

Internet in Jamaica

Internet access became available in Jamaica in 1994. Service to the island was provided by a newly formed company called Jamaica Online. Jamaica Online was the first commercial Internet Service Provider in Jamaica. Initially, the island was serviced by a dedicated dial-up connection maintained at the University of the West Indies (www.jol.com.jm/about).

The company was formed because the founders, Dr. Haniph A. Latchman and Mr. Maurice McNaughter, wanted to make emerging technological developments available to the people of Jamaica. These two men believed that the Jamaican youth needed to be effectively trained on new technologies in order for the country to compete in the global marketplace (www.jol.com.jm/about). Considering the country has a GDP of \$9.8 billion and a GDP growth rate of 1%, this foresight is definitely warranted (www.cia.gov/cia/publications/factbook/geos/jm.html).

As for widespread use, that event has yet to be realized in Jamaica. Currently, there are only 100,000 Internet users in Jamaica, which represents 3% of the population. (www.cia.gov/cia/publications/factbook/geos/jm.html). This is startling since 634.1 million people are online today, or 10% of the world population (www.greach.com). Individual numbers for some countries are in the millions, such countries are the United States with 79 million, South Africa with 1.6 million, Japan with 10.3 million, and Germany which has 15.9 million people online (www.commerce.net). While the reason for this minimal amount of usage is technically unknown, there are some theories. The

first is the lack of computers on the island. For every 1000 Jamaicans there are only 46.6 *wow* computers (<http://lanic.utexas.edu>). Another reason could be the poor quality of the service. The Inter-American Development Bank has just loaned the country \$17 million in order to improve the country's access to the Internet and to e-government services. While a portion of the fund will be used to upgrade the e-government system, the rest will go to improve Internet access to about 60 low-income communities. Improving access will be achieved by merely providing the communities with computers. The fund will provide five computers to each of the 60 cities that were selected. (www.jamaicanobserver.com).

The current user base consists of individuals from various fields. The Internet in Jamaica is utilized for personal, business and government purposes. This is evidenced by what is available online and other characteristics of the Internet in Jamaica. Jamaica Online has various email and chat capabilities, and even event broadcast services in order to attract customers who utilize the Internet for personal purposes. In order to attract professionals, Jamaica Online is also able to offer dial-up access in the United States and Canada *very cool!*. This allows businesspeople, as well as Jamaicans living abroad, the ability to connect when traveling abroad (www.jol.com.jm). As for government, they are obviously online and are trying to improve their online presence through the use of funds to further develop their e-government services.

As was previously mentioned, current Internet use in Jamaica consists of 100,000 users. However, steps are being taken to improve this. Already, the island's connection has been improved. The island has evolved from a dial-up connection, to a dedicated connection via an N5 system, to a two-way satellite system, and now a leased connection

great detail!

via Cable (www.jol.com.jm). There has also been an increase in the number of Internet Service Providers. In 1995 the country had one ISP and now they have 21 (www.cia.gov).

Also, due to the founder's desire of using low-cost personal computers with LINUX operating systems more people should be able to afford the technology. The founders have also done their part by keeping Internet access rates at \$20/month for unlimited access (www.jol.com.jm). With strategic moves like these and continued investments, the Internet will soon be an integral part of the Jamaican society.

* Very nice paper!
* You hit every point accurately and precisely, great work

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The country I chose to do a little technology research on is France. While examining the telecommunications field of France, I found in general that they are a rather advanced country on the whole. Within the European Union, they have the third largest telecommunications network with Germany and the United Kingdom above them. With their telecommunications now 100% digital, they are one of the most advanced countries in the field. As of 2001, the country was spending more than \$29 billion Euros on telecommunications each year out of the total \$156 billion Euros spent by the EU countries. Recently, the field has been growing faster than average because of deregulation according to EU standards, as has Western Europe as a whole. This was done in order to promote more competition in the markets of each country. Since the new regulations became active there has been approximately 15% growth each year. France was one of two EU countries to take the initiative to liberalize their market before the EU requirements were fully in effect and have taken the lead as one most competitive markets in Western Europe.

The specific technology that I looked into was telephony. I focused most of my research around the plain, old, "tethered to the wall" telephone. The telephone arrived in France in the late 1870's. The population of France as of 2001 was 59.6 million. The number of phone lines installed as of this year was just over 40 million. As I mentioned above, there have been new regulations applied within the countries of the EU that have been a source of growth with technology use. The new rules have opened the market for other companies. The largest telecommunications company in France is France Telecom.

