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AT&T Technologies' Marketing Philosophy: The Impact Divestiture Had Upon It

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AT&T TECHNOLOGIES' MARKETING PHILOSOPHY: THE IMPACT DIVESTITURE HAD UPON IT

Cynthia Gerard B.A.



A Culminating Project Presented to the Faculty of the Graduate School of the Lindenwood Colleges in Partial Fulfillment of the Requirements for the Degree of Master of Business Administration

Thesis G312a 1985

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DEDICATION

This project is dedicated to my family and friends who have given me the support and encouragement to pursue this academic challenge.

ACKNOWLEDGEMENTS

I am grateful to my employer, AT&T Technologies, who has made this project possible and has allowed me to fulfill my academic goals. Upon completion of this project, I feel I am better qualified to understand and contribute to the marketing goals of this company.

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AT&T TECHNOLOGIES' MARKETING PHILOSOPHY: THE IMPACT DIVESTITURE HAD UPON IT

Cynthia Gerard B.A.

A Digest Presented to the Faculty of the Graduate School of the Lindenwood Colleges in Partial Fulfillment of the Requirements for the Degree of Master of Business Administration The marketing mindset at AT&T Technologies, Inc.—does one exist? This thesis is prepared by a Lindenwood College student and employee of AT&T Technologies, Inc. inspired by the academic excellence challenge as well as established professional career objectives. The goal of this thesis is to analyze the marketing efforts instituted at this Company.

The literature utilized in conjunction with this research was derived from published material. This was done to preserve the integrity and proprietary needs of such a business. Any recommendations, analysis, and conclusions are made from the basis of this author acting in a consulting capacity.

The focus of this project will be to analyze the marketing capabilities at AT&T Technologies, Inc. (AT&T-T). Research will include published financial reports, magazines, compositions, and newspaper reports. Additional analysis will be conducted from a consultant's viewpoint. In addition to research, surveys will supplement this thesis to attain a pulse of the current mindset that resides at AT&T-T. A cross section survey will be used to reach the different levels of employee attitudes.

The information gathered from researching published data will be used to develop strategies and recommendations. The hypothesis that will be tested is as follows: Is AT&T-T market oriented? Do they have the credentials, talent, capacity, knowledge, and skills to run a company competitively yet profitably?

CHAPTER 1: INTRODUCTION AND STATEMENT OF PROBLEM

This culminating project will analyze the environmental factors that currently impact upon the survival of American Telephone and Telegraph-Technologies (hereafter AT&T-T) as a market-driven company. This paper will address marketing issues and forces that should reside within a business setting such as this.

To fully appreciate the significance of analyzing the marketing abilities of a company like AT&T-T, it is imperative to review the circumstances of how they encountered their present business environment. As far back as 1917, AT&T Corporation faced a turbulent existence. Many facets of their business were challenged throughout the years. Not until 1982 did the telecommunication market realize the impact AT&T had on this industry. A brief synopsis of this history can be reviewed in Figure 1-1.

FIGURE 1-1 AT&T IN RETROSPECT

- 1913 TELEGRAPH STOCK EXPANSION
 Provided long distance connection of Bell System lines to independent telephone systems.
- 1934 COMMUNICATIONS ACT
 Brought interstate telephone business under regulation by FCC.
- 1949 ANTITRUST SUIT
 U.S. Attorney General filed suit alleging AT&T and
 Western Electric in violation of the Sherman Antitrust
 Act.
- 1956 CONSENT DECREE
 Final judgment that limited Bell System to common carrier communications and government, preserved long standing relationship between manufacturing, research

- 1956 CONSENT DECREE (Continued)
 and operating arms of the system. Also mandated major
 concessions regarding patent protection.
- MCI/GOVERNMENT
 Microwave Communications Inc. (MCI) filed antitrust suit
 against AT&T and Bell System. The suit alleged Bell
 Companies of monopolizing business and data
 communication market.
- 1980 COMPUTER II

