suspect: Bradesco, one of the nation's largest commercial banks. Bradesco started offering free Internet access in December 1999, finding it could save money with online transactions and tempt advertisers with a large captive audience. Other banks rushed in.

Unlike in the United States, where Internet-only companies initially drove online spending, in Brazil, e-commerce is driven by traditional retailers. The supermarket Pão de Açúcar, for example, was quick to launch Amelia.com, where clients can order groceries, review products and download recipes.[Wired]

Strategic investments from abroad

Countries Investing from Abroad

Apparent competition between the countries in terms of overall investments :

United States \$23.9 billion

Spain \$20.4 billion

Holland \$8.8 billion

France \$7.8 billion

Portugal at \$7 billion

Brazilian companies, just like the other Latin American companies use foreign countries as their basis to avoid tax, and Brazilian bureaucracy as well as misregulation. In the meanwhile, by having headquarters in places such as Miami, the Cayman Islands etc... they become players in the world Internet scene and attract investments and venture capital in an easier manner. They also can keep up with technological changes.

Foreign companies have added Portuguese content to their sites, hoping to tap into the country's rich online demographic: millions of young, urban consumers.

Terra Networks of Spain Today, AOL Brazil, Yahoo and Microsoft's sites are among the top five properties in Brazil, according to Media Metrix.

Problems:

Most Ecommerce companies try to build constellations of services by attacking multiple industries, but because of the scarcity of their monetary resources, the constellations might collapse as a whole. It would be smarter to have a concentration in one area instead of multiple areas.

Currently the independent companies are growing faster than supported companies, but they also have a higher cash-burn rate. And this will cause them to get acquired by the conglomerates or the foreign companies or simply fail. [Mercado Libre during the conference last week, actually said that eventually they will be acquired, but so far they need to concentrate on becoming the best, and they also indicated that they are happy to see their competitors ads when they visit us cities, (their competitor being DeRemate.com also based out of miami) because they will eventually run out of money and fail.

Reference:

Lori Enos [<http://www.ecommercetimes.com/perl/story/7235.html>]

E-Commerce Experiences from Latin America , Stanford GSB, Vice President of BV of [Mercado Libre](#)



Infrastructure

Digital Divide

Brazil's 6.1 million Internet users representing 40 percent of the total of Latin America.

Up to 27.4 million users by the end of 2003.

-Cost of a computer and a phone line is high for Brazilian Urban Poor so the most of the population is not able to access the Internet.

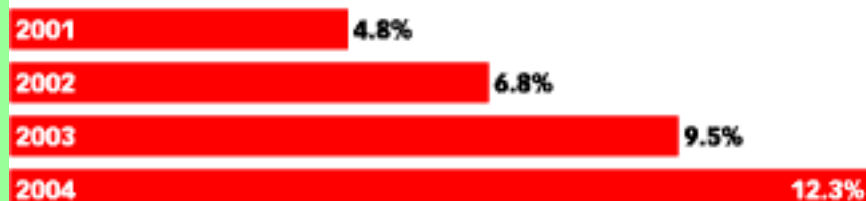
-Digital divide parallels itself with Economic Divide.

-Brazilian Government has plans to increase PC penetration (The government now has plans to produce \$200 basic computer for this purpose)

-NetCash-PopBanco has plans to install kiosks in local padarias.

[By Noah Elkin Emarketer.com]

Internet Users in Brazil, 2001-2004 (as a % of population 14+)

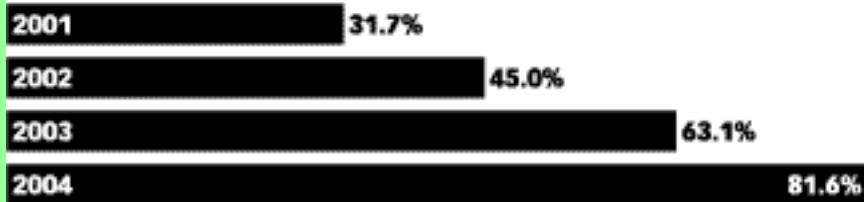


Source: eMarketer, 2001

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www.eMarketer.com

Internet Users in Brazil, 2001-2004 (as a % of top 15% of population 14+)