Prior to EU guidelines, France Telecom held 65% of fixed telephony in France. One year after deregulation, they only held 50% of fixed telephony. Prior to the deregulation, the people of France lacked a lot of choices for phone service, particularly for local calling. There have also been movements by the EU to have a better distribution of access to technology. For of the European continent, this is a goal for the next few years. This includes providing universal, affordable telephone service to everyone. Their movements in this manner have focused on licensing, frequency allocation, security and copywriting, thus creating a policy that mimics those of the United States. On average, the interconnection rates for France cost less than a majority of other Western European nations, including Germany. They are continuing to have success creating competition within the telephone market by improving service offerings and decreasing tariffs costs.

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* Good job of explaining the current state of telephony in France, but you didn't talk much of the current user base, or the dates of first widespread use.

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In America, we see technology all the time. Whether we look around in our house or out on the street, where ever anyone may go they will almost always come into contact with some form of technology. This constant barrage of technology can lead one to believe that everyone has the same availability of technology. However, when we compare America to other countries, in this case Brazil, we see that Americans are quite unique in their luxuries. The technology that this essay will examine is the television.

Television has been present in America since the beginning of the 1940's. From that time, the spread of the television has increased dramatically over the years. Presently, there are roughly 219 millions televisions present in America (CIA-US). There are televisions in nearly every one house in America. Some homes have two or even three televisions present. Compared with the population, about 77 percent of the U.S. population has one television.

However, in Brazil things are not the same. Televisions were introduced into the country in the 1950's. Brazil however did not pick up on the television as quickly as America did. The economic situation of Brazil did not lend for the country to be able to buy televisions as easily as Americans did. Poorer citizens could not afford for the televisions that were being produced. However, as the cost for televisions eventually decreased over the years, more Brazilians were able to afford the cost. As of 1997, Brazil has roughly 36.5 million television sets (CIA-BR). As decades earlier, not that many people in Brazil have a television. Only about 20 percent of all people in Brazil have a television.

Television has many uses for businesses and for individuals. The television brought novel ways of transmitting information to the public. Talk shows, news reports, and various

other programs have made information readily available to the public. In addition, businesses have been able to cash in with television commercials, paid advertisements, not to mention the many different ways of plugging products in television shows. In both America and Brazil the same tactics are used. Television in Brazil and in America is remarkably similar. In fact, most of the same programs that are created in America are eventually translated into Portuguese and then shown to the Brazilian public. MTV even is present in Brazil showing much of the same American stars, but also highlighting the countries stars (mtv.com).

Television is also reaching new heights for Brazil. Like in America, Brazil is now using television to educate its people. Just recently, Brazil is using satellite television to help teach its doctors. The service is being provided free to “215,000 physicians, 5,800 municipal health centers, all Faculties of Medical Sciences, and 400 accredited hospitals considered centers of excellence in Brazil” (www.whocancer). As in America, the use of the television has helped to improve education by distance education, not previously available before the widespread use of the television.

There is one interesting fact to be pointed out in the difference between American and Brazilian television. Whereas from the creation of it in America, the television has been a source of the freedom of speech and the flow of free ideas, Brazil has not had this opportunity except for little more than 20 years. Before it was a democracy it was an authoritarian government that restricted the use of television (www.nd). Even though we do see today that freedom of speech is valued and obtained, there was and has been concern for the use of television for political manipulation (www.nd). Though the thought of manipulation of the television by a political party may seem scary, in America this trend can be seen in certain shows catering towards a political party, or even the use of paid commercials to try to promote a party’s ideals.

*we could have been
Paper.*

While the countries of Brazil and American might seem very different from each other, the way that the two countries have adapted to the use of a technology is very similar. Both use the television primarily for entertainment. Both have commercials, paid advertisements, and the use of plugs to promote a product. Even the channels available to both countries and the programs that they receive are similar. Finally, both have used the television for other things such as long distance education. The television is a very versatile technology that produces much the same results and has almost exactly the same uses in the countries of America and Brazil, even though the cultures are different.

