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Changes in Telecommunications Due to the 1996 Telecommunications Act

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CHANGES IN TELECOMMUNICATIONS DUE TO THE 1996 TELECOMMUNICATIONS ACT

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ABSTRACT

Telecommunications has gone through various stages of development since its conception in the late 1800's. The most current event and the basis for this thesis, is the legislation that passed Congress titled the "Telecommunications Act of 1996". It is the purpose of this document to research the impact of this legislation to the user and the businesses involved in this industry.

There were three main areas of focus for this research. The first area of study pertained to the current local and long distance companies in the telecommunications industry. The second area related to the users of the telecommunications products and what impact this change could have on them. And finally, the article addressed how this law would expand competition and bring in other industries not normally associated with telecommunications.

To undertake this challenge, seventy-eight articles were obtained relating to these three categories. These articles were then sorted, with the data classified into the three areas of investigation. This data was then analyzed to eliminate biases that could impact the decision process to either substantiate or refute the hypothesis. It was hypothesized that deregulation of the telecommunications industry would not create opportunities for companies to expand into the national long distance business.

Results of the analysis showed that the competition will be the strongest in the local access arena, and that this is already taking place through mergers and the entry of both utilities and cable television companies into telecommunications.

These companies already have a consumer market in a particular region of the country and plan to expand their product lines to include telecommunications. Most of the mergers have been between local access providers merging with other local access providers to concentrate on that business.

Based on the study, the hypothesis was supported that at least initially the focus will be in the local access markets. The existing long distance companies will have to compete with these providers in regions but not on a national basis. What can also be concluded from this research is that the telecommunications act will in fact create more competition and expand the type of products that will be produced in this new industry.

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INTRODUCTION

Evolution of Deregulation

Telecommunications has evolved tremendously since its conception back in the late 1800s. The instrument that Alexander Graham Bell displayed as a toy, while teaching the deaf, has evolved into a one trillion dollar industry here in the United States. Ever since that time controversy has existed over the role of competition and antitrust in telecommunications. Conflict began in the 1890s, when the first Bell patents expired and competitors entered into the local service exchange market-place. The question with competition in telecommunications is whether a company can achieve efficiency through economies of scale and scope, or is profitability only achieved through inefficient anticompetitive monopoly power. (Noll 501)

The history of the telephone goes back to the evening of March 10, 1876. Alexander Graham Bell had devised an instrument that allowed people to talk to each other over copper wires. During that evening Bell was working in his laboratory with his associate Watson. It was at that time when Watson heard the first words over the wire. Watson at the receiving end, claimed that Bell had spilled acid and shouted into the transmitter, "Mr. Watson, come here, I want you!" Bell's recollection, at the transmitting end, omitted the acid and remembered the immortal words as "Mr. Watson - come here - I want to see you!". The patent for this devise was offered to Western Union, the dominant United States telegraph provider, to develop and deploy this technology. They refused the opportunity, as they were

developing their own phonic device, so Bell created his own telephone company. (Hyman 67).

Competition did exist as Western Union, through subsidiaries, formed the American Speaking Telephone Company. This company had patents from some of the most prestigious inventors of the time; Gray, Edison, and Dolbear. Negotiations between Bell Telephone and American Speaking were taking place to combine the two operations, but ceased in February 1878. Western Union had by then undercut Bell's prices, and the Edison telephone instrument was superior to Bell's. This competitive situation created the first antitrust suit in the telecommunications industry. Bell Telephone discovered that Emile Berliner had filed a caveat for a transmitter thirteen days before Edison, hired Berliner, and then sued Western Union for patent infringements. This patent suit extended for twenty years. The odds, however seemed to favor Western Union. Albert Bigelow Paine explains,

> The giant expected to crush the pygmy with a blow. The first result was quite unexpected; the action of Western Union considered Alexander Bell's "talking Toy" worth claiming had the effect of awakening the general public to its value. The Williams shop, Bell's manufacturer, could not make the telephones fast enough to supply the demand, and what was equally important, alas! Sanders, Bell's treasurer, could not get money fast enough to pay for them. (69)

Western Union in refusing to market Bell's telephone devise when offered in 1876, created competition and, as noted by Paine, they soon lost the competitive advantage in the market place.

On November 10, 1879, an armistice was agreed upon between Western Union and the Bell Telephone Company. Western Union, being under attack in both the telegraph and telephone markets, decided to stay out of the local exchange telephone business. They acknowledged that Bell had created the telephone and sold Bell the Western Union telephone system. The agreement was that Bell would pay a twenty percent royalty on revenues from Western's phones to Western Union

and Bell pledged to stay out of telegraphy. Bell eliminated a deadly rival and acquired 56,000 telephones in fifty-five cities. The new company was named American Bell (72).

Up to this point in time, most users of the telephone were in the local exchange market or inter-city users. As the technology improved customers wanted to communicate between more distant locations. In 1885, American Telephone & Telegraph (AT&T) was incorporated as a subsidiary company of American Bell in order to handle long-distance calls. For manufacturing, American Bell bought control of Western Electric in 1881 from Western Union. American Bell now owned the largest electrical equipment manufacturer as well as the only telephone system in the United States (73).

Bell's patents expired in 1894, allowing for independent telephone companies to come into the telecommunications market. Several manufacturers began to create and sell their own telephone instruments. This caused an outbreak of price wars. Independents took six percent of the telephone equipment market in 1894, forty-three percent in 1900, and fifty-one percent by 1951. The local exchange market was also affected with forty-one percent being serviced by Bell, fourteen percent by independents, and forty-five percent had multiple telephone lines from multiple providers. AT&T had eighty percent of the long distance business in 1907 and was the predominant player because it serviced between the major population areas and because it would not interconnect with the independents (75).

The Communications Act of 1934 created the Federal Communications Commission (FCC) which took over regulation of the telephone industry's interstate and foreign business. The FCC had power to order interconnections between carriers, set prices, and prescribe accounting procedures. As stated in Section I of Title I of the Communications Act, "To make available, so far as possible, to all the people of the United States, a rapid, efficient, Nationwide, and worldwide wire and radio communications service with adequate facilities at reasonable charges."

What this law enacted was a separate federal agency to provide jurisdiction over interstate and foreign telecommunications. Regulation within the state was controlled by the Public Utilities Commission (Auw 97).

The FCC in a ruling in 1949, divided the market between wireline (telephone) and non-wireline radio common carriers. This came about when mobile radio carriers began to interconnect their radio signals to the telephone network. Mobile radio came into existence in the 1920s and was able to handle one-way transmission communication. Two-way operation came about in 1932 and in 1940 New York Telephone interconnected the mobile radio to the telephone network to validate compatibility. As more mobile radio carriers came into play, the Bell system began refusing to interconnect them. This meant that mobile customers were limited on the distance they could communicate. They were not allowed to call directly from their mobile phone to an ordinary wired telephone to make long-distance calls. An intermediary system would have to be put into place to relay the message. In 1961, this was changed when AT&T and the radio carriers made an agreement to interconnect, if the radio carriers became state-certified (Hyman 121).

Another innovation that changed telephony was satellite technology. It was discovered that international communications could be established by bouncing radio signals off of satellites. Congress, in 1962, passed the Communications Satellite Act, which made Communications Satellite Corp. (COMSAT) the sole agent for the United States in an international communications satellite consortium. COMSAT shareholders were held by the public and by common carriers, although the carriers subsequently sold their stock. In 1972, the FCC opened up domestic satellite transmission to the competition (125).

In 1963, Microwave Communications, Inc. (later known as MCI) filed with the FCC, seeking permission to build a private-line microwave system between Chicago and St. Louis. The case dragged on until 1969, when the FCC decided in RE:

Applications of Microwave Communications, Inc., that MCI's offering would be beneficial to users who did not need the expensive, full-time offerings of the established carriers. This market niche of offering time allocated service instead of dedicated service created opportunities for competition within telecommunications (Martin 32).

The first step toward deregulating the telecommunications industry occurred in 1968 when the Supreme Court ruled on the Carter Telephone. This decision permitted any private company to access non-regulated long distance lines as long as it did not compromise telephone service on any level, from local telephone companies to long distance interconnections. The FCC ruling, "Matter of Use of the Carterphone Devise in Message Toll Service", struck down AT&T's entire tariff on foreign attachments and reasserted that AT&T must show that an attachment will cause harm before it can be prohibited. This went against the long held standing of not being able to interconnect devises of any sort to the Bell telephone system and reselling of that service (Johnston 24).

Another ruling by the FCC which further opened the door to competition was in 1971, when it decided in favor of specialized common carriers. Specialized common carriers (SCC) were companies that could establish dedicated private line networks for businesses. The problem that occurred was that once these carriers got their physical plant in place they realized that the margins were not good enough to prosper. What these carriers did then was to extend into the switched voice business. The rulings by the FCC, were so vague and there was so much litigation occurring because of this decision, that competition to AT&T took advantage of the situation. In 1977, AT&T Chairman, John deButts told the Senate subcommittee that in his view:

> the very diversity of application that the FCC sought in its Specialized Common Carrier decision ... lies not in a diversity of suppliers but in the common user switched network and the new potentialities with which technology just now being introduced will endow it. What this

> longer-term perspective says to me is that it is important to eschew solutions that, plausible as they might appear at the moment, would at the same time foreclose opportunity that new technology might afford in the future. (Auw 152)

This was further outlined by AT&T Chairman, Charles L. Brown, in testimony before the same Senate subcommittee that ruled on the bill, two years after the decision:

> Looking ahead, I am concerned that ... fragmentation ... would represent an obstacle to engineering the "intelligent network" of tomorrow. How "intelligence" will be distributed among the terminals, switching nodes and transmission paths of the network we can't currently predict. It would be regrettable if arbitrary corporate boundaries preclude our doing so in an optimum way. (152)

The fear was that as more carriers began to offer switched products to businesses that consistency in the product lines would not exist. This would steer away from the common concept of "universal service", in providing service to the majority. Competitors might provide certain customers specific services to meet their objectives and gain access into the market (152).

AT&T, in 1978, filed the Exchange Network Facilities Interstate Access (ENFIA) with the FCC, which would eventually establish the connection rules and tariffs for the SCC's, on how the SCC would pay for their use of local access. The FCC in essence ruled that the SCC's had an access arrangement to reach the local network that was inferior to AT&T's, so that they would be required to pay less for use of the local network than AT&T did. This judgment reinforced the previous decision creating the settlement formula for independents. That discount accounted for a large part of the lower expenses that made it possible to undercut AT&T prices making it profitable to go into the long-distance business (Hyman 149).

The Department of Justice in settling a long standing antitrust case against AT&T, ruled that the local exchange carrier companies were to be split from the mother company. The ruling dated January 8, 1982, stipulated the following; 1.)

AT&T would keep Western Union, Long Lines, Bell Telephone Laboratories, terminal equipment, Yellow Pages, and all related to interexchange service. 2.) AT&T would divest itself of all fully owned Bell Telephone companies. 3.) AT&T could enter any business, but it could not buy stock or assets of a local Bell operating company. 4.) The Regional Bell operating companies (RBOCs) could provide only regulated natural monopoly local exchange service. 5.) The RBOCs had to assure that all interexchange carriers would have the same access to the local network as did AT&T. This divestiture created a new structure in the telecommunications industry, producing AT&T Long-Distance and seven RBOCs of equal size (Martin 28).

Judge Greene, on August 24, 1982, issued the Modification of Final Judgment (MFJ), which underwent additional fine tuning as more problems were discovered. The MFJ followed the line of the January agreement except that the RBOCs retained the Yellow Pages and could engage in unregulated operations such as cellular mobile radio, sale of customer premise equipment and other activities specifically approved by the courts. One thing restated was that they could not manufacture telecommunication equipment. Later, Judge Greene gave the RBOCs a significant marketing presence by restricting the use of the Bell trademark to the RBOCs. With the exception of the name Bell in Bell Telephone Laboratories, AT&T was stripped of its heritage (27).

A passage from a 1982 FCC staff report conjures the significance of the MFJ. More particularly it addresses the question as to when as a consequence of it AT&T might be ripe for deregulation, upon which happy days its management might thereafter spend the time it currently devotes to regulatory matters exploring and exploiting new market opportunities. Here is the staff's view of what - conceptually - the MFJ does and what it means:

> Generically, AT&T will be transformed into an MCI. The question that the Commission and Congress will confront in the months and years ahead will revolve around the extent to which public policy should treat AT&T like

an MCI. (Auw 80)

That turning AT&T into an "MCI" might be an appropriate objective of public policy is a notion that not only employees of AT&T might find distinctly odd. Be that as it may, it goes a long way to explain the FCC's decade-long disposition to open telecommunications markets to competition while constraining AT&T's response to them. In present context, however, it suggests that the "freedom" to which AT&T aspires may come only at the cost of its becoming indistinguishable from its competitors (80).

Today's Key Players in the Telephone Industry

Judge Greene's decisions would change the telecommunications industry and break up the monopoly held by AT&T in the local exchange and long distance markets. Because of that decision, today there are three key long distance players in the telecommunications industry. These include, AT&T, MCI, and Sprint. In the local exchange market place it is dominated by seven Regional Bell Holding Company's (RBOCs) and one independent carrier GTE. The seven RBOCs are Ameritech, Bell Atlantic, BellSouth, New York Telephone, SBC Communications, Inc., U.S. West, and Pacific Telesis. There are many other companies in this industry but these are the dominant players and bear the most influence on the legislation (Martin 27).

AT&T was incorporated in 1885 and was the holding company for Bell Telephone System, Bell laboratories, and Western Electric. The company was diversified into Long Distance telephone services, manufacturers of computers, financiers of leased equipment, as well as providing credit and calling cards. It structured itself into five main divisions. AT&T Communications was the largest organization or division. This handled both intra and interstate long-distance telecommunications services. Another division, AT&T Information Systems provided computer and customer premise equipment. This organization leased out

telecommunications equipment to the long-distance subscribers. AT&T Technologies consisted of the old Western Union manufacturer. It manufactured and sold various types of telecommunications equipment. The largest customers to this division being the RBOCs. The AT&T International division negotiated joint ventures with other international providers to establish its presence in those countries. Finally, AT&T Bell Laboratories was the research group for the company. This company became and currently is the largest telecommunications provider in the world (AT&T 16).