 Due to Computer Inquiry FCC announced detariffing of all

 new customer premises equipment and all enhanced
 communications services.
- 1982 ANTITRUST SETTLEMENT
 January 8, 1982, AT&T and Justice Department announced resolution to antitrust suit. AT&T agreed to divest the 22 Bell Operating Companies.
- 1983 AMERICAN BELL
 AT&T new subsidiary was formed as a strategy resulting from divestiture.
- 1983 NEW NAMES
 The name American Bell can no longer be used, also the
 Bell symbol cannot be utilized within the AT&T
 Corporation universe. Western Electric name changed to
 AT&T Technologies.

SOURCE: "How it came about" The Valley Voice, Merrimack Valley Works, March 1, 1983, page 1.

In the year 1983, AT&T found itself divorced from a long marriage to the "Bell System." Part of the agreement was to set free the local operating companies from their parent company, AT&T Corporation. It was this agreement that changed the course of the telecommunication business. As a result, the former Western Electric Company became AT&T Technologies, Inc.

AT&T-T manufactures telecommunication equipment. This equipment ranges from cable products, switching components, telephone systems to computers. Before the divestiture agreement, AT&T-T existed in a world that was not only a monopoly

and regulated but served basically one type of customer for over nine decades. When Western Electric was part of the Bell System, their primary mission was to design, engineer, and install a product. In other words, AT&T-T manufactured the equipment that was purchased by the telephone companies. AT&T-T was the manufacturing arm of the Bell System. They made the products for the telephone companies. Not much concern or sensitivity was given to the marketing aspect of any products. That sort of mentality was prevalent over the years at the former Western Electric and currently some residue of this mindset still prevails. This project's research will also attempt to gain a pulse of the present mindset coupled with suggested methods to correct habits.

The Pre-Divestiture marketing situation consisted of AT&T-T selling Bell Labs products, with little product choice and an established delivery schedule. AT&T-T basically developed, engineered, and installed products and services. AT&T-T would have a selection of products of which the telephone companies made their choice. In 1976 AT&T-T established Account Management Teams for the purpose of marketing products and services to the telephone companies.

Since divestiture, the customer has a choice of vendors. The climate is very competitive, therefore AT&T-T is listening more to the customer by visiting locations, increasing personal selling techniques, and trade shows.

AT&T-T has established marketing guidelines such as assessing customer needs and matching those to specific products.

Marketing efforts also are focusing on stressing features and benefits. AT&T-T is doing something they have been unaccustomed to and that is following up on post-sale activities to ensure customer satisfaction.

The year 1984 started off with a slimmer AT&T minus the Bell Operating Telephone Companies. The following Figure 1-2 is a composite which illustrates the reshaped post divestiture AT&T Corporation as well as the composite of the former Bell System.

FIGURE 1-2 REORGANIZED AT&T CORPORATION

AT&T

AT&T COMMUNICATIONS

AT&T TECHNOLOGIES

AT&T BELL LABS

AT&T NETWORK SYSTEMS

AT&T TECHNOLOGY SYSTEMS

AT&T CONSUMER PRODUCTS | AT&T INTERNATIONAL | AT&T INFORMATION SYSTEMS

AT&T CORPORATION
BELL SYSTEM COMPOSITE

AT&T

LONG LINES

AT&T INTERNATIONAL

BELL LABS

WESTERN ELECTRIC

22 TELEPHONE COMPANIES

Since the divestiture, AT&T-T has encountered many challenges. AT&T-T began to realize shortly after divestiture they were lacking certain types of skills which were not previously required. Research has been conducted and elicited regarding marketing efforts that have been employed as well as needed at AT&T-T. Specifically, the direction of this paper hereon will be focused towards analyzing the marketing endeavors currently at AT&T Technologies (AT&T-T). In addition, significant historical events will be examined to arrive at unifying recommendations and future considerations.