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2. The Brazilian MTV website. <http://www.mtv.com.br/index.html>
3. Medical teaching site. <http://www.whocancerpain.wise.edu/eng/12-2/pet2.html>
4. Television manipulation. <http://www.nd.edu/~kellog/WPS/147.pdf>

* You addressed the current state of TVs in Brazil nicely, yet you jumped around just a little bit.

Cellular Telephones in the United Kingdom

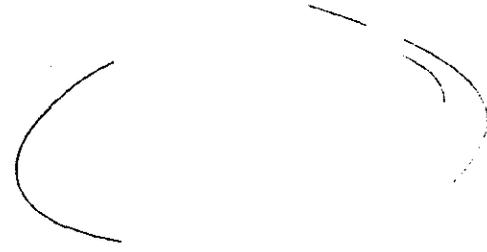
Cellular telephones have had a tremendous impact on the United Kingdom just as they have had on the rest of the world in the past two decades. Cell phone usage in the United Kingdom has reached an incredible level and affects every aspect of society. Cellular telephone communication was basically introduced to the United Kingdom with the implementation of the Total Access Communications System (TACS) in 1985 (Privateline). The idea for TACS was developed at Bell Laboratories in the 1970's and was implemented to solve the problem of an insufficient number of channels to carry a large number of radio telephone calls. TACS proved to be quite successful and coverage grew. Initially, mobile phones in the U.K. were made to fit into cars, particularly those of the mobile phone business's primary target which consisted of company cars used by salesmen. The United Kingdom's two competing networks at the time, Cellnet and Vodafone, provided virtually identical service at the same price which was not cheap (Mobileshop). As sales increased and call volumes expanded a need for greater capacity arose, so the networks persuaded the government to release additional frequencies which were borrowed from military allocations. As a result, TACS became Extended TACS (ETACS). However, the Total Access Communications System was replaced between 1987 and 1988 by the implementation of the Global System for Mobile Communications (GSM), which is now the dominant system throughout most of the world. Much like the

FCC of the United States, the United Kingdom's current regulatory body for cellular communication is the Office of Telecommunications (OfTel). However, by the end of 2003 it will be replaced by the Office of Communications (Ofcom), which will combine the Office of Telecommunications, the Independent Television Commission, the Broadcasting Standards Commission, the Radio Authority, and the Radiocommunications Agency (Infoserv2).

Obviously, the technology itself has also come a long way. Large, clumsy first generation cell phones have evolved into the internet capable, text messaging, picture taking third generation phones that society now embraces so dearly. In the United Kingdom, cell phones are used extensively by government officials and people doing business as well for personal purposes. Cell phones are actually so popular in the United Kingdom that as of 1999 the U.K. had a cell phone penetration of 40.76% compared to that of 31.15% in the U.S. (tca). As of 2001 the cellular density in the U.K. was 78.0 compared to a telephone density of 58.0, meaning that there were around ten million more cellular phones than regular switched network telephones in use (Infoserv2). In many cases individuals have more than one cell phone. In a study performed by Pitney Bowes, Inc., the United Kingdom showed a 25% increase in internet usage between 1999 and 2000, the highest of any nation surveyed (Relojournal). However, more than 50% of all messages received daily by U.K. office workers are over the telephone rather than e-mail or some other alternative means (Relojournal). Meredith Fischer, vice-president of Pitney Bowes, Inc. and co-author of the study states, "Despite the shift towards electronic communications, the telephone, either wired or cellular, is still the communication tool of choice in the United Kingdom. British phone use is more frequent than in any other

Typical of a European country.

nation we surveyed, signaling the British worker's affinity for real time voice communication" (Relojournal). Cellular telephone communication has expanded very rapidly in the United Kingdom since its introduction in 1985. It obviously is a dominant force in and has a profound impact on the lives of a huge percentage of the population in the United Kingdom. With improvements in technology and service, its penetration and impact will continue to grow.

- * Good history of the cell phones in the UK.
 - * Would like to have seen a little more about why the numbers of usage is so different.
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Case Study – Internet Usage in South Africa

It is hard today to imagine life without the Internet. So much of what we do revolves around being online and connected. Internet usage only really took off in the mid nineties with the ability to connect to the Internet through personal computers. While the United States was a major, if not the largest, user of the Internet, other countries around the world were experiencing growth as well, including South Africa. South Africa is unique because it is largely English-speaking and “westernized,” while the rest of Africa is, for the most part, undeveloped and third-world. Thus, the majority of Internet usage in Africa takes place in South Africa.