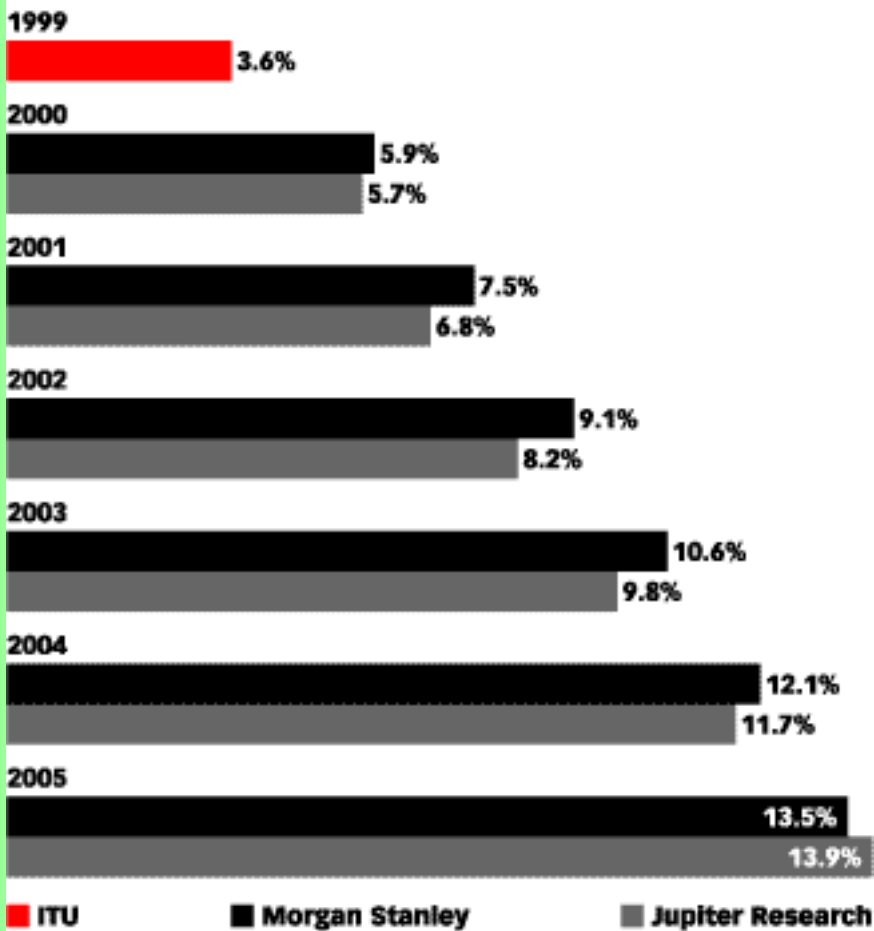


Source: eMarketer, 2001

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Comparative Estimates: PC Penetration in Brazil, 2000-2005



Source: various, as noted, 2000

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Infrastructure

Phone Infrastructure

Newly Privatized Telecoms

The government privatized the national monopoly to create the opportunity to have state-specific solutions to the fixed line problem.

Fixed Line Service Providers

The Spanish phone company Telefónica de España dominates the telecommunications industry in the country. Telefónica bought several phone operators, including São Paulo's Telesp, and is now the biggest private investor in Brazil.

Fixed phone lines are expensive because they require the customers to pay for the cost of the line from where it ends to their homes and sometimes, the areas are so far that it is impossible. Even when it's possible, there is a huge wait time upto 3 years.

Infrastructure

Cellular Future

1 in every 4 Latin Americans will own a cell phone by 2004 [IDC]

Greater Mobile Internet Access : more than 50 million people in Latin America will surf the Net from their cell phone in 2005 [Jupiter]

Low-end users, or folks at the bottom of the income scale, make up most of this South American country, whose minimum wage is equivalent to \$90 a month. "Most people buy phones to just receive phone calls. Unlike in the US, the caller pays but not the receiving party. Cellphones provide access everywhere, there is no wait to get a phone line, the prepaid options are quite cheap and sold everywhere, and create a spending limit

Mobile licenses for carriers wanting to build a GSM infrastructure will be awarded at the end of this month. Siemens, Ericsson and Motorola have all together invested \$3 billion to build a GSM network and/or manufacture handsets to be distributed later this year. .

Portugal Telecom recently purchased Telesp Celular -- the operator of the cellular phone system in São Paulo.

Users: 21 million in 2000 to 41.9 million by the end of 2003.

Standards

GSM and TDMA are network standards that use the same frequency to transmit data, while CDMA uses multiple frequencies. GSM allows cool features that appeal to many, such as SMS (Short Message Service) and is a good system for worldwide roaming.

USA: Different Cell phone technologies have caused the American carriers and e-commerce companies to lose business. Normally, they would be able to use each other's cell phones, each other's lines, casting systems.

Europe and 65 Countries: Use GSM as the standard, and enable roaming across the world.