To examine the established marketing objectives, one market area, Network Switching Product Line #5ESS, will be utilized for purposes of brevity and illustration due to the seven lines of business within AT&T-T's charter. Figure 1-3 gives a brief reflection of these lines of business.

FIGURE 1-3 AT&T TECHNOLOGIES LINES OF BUSINESS

- 1. BELL LABS
 develops and designs products
- 2. NETWORK SYSTEMS manufacturing sector
- INFORMATION SYSTEMS business and residence products
- 4. INTERNATIONAL markets products on a global scale
- 5. TECHNOLOGY SYSTEMS
 consists of two telecommunication business segments
 I. Components and Electronic Systems II. Federal Systems
- 6. CONSUMER PRODUCTS
 markets multi-functional telecommunication systems

7. TECHNOLOGIES INC. research and development, manufacturing and business groups that markets equipment and services

SOURCE: 1983 AT&T annual report, pages 1-24.

Together the aforementioned lines of business embody the newly shaped AT&T-T. This restructuring lends itself to a different mission. Before it was universal service, now it is to be the best telecommunication provider while maintaining customer satisfaction. Prior to the January 8, 1982 divestiture agreement, AT&T Corporation was the parent company with offspring consisting of Western Electric, 22 Operating Telephone Companies, Bell Labs, International, and subsidiaries. As the divestiture proceedings were approved by the courts during August of 1982, the agreement stated that the Operating Companies be owned and operated as single business entities as of January 1, 1984. Thereafter, these companies would be known as Regional Bell Operating Companies (RBOC's). The divestiture agreement to date has had the most impact upon the telecommunication industry. There is no more Bell System. The outcome of the antitrust suit which culminated in the historical divestiture document was that the operating companies would retain the following lines of business:

- Local exchange areas
- 2. Long distance access
- 3. Yellow page printed directory
- 4. Cellular mobile communication services SOURCE: AT&T 1983 annual report, page 4.

The remaining business sectors which constituted the Bell System are now under the direction of AT&T Corporation which are as follows:

- 1. Long distance
- 2. Research and development
- Manufacturing

SOURCE: AT&T 1983 annual report, page 4.

At divestiture, AT&T-T found itself operating in a competitive plus somewhat unregulated environment. AT&T-T is acclaimed for being the producer of the highest quality and state-of-the-art telecommunication equipment. To add to this illustrious reputation, they have supplied to predominately one industrial user, namely the telephone companies, since their existence. Now AT&T-T is conducting business in an external environment which includes many uncertainties and unanswered questions. Presently, to examine the magnitude of the current situation that resides at AT&T-T after two years of existing in a competitive world, a situation analysis was prepared. The goal is to examine strong points plus weak areas.

AT&T-T's market segment consists primarily of the local telephone companies. Non-traditional market segments are evolving in such areas as the commercial businesses and other non-Bell telecommunication companies. There are other lucrative markets that exist other than the traditional telephone company market share. For example, the government could easily have the fifth largest phone system in the nation, for it utilizes some 250,000 phones. Telecommunication analysts cite that the United States spends an average of \$700 billion on telecommunication services yearly. Approximately ten percent or \$75 billion belongs to the telecommunication market share which can be segmented as follows:

1981 Market Share

77%	AT&T
17%	Independent Telephone Companies
5%	Independent Equipment Suppliers
1%	Other Common Carriers

These same market analysts project this market will expand to five times the size it was in 1981 by the year 1986. The projection for market share for this year is as follows:³

1986 Market Share

45%	AT&T
17%	Independent Telephone Companies
6%	Independent Equipment Suppliers
30%	Operating Companies
2%	Other Common Carriers

The market for telecommunication equipment is fiercely competitive. Prior to 1982, competition was limited solely to the long distance markets, today the entire scope of telecommunication services is competitive.