The Internet had its beginnings in the United States in the 1960's. Because of government sanctions against it, South Africa did not become involved in Internet research and use until almost 25 years later. In 1988, a group of three men working at Rhodes University in Grahamstown, South Africa, found a way to establish a sustainable email link to the Internet. The link was established between Rhodes University and the home of Randy Bush, a programmer in Portland, Oregon. After a few years of improvements and advancements, the group was able to establish a full Internet connection in 1991. In 1992, the U.S. sanctions against South Africa were lifted and the group was able to use routers to link to the United States.

In South Africa, the Internet first became commercially available in 1994. From that point on, Internet usage began to grow popular with the public, experiencing rapid growth rates much like in the United States, but on a smaller scale. By 1997, there was

an estimated 600,000 South African Internet users. That number jumped to 1,266,000 in 1998, and was up to 2,500,000 in 2001. While the original user base consisted of university researchers, the Internet was quickly embraced by businesses and the general public. Popular uses of the Internet in South Africa are very similar to those in the United States, such as banking, making online purchases, and browsing websites of local companies including insurance and telecom services.

The Internet and the number of Internet users grew immensely from 1994 to 1998. Every year the Internet user base was at least doubled, but often even more so. The rapid growth finally began to slow down in 1999, which was the first year that the user base did not double in South Africa. According to *The Goldstuck Report*, "the slow growth is largely a factor of delays in licensing a second network operator, Telkom's own uncompromising attitude towards Internet Service providers, and market ignorance about the continued value of the Internet in the wake of the technology market crash of 2000 and 2001." The number of users continues to grow at a slower rate, and it is estimated that by the end of 2003 there will be approximately 3,600,000 Internet users in the country. The majority of Internet use in Africa is concentrated in South Africa. The total number of users on the continent of Africa is approximately 6,310,000, with over half of them from South Africa alone. In comparison, there are approximately 182,670,000 Internet users in the United States and Canada.

Despite its late start, South Africa has made strides in Internet technology. The Internet is popular for its convenience and its entertainment value, and South Africa is definitely taking advantage of what the Internet has to offer.

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** Nice job of comparing the state of internet usage in S.A to the U.S.A.*

Village Advancement

“Beep, beep, beep.” It is seven o’clock in the morning, and this is your wake up call. It is your alarm clock. You get up, turn on the light, go to the kitchen, turn on the coffee maker, and hop in the shower. You do these things everyday, and they all involve technology. It is what our “world” is founded on. But what about other people and their “world.” There are some countries that do not have our advanced technology. In India, the technology is not so advanced, like in the state, Manharasha. If we go even further into Manharasha, we can pinpoint one example of technology at work. This can be found in a place called, Warana.

Warana is a rural area made up of about 100 villages with 50,000 farmers that are all located in a 25,000 sq. kilometer area. In June of 1998, a project called the “Wired Village,” was launched. This project involved Information and Communications Technology or (ICT), which they wanted to use as an effective tool for rural development. Several groups introduced ICT into Warana: the National Informatics Center (NIC), the Government of Maharashtra, the Warana Vibhag Shikshen Mandal (Education Department,) and the WGC, also known as the Warana Group of Co-operatives. It is the first rural network Project completed in India. The project was actually initiated by the Prime Minister’s Office Information Technology (IT) Task Force. Their goal was to increase the efficiency and productivity of the sugar cane co-operative. They also wanted to allow the 100 villages around Warana to have a wide

range of information and services. The villages can access information in their local language. This information ranges from crops and agricultural market prices, employment schemes from the government of Maharashtra, and to the educational opportunities available. The information can be accessed at one of the 54 village information kiosks. There are 70 kiosks, but only 54 are working. There are 10 servers, 2 small aperture terminals, 165 PC's, and Internet kiosks in every village. To get a better idea on how beneficial the project may be, you must first have an understanding of the processes the farmers have to go through to harvest and sell their sugar cane. First, the farmer would have to take a sample of their sugar cane to the sugar factory. Then, the farmer would have to return in a few days to see if the factory would send workers to his field to cut and take the sugar cane. Next, he would have to return to the factory to get the weight of the crop. Then, one more trip is necessary in order to collect his money. In all it takes the farmer four trips to the factory to harvest a crop of sugar cane. It seems a lot easier for the farmer to go to the local village information kiosk. Here, all he has to do is give his account number to the person working at the kiosks. Then, the farmer can find out when his sugar cane needs to be cut. When the sugar cane is cut and taken to the factory, the farmer can go back to the kiosks and find out the weight of his crop and how much money he has made. He can also find out when his account will be credited with the money. If he has any problems, the farmer can have the booth operator e-mail the managing director of the cooperative society. The kiosks also provide weather forecasts, veterinary advice, and land records. The kiosks are not limited to the farmer; other villagers can come in and use the lab. Mothers, in Warana, can bring their children in where they can play computer games.