MCI Communications Corporation was incorporated in 1968. This is the largest competitor of long distance services in the United States to AT&T. The company is set up with the following divisions: Data Services, Electronic Mail, Information Resources, MCI Business Services, Mid-Atlantic, Consumer Markets, and International.. This is an extraordinarily aggressive company that has created multiple niche markets in order to survive in the telecommunications industry. It was through MCIs efforts that the divestiture of AT&T from the RBOCs occurred. This company now offers product-for-product the same as AT&T (MCI 10).

Sprint Corporation was founded in 1938. Subsidiaries of this company include: Carolina Telephone and Telegraph Co., Centel Capital Corp., Centel Corp., Centel telephone Co., Central Telephone Co., Sprint Publishing and Advertising Inc., Sprint TeleMedia, United Telephone of Minnesota, Centel-Virginia, North Supply, United Management Co., United Telephone, United Telephone-Florida, Telenet Communications Corp., UCOM Inc., U.S. Telecom Inc., United Information Services Inc., United Inter-Mountain Telephone Co., United Telephone Company of Indiana Inc., United telephone Company of Kansas, United Telephone Company of Missouri, United Telephone Company of Ohio, United Telephone Company of Pennsylvania Inc., United Telephone of South Central Kansas, United Telephone of Texas, United Telephone of the Northwest, United Telephone of the

West, United Telephone of the Carolina's, United Telephone System, United Telephone-Southeast Inc., and Utelcom Inc. As this indicates, Sprint acquired many Independent telephone companies to create both its long-distance and local access telephone networks. Until the Telecommunications Act of 1996, these companies were separated by Tariffs and could not be marketed as one company (Moody's 121).

The first of the seven RBOCs is American Information Technologies Corporation, commonly known as Ameritech. This company is made up of Ameritech Communications, Ameritech Credit, Ameritech Development, Ameritech Mobile Communications, Ameritech Publishing and Applied Data Research. Ameritech provided local access services to the five mid-western states of Illinois, Indiana, Michigan, Ohio, and Wisconsin. It's subsidiary, Ameritech Communications, provides telecommunications equipment to Ameritech subscribers. The credit division offers financing to subscribers who lease or purchase equipment from Ameritech Communications. One of the fastest growing businesses for Ameritech is in the cellular mobile communications industry. It was allowed to market cellular products outside of the five states it serves through Ameritech Communications. Ameritech Publishing provides the telephone directories for the five state regions. The development organization invests in new companies and joint ventures, which develop new product to be deployed and marketed by the various divisions. Applied Data Research is the computer information organization for Ameritech. It provides the information systems used by the other organizations (Ameritech 4-5).

Bell Atlantic Corporation is the next RBOC to be outlined. This company services seven mid-Atlantic states. Namely, New Jersey, Pennsylvania, Delaware, Maryland, Washington, D.C., West Virginia, and Virginia. This area is the most densely populated area in the United States. Organizations making up this company include Bell Atlantic Business Systems Inc., Bell Atlantic Corp. CTS-

Milwaukee Division, Financial Services Inc., International Inc., Bell Atlantic Mobile, Network Integration Inc., Software Systems Inc., Systems Integrated Corp., TriCon Leasing Corp., Delaware Inc., Maryland Inc., New Jersey Inc., Pennsylvania Inc., Virginia Inc., Washington D.C. Inc., West Virginia Inc., Bell Communications Research Inc., Belo Broadcasting Corp., Pacific Atlantic Systems Leasing Inc., and Vision Energy Inc. (Moody's 14).

BellSouth Corporation covers nine southern states which are Alabama, Georgia, Florida, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee. The company subsidiaries are American Cellular Communications Corp., Advanced Networks, Advertising and Publications Corp., Business Systems Inc., Communication Systems Inc., Enterprises Inc., Information Systems Inc., Intelligent Media Ventures Inc., Personal Communications Inc., Products Inc., Telecommunications Inc., and Dataserv Inc. This company extends across some of the fastest growing regions in the country (BellSouth 47).

NYNEX Corporation has most of its profits from service in the state of New York. Other areas that it covers are, a portion of Connecticut, Maine, Massachusetts, Vermont, Rhode Island, and New Hampshire. It has seven unregulated subsidiaries; NYNEX Business Information Systems, NYNEX Business Centers, NYNEX Information Resources Company, NYNEX Material Enterprises, NYNEX Mobile Communications Company, NYNEX Credit Company, and NYNEX Development Company. This has always been a very conservative company and has not expanded much since divestiture (Moody's 72).

Pacific Telesis Group serves the States of California and Nevada. Subsidiaries of the company include Nevada Bell, PacTel Properties, and Pacific Bell. At the time of divestiture, Pacific Telesis Group had the highest debt ratio and lowest pre-tax interest coverage among the RBOCs. The company services telephone communications, high-speed digital transmission with voice mail and network access to toll long-distance (Moody's 90).

SBC Communications Inc., formally known as Southwestern Bell Telephone, serves the states of Arkansas, Kansas, Missouri, Oklahoma, and Texas. It has diversified with the following subsidiaries: Associated Directory Services, Inc., Cable TV Arlington, Cable TV Montgomery, Cellular One of Chicago, Metro Media Paging Service, Southwestern Bell Capitol Corp., Southwestern Bell Mobile Systems Inc., Southwestern Bell Publications Inc., Southwestern Bell Technology Resources, and Southwestern Bell Telecommunications Inc. (SBC 5).

The last of the seven RBOCs is U.S. West Inc. U.S. West, which has the largest land mass, serves Arizona, Colorado, Idaho, Montana, New Mexico, Utah, Wyoming, Iowa, Minnesota, Nebraska, North and South Dakota, Oregon, and Washington State. Subsidiaries include Business Resources Inc., Capitol Corp., Communications Group Inc., U.S. West Diversified, U S West-BRI Credit Card Ventures, International Holdings Inc., International and Business Development Group Inc., Marketing Resources Group Inc., Multimedia Communications Group Inc., and NewVector Group Inc. While it covers forty percent of the continental United States in land mass, this area is pretty sparse in population (Moody's 141).

There were many independent companies that came into being over the history of telecommunications. The two most dominant were United Telephone and GTE Corporation. Both of these were purchased or merged with Sprint.

GTE Corporation was formed February 25, 1935 as General Telephone Corporation. Through various acquisitions and mergers GTE developed a presence in thirty-one states in the United States and has a presence in Canada, the Dominican Republic, and the northern Mariana Islands in the Pacific Ocean. Subsidiaries include Contel Cellular Inc., Contel Corp., GTE Airfone Inc., GTE Business Phone Systems, GTE California Inc., GTE Interactive Media, Government Systems Group, Discovery Publications Inc., Education Services Inc., GTE Florida Inc., Government Systems Corp., GTE Hawaiian Telephone Company Inc., ImageSpan, Information Services Inc., International Inc.,

Investment Management Corp., Laboratories Inc., Marketing Services, GTE Mobile Communications Inc., Mobilnet Inc., GTE New Hampshire, GTE New York, GTE North Inc., GTE Northwest Inc., Precision Materials, Retail Information Services, GTE South Inc., GTE Southwest Inc., Spacenet Corp., Telecom Inc., Telecom Marketing Corp., GTE Telephone Operations Inc., Testmark Laboratories, Vantage Solutions, GTE Virginia Division, GTE of Missouri, and GTE Corporation. The company's service are as varied, comprised of metropolitan and rural markets, servicing high growth as well as mature states (Moody's 62).

The 1996 Telecommunications Act

The Telecommunications Reform Act of 1996, the wide-ranging legislation passed by Congress and signed by President Clinton in February, will go down in history as the death knell of an archaic, paternalistic local telephone system--a system whose monopolistic approach to service delivery fostered inefficiencies and stifled technological advancement in ways that could not survive innovative technological developments and marketplace realities (Holland 36). This reform came after years of deliberation and is the first comprehensive rewrite of the law since "The Communications Act of 1934".

The new law confers its blessing on several kinds of competition the old laws banned. Local phone service is open to all comers, even long-distance providers. In return for opening their local markets to competition, the seven regional RBOCs can enter the long-distance business. Telephone companies may enter the cable business, too, and there can be cross-ownership of local phone and cable-TV services. A single company may now own TV stations that reach thirty-five percent of the U.S. population (up from twenty-five percent), and caps on radio-station ownership have also been relaxed (Schiffres 26). Under the federal law, the RBOCs must let competitors build their own local networks and gain access to the

precious "last mile," the connection that reaches into the home. The Bell companies can go into long-distance but only after satisfying various conditions. Another change in the law is that the Bell companies can now manufacture equipment for the first time. Before this change they would buy equipment and put their label onto it. The Bells can now offer cable television over their phone lines, and cable operators can offer telephone service over their cable wires. Long-distance companies can offer television, local and long distance services (Galarza 38).

Conformity to the act requires that the local access and long distance providers meet specific objectives. The checklist for local carriers include:

* Offer nondiscriminatory access to network elements.
* Offer nondiscriminatory access to poles, conduits and right of way.
* Provide 911 and E911 access on nondiscriminatory terms.
* Include white pages directory listings for customers of new entrants.
* Offer nondiscriminatory access to databases and signaling necessary for call routing.
* Provide interim number portability until permanent number portability is available.
* Offer nondiscriminatory access to telephone numbers.
* Comply with numbering administration plan.
* Offer reciprocal compensation.
* Offer wholesale discounts for sale.

The check list for long-distance entry includes:

* RBOCs are permitted to immediately offer interLATA services that originate outside of their respective regions.
* A Bell company can offer in-region interLATA service once it has at least one facilities-based competitor for both business and residential services. The FCC makes the final decision based on a public interest standard, in consultation with

the Department of Justice.

* Bell companies must provide interLATA services through a separate subsidiary for at least three years.
* Until a Bell company is authorized to provide interLATA services, or until thirty-six months have passed, competitors who serve more than five percent of the nation's access lines may not jointly market the RBOC's local service with their own (McCarthy, Telcos Charge Forward 8).

President Clinton's Act will change the telecommunications industry in ways unknown currently. Alan Burgess, managing partner of Andersen Consulting communications industry group, says it will be much like when the long-distance market opened up to competition. "Back in 1984, competition was focused on price. So the issue of the day was cutting costs to attract business, " he explains. "Then companies started to bundle products and services, at first to the big-business customers, and finally the residential consumer got the discount and the package deals" (Galarza 39). Who stands to benefit from these changes, the future only knows.

Statement of Purpose

Throughout the history of telecommunications state and federal regulators have intervened for the rights of the consumer. In order to provide a service, that could be utilized by all Americans, subsidies were created. This was not difficult to perform when there was a predominant carrier who had a monopoly of the market. As more competition came into the market, subsidization became more complicated. The government again had to interject an opinion to insure that a fair environment existed to all competitors.

Telecommunications is not the only industry that faced government regulation. Before telecom, U.S. airlines, banks, interstate trucking companies, and natural gas pipeline companies all woke from a sleepy state to find their safe worlds

deregulated and turned upside down. All of these entities went through the confusion and change created by deregulation. The concept of deregulation, and for that matter regulation, has caused controversy for generations (Kim, Telecom Deregulation 46).

The purpose of this research is to identify which entities will be impacted by the changes in the law. Who stands to gain and who stands to lose from these changes. Specifically, has deregulating the telecommunications industry achieved the goals established by the regulators during the deregulation process?

Chapter II

LITERATURE REVIEW

Subsidized Costs, Tariffs, and Pricing

The first major challenge that regulators face in implementing the Telecommunications Act of 1996, is with the interpretation and deployment of subsidized costs. Subsidized charges were created to distribute the cost of telecommunications in such a way that all consumers could afford basic telephone service. As stated in Section I of the Communications Act of 1934; "... to make available, so far as possible, to all the people of the United States a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable cost ...". This concept, called "Universal Service", was the guideline that local and long distance providers had to maintain when outlining their business strategies. The Communications Act of 1996 will change how these services are to be priced and maintained (Auw 48).

To pursue the public policy goal of universal service, regulators approved rate structures in which access to the network, particularly for residential consumers, was priced far below their cost so that residents could be connected regardless of their income. For the telephone companies to recover all the costs of providing basic residence telephone service, including a reasonable return to their shareholders' investments, it became necessary to price many discretionary services above their costs, in many cases by a substantial margin. What the new legislation has done is change the relationship of competition in the local access and long distance market place. These changes will affect how the old system of allocating

costs, or subsidies, can be utilized. This also raises concern with the idea of "universal service" and how cost containment will be handled as the defined lines created by regulation gets dismantled (Anderson 22).

Historically, the financing of universal service has been supported by several mechanisms, the most popular are the subsidies from long distance toll services dispensed through the local exchange carriers (LECs). How this works is that a subsidy, or charge, was created to compensate the local access provider for cost associated with interconnection from the consumer to the long distance toll service. Toll service was created as a result of the 1984 divestiture of AT&T. This service maintains that the LECs could carry traffic across what is know as a LATA. A LATA, or Local Access and Transport Area, is defined as a geographical area in which the LEC can legally carry local and long distance telephone calls. It was necessary to create these barriers to regulate what would constitute a local or a long-distance charge. Local access providers cannot cross LATAs (interLATA) and long distance providers can not provide service within the same LATA (intraLATA). LATAs were developed based on the Census Department's Standards Metropolitan Statistical Areas and bare no relationship to area codes or state lines. These were devised to service common social and economic segments. The costs associated with calls either generated in and/or carried across these areas are called toll charges. This additional cost, added on-top of the long distance charges, increased the price of long distance service to the consumer. (Martin 433).

A way that subsidies are financed is through toll calls made within the LEC service area. These are calls that do not go through a long distance provider and are called intraLATA calls. The bulk of these access and toll revenues come from business consumers. Within the revenue structure for these toll calls, the business consumers pay higher rates so that residential consumers can pay less. The business consumer is about twenty percent of the business to the LEC but provide

eighty percent of the local exchange company's revenues. Neel's Association, which represents local telephone companies, estimated that in 1993 twenty billion dollars in profits from access charges and toll calls were shifted each year to support local phone service. That amount, which is disputed in many quarters, translates into a subsidy of about twelve dollars per monthly phone bill for business consumers (Healey 1917).