Brazil : TDMA is the dominant network standard in Brazil, followed by CDMA. This year about 7 million TDMA handsets were sold compared to 3.5 million CDMA handsets in Brazil. In 2005, about 17 million TDMA phones and 4 million CDMA phones are expected to be sold [Yankee Group]Telefonica, Telesp Celular, Global Telecom and Motorola are offering CDMA handsets or the services for CDMA handsets.

Though 55 percent of the cell phones in Brazil operate on a TDMA network, CDMA technology is taking over slowly.

Infrastructure

Broadband

ADSL/Cable Modem Operator competition is causing equipment prices to fall, making broadband more accessible. In Brazil, ADSL subscribers are expected to top 1 million in 2003 with the number of cable modems increasing from 60,000 in 2000 to 827,000.

For Broadband to become widely used, there needs to be a trigger. This trigger according to Yankee Group research is either a B2B marketplace that will require faster and more reliable connections or a special application that requires a faster or broader bandwidth.

Problem: Latin America doesn't have much content available online, so it will be quite hard for them to transition to broadband. First, the need of broadband needs to be created. [Michael Mahoney www.NewsFactor.com]

ISPS

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ISPs

History Highlights of ISPs in Brazil

1995 – The Brazilian government approves new regulations that open the commercial ISP market to competition. From June '95 to May '96, 90% of the traffic on the Internet from Brazilian users was directed to non-Brazilian (mainly US) web sites.

- 1996 – Universo Online ([UOL](#)) is launched. UOL patterns itself after [AOL](#), starting mainly as an ISP, developing a large subscriber base, and later launching a portal.
- 1997 – UOL and [ZAZ](#) control ISP market, facing little domestic competition and no foreign competition.
- 1998 – Until June, the Brazilian ISP market is 100% national. However, Argentina's [IMPSAT](#), Uruguayan owned [Starmedia](#), and [Yahoo!](#) declare their intent to enter the Brazilian market, rapidly changing the business.
- 1999 – America Online ([AOL](#)) enters the Brazilian ISP/Portal market with a Brazilian version of their site. However, AOL loses a lawsuit in Brazil for the domain name [www.aol.com.br](#), which is already held by a small ISP in southern Brazil. AOL immediately becomes the #1 rival to UOL. UOL names its strategic plan for dealing with AOL "Welcome to Vietnam".
- 1999 – [Terra Livre](#), part of European company [Terra Networks](#), raises \$500 million (US) to finance expansion into Brazil. Terra Livre is one of the first free ISPs, competing against approximately 280 fee-based ISPs that charge between \$10-20 dollars (US) a month to 1.7 million subscribers.
- 2000 – Free access providers, including Internet Gratis ([iG](#)) and Terra Livre, force UOL and other fee-based providers to lower rates by as much as 50%.

ISPs

Current Overview

- 400 ISPs in Brazil, but the number is expected fall drastically through mergers and consolidation of the market. Analysts predict that the Brazilian market can accommodate 8 to 12 ISPs.
- More than 30% of Brazilian websurfers subscribe to UOL, however experts estimate that free access will dominate 70% of the market as more of the country gains access to the Internet.
- The main difficulty that Brazilian ISPs are facing is that they are still heavily dependent on access fees. Access fees in Brazil represent 80% of revenues on average, compared to the U.S. where access fees only represent 50% of revenues.
- Many fee-based ISPs are further reducing fees, specializing in niche markets, or creating their own free access providers. Others are focusing on proprietary content to keep subscribers.
- Internet advertisements currently account for only 1% of the \$9 billion (US) spend on advertising in Brazil, which ISPs see as an opportunity for revenue growth.
- Most paid and free providers do not expect to turn a profit for three to five years.
- Industry representatives estimate that by 2002 there will be 7 million subscribers and 15 million users.
- Many of the larger international and domestic firms view Brazil as the centerpiece for an expansion into other parts of Latin America.

ISPs

Brazil's Largest ISP

- UOL was started by [Folha de Sao Paulo](#), a major newspaper in Sao Paulo, and [Grupo Abril](#), a large media company that owns many magazines. The UOL portal derives its content from its parent companies.
- UOL has forged partnerships with other traditional media companies such as [New York Times](#), [USA Today](#), France's [Le Monde](#), Spain's [El Pais](#), and [Playboy](#).
- UOL services include:
 - Over 4 million pages of news, information, and entertainment.
 - Daily editions of papers from across the country and around the world.
 - E-mail, instant messaging, chat rooms, and video conferencing.
 - Library section contains an encyclopedia, multiple dictionaries, and other reference works.
 - An e-commerce shopping mall.
 - Web-page hosting and web design tools.
- UOL has over 800,000 subscribers, paying an average of \$10 (US) per month. The portal site registers an astounding billion page views per month, making UOL the most visited Portuguese language site in the world.