Good additional information!

Warana does have some advantages that help the "Wired Village" project to be successful. Sugar and mild make Warana and its people very prosperous. Also 90% of the population is literate. In Warana, there is a regular power supply. There are two telephone lines per every thousand people, which is better than the national average, which is less than one. There are also two Aptech computer-training centers. It takes 100 people to operate the 70 kiosks, and the six businesses and the IT centers. Soon the six IT centers will be able to help students study using computers. Younger people are now using the computers to surf the web and send e-mails at a cost of 45 cents per each hour used. This Internet access may lead to better job opportunities to these younger people if they know more about computers. The Internet also exposes them to the other options that they may have in life. The "Wired Village" project and the adaptation of ICT show how technology information makes life easier, especially to people who do not have as many benefits from technology as we do.

These benefits that the people of Warana are grateful for show us that the things we may take for granted or not even think about are very important and make a difference in our "world." So, instead of cursing to your self when you hear the insisting sound of your alarm clock at 7:00 in the morning, be thankful you have the advantage of this technology, even if it is a small one.

- * Very nice report on an information technology we had never heard of.
- * Don't be afraid to speak up in class a little bit, maybe about this technology you found



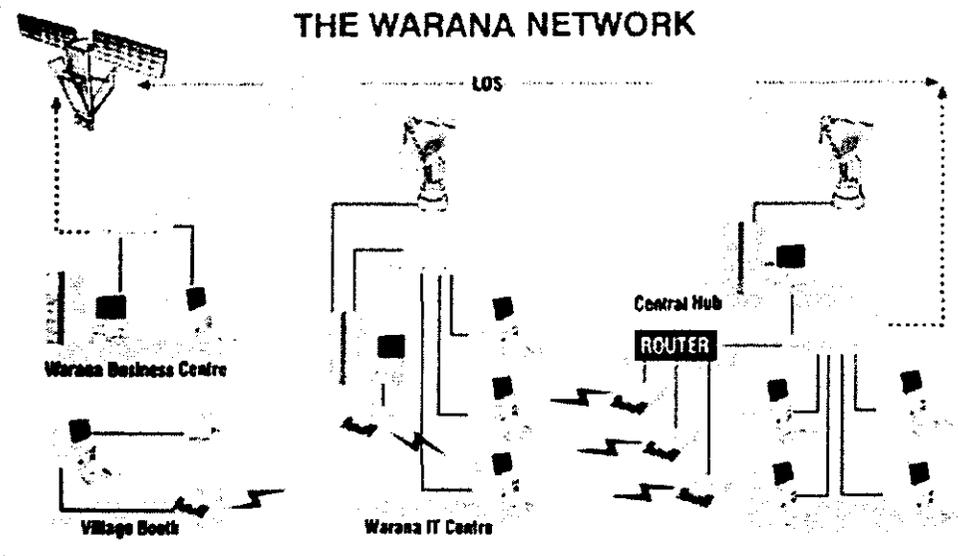
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THE WARANA NETWORK



Spain vs. the U.S. Concerning Cellular Phones

Cellular telephones are one of the most popular information technologies in the world. They are seen in the hands of people everywhere and are used for many different reasons. The use of them, however, along with the number that each person owns, varies between nations. People in Spain, for example, may own one cell phone for business purposes and another for social functions. People in the United States, on the other hand, use only one cell phone for both social and business aspects. Although both countries enjoy using their cell phones, the use of cellular phones in Spain greatly differs from the use in the United States.