With the AT&T divestiture, in 1984, came the introduction of cost-based access services and the concept of competitive toll rates. These concepts changed how subsidies were to be collected. The new system included various funds (e.g., the Universal Service Fund) and programs (Lifeline Assistance fund), that were financed by direct carrier assessments and targeted at specific objectives-e.g., ensuring that rates for local service in high-cost areas were priced as closely as possible to the rates in average areas, and that, as nearly as possible, every household could afford basic, minimal service. It was important when developing these services, that these changes not deviate from the idea of universal service and that the pricing of basic telephone service not become excessive for an individual household (Toth, The New Act 24).

How revenues were to be obtained for some of these programs, was based on the concept of toll-rate averaging. This was done by dispersing the costs of all services through averaging of both rural and residential areas. Phone companies were encouraged to charge the same amount for calls of equal distance, regardless of the difference in costs. The companies end up charging an average rate for each distance, which brings down the cost of toll calls in rural areas at the expense of calls in densely populated ones (Healey 1917). This concept is not supported in all areas or by all local access providers, as stated below.

Federal Communications Commission chief industry analyst Peyton Wynns states, "Most states believe that service should be more expensive in big cities," because residents there can reach more people for the flat fee that most pay for all

local calls. Then there are a few states, like Illinois, that keep rural rates higher to reflect the greater cost of stringing lines long distances. Regulators in New York allow NYNEX to charge consumers for every local call they make in New York City (except for the borough of Staten Island, which wants to secede anyway). In California, for example, prices for local service have been kept artificially low, and are subsidized by toll calls, which are middle-distance calls typically between a city and its suburbs (Kupfer, "They Want to be Your Phone Company" 145).

However, the local phone companies contended that even with subsidies they were losing money on home phones because the lines are longer, farther apart and less heavily used than business phones. "We believe universal service needs to be maintained," says US West Communications vice president Mark Stromberg. US West wants regulators to set "competitive zones" that cordon off the higher-profit, higher-density areas from less profitable rural areas that new companies are slow to enter (Fahys 01150270).

The gap between rates and cost is especially large in rural areas. Because of this disparity the FCC created a Universal Service Fund in 1986 to help support local telephone companies that have costs well above the national average -- generally, small companies in rural areas. The fund collects about $725 million each year from long-distance companies, which collect the money, in turn, from each of their consumers. It is estimated that local, toll, and regional calls provide about forty-five percent of the total subsidies necessary to maintain residential access rates below cost (Healey 1916). The FCC established the National Exchange Carriers Association (NECA) in Docket 78-72 to handle the issue of managing this fund. NECA would file, bill, and collect interstate access tariff revenues, distribute the revenues among its exchange carrier members and administer the Universal Service Fund and revenue pools for member exchange carriers (Johnston 26).

What all this identified was that the old pricing structure was an inefficient system of allocating cost. The price of basic local telephone service was kept

artificially low, supported by a complex web of mandated subsidies, including: 1.) revenues from artificially inflated long-distance prices, 2.) allocations between classes of consumers (e.g., from business to residential), and 3.) geographical rate averaging (e.g., high-density urban areas to low-density rural). This system demonstrates that indiscriminate subsidies prevents economically efficient competition by shifting costs from a price-resistant local access service to price-sensitive long distance service. The pricing system was developed before competition was of concern and was to provide reasonable priced telephone service to the consumer (Makarewicz 26).

What was also discovered was that the majority of the costs were being recovered from the interexchange carriers (IXC) or the long-distance providers. The IXC's would pay access charges to the local exchange carriers for the use of the local access to the consumer. This was not based on usage but access only. The resulting cross-subsidy was mandated in a near-monopoly environment to keep local rates as inexpensive as possible, thereby encouraging universal telephone service. In other words, consumers, regardless of need, pay artificially low local rates at the expense of, among other things, artificially high interstate toll rates (27). As stated by Peter Pitsch a Washington D.C. telecom consultant ;

> Cost-based pricing is going to be mandatory if the carriers are to be truly competitive, and what will free them from this regulation is the revolution in technologies. Another good thing about the 1996 bill -- and remember, I do not like regulation -- is that the entry barriers to telecommunications that used to exist are now out. Opening the market process will create a dynamic that will drive change way beyond the FCC's ability to control and shape it. (Srodes 48)

In doing this, it is hoped that the cost will be dispersed equally to anyone entering into the long distance and local access telecommunications market.

In the mid-1980s, to correct some of the inefficiency in customer-access pricing, the FCC implemented and gradually increased the federal subscriber line charge (SLC), a flat-rate monthly federal charge collected from all end users. The SLC

recovers a portion of the interstate nontraffic - sensitive costs of accessing the telephone network (i.e., cost of loop facilities from the LEC's wire center to the consumers' premises). Thus, the SLC shifts recovery for the consumer access from the IXCs to the end user. Phase-in of the federal SLC directly reduced LEC interLATA access charges, specifically the carrier common-line charge (Makarewicz 28).

Before being implemented there was concern that the SLC would cause residential consumers to not subscribe to telephone service. This created anxiety for the regulators who pushed Congress into establishing a cap on the charges. These fears proved unfounded as telephone services rose from ninety-one percent to ninety-three percent between 1984 (when the SLC began) to 1989 (when it was capped). This also demonstrated what economic estimates predicted with the price of basic local service exerting little influence over the consumer's decision to buy or retain the service. The price elasticity of demand for local service was extremely small. At the same time, however, the unit price of interLATA long-distance greatly influenced the demand. Consequently, the toll-to-local subsidy begets losses in efficiency in the billions of dollars. Existing subsidies "also create a pattern of subsidization that does not consistently promote universal service or equitable pricing." The web of interservice subsidies was once substantial. Today, however, to no one's surprise, the subsidy-laden margins in LEC prices for local access (together with advancements in technology and regulatory sanctions) have attracted significant competition, threatening the source of the universal service subsidy (27).

With competition, the old subsidy-based rate structure will no longer work. As regulatory and economic barriers in entering the telecommunications market continue to be lowered or removed altogether, companies looking to compete with the telephone company naturally target low provider cost, high-priced services such as toll calling that subsidize residence access. The lower-priced alternatives, provided by competitors that are not required to build into their rates the same

subsidies for basic residence service, encourage many users to leave the public switched network. When this happens, revenue from services are no longer available to contribute toward the cost of subsidized services (Anderson 22). NYNEX director of regulatory planning, Paul Calabro quips,

> We are going to make sure that NYNEX is not viewed by public policy setters as opposing competition in the marketplace. All we want in return is the legal freedom to compete as well. We are still competing with one hand tied behind our back. (Reingold 50)

Specifically, NYNEX wants to determine its own price structure.

One way the LEC has been able to manage subsidies is through the ability to move profits around internally and charge average toll rates because of disparity within the law. In virtually every part of the country, state law or regulation gives a single company almost exclusive access to the local market. These barriers will change now that the new law has been enacted. What the LECs would like to see is a de facto tax on all entrants in the local phone business to fund subsidies. They would also like for the dominate provider for local access to receive this fund. Competitors, long distance providers, cable companies, and telecommunications entrepreneurs, would support such a fund to keep the local phone rates low. Although, they argue that the subsidies should be available to all entrants to insure competition (Anderson 22).

There are other considerations besides subsidies that the regulators will have to review before devising the pricing and cost of services under the 1996 Telecommunications Act. One lesson comes from the divestiture of 1984. In structuring divestiture of AT&T, federal policy adopted the interpretation that exclusions based on historical market structure are undesirable and illegal for two fundamental reasons. First, if only one optimal interconnection is possible, the firm controlling interconnection -- the local exchange carrier -- could avoid an anticompetitive effect in vertically related markets by auctioning the right to that

interconnection. The winning bid would pay the local exchange carrier the difference in value between the two types of connections, so that all vertically related firms would operate with the same costs of interconnection. Because this option is less anticompetitive than simply giving the optimal interconnection to an affiliate, the latter action is usually regarded as vertical foreclosure. Second, is the cause of limitations in optimal interconnection arrangements because of previous business decisions by the local exchange carrier in buying switches and designing central offices. These firms created entry barriers in vertically related markets and then profited from them. To eliminate an incentive to make technical decisions that lead to vertical foreclosure, policy must require that local exchange carriers either undertake investments to eliminate a scarcity of optimal interconnections, such as by requiring equal access and collocation by a reasonable date, or auction off the "natural monopoly" in interconnection and give away the proceeds, such as by financing "lifeline" access, or returning the revenues to the government (Noll 504). What this implies is not how costs will be covered, but on how unnecessary costs could be incurred by competitors entering the market based on the business practice and access configurations of the local access provider which they might chose.

To counter this situation MCI Communications Corporation has taken on an initiative to build their own local access interconnection through a subsidiary, MCI Metro. This will connect local callers to their long-distance carriers without going through the current local exchange monopoly. As stated by Bert Roberts, MCI's chairman and chief executive,

> In the absence of any competitive pressure, the Bell operating companies have not lived up to their responsibility to provide local access capabilities that MCI needs at a fair price. MCI is now launching an historic assault on the local monopolies. (Bank 01040210)

This arrangement not only provides an alternative access arrangement for MCI, it will reduce their cost making MCI more competitive.

Joel McIlvain, a regulatory analyst for the Public Utilities Commission, on the other hand acknowledges that it is a common practice for the long distance carriers to "steal consumers from the local companies and undercut their prices." He says,

> long distance carriers are legally allowed to cut into local lines by paying access charges to local exchange carriers to hook up their long distance consumers. As a result, many long distance carriers can offer their consumers local toll call service at prices below those being charged by local carriers because the long distance carriers do not have to factor in the cost of installing or maintaining expensive local system equipment. (Nodell 51)

This is just the opposite approach to what MCI hopes to accomplish through MCI Metro.

Other considerations relating to pricing of services involve predatory practices and cross-subsidization of consumers. Predatory pricing occurs when a firm temporarily sells a product at a loss for the purpose of driving a competitor out of the market and then raises its prices later. In a capital-intensive industry, short-run marginal cost can be virtually zero, as in telecommunications, so that a firm virtually cannot lose a predation case. A farsighted firm can respond to this standard by engaging in efficient substitution of capital investments for variable inputs as a way to reduce its exposure to antitrust if a competitor enters and the firm starts a price war (Noll 505).

Cross-subsidization occurs when a firm uses excess profits from one consumer to offset losses in sales to another. It can occur between consumers in the same market, or across different product markets. The issue refers to a perhaps permanent, long-run policy of losing money in one market that is offset by excess profits elsewhere. It provides a means of vertical foreclosure when the monopolist uses excess profits from a safely monopolized market to subsidize losses in a vertically related one. The most likely example of this would be a price squeeze. A price squeeze can harm resale competition, and has been alleged in cellular radio telephone service and in some plans for selling unbundled elements of local access

service. The unfortunate downside to price squeeze claims is that any cure may introduce regulation guaranteeing minimum retail margins that keep inefficient competitors in business (506).

In the 1974 case against AT&T, another form of exclusionary pricing was alleged: "pricing without regard to cost." The theory behind this allegation is that if a firm credibly commits to match or to beat any price charged by a competitive entrant, regardless of the incumbent's actual costs, the incumbent can substantiate supercompetitive prices indefinitely while simultaneously retarding competitive entry. Firms can commit to such a strategy by basing management rewards on sales or market share, not profits, and maintaining a management information system that systematically does not record or make available to personnel who set price without any information about costs. The government alleged that AT&T employed both policies with respect to private line service (506).

Another challenge with pricing of services relates to tariffs. The FCC would like to change the current pricing structure by eliminating current tariffs. A tariff is a document submitted by an entity to the regulatory agency for permission to offer a specific service or product. It describes the offering and outlines the charges associated with that offering. Although not mandated in the 1996 Telecommunications Act, the FCC is seeking support for its proposed plan to eliminate tariffs in the hopes that pricing problems will go away - not only the practice of competitors pricing just under AT&T's rate umbrella, but also practices that give carriers an unfair advantage over their consumers in setting rates, terms and conditions of service. It is hoped that this would generate more competition and pricing would be based on actual costs versus competitive pricing wars (Toth, The New Act 22).

There is an outline provided by the new Act to address some of these issues. These are outlined in actions that must occur over the course of the next three years as the Telecommunications Act is deployed. In line with maintaining universal

service, the 1996 Telecommunications Act directs that, within six months of its enactment, the FCC adopt new rules to ensure:

1. Rates to rural customers are no higher than rates to urban consumers.
2. Rates charged to customers in one state are no higher than those charged to consumers of the same service in another state. (22)

While the FCC has mandated these new rules, it does not want to mediate in their deployment. The FCC believes that pricing of services is an internal state affair, that it is up to each state to conform to the law. How the FCC plans on monitoring the situation is through complaints filed by consumers and/or by having each telecommunications provider file an annual report stating it has complied with the requirements (22).

The new act further stipulates that the FCC and state regulators establish new policies for funding universal service based on several key principles. First, the policy should insure that quality service be provided at affordable rates to everyone. Second, access to information and advanced technologies should be equally shared and distributed across state boundaries. This information has been defined as providing educational, public health and public safety benefit. As having been subscribed by the majority of residential consumers through their choice and that the services are being deployed in public telecom networks by telecommunications carriers. Third, that low income consumers, those living in rural areas, and other high-cost regions should be provided equal levels of service at a compatible rate as compared with the urban consumer. Fourth, elementary and secondary schools and classrooms, health care providers and libraries have access to the advanced services and information. This is a special requirement, stated in action two above, allowing for these specific groups to be given service at a discounted rate (22).

As far as initial costs for competitors wanting to get into the local access market place, the new act stipulates that the LECs, GTE Corp., and other carriers must offer their service to potential competitors at the retail rate minus "avoidable costs."

These cost are the money used in marketing, billing, and the like which does not impact the consumer directly. No surprise, there's a wide gap between how the local carriers, their wholesale consumers, and the state regulators calculate those costs. US West, for example, proposed a formula in Colorado that actually puts the wholesale price higher than the retail rate, arguing that its local consumer rates now are heavily subsidized. Connecticut regulators came up with a similar interim formula. Most state public commissions have been more generous - Tennessee and Illinois regulators are recommending twenty-five percent and twenty-two percent discounts, respectively (Arnst 119).