ISPs

Current Portal Overview

- Many of the top portals in Brazil are affiliated with one of the major ISPs.
- By far the most popular portal is UOL's site. UOL draws visitors by providing the best content of any Portuguese language site.

TOP 10 BRAZILIAN PORTALS

- **Company Unique Visitors (in thousands)**

UOL.COM.BR 1,194

BOL.COM.BR 851

YAHOO.COM 809

IG.COM.BR 797

MSN.COM 702

TERRA.COM.BR 672

STARMEDIA.COM.BR 423

ZIP.NET 423

YAHOO.COM.BR 405

GLOBO.COM 385

ISPs

Future Challenges

- Brazilian portals are teaming up with technology partners so as not to be left out of the race to develop wireless mobile services. The telephone infrastructure is so poor that Brazilian businesses which require high-speed connections are rushing to wireless internet access.
- Major portals such as UOL, IG, and StarMedia's Cade have been hacked recently, raising concerns about Brazilian portal security. The Brazilian portals are growing so fast that they are pushing their technological limits, creating cracks in their security.
- As evidenced by the list of Top 10 Portals in Brazil, which contains two U.S. portals (yahoo.com and msn.com) in the top 5, Brazilian portals need to distinguish themselves as Brazilian products, with losing an international perspective.
- UOL, the top portal in Brazil, is having difficulty expanding into other Latin American countries because their content, aside from being in Portuguese, is so specific to Brazil.

Non-Profit Analysis

Endeavor

Endeavor, a non profit organization founded by a group of Harvard alumni in 1997, is headquartered in New York. The founders had extensive experience in emerging markets and were aware that entrepreneurs in developing countries had a hard time finding investors to support their projects. Endeavor was their response to that problem.

Endeavor opened offices in Latin America in 1997, first in Argentina and Chile. In June 2000 it open an office in Brazil with the idea of adapting its business models to the realities of the country and to respond to specific needs of the Brazilian entrepreneur through the promotion of workshops, monthly meetings with individual entrepreneurs and facilitating meetings between them and volunteer MBAs from American top universities.

Non-Profit Status

Why Endeavor first went to Argentina and Chile and seemed to ignore the largest market in Latin America? Blame it on an old law forbidding salaries for non-profit organization's employees. It is easy to see why Law No. 4.506 of 1964 was passed. Under the military dictatorship, any non profit organization was a threat to the government. Unions, were the obvious target of the law, though it served to force an array of organizations working with the general population to depend exclusively on volunteers to survive.

The democratic government, in its bid to foster civil society, responded positively to non-profits pressures for a review of the old law. Law 9.790, of 1999 legalizes the payment of salaries for employees. However, the organizations are expected to pay all incurring social security taxes.

Endeavor's Programs

Endeavor offers a myriad of programs to support its grant's recipients, such as:

- o Identify and entrepreneurs and help them throughout the development of a business plan, infrastructure, and matching them with potential venture capitalists.
- o Development of case studies from prior projects as encouraging examples to both new entrepreneurs and their supporters.
- o Promoting forums to encourage a creation of local venture capital firms.
- o Creating alliances with Universities and research institutions to foster entrepreneur spirit among students.

Recently, Marilia Rocca, Managing Director of Endeavor Brazil participated in a panel at Stanford School of Business about the Internet in Latin America. According to her, Endeavor received 350 proposals on its first year in Brazil. Though their picks have been successful, Endeavor's emphasis, Rocca said, is not in making fortunes but on encouraging entrepreneurial spirit that makes uses of internet technology. The organization supports itself through grants from the World Bank and from a symbolic 2% fee charged over the profits of its beneficiaries. As a non-profit, any excess goes back into the investing pot.

Endeavor's Entrepreneurs

Endeavor has invested in realistic projects that can survive within the country's infrastructure. Of the first applicants to grants and support, in Brazil, four were chosen:

- o Multidelivery: similar to Waiters on Wheels, the company does not depend on sophisticated technology, for example. The business is based upon the idea that customers should be able to order food from their favorite restaurant and have it delivered to their homes. The woman-operated company works in the two largest cities, São Paulo and Rio de Janeiro. Profits for 2000 were projected to be 1.7 million dollars, an astronomic amount for a "small business."

- o Solvo is a technology company offering technical support to companies. It is not in the business of innovation but that of helping companies make maximum use of existing technology.

- o Rede Omega, will offer internet wireless service, circumventing the difficulties of lack of access to traditional phone lines. Endeavor helps companies to identify the direction in which the Internet technology is going to avoid costly choices that may be obsolete in the near future.