The use of cellular phones in Spain has increased dramatically. They were first introduced in the late 80s and have since then, become very popular (Nokia). As of 1999, there were 15 million users in Spain (Moore). Many of the users in Spain own up to three or four cell phones (Condra). The reason for this is the way users pay their bills; using cell phones as opposed to landline phones is much cheaper. Instead of paying monthly bills on the phone, the users pay with a new prepay system. Although users may only be able to use the cell phones until they reach a certain amount, they stretch their money by texting messages for about twenty cents a message. Cell phone usage is so cheap in Spain that users range from teenagers to senior citizens (Condra). Since many Spaniards own cell phones, the government has made rules about its usage. The biggest issue was driving while using cell phones. Luckily, the government has decided that the

I think that may be b/c of the high taxes from the gov + here in the U.S.

use of them while driving is banned. Everyone is forced to use a hands free phone if they use one at all (Cellular-news). Spaniards will just have to buy hand free phones to add to their collection. Although owning three or four cell phones may sound crazy to someone in the U.S., it makes perfect sense to people in Spain.

Cell phones are everywhere in the U.S. The use of them has been increasing ever since its first commercial use in 1984 in Chicago, IL. Although it seems like everyone has one by now, only about half of the U.S. population actually own cell phones (Wireless). Despite the fact that users range from teenagers to businessmen, cell phone usage in the U.S. is considerably lower than in Europe. Since landline telephones are cheaper than cell phones, many people in the U.S. do not need cell phones. Those in the U.S. who do own them tend to own only one because the expenses are just too high to own multiple phones. It is possible that the use of cell phones would increase if there were more prepay services (Wireless). Until then, cell phone usage in the U.S. will not include everyone. Even though there are not as many users in the U.S., there is still a problem with using cell phones while driving. While it is illegal to drive while using cell phones in certain states, the national government ruling is still being debated (Cellular-news). Many accidents could be avoided if people were banned from using cell phones while driving. Hopefully, the U.S. will join other countries soon and make it illegal. ✓

Cell phone usage varies greatly between the Spain and the U.S. The two countries differ from the number of users to the number of phones per user. There are a lot more Spaniards that own cell phones than Americans. Not only are there more users in Spain, but many of those users own more than one cell phone. The prepay system in Spain makes it possible for everyone to afford them. However, the many differences

between cell phone usage in the Spain and the U.S. does not change the fact that users from both countries use their cell phones everyday and will agree that it is an extremely useful tool.

* Great description of the usage of cell phones and how they are used differently than here in the U.S.

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The advent of the mobile cellular phone has revolutionized the communications industry. Now, one can virtually call anyone anywhere at any time. The magic of the mobile phone has not escaped the notice of the European Union, especially Finland, which has experienced an exponential growth in the public use of mobile phones among its citizenry in recent years.

European cellular service began in 1981 with the introduction of the Nokia Mobile Telephone System in Finland, as well as in Denmark, Sweden, and Norway. Then, according to a study by Statistics Finland released May 30, 2000, the years between 1996 and 1999 revealed a dramatic increase in the public use of mobile phones. "The number of new Finnish households with a mobile phone increased by over 800,000 between 1996 and 1999. ^{wow!} Seventy-eight per cent of the 2.35 million Finnish households had at least one mobile phone in autumn 1999. as many as 23 percent of households no longer had a wired telephone at all. Their number went up by 200,000. According to a Statistics Finland survey, nearly all Finns aged between 15 and 39 used the mobile phone, whereas only some 40 per cent of the men and 20 per cent of the women aged over 60 had a mobile phone of their own." (Statistics Finland) The same survey goes on to mention the increase in text messaging via the mobile phone: "Ninety per cent of the mobile phone users sent text messages via their phone. A considerable proportion of the young women users have adopted text messaging as their prime form of communicating *that's amazing!* via the mobile phone. About 70 per cent of those using text messaging said they had sent questions or reminders concerning a matter of time. Gossiping and chatting messages

had been sent by 46 per cent of the respondents while 28 said they had sent intimate messages." (Statistics Finland)

More recently, however, according to an April 2001 article by the Internet magazine *Fresh Gear* entitled "Mobile Phone Infatuation," "Every 73 out of 100 Finns owns at least one mobile phone. With 5.2 million people, that's 3.8 million mobile phones, making Finland the world leader in mobile phone penetration per capita." The author of the article goes on to speculate as to why this phenomenon is true: "Perhaps the Finnish people's fancy for cell phones reflects underlying cultural traits. 'I think that us Finns have some kind of character that we are not so eager to discuss face to face,' one Finnish man says. 'It's much easier to speak mobile.'" (Fresh Gear) This, dovetailed with the fact that Nokia is based in Finland, may shed some light as to why cellular phones are so popular in Finland. As technology becomes cheaper, more available, and remains as useful to the common Finn, there would seem to be no reason for the growth of the use of mobile phones in Finland to stop.