Listen to David Goodtree of Forrester who says that the best thing the LECs can do is sacrifice some retail market share by giving long distance carriers discounts to use their networks. That would discourage the long distance carriers from building their own local infrastructure, which would represent a more dangerous competitive threat in the long run. "The LECs have a great opportunity: give up twenty to thirty percent of retail market share but hold on to one hundred percent of wholesale by encouraging reselling," says Goodtree. "The longer they can prevent someone from building their own facility, the longer they will have a monopoly" (Galarza 41).

Competitive Strategy

Telecommunication companies anticipating deregulation of the telecommunications industry, had been jockeying for market position over the past several years. Speculation of how this change would be brought about generated a different prospective of what will be the market niche. These actions were based on legislation that had been presented in two previous Congressional sessions before finally being passed into law in 1996. Passage was anticipated because of advanced developments in telecommunications technology and the antiquating of the Communications Act of 1934. This action was supported by the major

telephone, cable, wireless, equipment manufacturers, Telecommunications entrepreneurs, and Internet providers (Church 38).

The anticipation of the economic impact to Congressional deregulation is partly driving the wave of multi-billion dollar mergers, acquisitions and alliances rippling through the industry, most recently is the celebrated Disney purchase of Capital Cities/ABC. AT&T previously purchased McCaw Cellular and in Alaska, AT&T's acquisition of Alascom received final regulatory approval to close that deal. Most of the regional Bell operating companies have joint-ventures with movie studios to develop interactive TV programming for transmission over phone wires or by wireless cable (O'Tierney 115).

Even with the expectation of key players changing their strategies, the industry was shocked with the announcement on September 20, 1995, that AT&T would be splitting into three individual companies. This announcement totally reversed the strategy maintained by AT&T, during the previous decade, of vertical integration and a domestic focus on the market place. As stated by Bob Allen, AT&T Chairman, vertical integration is "an idea whose time has passed" and says that "we've reached the point where the advantages of our size will be offset by the time and costs in coordinating and integrating sometimes conflicting business strategies." The concept of vertical integration was to differentiate themselves from their main competition of MCI and Sprint, which provide long-distance telephone services. The breaking up of AT&T, is the largest corporate split-up ever, as measured by the stock market value of the splitting company (Church 38).

The company will be divided into long-distance telephone service, equipment manufacturing with Bell laboratories, and computer operations. The core business will be the services business, which will carry the name AT&T. Lucent Technologies will be the name provided for the telecommunications equipment business with Bell laboratories and Global Information Solutions as the computer entities title (Finneran 78).

The new AT&T companies will be comprised of AT&T Communications Services Group (local and long distance operations), AT&T Wireless (cellular and PCS), AT&T Solutions (consulting and outsourcing), and AT&T Universal Card (credit cards). This generates about fifty billion dollars in revenues, which represented over sixty percent of AT&T's gross revenue and eighty percent of its profits. The company is poised to attack the international communications market, in which AT&T currently generates only about four billion dollars in revenues on basic international calling. AT&T Wireless, formally McCaw Cellular, covers eighty percent of the United States, which is more than any other cellular provider. AT&T Universal Card is the second largest in terms of client accounts in the country, the company will continue to focus on its core markets and grow overseas while expanding revenues at a projected ten percent annual rate (Simons 62).

The telecommunications equipment business for AT&T generated about twenty billion dollars in annual revenues, about seventy-five percent of which comes from the central office business. This is one of the primary reasons for AT&T splitting, to break this portion from the core business. The new legislation allows for the local exchange carriers to go into the long distance markets. These LECs are the primary consumers for AT&Ts equipment, buying over fifty percent of the factories outputs. In anticipation of this new law passing, the LECs have sought other equipment providers, so as not to finance their soon to be rival. The separation could also bring old rivals, MCI and Sprint, in as prospective consumers, who were once hesitant to do business with AT&T. The equipment company will most likely be a fast-growing operation that will trade at a higher price-earnings multiple than the others. After an initial public offering, analysts expect revenue growth of more than fifteen percent in 1997 (62).

This company operation will consist of, the Global Business Communications System (PBX and key telephone systems), AT&T Paradyne (data communications products), and Consumer Products and Microelectronics (components). It also will

contain Lucent Technologies which comprise most of the old Bell Laboratories research division and overall will bear that name (Finneran 78).

Global Information Systems, or the computer operations, was the only company that would not have surprised the industry in being separated from AT&T. This was an expensive venture that never really worked. It generated eight billion dollars in annual revenues but produced no profit from its operation. When AT&T acquired NCR in 1991, the idea was to integrate computers into the telecom business. AT&T could never successfully get this aspect of the business to merge with the other operations (78).

Splitting up will allow AT&T to go after both local and long-distance competition without fear of causing a disastrous loss of equipment sales; similarly, the separate equipment company will no longer scare off consumers fearful of fattening a competitor. Also at stake is the emerging international market. Most of the telecommunications industry on the international market is controlled by their prospective governments. This could soon be changing. Part of the push to get the Telecommunications Act passed here in the United States was to deregulate the largest market of telecommunications products in the world. It was hoped in so doing that other countries would soon follow (Church 39).

It seems likely that the new AT&T will seek equity stakes in one or more international telecommunications companies. If AT&T had retained its equipment business, it would have encountered vehement opposition from domestic equipment suppliers in any country where it looked to take an equity position in the local telephone company. Shedding the equipment business serves the dual objective of nixing that opposition while providing additional capital to finance the purchase (Finneran 79). According to The Wall Street Journal within the next year there will be over sixteen countries opening their telecommunications markets, offering up to thirty-six billion dollars in stock. This is what AT&T has just positioned itself to be involved with, taking action on some of that stock. AT&T wants to straddle the

deregulation globe with its networks, and foreign telephone companies such as British Telecom and Deutsche Telekom also are not interested in buying equipment from a major competitor (Cook 60).

Another arena in which AT&T will find itself involved is the ninety billion dollars local access market. According to AT&T Chairman Robert E. Allen, spelling out his ambitions of the new market in a speech to investors on June 11, 1996: "We plan to take at least a third of the local market within a few years, " he declared. His team has plans to get local access calling approval in every state by the end of 1997. The plan is to sell local service as a loss leader. How this will be done is to provide bundled telecom products, taking the gains and spreading them across the product line. This will include long distance, local access, cellular, and other voice and data services. According to Shaun P. Gilmore, AT&T's Northeast states president: "The local-services part of a package of services could be discounted." Entry into the local access market would benefit AT&T about thirteen billion dollars per year which it currently pays in local access charges (Arnst 118).

What AT&T is looking forward to most of all is they will be selling their brand name, which the company keeps before the public with a $700 million annual ad budget. Executives love to trot out the fact that most surveys show that thirty to forty percent of all consumers already believe they get their local-calling service from AT&T, even though the company has been out of that business since the breakup of the Bell system in 1984. "Clearly, AT&T will be our biggest competitor," says Solomon D. Trujillo, president of US West Communications. "It's the largest company around, one of the largest companies in the world" (119).

The FCC helping AT&T prepare for the competition, last October reclassified the carriers domestic business from a "dominant" to a "nondominant" carrier. Fifteen years ago, the classification came about to solicit competition in telecommunications. The classification contained two key elements: to relieve the regulatory burden on nondominant carriers and to police the pricing and

competitive practices of AT&T. What this category regulates is market power by specifying more requirements to dominant carriers. This doctrine proved effective as noted by the change in revenue share of AT&T which changed from ninety-eight percent of the total market, when instituted, to fifty-five percent today (Toth, AT&T Reclassified 20).

AT&T is now free from price cap obligations on everything except international services. Its tariffs, which now can be filed on one day's notice, will be presumed lawful, and cost data and other support are no longer required. AT&T will no longer have to report carrier contracts, and most of its other reporting requirements are either eliminated or substantially reduced. In addition, AT&T no longer has to secure prior permission to construct new facilities (except where radio licenses are involved), and requests to discontinue services or remove facilities will be granted automatically after thirty days (22).

On January 1, 1997, AT&T will be officially free of its systems, computers, and telecom product shackles. This is when the separation of the three companies has to be completed. Although the new AT&T will now have a simpler identity as a telecommunications service provider, competitive life only gets more complicated from there. The former monopoly must position itself to take on competition from a growing list of competitors: the seven regional Bell operating companies, cable networks, wireless service providers, Internet service providers, software companies, entertainment companies, and even electric utilities. Any business with conduit into a home or business may develop as a competitor (Rosner 23).

MCI Communications was the company that was very instrumental in getting AT&T divestiture to occur back in 1984. "We did not inherit any of our consumers. We had to work for every consumer to convert them to MCI and I think we, uniquely, are very much attuned to that," says Paul Hales, MCI director for the state of Indiana. This philosophy has paid off as it went from a four and one-half percent share in 1984 to almost seventeen percent of the long-distance

telephone market in 1993. The company's position since the Telecommunications Act of 1996 passage has been to move into the local exchange market. It plans on doing this through the MCI Metro division, part of the twenty billion commitment to develop Network MCI. Network MCI is the company's entry into the information superhighway marketplace (Blake 26).

MCI plans on building its own fiber optic network in twenty metropolitan areas in the 1990's. This is feasible as they are currently paying six billion dollars annually for local access, as of 1994. This amounts to about forty-five cents out of every dollar that MCI takes in on long-distance sales going to local access charges. The plan is to establish a bypass network around the LECs and recoup some of these costs. Construction has already begun in Atlanta, with New York City, Los Angeles, and Chicago soon to follow (26). Mickey Henry, an attorney for MCI states, "We are encouraged that the legislation is considering opening up local telephone service to competition. We only caution that the market was not created overnight, and it can not be changed overnight." (Billips 02140017)

Giving it an infrastructure advantage is a little-known purchase MCI made in 1990 from Western Union of underground conduits and pipes that connect more than 2000 buildings in some 200 cities. These conduits, some of which date back to the nineteenth century, permit easy laying of fiber-optic cable. Once the network is in place, MCI Metro plans on opening the access to both AT&T and Sprint. It plans on offering this service at the same cost as it does to MCI Long-Distance. An AT&T spokeswoman welcomed the initiative, saying, "We'd consider all alternatives when it comes to increasing local competition." A Sprint statement was not as positive calling the MCI announcement, "a slick admission of being behind in terms of technology deployment," but softened the criticism by adding that what MCI was doing was "one in a long series of steps necessary before local competition exists" (Flanagan 14).

Henry Whitfield, Southern Bell's district manager in Macon, Georgia, said the bill would level a playing field that currently is tilted against his company. MCI's recently announced plan to provide local calling services in Atlanta allows it to "cherry-pick" Southern Bell's largest and most profitable customers, Whitfield said, without requiring MCI to provide universal access, as current regulation requires Southern Bell to do. "We don't mind competition, we just want fair competition," Whitfield said (Billips 02140017).

Like AT&T, MCI sees the opening of the international market. An agreement between MCI and Groupo Financiero Banamex Accival, Mexico's largest bank, is to build a fiber-optic network between the United States and Mexico. Mexico in 1996 opened up competition to long-distance providers, breaking the Telefonos de Mexico's monopoly. MCI estimates that forty-five percent of the state-run long-distance business is international and ninety percent of that, some ten million hours each year, goes to the U.S. (Flanagan 14).

MCI is able to expand into both the local and international business as it has capital outstanding from the twenty percent equity sale of its domestic network to British Telecom (BT). This occured in 1993 for an estimated four-point-three billion dollars. According to the terms of the MCI/BT alliance, the two companies agreed to split global marketing responsibilities geographically, with MCI controlling North, Central and South America and BT handling the rest of the world (O'Shea 22).

A controversial move was the alliance with media baron Rupert Murdoch's News Corporation. MCI will spend up to two billion dollars for a thirteen and one-half percent stake in the company and the two will form a joint venture to develop news media services. The marriage of Murdoch's TV and newspaper operations with MCI's on-line services could produce a customized news service that, for example lets an oil and gas executive receive video and text about his industry via computer (Ward 33).

One of the most recent events for MCI was the announcement of partnering with Microsoft. MCI will market a customized version of the Microsoft network, called MSN from MCI, with its Internet MCI Access Services. MCI will also market Microsoft software and software upgrades using its network for distribution. In exchange, Microsoft will build icons into its Windows operating system for all consumers to easily order MCI products such as conference services, ISDN and e-mail. In joining forces Microsoft will gain access to the twenty million consumers of MCI and MCI will get exposure to the 120 million users of Microsoft software. Ted Julian, research manager for Internet commerce at marketing research firm International data Corp., Framingham, Mass. said,

> As Microsoft puts more communications features into Windows 95 and Windows NT beyond the basic Internet tools, you are probably going to see a pick list of vendors for services like ISDN and conferencing. As these options are added on top of the operating system rather than on an application-by-application basis, you will see a number of companies added to the list, just like you see options for Internet service providers when you set up your Internet connection, MCI has established that it is going to be there, and now the real question is, who is next. (Bucholtz 10)

Three and a half weeks after the passage of the new Telecommunications Act, the first merger announcement occurred between two local exchange carrier companies. SBC Communications Inc. will acquire Pacific Telesis Group for seventeen billion dollars. This will join two of the seven baby bells that were once under the control of AT&T. When the deal is finalized late this year, the two Regional Bell Operating Companies (RBOCs) will become a twenty-one billion dollar giant that will control seven of the ten largest metropolitan markets in the country and sixteen of the top fifty markets. The new company will be called SBC Communications and be based in San Antonio, Texas (Schroeder 8).

In preparation for the passage of the Telecommunications Act, SBC CEO Edward Whitacre Jr., a year ago decided to change the name of his corporation. The down-home Southwestern Bell name seemed to tie the company to a specific

region, not fitting the international intentions of the firm. Changing the name to the present bland acronym of SBC Communications eliminated that image (8).