For-Profit Case Analysis

Terra Mobile

Background

- July 18, 2000 - [Telefónica Móbiles](#) and [Terra Networks](#) announce plans to set up [Terra Mobile](#), a new company charged with developing and operating [Telefónica](#) group's global mobile portal. Terra Mobile will be 51% owned by [Telefónica Móbiles](#) and 49% by [Terra Networks](#). To achieve this it can draw heavily on the experience and market-leading positions of [Terra Networks](#) and [Telefónica Móbiles](#) in Internet and mobile telephony. The company is launched on September 15.

Business Plan

- [Terra Mobile](#) will operate internationally. In Spain and Latin America, natural markets where [Telefónica Móbiles'](#) and [Terra Networks](#) are already the leading mobile and Internet players, as well as in Europe, [Terra Mobile](#) will spearhead [Telefónica's](#) drive to develop the market and to provide the services before the development of UMTS networks.

- Estimates put the potential market for mobile telephony in countries where [Terra Mobile](#) will operate at 812 million users by 2004 with 234 million using wireless Internet services.

Services

- [Terra Mobile](#)' content will be customized to the users' needs, distinct from conventional internet content and tailored to the size, resolution and mobility of mobile receivers.
- The [Terra Mobile](#) portal is independent. This means it will be able to reach any mobile operator with Internet access.
- The services offered across the portal will include:
 - Information: both on request by users and also in "push" mode, alerting users to items of personal interest the moment they occur. Available information includes the latest news, financial updates, road and traffic information with commuter itineraries, and city guides.
 - E-commerce allowing users to buy products and services from their mobiles. The m-commerce user can shop, buy tickets to shows, take part in online auctions, book hotels, trains, planes, taxis etc simply and efficiently across their mobile.
 - Information management and personal communication services. These services include email, chat, messaging, personal organizers, schedules of events, calendars, etc.
 - Entertainment services allowing the user to play games or select personalized music and icons for the mobile.

Analysis

1. Portals, ISP's, and Users

- It is estimated that the number of mobile users in Brazil will skyrocket from the expected 21 million in 2000 to 41.9 million by the end of 2003.
- Experts say cellular phone manufacturers and vendors that offer products in all three network standards -- GSM (Global System for Mobile Communications), TDMA (Time Division Multiple Access) and CDMA (Code Division Multiple Access) -- and at affordable prices, will have the best chance to snap up the most customers.
- Though 55 percent of the cell phones in Brazil operate on a TDMA network, CDMA technology is slowly taking over the market now that moguls such as [Telefonica](#), [Telesp Celular](#), [Global Telecom](#) and [Motorola](#) are offering such handsets or the services for these handsets.
- However, [Yankee Group](#) analysts predict that GSM may trump all, since it is available in 25 countries and allows for popular services like short messaging service.
- Though more affluent folks in Sao Paulo, for example, will be willing to dish out cash for sexier, name-brand phones, analysts say the greatest market opportunity lies in the lower-income bracket, such as the northern Amazon part of the country. But it may mean that phone manufacturers will have to subsidize some of the costs for the phones.
- Brazilian TDMA operators are finally launching their WAP services, more than six months after their cdmaOne counterparts. The most common applications include banking, e-mail, and directory services (maps). These operators are still not charging monthly fees for the service itself, only per-minute charges. Research

indicates that TDMA operators serve approximately 65% of the total subscriber base in Brazil. Even though they have now launched this service, they have lost some ground to cdmaOne operators, which took advantage of their earlier launch date, capturing many early—and profitable—adopters.

- Most major portals serving the region, including [StarMedia](#), [Terra](#), [Universo Online](#), [AOL](#) and [Yahoo](#), have rolled out WAP content, as have many secondary portals and dozens of destination sites, the report said. The region's banks have also embraced mobile Internet access.
- At the end of 2000, about 5 percent of Latin American households owned computers, while 12 percent of individuals in the region owned mobile phones. The gulf will widen by 2005, with just 13 percent of Latin American households owning personal computers but 39 percent of the population owning mobile phones.
- And 25 percent of Latin Americans will own an Internet-capable mobile phone in 2005 - meaning a phone with a micro-browser, not merely one that can send and receive text, the study said.
- But having an Internet-ready handset is not the same as using one. Even in 2005, just over one-third of the region's residents who have such phones - or about 9 percent of the overall population in Latin America - will be active users of mobile Internet services.
- In the United States for example, typically less than one-fifth of mobile phone customers with WAP-capable handsets actually use them to go online, the company said.