So what does this say about the U.S.?

* Very nice report of the cellular usage in Finland, thank you.

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Interactive Television

If you are looking for what the future of television might look like then you will want to visit England where digital TV is more commonplace than Internet access. For an example of what TV is like in England we will talk about an account-manager who is home sick from her job. She has been ill for a few days and unlike most people in the United States that are home sick she didn't have to stare at the same bad programming day after day. Instead she scanned the headlines, ordered pizza, paid a few bills, answered polling questions, bought some CD's, and played a few games all with her remote control and her television.

This is just an example of how interactive television (iTV) is used in England. For the past decade U.S. TV executives have been promising that viewers will be able to do more with their TV sets. However, we have seen how that has turned out WebTV quickly flopped and recorders like the TiVo are being slow to take off. Britain on the other hand is a much different story. According to Fortune magazine 31 in March of 2002 31% of Britain's 26 million households had interactive television as compared to only 8% in the U.S.

How did England achieve such dominance in iTV when the technology is available on both sides of the Atlantic? It started in 1989 with the introduction of digital television. British cable companies took to the idea of digital television which allowed them to go straight to building interactive capable networks and leapfrog the U.S. in this area. Most U.S. cable companies had millions already

invested in existing cable structures and were reluctant to push this digital technology which is what has held back the use of iTV. Consumer habits also have played a big part in the popularity of iTV. Most English don't own a PC and few that own a PC have online connections; to give some percentages about 46% of households in England have PS's and only about 32% are online. The government has also got behind the push for digital cable in England. In September 1999, the Department of Media, Culture, and Sport issued a mandate that requires British households to be digital by the year 2010.

Normal citizens in England now have the ability to have iTV in their homes and many take full use of this ability. Citizens of the U.S. and other countries have to have a PC with online access to accomplish tasks that citizens of England can do with just their television, remote control, and a monthly subscription to iTV. Hopefully in the future other countries will be able to have an iTV option with the abilities displayed in the English broadcasts.

- * Good job of finding an interesting topic to write on.
- * Also, good report on the use of iTV.

Reference Page

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"Interactive TV Today", American Film Institute | Intel Corporation | Tracy Swedlow
<http://www.itvt.com/etvwhitepaper-3.html>

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Cell Phone Usage in Spain

Spain is currently the fifth largest telecommunications market in Europe, and as a country has embraced the use of cell phones and taken off with it. Currently, 70 percent of Europeans carry cell phones, in comparison to 45 percent of United States citizens. Cell phone usage has been on a steady rise both in the United States as well as Europe, but the increase in usage in Europe has been drastic.

Spain currently has a population of about 40 million people. There are about 8.5 million cellular lines, as well as about 17 million land-line telephones. This is a very interesting fact that Spain's has a ratio of one cell phone to every two land lines. The boom in cell phone use in Spain is enormous. Prior to 1999, cell phone usage per 100 people was higher in the United States, though now Spain currently has a higher rate. From 1998 to 1999, subscribers per 100 people more than doubled in Spain from 17.9 to 37.8, while in the United States usage only increased from 25.5 to 31.5.

Much of the difference in the figures of these two countries may be contributed to the pricing structures of the two countries. Both land-line and cellular service in Spain are priced on a per-minute basis, while the United States primarily uses a fixed-rate system for land-line calls and a per-minute basis for cellular calls. Spanish cellular lines operate on a structure known as calling party pays (CPP), while the United States cellular network operates on a receiving party pays (RPP) structure. In Spain, when a call is placed, only the caller pays for the call, with no charge to the recipient of the call. But in the United States, both the caller and the recipient of the call both pay airtime charges for

*Interesting point!
I did not know that*

the call. This suggests that cell phone users in Spain may now view cell phones as a substitute to land-line phones, as on both land and cellular lines a fee is incurred. As the price of cellular service continues to decrease, cell phone usage will continue to increase in Spain.