On first blush, most people, Bob Barada, Pacific Telesis Vice President of Corporate Strategy and Development included, likes to point to the "tremendous synergies" between the two RBOCs. According to Dave Otto, a telecom analyst with Edward Jones consultants, "PacTel was really behind the eight-ball" as it struggled to get its PCS wireless network and services running. "SBC brings the money and the talent," he adds. SBC Communications, Southwestern Bell Mobile Systems is the nation's second-largest cellular operator, behind AT&T (McCarthy, Strange Bedfellows 6).

Another market open to them is Mexico. Half of all calls from the United States to Mexico originate in California or Texas. SBC would gain significant control over traffic to and from Mexico and South America by acquiring the California market. SBC's ten percent stake in Telefonos de Mexico still stands as a great investment, even after the peso collapse (6).

In profitability SBC is at the top of the Bell heap, with average return on equity over the past five years of 16.2%. It posted excellent returns again last year, in sales. But the purchase of a weaker performing Bell at a premium will probably dilute earnings for several years. There are no easy efficiency gains to be had from combining Southwestern and west coast telephone companies (Palmeri 92).

"What's in it for SBC? The answer is California - the seventh-largest country in the world." The state also serves as the west coast gateway for Asian traffic, which "just expanded the amount of buying power that they have for the long distance market," notes analyst Ron Atlman of Furman Selz (Wetli 40). SBC will also tap Pacific Telesis's significant ISDN and Internet technologies, where SBC has lagged in ISDN deployment. "Likewise, Pacific Telesis stands to reap the benefits of SBC's extensive wireless operations," states SBC Chairman and CEO Edward

Whitacre, who will remain head of the united company, and Pacific Telesis CEO Phil Quigly, who will serve as Vice Chairman of the new board (Schroeder 8).

So for twenty-three billion dollars, SBC might have scored a bargain. The bottom line, per Dave Otto's view, is that the prosed merger "certainly improves my opinion of PacTel by leaps and bounds" and doesn't hurt SBC "one bit, assuming they can get PCS up and running." Market watcher Bob McNamaram managing director at New Jersey based Broadview Associates, agrees that the deal will prove a "great move if they don't take their eye off the ball." Assuming the two companies can take advantage of existing synergies, playing off each other's strengths and shoring up weaknesses, "the potential is there," he concludes (Wetli 41).

What this merger does is create a very large competitor overnight to AT&T. When the announcement took place, SBC Communications became the second largest telecommunications provider in the United States, behind AT&T. This was short lived although, as Bell Atlantic and NYNEX decided to get hitched, replacing SBC Communications as the second largest provider. The twenty-three billion dollar merger would create a company that stretches from Maine to Virginia (Cohen, A New Telecom Titan 57).

The pair plans to enter the long-distance business in their region. Ray Smith, Bell Atlantic CEO, boasts that the combined company could steal thirty percent of the regional long-distance market from the likes of AT&T and MCI. The duo also intends to consolidate redundant operations, which Smith says will save six hundred million dollars within three years. Most important, Smith believes the new Bell Atlantic can grow ten to twelve percent a year, versus seven to ten percent as a stand-alone company (57).

The two companies have already combined their cellular networks together and Bell Atlantic through an investment in CellularVision of New York had already entered into the wireless cable TV business in New York City. CellularVision, an

entrepreneurial start up company, has a one-of-a-kind license from the FCC to offer wireless CATV services in New York and three of its suburban counties. Bell Atlantic used its expertise to build the wireless network in the city and CellularVision developed the business plan to market the service. Because Bell Atlantic was offering the CATV service outside of its telephone operating territory, the company was not subject to the restrictions contained in the 1984 Cable Act, which, with a few exceptions for some rural local exchange carriers, prohibits cable/telco cross-ownership by telcos within their telephone operating areas. The Communications Act of 1996 undoes this law (Mason 10).

There are mixed reviews on how this will impact the region. Some consumer advocacy groups claim the merger between the neighboring Bells eliminates competition and instead expands a monopoly that will face little competition from one-stop providers of voice, video and data transmission services. "Too often consumers and employees are the victim of so -called corporate synergy," said Bradley Stillman of the Washington D.C. based Consumer Federation of America. "Bringing together the two largest monopolies in the country will only make promises of more competition ring hollow" (Baker 4230359).

But Bell Atlantic and NYNEX officials said the merger doesn't expand a monopoly; rather the new Bell Atlantic will be better equipped to compete against AT&T and other telecommunications corporations. "We are facing very intense competition, and the competition is very big," states Paul Miller Richmond based Bell Atlantic spokesman. "The new Bell Atlantic will not be as big as AT&T, but this will allow us to compete more effectively" (4230359). Ray Smith, CEO Bell Atlantic, views it this way on the merger, "The main benefit is that we end up with ... the most information-intensive part of the county." On rivals, "We needed the scale and scope to compete with nationwide competitors [like AT&T]." And on the market, "We want to be one of the remaining phone companies that will serve the U.S. and the world" (Cohen, A New Telecom Titan 58).

With so much competition coming from so many different directions today, the Baby Bells are being forced to mature in a hurry. Their adolescence could be painful. Listed is the condition of the seven RBOCs, as of April 1996:

* Pacific Telesis Revenues: nine billion dollars. Net loss: two point three million dollars. Share price: thirty-three dollars and twenty-five cents (latest and the fifty-two week high). Outlook: The lucrative California market is a definite plus for Pacific Telesis.
* SBC Communications Revenues: twelve point seven billion dollars. Net loss: nine hundred thirty million dollars. Share price: forty-nine dollars and seventy-five cents (latest) with a sixty dollar and twenty-five cent fifty-two week high. Outlooks: SBC Communications boasts a very strong cellular operation.
* BellSouth Revenues: seventeen point nine billion dollars. Net loss: one point two billion dollars. Share price: thirty-seven dollars and thirteen cents (latest) fifty-two week high of forty-five dollars and eighty-eight cents. Outlook: BellSouth will focus on core services in its region.
* US West Revenues: nine point five billion dollars. Net income: one point two billion dollars. Share price: thirty-three dollars and thirteen cents (latest) fifty-two week high of thirty-seven dollars and fifty cents. Outlook: US West has moved aggressively into cable television.
* Bell Atlantic Revenues: thirteen point four billion dollars. Net Income: one point nine billion dollars. Share price: sixty-two dollars (latest) fifty-two week high of seventy-four dollars and eighty-eight cents. Outlook: Bell Atlantic is very merger-friendly.
* NYNEX Revenues: thirteen point four billion dollars. Net loss: one point eight billion dollars. Share price: fifty-two dollars (latest) fifty-two week high of fifty-nine dollars and twenty-five cents. Outlook: Is a merger with Bell Atlantic, awaiting FCC approval.

* Ameritech Revenues: thirteen point four billion dollars. Net Income: two billion dollars. Share price: fifty-four dollars and seventy-five cents (latest) fifty-two week high sixty-six dollars and eighty-eight cents. Outlook: Ameritech is a very independent player (Cohen, Look Who's Talking 52).

As far as competitive advantage in telecommunications goes there will be challenges faced. According to David Goodtree of Forrester:

> Right away, the long-distance companies have four things going for them: One, national reach, right now. No other telephone competitor offers service coast to coast. Two, competitive skills. For twelve years they have fought for every point of market share and have proven to know how to wage war. Three, no excess baggage. With their bloated work forces and aging plants, the RBOCs will have to focus on managing down sizing and dealing with unions. Meanwhile, the long-distance guys are already relatively lean and have up-to-date networks. Four, killer brands. Like Coca-cola and Nike, the big three have created some of the most recognizable brands in the country: At best, the RBOCs have meaningful brands in a few states each. (Galarza 40)

Depending on the survey, some thirty to sixty percent of consumers still think that AT&T is their local phone company.

What is more, the long-distance companies do not have to meet any regulatory approvals to get into the local market. "they do not have the regulatory handcuffs that the RBOCs do," explains Eileen Healy, an analyst with San Jose, California based Dataquest. "As it is structured, the RBOCs have one hand tied behind their backs." Quips Bryan Van Dussen, director of telecom research for the Yankee Group, a consultant in Boston: "The RBOCs are still pretty much dial-tone providers: Plain Old Telephone Service, POTS guys. The long-distance companies are the PANS, Pretty Amazing New Stuff." Yet another threat to the RBOC monopolies comes from companies such as MFS and Teleport, which cater to businesses by providing competitive local networks. Although these alternative providers have built local telephone networks that sell service mostly to midsize business consumers, these same networks can just as easily be used to reach the retail consumer. Indeed, MFS has constructed local networks in forty-three U.S.

Markets. "The RBOCs are subject to nimble niche players coming in and taking lucrative pieces of business," says Andersen Consulting Alan Burgess (40).

To get into the local market, the long-distance players will either have to build their own networks at great expense or buy capacity from the RBOCs. That, says Daniel Reingold, an analyst for Merrill Lynch, works to the advantage of the RBOCs. Reason: There will be four or five potential long-distance suppliers in any one region, so the Bells will be able to bargain for volume discounts on long-distance service, Reingold says those discounts could run as deep as eighty percent off retail rates, about what major long-distance resellers currently pay (40).

One Stop Shop

The challenge for Washington lawmakers is to craft a balanced deregulatory scheme that reconfigures the monopolistic playing field for near-term competitive entry and long-term market discipline. Advances in technology (such as digitization and broadband capacity) have been driving the provision of services in a competitive direction for some time now. Declining costs have been an ongoing trend of the industry. Since the anti-trust divestiture of AT&T in 1984, long-distance telephone competition has proven a robust success. According to Leon Kestenbaum, manager regulatory affairs for Sprint,

> Divestiture has had enormous implications for the development of telecommunications. It was the single most important event of this century, without question, in redirecting the energies and the priorities of each and every company. It has created an explosion of competition which in turn has led to the explosion of the implementation of technology, which has led to far lower prices for long-distance calls and a whole new environment." (Blake 25)

New and innovative services have appeared and price competition has been fierce. But this is only the tip of the telecom market iceberg. Broader competition in the telecom industry is currently restricted by overlapping layers of federal, state and

local statutes and regulations, as well as by judicial oversight in the wake of the AT&T breakup. Congressional legislation would break the logjam and eliminate numerous barriers that currently prevent local telephone companies, long-distance carriers and cable and broadcast television companies from offering similar services and competing for one another's consumers. Proponents of the new telecommunications laws anticipate an explosion of new investment, services and products in a modern land rush to compete (O'Tierney 114).

As the Baby Bells and cable companies lay down broadband on-ramp connections to the National Information Infrastructure (NII), long-distance carriers are finding ample digital convergence opportunities of their own. The three major carriers, AT&T, MCI Communications Inc., and Sprint Corp., are in the midst of upgrading their national networks -- the long-haul backbones of the NII -- to provide the massive bandwidth needed for interactive, multimedia services. At the same time, Sprint and MCI are quietly talking to information providers and participating in test projects, but are holding details of their further expansion plans close to the vest. AT&T, on the other hand, is the most visibly aggressive of the trio, staking out new opportunities by leveraging its long-distance role along with its telecommunications and stakes in dozens of companies. "They're all trying to see how this puzzle fits together," said Charles Robbins, director of communications research for Aberdeen Group, a market-research firm in Boston (Smalley 143). Networks will have to be available to keep pace with the technologies.

The Clinton administration has announced plans to open up a large chunk of the public airwaves to commercial users, frequencies that had previously been used by the Defense Department and other federal agencies. The large amount of the spectrum freed up, four times the size of the fifty megahertz slice currently devoted to cellular telephones, would provide room for new commercial services that might include satellite radio broadcasting or whatever other money-making activities that private industry might dream up. The administration's plan, a response to

legislation passed by Congress in 1993 to reallocate the public airwaves, comes on top of a large band of frequencies that are already being allocated for "personal communication service" (Billips 02140017)

Personal Communications systems (PCS) are touted as the next generation of wireless technology that will compete with digital cellular and coaxial cable for data transmission in local area networks, as well as voice communications. Eager bidders spent seven billion dollars in the first round of the FCC's auction of the PCS spectrum. Successful bidder Sprint and its cable partners TCI, Cox and Comsat plan to offer a "triple play" package of wired and wireless telephone services along with traditional cable TV across the country (O'Tierney 115).

This venture has allowed members to cross-market each others' services. In fact, beginning in the first quarter of 1995, TCI packaged Sprint's long-distance service with its entertainment services, providing customers with one bill for both. Comsat and Cox are expected to do the same, according to Allan Kurtze, senior vice president of operations at Sprint's local telephone division. Michael Killen, president of Killen & Associates comments,

> Sprint is now in a position to bid for PCS licenses more aggressively -- it no longer has to worry about having the money to actually implement the PCS infrastructure because it can piggyback on existing cable company systems, using their poles and systems to put the transceivers and receivers. (Bernier 8)

This has allowed Sprint to become more diverse with its product lines, expanding into the latest in technologies.

The fundamental aim of the alliance is to bundle long-distance and local telephone services in the allies' existing operating areas, which span all forty-eight states. The cable systems included in the partnership alone pass roughly one-third of the nation's ninety-five million households. The new telephone company, could make money by garnering as little as fifteen percent of the business that currently goes to existing local phone companies. In the United Kingdom, a TCI - backed

cable TV venture already has taken away twenty-five percent of local telephone business in the markets where it operates, said a TCI spokesman. Planned services for the new venture include:

* Plain old telephone service, which would begin in New York, Illinois and four other states.
* Long-distance service, through Sprint. The service would be billed to customers' cable bills at first, even if the connection still went through their local phone company.
* "Universal" portable cordless phone service. A customer would use the same lightweight phone at home, in the office and in transit.
* Temporary extra capacity. Home workers could triple the number of phone lines in their offices, to handle facsimile transmissions, on-line connections and conversations, only for the time needed.
* Video phone calls. This could range from allowing individuals to talk face-to-face or providing the capacity for sex lines to add sight and motion to their services (Steinert-Threlkeld 14).

Not mentioned, but a very intricate player in this alliance is the local access provider Teleport. "Without Teleport, the whole thing is ridiculous," says Berge Ayvazian of the Yankee Group. "It links the long-distance carrier to the cable telephony providers." Using Teleport to carry the local portion of its long-distance service -- and not a NYNEX or a Bell Atlantic -- will sharply reduce the two and one-half billion dollars Sprint spends every year on local access charges (Reingold 50).

US West has taken a similar approach in offering multiple services when it acquired a twenty-five percent stake in Time Warner's cable television and entertainment operations. This is the first time that a Baby Bell has made a major investment in a producer of television shows and movies, which are likely to be carried over telephone lines by the late 1990s. About half of US West's investment will be used to build an "electronic super highway" capable of transmitting voice,

data, and video programming to homes and businesses. Time Warner will use the rest to pay down debt (Forging Giants 7).

Time Warner has approximately seven million cable consumers, and if all goes well with the US West alliance, those consumers, by the end of the decade, will have the option of buying local telephone service from Time Warner. Time Warner's cable systems would be able to carry telephone calls to and from homes and businesses directly to a long-distance carrier, bypassing the regional companies and avoiding the costly access charges of the regional Bells. US West had plans already underway on spending more than two billion dollars to rebuild its fourteen state telephone network to carry interactive full-motion video services, positioning itself for the merger with a cable company like Time Warner (8).

Wireless has emerged as the "next big thing" for telephone and cable TV companies planning to deliver broadband services. As one independent LEC executive categorized the phenomena: "Like everyone else, we're exploring all the wireless options." For good reason, too: Direct Broadcast by Satellite (DBS) suddenly is a high-flying option for providing some broadband services, such as video, interactive entertainment and shopping. In less than two years, in fact, DirecTV has signed one-point-four million consumers, while PrimeStar has exploded to one-point-one million after sleepily motoring along for years with only a few scores of thousands of consumers. Even more, AT&T and MCI are now high profile DBS investors (Kim, Direct Broadcast 26). The entry into the business by AT&T and MCI is a validation of a new technology, said analyst Ray Boggs of Response Analysis Inc. "You could call it the quest for bandwidth, a way of getting bits' into consumer households in the most cost-effective manner possible," he said. "It is based on the consumer's being willing to pay, big-time, for education and entertainment coming into the home" (Vielleux 2).

While DBS has seductive potential as a video delivery medium for both LECs and interexchange carriers, it may make no business sense at all for LECs that

already have extensive local fiber in place or plans for extensive fiber upgrades. Simply put, DBS makes great financial sense as a "green fields" approach for long distance carriers, such as AT&T and MCI, that have little or no embedded wire in the local loop (Kim 26).

Through a deal struck with DirecTV Inc., AT&T said it plans to offer a Digital Satellite System package directly to its ninety million subscribers by the middle of this year. Under the deal, AT&T will pay $137.5 million to acquire two and one-half percent of DirecTV, a unit of Hughes Electronics, which is owned by General Motors. It has an option to increase this to thirty percent over a five year period, which was also stipulated (Vielleux 2).

MCI made a similar purchase of the last available license for direct broadcast satellite television. The two companies will use each other's strengths to bolster their products, stated Kathryn Hale, a senior industry analysts at Dataquest Inc., San Jose. This plays well with the Microsoft partnership, as they could eventually use the high bandwidth of MCI's DBS resources to transmit software or entertainment products directly to its consumers, said Steve Von Rump, vice president of marketing for MCI's data services division. A spin-off to DirectTV is DirectPC developed by Cisco, Hughes Network Systems, and Helius. This is a high-speed, one-way, digital broadcast to a twenty-one inch satellite dish. With DirectPC, you can interconnect say to the Internet from a desktop PC (Bucholtz 9). As the Internet continues to grow at a phenomenal pace - currently there are thirty million to forty million users and traffic is doubling every five months - it may become the dominant vehicle for business communications and residential entertainment (Holland 36).

Buying access to wireless will become much cheaper when the industry sees cellular carriers' conversion to digital technology as well as a big capacity increase from the onset of PCS, according to Michael Rowny, MCI executive vice president

of ventures and alliances. As stated by Douglas Maine, MCI's chief financial officer,

> What you are looking at is something like a fifteen fold increase in capacity available. Given that, we said let's not plunk down twenty billion the way AT&T did for McCaw (referring to AT&T's purchase of the country's biggest cellular carrier). (Ward 33)

MCI's plan is on buying a reseller, Nationwide Cellular Service, for $190 million, instead of developing and owning a cellular infrastructure. Rowny says, here is the tricky part: Rather than pure reselling, MCI wants "to create a value-added service".

MCI is going beyond traditional term and volume discounts to offset the effect of basic-price hikes. It is going to offer to add Internet access services, new data solutions and other services to telecommunications contracts to build volume to higher discount levels. Ronald West, telecommunications manager for the New York law firm Shearman and Sterling, "What MCI and others are alluding to is they want you to increase your commitment, however they can" (Rohde 10). Director of computer and telecommunications services for Pacific Gas & Electric, in San Francisco, further states;

> Being able to have a single services provider to support our network with the bandwidths we need is attractive, as opposed to having to manage multiple contracts in multiple locations. As a competitive market drives these companies to merge, it is an opportunity we should seize. (Schroeder 8)

Confirmed by AT&T's corporate manager for advertising and brand management, Jim Speros;

> Communications is being redefined by the convergence of industries. If you stand for [only] a single thing, you lose, because the consumer will be buying from companies multiple forms of communication, [entertainment and information] services. The companies that will win are the companies that are effective at catching new things that go beyond their core business. (Rosner 26)

There has been alot of positioning to create the optimal product or products. This is through joint ventures, expansions, split-up, and about every conceivable way to position. It is important to keep in mind the intent of the new legislation. After President Clinton signed into law the Telecommunications Reform Act of 1996 in February, Reed Hundt, the White House's activist chairman of the Federal Communications Commission, hailed the eighty sets of new regulations as the first tollgate on Vice President Al Gore's fabled information highway. Crowing after the White House bill was signed, Hundt stated,

> I consider this to be the Invest in America Act of 1996. It's going to lead to a tremendous investment boom in the communications sector .. to investment in kids under historic provisions that permit us to -- for the first time -- create real incentives to put networks into every classroom. (Srodes 48)

Gore said that the goal of the legislation was "real competition, not the illusion of competition, not the distant prospect of competition." Only "competition can meet the test of lower prices, higher quality and greater choice, " he said, and that's why the Administration can not support the proposal to deregulate local loop "upon the mere prospect that some theoretical competitor might be able to provide some service .. Competition must be real." In 1994's debate, Gore said, Regional Holding Companies were trying to delay competition while long distance companies were "proposing a level of detail difficult to achieve in federal legislation before they are willing to support change." Each industry, including cable and information service providers, seems to be following a policy of "what's mine is mine -- what is yours is negotiable," Gore said. (Republicans Hope to End 3)

What the new legislation has done is prompt concerns from consumer advocates, regulators and the companies to agree on a few basic points:

* Competition. In order not to let down consumers or hinder upstart companies, regulators should make sure that local access providers in a territory have competitors before withdrawing all the rules. At the same time, companies must

find a way to share responsibility for essential day-to-day services.

* Universal Service. Everyone who wants plain-old telephone service should get it affordably.
* Interconnectability. No competitors should be impeded - financially or technologically - in linking their consumers to other companies' consumers.
* Portability. Consumers should be able to keep their same phone numbers, even if that includes relocating from Los Angeles to Long Island.

Even though key interest groups agree on these concepts, they do not have a consensus on how the legislation should be deployed or how the products will be presented. This will be debated as the law is enacted and competitors assert themselves (Fahys 01150270).

Statement of Hypothesis

It is hypothesized that deregulation of the telecommunications industry will not create opportunities for companies to expand into the national long distance business. The United States will continue to have only a few national long distance carriers.

Chapter III

SELECTIVE REVIEW AND EVALUATION OF RESEARCH

The column by Robert T. Anderson, "LEC Pricing for Basic Telephone Service: Why Rates Are So Low", was in response to a previous article in Telecommunications by Bruce Kushnick, that was critical of New York Telephone's rate structure. This provided an opportunity for New York Telephone to justify their rate plans and explain why they are configured as they exist today. The document reviewed the history of how the rate structure evolved to meet the regulators', both federal and state, concept of universal service. It emphasized that New York Telephone had to subsidize for the cost of emergency 911 numbers and provide discounts to people receiving food stamps to comply with this concept. The article explained how these additional costs were incurred and added to other consumers' long distance charges in order to help compensate for these subsidiaries. Subsidization was necessary to allow all consumers the right to receive basic telephone service as depicted under the Communications Act of 1934. The article explains the concern of the local exchange carrier (LEC), of how competition could enter the local access market as they currently do not have to meet this same regulation or provide the same subsidies.

A limitation of this article is that it only addresses one, New York Telephone, of the seven local exchange carriers perspectives. The statistical material presented is just for that particular company and does not show if subsidies within the other exchange carriers vary as widely. All of the information and references provided were from New York Telephone in defense of their price rating system.

In, "Regional Companies Warn of Higher Phone Bills", written by Jon Healey, it further stipulates the LECs concerns with deregulation and what measures had been taken previously to compensate consumers. The focus of this article was on the subsidy laden structure created through regulation. Again this article, written from the local phone companies' perspective, emphasized the history of subsidies and why subsidies came into existence. It substantiates the document by addressing the Congressional concerns of the law and why it has taken so long for the telecommunications act to be enacted. How subsidies, through toll-rate averaging, were created to reduce the cost to the residential consumer and how divestiture created an opportunity for bypass carrier companies to come into the market before deregulation. These bypass carriers targeted the lucrative business market avoiding the high cost rural and residential areas, creating yet another barrier for the LECs to compete.

Victor J. Toth's article further explores the history of what actions were taken by regulators to uphold the commitments to the consumer outlined in the Communications Act of 1934. In the article, "The New Act - Too Many Questions; Too Few Answers", he explains the regulators' viewpoint to servicing the consumer. Unlike the previous articles, this comes from the regulators' perspective, not the providers. It explains how divestiture of AT&T created the concept of cost-based access and competitive toll rates. This did not change what was to be subsidized, just how the subsidies were to be collected through the introduction of the Universal Service and Lifeline Assistance funds. The article also identified how carriers like AT&T were handling service rates through tariffs and did not have to deal with subsidies. It continues by outlining how the FCC established mandates for universal service but would prefer not to mediate in the new laws' interpretations. The FCC would rather have the state legislators deal with those issues. Conclusions for this article were supported by those assumptions. Toth is a communications attorney with offices located in Reston,

Virginia and Washington D.C.. He specializes in state and federal telecommunications litigation, as well as regulatory and legislative matters.

In another article that appeared in Business Communications Review by Victor J. Toth, "AT&T Reclassified - Bureaucrats Still Dominant", it highlights the carrier AT&T. This document again goes over from a regulators' standpoint the effects of the recent change for AT&T from a dominant to a nondominant carrier. How this freed AT&T from price cap restrictions and tariffs. Sources for the statistical information in both of these articles were not identified. Toth has a monthly column in this magazine.

The article from Fortune Magazine authored by Andrew Kupfer, "They All Want To Be Your Phone Company: With Competition Looming, Baby Bells Must Woo Their Own Customers", utilized surveys by Morgan Stanley and the Yankee Group. These surveys were given to residential consumers and local access providers for their comments, not to business or long distance carriers. They identified what concerned the LECs about the changes in the telecommunications law, as well as represented the issues of the residential consumer. The surveys, based from the general publics opinion, idenitifed an image problem exists for many of the LECs, in comparison to the long distance companies. It stipulated how inconsistent state legislators are in deploying pricing structures and how government subsidies have been further supplemented by internal subsidies based on state statutes. Many outside representatives were consulted to substantiate the article, as well as the FCC's chief industry analyst, who was quoted in the literature review. The parent company of Fortune Magazine is Time Warner, a cable TV company, that has recently gone into the local telephone service market in various locations within the United States. It should also be noted that US West, a local exchange carrier, has a twenty-five percent stake in Time Warner.

The article "Utah Legislature to Discuss Phone Deregulation", originated from The Salt Lake Tribune newspaper titled the same and authored by Judy Fahys. It

takes the consumer's side of frustration with the local exchange carrier. This article talks about the aggravation that the consumer felt at their local provider, in this case US West Communications, because of changes due to regulation. It further explains how the LEC has fought the regulator on these issues. This article focuses only on fourteen states which are covered by US West. In particular it talks about what regulations were put into place in Utah and the impact on those consumers. Limitations of the document include addressing only one region of the country and only one LEC, in this case US West.

National Rural Electric Cooperative Association holds the rights to the article from Management Quarterly and authored by Amy Johnston. This document provides a slightly different approach to the deregulation issue, as utility companies can now compete in telecommunications. According to the economist cited in the article, the industry can survive and even succeed in a deregulated environment by following a number of rules. The article outlined how MCI took advantage of the regulated price structure and created a market niche in undercutting AT&T's prices in the early 1980s. MCI accomplished this as they could sell the AT&T regulated services at unregulated prices before divestiture. It is speculated that this same effect of companies creating a new market niche could occur with the new legislation. The article's focus is on rural areas and how the FCC through subsidation handles this additional cost. Johnston is a senior management consultant with the National Rural Electric Cooperative Association. She has eight years of management development and consulting experience in corporate and academic settings. Her management experience includes five years in the telecommunications industry as a business systems analysts and department head. Currently, Johnston is a human resource specialist in equal employment law, interviewing, employee motivation, performance evaluation, conflict resolution and problem solving. She is an adjunct assistant professor of management and organizational behavior at the University of Maryland at University College.

Johnston holds a bachelor's degree in economics from Saint Mary's College, with a second major from the University of Notre Dame. She earned a master's in business administration from Loyola University, Chicago, and a master of arts degree from the University of Chicago.

A solution to the subsidy problem is outlined by Thomas J. Makarewicz's article, "Who Stands to Benefit?". In this document the history of regulation is again addressed from the LECs perspective. The column brings to life how long distance carriers are penalized by local access providers to help pay for subsidized costs and through this create an inefficient cost allocation system. Consumers are more sensitive to changes in long distance costs versus local access service charges. These inefficiencies, per the article, cost in the billions of dollars. Makarewicz is an area manager of access planning for SBC Communications Inc. in St. Louis, Missouri. In the article he acknowledges the collaboration and expertise of Terry Schroepfer who developed some of the results presented. Others whose comments are noted include Darryl Howard, Steve Fursons, and Margret Starkey. It is stipulated that the article does not necessarily represent the opinions, policies, or business plans of SBC Communications Inc., or any of its subsidiaries. The information provided was based on results from Southwestern Bell Telephone company, only one of seven LECs. Even though these figures only represent one of the LECs, the federal mandates are across all seven companies and adjusted by the state's Public Service Commission. These adjustments cause for disparity in cost allocation of the subsidy between the various LECs.