Spain is also a large consumer of pre-paid cellular service, which has recently started to grow in the United States. In Spain, the growth of the cellular market was driven by the popularity of pre-paid access with the younger aged Spaniards. The pre-paid plan also appeals to parents because they can place a limit on the cost of providing a cell phone to a child. With the calling party pays structure of Spain, parents can contact children at any time without having to worry about extra charges incurred on the child's cell phone, because only the parent (calling party) pays for the call. This gives the parent unlimited access to their children, as well as knowing the child always has the phone in case of an emergency, while still being allowed to place a cap on access the child has to cell service time. The CPP pricing structure allows for quicker pre-paid growth in Spain, as well as other countries using it, than for countries using the RPP structure.

been ... could have
17% for
an entire

* Good job of explaining the usage of cellular phones in Spain.

* I would have liked to see either more detail / about how regular cell phones are used or an entire paper about the prepaid cell phones usage.

Sources

Guerrero, Lucio. "Cell phone sales apparently up sharply." Chicago Sun-Times.
20 Sept. 2001: 26

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Mobile Pricing Structures and Trends. Paris: OECD, 2000.

OECD (Organization for Economic Co-operation & Development). OECD
Communications Outlook. Paris: OECD, 2001.

"Spain". 13 Feb. 2003. CIA – World Fact Book. 16 Mar. 2003
< <http://www.cia.gov/cia/publications/factbook/geos/sp.html>>

Appendix B: Final Presentations

The following pages contain the final presentation evaluation forms, which include the authors' comments and the grade given for each presentation. In order to keep the students' anonymity, their names have been omitted.

Appendix C: Course Handouts

The following pages include any supplemental handouts that were given to the students during the course of the class. These handouts include:

- Technology Quotations, February 24

This handout was a set of quotations relevant to the fields of technology and information technology.

- Technology Timeline, February 26

This handout was a timeline compiled by the authors' that gave the history of technologies that were discussed in that class.

- Technology Timeline Updated, March 3

This handout was used as an update to the original technology timeline in order to include the history of the technologies covered in that lecture.

- Not Media Convergence, March 5

This handout was used in the discussion of media convergence so that the students could better understand what media convergence is and what it is not.

Technology Quotations

Globalization, as defined by rich people like us, is a very nice thing... you are talking about the Internet, you are talking about cell phones, you are talking about computers. This doesn't affect two-thirds of the people of the world.

Jimmy Carter

<http://www.technicity.net/quotes.htm>

All of the books in the world contain no more information than is broadcast as video in a single large American city in a single year. Not all bits have equal value.

Carl Sagan

http://www.sunybroome.edu/~dixon_a/info/QUOTES1.TXT

Western society has accepted as unquestionable a technological imperative that is quite as arbitrary as the most primitive taboo: not merely the duty to foster invention and constantly to create technological novelties, but equally the duty to surrender to these novelties unconditionally, just because they are offered, without respect to their human consequences.

Lewis Mumford

<http://www.technicity.net/quotes.htm>

Technology is not an image of the world but a way of operating on reality. The nihilism of technology lies not only in the fact that it is the most perfect expression of the will to power ... but also in the fact that it lacks meaning.

Octavio Paz (Mexican poet)

"The Channel and the Signs," *Alternating Current* (1967)

Technology is a servant who makes so much noise cleaning up in the next room that his master cannot make music.

Karl Kraus (Austrian writer), attribution

Harry Zohn, translation

originally published in *Beim Wort genommen* (1955)

Half-Truths and One-and-a-Half Truths (1990)

NOT MEDIA CONVERGENCE!



Hardware:

- 2xPIII 1.0GHz CPUs 1 GB SDRAM
- GeForce 256
- 1x20GB boot drive + 2x40GB storage drives in RAID 1

Overview:

Basically, it's a fully functioning coffee maker integrated into a computer case. You pour the water into the funnel at the top, it goes down the tube into a book-shaped water tank where it sits until you hit the power switch, at which point the heating coil boils the water, sending it back up another tube and into the coffee grounds basket. The switch can also be controlled using an RF keychain remote. Other modifications include: custom-cut window which was then hand-etched to a coffee cup motif, custom-build LED arrays to provide exactly the right shade of red light, stereo VU meter in the front panel indicator section, additional hot plate on top for two pots of coffee at once, and the white, kitchen appliance paint job.

Appendix F: Media

The following pages include the captured class sessions and authors' journals in DVD format. The DVD may be played on most standard DVD players or DVD drives, with appropriate software.