The Federal Communications Commission was interviewed by Financial World Magazine's James Srodes to insure that the governments perspective was known on the deregulation issue. This article, "Surprise: Congress Gets It", focuses on that interview and viewpoint. It outlines how the new law contains a forbearance clause to prevent the FCC from just being able to implement regulation without first deciding that it is clearly necessary. The article also identifies how the United

States government is trying to open international telecommunications through talks at the General Agreement on Tariffs and Trade held by the new World Trade Organization in Switzerland. That it was anticipated for the deregulation within the United States market to spread to other international locations.

Roger G. Noll's bulletin, "The Role of Antitrust in Telecommunications", describes the history of antitrust in the telecommunications industry. It substantiates the document by references from the legislative history of the Communications Act of 1934, as well as documentation of FCC and other antitrust rulings. In the article vertical foreclosure and recent applications of this being practiced are reviewed. Predatory and exclusionary pricing, along with cross-subsidizations in products, were presented in detail as to how it has occurred throughout the history of telecommunications. The conclusions drawn stipulate that competition is superior to a regulated policy, this was based on the information and cases presented within the article. It also highlights how AT&T and other long distance providers can reduce costs through diversification of product lines and dispersion pricing schemes. The research for the bulletin was supported by the Markle Foundation. Noll is Professor of Public Policy, department of Economics, Stanford University.

Bobbi Nodell's article from the Los Angeles Business Journal, "Local Phone Monopolies About to be Disconnected", discusses California's market and what regulators are doing in that local access arena. This article was written three years before the communications act passed and provides insight as to how positioning within the market was already taking place. The article generates different perspectives by interviewing personnel from the state Public Utilities Commission, AT&T, GTE and Pacific Telesis. Most of the figures presented throughout the document were speculative on the basis of predicted change and with the assumption that no other changes would occur to the market. It takes into

consideration only the Los Angeles area, not even the entire California market, let alone the nation.

Financial World Magazine's Pablo Galarza provided a breakdown of the 1996 Telecommunications Act with predictions of what companies would be the winners and the losers. In the article, "Happy Independence Day", he defers to several consulting firms for their expectations of what will occur because of the changes in the law. The statistical information referenced in the document came from those various consultants. Their assumptions that derived the calculations were not defined. It was also noted that the new law stipulates a fourteen point check list for the local exchange carrier to conform with before going into the long distance market. There are no such limitations for the long distance companies before they are allowed to enter into the local access market. Another advantage that the long distance players seem to have is with brand identity. The big three long distance companies have a national image, where as until now the local exchange carriers could not market outside their specific region of the country. It is suggested in the article that the local access providers might be better off selling their services to the long distance companies at wholesale prices, which should be cheaper for those companies than building a local access network. Conclusions on issues were brought out through a logical progression in the article. The references and quotations provided support for the hypothesis.

AT&T's strategic plan for entering the local access market, due to the recent changes in the telecommunications law, was outlined in Business Week Magazine's article, "Ready, Set, Devour? AT&T Wants to Grab a Third of the Regional-Calling Market in a Few Years". The reporter, Catherine Arnst, performed personnel interviews with members from the Basking Ridge AT&T headquarters. This column was based on future events and the assumptions drawn for the conclusions stated in document were not discussed. The article highlighted how the various LECs' pricing structures differed and how they are different from LEC to

LEC. This diversity is because of the inconsistency of subsidies through interpretations of both federal and states legislation. AT&T being aware of this inconsistency in the law, began to build their own local access facilities to replace the LECs local network. All the conclusions were based on the parties being interviewed and not necessarily the position of AT&T. Although the article's position seemed to be substantiated by a statement from Chairman Robert E. Allen. Some bias must be assumed as there were no outside representatives confirming the statistics.

AT&T was further identified in the Time article, "Just Three Easy Pieces: Running Against the Trend of American Business, AT&T Announces the Biggest Corporate Split-up Ever". In this article, George J. Church explains why AT&T might have decided to break off segments of their business. A quote by AT&T's Chairman Robert Allen stated that vertical integration, the previous philosophy is no longer the direction for the company. The article utilized this statement to substantiate the speculation of the split. Stock market statistics were presented to show the split company's position. The split-up announcement occurred before the passage of the Telecommunications Act, which was one of the major assumptions for the split-up having to occur. AT&T did this not only because of the United States deregulation but in anticipation of other countries to soon follow America's lead. Conclusions were based on predictions of what would occur in the telecommunications industry in the next few years.

U.S. News & World Report Magazine's article, "How to Make the Right Investment Call on AT&T", by John Simons goes along with the Time article. They both came out on October 2, 1995, right after the AT&T announcement. In Simon's article he utilized Smith Barney and Merrill Lynch to provide projections of the stock after the division. These analysts were not utilized except for those predictions. A corresponding article in this same issue written by William J. Cook, goes over the split-up in more detail. The basis of this article, "Dialing for Dollars:

AT&T Splits Itself Up in an Effort to Piece Together a Profitable Future", stems from interviews with various personnel within AT&T and their reaction to the decision. It breaks the article into segments based on the following: 1. Nimble, 2. Conflict, 3. Global and 4. Exit Strategy. Many of the statements were supported by Salomon Brothers and Mercer Management Consulting in Boston. Both articles talked about how the three new companies would position themselves with the changes in the telecommunications law that were being suggested. The consultants' correspondence presented in the document substantiated the conclusions that were drawn.

Hillary Rosner with the publication Brandweek, titled an article, "AT&T's New Esprit de Core: AT&T Bases Growth Strategy Beyond Year 2000 on a Single Principle: Rivals Can Replicate the Best Technology; They Can't Touch the Best Brand". In this document it is demonstrated how AT&T's identity will bring them through, with limited impact, the changes in the telecommunications laws. The column is filled with supportive quotes from various marketing and consulting firms. There were also favorable excerpts from Jim Speros, AT&T's corporate advertising and brand manager. Very reputable firms' statistics were utilized, along with material presented by J.D. Power, to defend the conclusions that were derived from that information.

Pat Blake's article, "Ten Years After: Telecommunication Since the AT&T Split", provided both the bypass carriers' and long distance companies' market position ten years after divestiture. Various perspectives were incorporated into this document based on interviews with key members from these diverse companies. The article was written as an overview rather than as a documentary, so there were limited statistics presented. In the column it highlighted how MCI was a key entity in getting the government to break up AT&T in 1984. It goes over how MCI currently plans on competing in the local access marketplace through MCI Metro. The document further identified how technological advances make it more practical

to build a new network than trying to upgrade an existing one. This is what the LECs currently face in having to overhaul their old cable plant to fiber technologies.

MCI's perspective was represented in a column by Patrick Flanagan in the magazine Telecommunications. The article, "MCI to Wage $20 Billion 'War' Against RBOCs", outlines the deployment of MCI Metro into the local access market. This document written in 1994, was two years ahead of the Telecommunications Deregulation Act. To balance the column both AT&T and Sprint provided comments concerning MCI's move. The article has supportive quotes from MCI management and Paine Weber's Jack Grubman, a telecommunications analyst for that company. Predicted cost savings from local access charges were confirmed by this outside source. Conclusions were drawn from the long distance carriers viewpoint. All sources represented the long distance carriers, in particular MCI's perspective.

An article that originated in The Macon Telegraph newspaper appeared in Knight-Ridder/Tribute Business News in February 1994. The documentary written by Mike Billips represents Southern Bell Telephones position of what MCI Metro would do to the telecommunications industry. Within the article MCI and state officials are questioned concerning the action of MCI Metro. Limitations of the document include that this is only one state's perspective, Georgia, and only one of the LEC's are quoted, Southern Bell. The impact of MCI Metro is across the nation and would involve all seven of the LECs, as well as independent access providers. The column was written prior to the telecommunications act coming into effect. It is implied that MCI Metro would go after the business consumers, which are the most lucrative consumers for profits. The article goes on further to talk about the decision by the Clinton administration to open up new radio frequencies to commercial users. These frequencies could be applied by industries for such things as satellite radio broadcasting. Long distance carriers might have an

interest in utilizing these frequencies also to create networks that could bypass the local access carriers. These assumptions were brought out through the material of the article.

MCI is further analyzed in the documentary by Judy Ward in Financial World. In this article, "Critics Choice", Ward explains the position that MCI seems to be taking in comparison with that of AT&T. The column is founded on various comments from MCI personnel and some outside consultants. All statistical information was provided by MCI and represents their viewpoint. The article talks about the position that MCI is taking with the building of MCI Metro, their merger with British Telecom, the purchase of Nationwide Cellular Service and its alliance with media baron Rupert Murdoch's News Corporation. Comparisons are made to these actions, taken by MCI versus what AT&T has done.

Microsoft teaming up with MCI was discussed in an article in Telephony by Chris Bucholtz. This document goes over the synergies that the two companies will have in marketing each others products. Even though this is not a merger or acquisition it shows what the new laws in the telecommunications industry will strive to achieve. Outside consultant Dataquest and marketing firm International Data Corporation endorse the move by the two companies. This article appears right after the announcement of the Telecommunications Deregulation Act. Supportive comments come from MCI CEO Bert Roberts, who explains the complements of the combination. Conclusions were derived from the material in the article, which outline the benefits that MCI and Microsoft both gain in being exposed to each others consumer base.

The merger of SBC Communications Inc. and Pacific Telesis appeared in an article in PC Week by Erica Schroeder, who describes the synergies between these two companies. This column comes with a slightly different outlook, as this magazine has an Information System (IS) author not in the telecommunications field. It talks about the merger of the two companies and what advantages the

telecommunications and IS communities will gain. Supportive information was provided by quotes from SBC Communications, Pacific Gas & Electric and Computer Telephone Reseller Association. Statistical information also came from these various sources and was not defined within the article. This essay was written after the Telecommunications Deregulation Act of 1996. The analysis and perspective of this document makes references between the two companies and the benefits/limitations to the merger. Conclusions were supported from the material based on these premises.

In the April 22, 1996, Forbes in an article by Christopher Palmeri, SBC and Pacific Telesis were again compared but for their differences. The article outlined how each of these companies was positioned after divestiture with AT&T. It goes over how SBC Communications was the runt of the seven LECs, working in the depressed southwestern United States oil market. SBC Communications was highlighted as a bully coming through that experience and becoming the strongest LEC in terms of profitability. Analysis was provided by TeleChoice in Verona , New Jersey, which has done extensive research on the Baby Bells. The article also referenced to other articles within the same magazine, to substantiate certain points. The document concluded that even though SBC was the strongest LEC in return on equity, this would be weakened in the coming years by taking on Pacific Telesis.

Questions are further raised in the America's Network article, "Doubts Linger Over SBC/PacTel Pairing". Patty Wetli interviews various consultants to gather insight as to what the acquisition really means for the two companies. One of these interviews was with Dave Otto, now a telecom analyst with Edward Jones, having recently left a position as manager of SBC Communications' debt portfolio. The article goes over why strategically this might make sense for international growth and how it will incorporate PacTel's advances in digital technology across the SBC

network. There were many different consultants' views represented throughout the document identifying both positives and negatives of the consolidation.

Warren Cohen with U.S. News & World Report teams up with a couple of other journalists to write an article about CEO Ray Smith of Bell Atlantic. The documentary outlines the accomplishments of this CEO, who with the merger of Bell Atlantic and NYNEX will have a telecommunications giant from Maine to Virginia. In the article it highlights Smith's progression through Bell Atlantic. The interview was utilized to substantiate critical points and supported conclusions stated throughout the text. Another article by Cohen and Robin Knight explain the first LEC merger since divestiture between SBC Communications and Pacific Telesis. In this particular feature, key industry players were considered in the overall positioning of the players in the market. This includes AT&T's splitting into three companies and speculation as to what the other five LECs will be doing now that the telecommunications act has passed. Statistical information was quoted, but the sources were not identified. Both of these articles make reference to the threat that AT&T now faces from these formidable competitors. That both of these mergers created a viable competitor that did not exist before the telecommunications act. Cohen provides statistics of the seven LECs and their strengths and weaknesses. Conclusions to the articles were supported by references throughout the text.

An article that originated in the Daily Press, of Newport News, Virginia goes over the merger of Bell Atlantic with NYNEX from the consumer and worker perspective. The article appearing in Knight-Ridder/Tribune Business News on April 23, 1996, documented interviews from various sources in the state of Virginia. It is full of supportive quotes from Bell Atlantic, the Virginia Citizens Consumer Council, Consumer Federation of America, and the Consumers Union in Washington D.C. Limitations to this article are that it only emphasized the workers in Hampton Roads and the State of Virginia. The articles' focus was on

the impact to the worker and how it would affect the state. This article was titled, "Bell Atlantic-NYNEX Merger Unlikely to Affect Virginia Jobs", and authored by Ken Baker.

Prior to the merger of Bell Atlantic and NYNEX, Bell Atlantic made a substantial investment in CellularVision, a CATV company. In the article, "Bell Atlantic Makes Move Into CATV", by Charles F. Mason, it goes over the strategy of Bell Atlantic to penetrate the New York City CATV market. This article comes three years before the telecommunications act gets approval through the government, as well as the merger between these two companies. The document takes the position of both Bell Atlantic and CellularVision. The only quote in the column comes from Brian Oliver, president of business development at Bell Atlantic Enterprises International.

In the article by Daniel Patrick O'Tierney, "Rewiring Telecommunications", he goes over the advances in technology and the economic impact assumed based on the changes in the telecommunications law. The article was written as the telecommunications act was being passed in Congress and before being presented to the president for signature. O'Tierney is an Anchorage attorney, on consul to Pradell & Associates, and former Commissioner of the Alaska Public Utilities Commission. Although the issue was written to direct the national implications of the bill, it presents specific examples based on Alaskan legislation and the impact to businesses in that state. Conclusions were based on speculation that the new PCS technology and changes in the law will stimulate more innovation in telecommunications.

Eric Smalley and Kimberly Patch outline for PC Week how the information superhighway will require broadband networks. In the article, "Long-Distance Giants Jockey for NII Stake", interviews were obtained for all three of the major long-distance companies. It further utilized outside consultants to substantiate what the carriers were claiming. The article identified the long-distance carriers'

perspectives and does not represent all telecommunications viewpoints. It highlighted what the three carriers were doing both publicly and behind closed doors to position themselves for the changes in the law. Conclusions were based on the consultants quotations and summary of the text.

Sprint's position was further outlined in an article in Telephony titled, " Sprint Ventures Into Partnership with Cable Company Trio". The document goes over the position of Sprint getting into the local exchange and wireless markets through this partnership. References were made to previous articles within the magazine, as well as having interviews with key members involved with the agreement. Market interpretation was provided by outside consultants, whose view of the combination highlighted the impact to the competition and consumers. Conclusions for this column were supported by these various quotes provided in the text. The author of this article is Paula Bernier.

Another article talking about the partnership between Sprint, Tele-Communications Inc. (TCI), Teleport, Comsat and Cox Enterprises was in InterActive Week. In this column, Tom Steinert-Threlkeld, takes more of TCI's perspective to the partnership. It goes over the services that the combined companies would extend to the consumer. Most of the statistics were provided by TCI. It does have comments from a couple of consultants outlining the cable companies' perspective. It stated that the cable companies pass roughly one-third of the nations ninety-five million households. The article concludes by summarizing the benefits of the joint merger and what it would bring to the consumer.

To represent the local exchange aspect to the partnership involving Sprint and Teleport, Jennifer Reigold in Financial World goes over the implications of that partnership. Within the article many references were made to outside consultants for information. It interviewed the carrier company AT&T for comments, as well as provided interviews with Merrill Lynch's representatives concerning the activity. Merrill Lynch founded Teleport in 1983. Other source

references came from Bear Stearns, a financial management firm in New York, and the Yankee Group, a marketing research firm.

Satellite television is being utilized by AT&T and MCI to enter into the local access marketplace. In the article "Telecom Giants In Sat TV", C. Thomas Vielleux and Jim Ostoff go over how these two powerful telecommunications carriers have purchased into the small-dish satellite systems. This article appeared in HFN The Weekly Newsletter for the Home Furnishing Network and the text was held by Capitol Cities Media Inc.. The document outlined the opinion of the television industry to the changes in the telecommunications law. It also supported distributors of the satellite system, through providing quotations and information pertinent to them. The column went over how the addition of the MCI and AT&T names to the Satellite television industry would impact the sale of these systems.

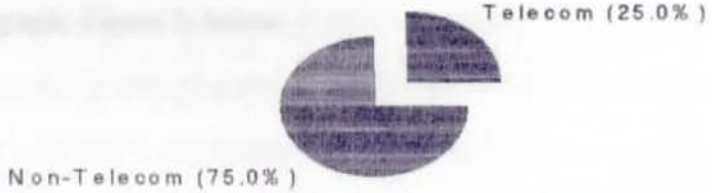
In a related article in America's Network, Gary Kim compares direct broadcast satellite broadcast to fiber optic transmission. This article highlights the cost comparison of what the local exchange carriers face in upgrading their outside transmission plant to fiber optics and how the long distance carriers are taking advantage of satellite carrier systems to the home. The document is full of statistics provided from the satellite and cable carriers on the cost of these systems. It provides a perspective from the long distance carriers why they might choose satellite versus waiting on the existing local cable plan to be upgraded to fiber optics. Assumptions of expense and projections for growth were presented in a logical sequence. The conclusions presented at the end of the document were supported by the details presented in the text.

Chapter IV

RESULTS

The information presented in chapter three has been divided and classified into two main categories for review. The first group identifies documents written in publications specializing in the telecommunications industry. These are trade magazines or journals that primarily follow this business segment. Examples of these publications include, Telecommunications and Business Communications . Articles published on a national or regional basis, that are not normally associated with the telecommunications industry, were classified in the second category. These included publications like Business Week magazine, Fortune magazine, and others. From the thirty-six articles presented, twenty-seven were from publications outside the industry, while nine sources were connected with telecommunications. This is presented in the pie chart, Figure 1, below.

Figure 1
Telecommunications Articles

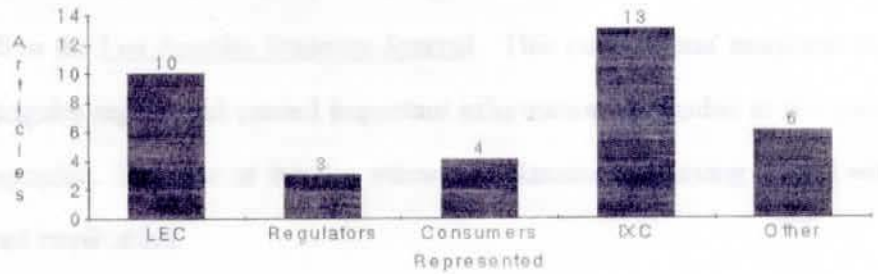


As indicated from this chart, the majority of the information, or seventy-five percent, came from publications not specializing in telecommunications. Only twenty-five percent of the articles reviewed were trade documents related to this field.

The articles' contents were then reviewed to identify what perspectives were being represented by each document. This was determined through bias in the authors' background, the publications' association to a business or speciality group, or the contents only referencing to one side of an issue. These perspectives were accumulated and broken into five major groupings for study. The divisions are: 1. Local Exchange Carrier, or LEC, 2. Government Regulators, both state and federal, 3. Consumers, business and residential, 4. Long Distance Carriers, or IXC's, and 5. Other.

An "other" classification was obtained if multiple perspectives were presented in the document or if the article did not easily identify a particular point of view. The articles were classified under the five areas based on how the document positioned itself through references within the article. If the article spoke about a particular company or segment in the industry, or if the substantiating quotes were referencing only a particular company or interest, this is how the articles' point of view was determined. An example would be from the article by Robert T. Anderson, "LEC Pricing for Basic Telephone Service: Why Rates Are So Low". This article was New York Telephone's response for a previous article that was critical of the company. This document was then classified as from the LEC perspective, considering it was only New York Telephone's view point being represented. Based from these classifications, chapter threes' articles are provided in the bar graph, Figure 2, below.

Figure 2
Perspectives



As indicated in this figure, the majority of the articles portrayed the local exchange (LEC) or long distance (IXC) carriers' perspectives. These two categories combined accounted for almost sixty-four percent of the articles' point of view. The local exchange carriers' goals were represented about twenty-eight percent of the time, with long distance companies represented in thirty-six percent of the documents. The consumers' position was the next largest interest with eleven percent of the articles making reference to this attitude. And the regulators' perspective carried eight percent of the viewpoint from articles outlined in chapter three.

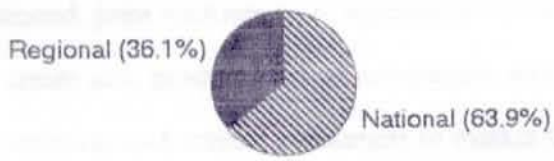
It is important to note that the "other" category carried almost seventeen percent of the articles. Some of these perspectives were from new competitors to the telecommunications industry, the utility and cable television companies, and their ideas relating to the Telecommunications Act of 1996. This percentage also represented the existing competitors' perspective, which are the companies that bypass the local exchange companies and the independent carriers organizations, the largest of these is GTE.

Another aspect that was identified from the information presented in chapter three pertained to if the document dealt with regional or national implications. There were two ways that this was derived. First, if the publication did or did not have national circulation. What this related to was how vast of a coverage the publication carried. National publications covered articles on a national basis pertaining to the general population. Regional publications are more likely to identify with a local area and specific region. An example is the article by Bobbi Nodell in the Los Angeles Business Journal. This publications' emphasis was in the Los Angeles region and carried important information applicable to this particular demographic. Because of this the article was classified as having to deal with regional implication.

The second item pertained to the contents of the paper. If the document only specified a particular serving area or was a local company, it was classified as regional. It is important to note that some of the articles originated in local newspapers and were picked up by Knight-Rider/Tribute Business News and broadcast nationally. An example of this is the article by Judy Fahys, "Utah Legislation to Discuss Phone Deregulation". This article originated in The Salt Lake Tribune newspaper. As noted by this document the publisher services national coverage, yet the article was for a specific region and was categorized based on the content.

The above criteria established the reasoning for the two sets of categories for classification. The results of this position are noted in Figure 3 below.

Figure 3
Coverage

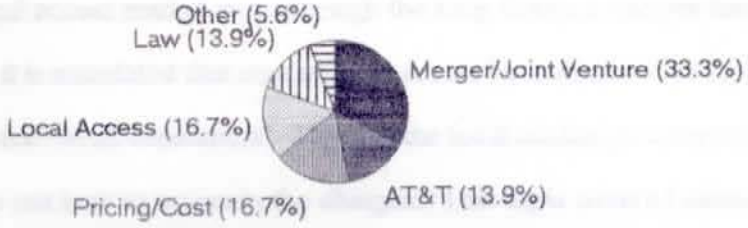


As indicated by this graph, almost two-thirds of the information pertained to national issues. This is important to note, that even though the Telecommunications Act of 1996 was a national law, state legislators could influence the law by identifying specific requirements to be met before being implemented in their states.

Another result from the information presented in chapter three highlights the focus of the articles. Focus being defined here as the center activity or main topic presented in the article. The articles were analyzed for activities the companies were performing in the telecommunications industry, both before and after the 1996 Telecommunications Act, to position themselves for competition. From these results six categories were identified outlining these positions. These groupings are:

1.) Mergers and/or Joint Ventures, 2.) AT&T, 3.) Pricing or Cost, 4.) Local Access, 5.) Law, and 6.) Other. This is represented in the graph, Figure 4, below.

Figure 4
Focus



Mergers and/or joint ventures were articles that presented the companies as becoming more competitive because of that activity. This was the largest category with over thirty-three percent. There were three main types of activities under this classification. The first being actual mergers between companies, an example being the combination of SBC Communications and Pacific Telesis, coming together under one name. Second, joint ventures were agreements between two or more parties to extend or create new product lines of companies, an example of this is Microsoft and MCI utilizing each others' consumers to market the others product lines. And finally, joint ventures that integrated networks and products together to enhance existing products, an example includes Teleport, Sprint, TCI and Cox cable companies joint venture to provide long distance, local access and cable television all under one name and bill.

Another group includes, AT&T rating a separate category as it had articles on how it broke this huge conglomerate into three distinct smaller companies, how after years the company received non-dominant carrier status, and why it got into a joint venture with a satellite access company for local access into the home. All these activities were in preparation to the coming wave of competition in the industry due to pending legislation. Some of this activity occurred before the Telecommunications Act of 1996 and others after it was announced. AT&T covered almost fourteen percent of the articles' focus.

The pricing or cost category dealt mainly with the issues of subsidies and how the local exchange carriers will handle these additional costs. The articles explained how subsidies came into existence and provided suggestions on how this should be handled under the new law. Most of the burden with the current subsidy system falls into the local access market and although the long distance carriers have to pay for these costs, it is mandated that cost of local access be maintained to support "Universal Service" to all consumers. This left the local exchange companies with having to figure out how to maintain the charges. This topic covered almost seventeen percent of the articles' focus.

Local access represented another seventeen percent with articles concerning the independent companies and MCI Metros' entree into the local access market place. These documents outlined how the long distance and independent carriers were utilizing the changes in the telecommunications law to open new markets of business. The articles identified opportunity for these companies to move into other areas of telecommunications once restricted. Along that same line another category, identified as the "law", dealt with how the Telecommunications Act of 1996 was to be implemented. This covered about fourteen percent of the articles' focus. It specified the requirements that were to be placed on entrants to the local access or long distance marketplace, and time lines that were required for entry into either of these markets.

Finally, the last grouping dealt with two articles that did not easily fit into any of these other classes. One of the articles addressed the frustration with the local exchange carrier U.S. West and its deteriorating service levels. The second document concerned antitrust in the telecommunications industry history and how this could repeat with the changes in the laws. This identified the events that occurred with the previous changes in the laws and what activities took place immediately after their implementation. Both of these articles accounted for five point six percent of the focus and were classified under the "other" category.

The final result was an evaluation of the articles and who was represented. There were articles that represented views from all three of the major long distance players AT&T, MCI and Sprint. Six of the seven regional bell operating companies were covered with only Ameritech not having an article evaluated. The largest independent carrier, GTE, was identified in the evaluation of material. This was the only independent that rated consideration in the evaluated material. Many of the smaller independents views were not covered. One bypass company, Teleport, was evaluated in this process, making the evaluation spread across all the current competitors in the telecommunications industry. New competition to the industry was also covered with articles on the utilities companies and cable television sectors.

Another competitor to the local access market was the introduction of satellite television. These same satellite dishes replace the previous version that was larger and analog based. These small digital antenna serve competition to both the local access telephone and cable television industries. Both AT&T and MCI have purchased airwaves and have invested in this technology. This perspective was covered in the evaluation.

Chapter V

DISCUSSION

Summary

As indicated from the results presented in chapter four, seventy-five percent of the researchers' articles were derived from publications not associated or affiliated with the telecommunications industry. These documents highlighted that both the telecommunication industry and other enterprises have an interest with the passage of the Telecommunications Act of 1996. They provided speculation, as well as fact, as to the impact that the new law will have on the American public and business. As stated in these documents, this new enactment would change the competitive nature within telecommunications. Due to this legislation existing processes and procedures within telecommunications, are being questioned by members both inside and outside of this industry. The attention that has been stimulated from these initiatives has enticed the fascination of both business and residential consumers nationwide. These parties are curious as to the impact that it will have on them as the users of this technology. The enchantment of the American people, with the developments being generated through this act, has been substantiated from the number of publishers writing feature articles, as well as the overall total number of articles being generated, pertaining to this topic. This fascination at the same time justifies the large number of articles being published and the reason that non-telecommunications magazines have been covering this issue.

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