Purchase decisions for AT&T-T products are determined by telephone companies' user requirements. For example, each telephone company has a predetermined budget which dictates what type of equipment can be purchased. This translates into the degrees of technological impact via purchases. Each telephone company is considered an industrial user and, thereby when they make a purchase, it is determined by concluding the impact on possible revenue generation in the long run. AT&T-T's prime customer, the telephone company, is anxious to increase their revenues and will be looking for products that not only are cost effective, but also generate significant amounts of revenue. 4

Therefore, this need tells AT&T-T that the product features must

consider customer benefits. Another instance of this type of buying behavior is the Southwestern Bell Corporation (SBC). They are a customer of AT&T-T. If SBC is considering expanding offices in order to offer additional services, they will investigate a variety of products in an attempt to determine the end product.

Traditionally, AT&T-T did not have to be sensitive to any type of customers' buying patterns or behaviors. This culture can be attributed to a lack of competition in telecommunication technology. Presently AT&T-T is in a position of needing to become more attune to customers' purchasing powers and requirements. Telephone company personnel rely predominantly on the close relationship employed with AT&T-T for making purchasing judgments. For many years, both companies worked closely together as being a part of the Bell System. This intimate relationship has cultivated various networks of information in this post divestiture environment.

This industrial resource can give AT&T-T an edge on possible market opportunities. If personnel at AT&T-T are properly trained, they can examine buyers' patterns in addition to reinforcing positions of obtaining constant feedback.

Product information is communicated via television commercials, trade magazines, newspapers, trade shows, radio advertisements, and personal selling. Since divestiture, customers are asking more questions as well as demanding more answers and AT&T-T is realizing the customer's new freedom as

well as theirs. Now management is focusing attention on this aspect which opens the door to more marketing endeavors.

The degree of brand awareness and loyalty is becoming a management concern at AT&T-T. They have been in business for over 100 years while being part of the Bell System whose primary mission was to make telephone service available and affordable to all. Divestiture has heightened brand awareness, yet loyalty seems to be diminishing due to the influx of competition. In addition to competition surrounding AT&T-T market share, the telephone company is dealing with new vendors. This freedom is being exercised by the telephone companies and they are finding other businesses can meet their requirements and supply equipment.

Since AT&T-T is used to working with and supplying products to the telephone companies, they are somewhat familiar with buying procedures and approvals. Most brand decisions are made relative to experiences encountered with particular products. That is, if a product was reliable and performed satisfactory, then the customer will retain a favorable impression.

Pricing is becoming a more sensitive issue to AT&T-T and its customers. Competitive bidding, proposals, and presentations are now a reality of AT&T-T. Customers are very aware of cost and are analyzing every purchase decision.

The product categories for AT&T-T can be captured by three areas: Consumer Products, Technology Systems, and Network Systems. Current sources for communicating these types of product information are catalogs, brochures, television

advertising, and promotional campaigns plus personal selling. In the predivestiture world, AT&T-T's products were manufactured and delivered to its customers with little marketing effort.

Product purchase decisions are made by the telephone companies' management. Their decisions are based on economic considerations and customer feedback. Telephone company end user communication is vital to purchasing decisions.

The cost of telecommunication equipment is justified by its revenue generating abilities. Experience has indicated that telephone companies will spend a reasonable amount of dollars if the product will produce a significant return on profit. AT&T-T has survived the past two years by repeat purchases from its target market, the operating telephone companies or RBOC's. This market's purchasing power is gathering momentum since the newly acquired freedom they have to pick and choose any telecommunication manufacturer.

The rise of a negative purchase outcome is gaining some publicity. Weekly, articles are published in newspapers, trade journals, and magazines alluding to these types of customer feelings. There is eminent risk and cost associated when a buyer's attitude and experience with a telecommunication product is negative. Traditionally, the 22 Bell Operating Companies maintained a close network among their own personnel and AT&T-T's. This closeness still exists and attention has to be given to this factor.

AT&T-T's favorable reputation is attributable to Bell Labs.

AT&T Bell Labs enhances the Corporation with a favorable

reputation for inventing and designing state-of-the-art products. This technological image projects a positive influence upon the telecommunication market.

Functional considerations place an enormous impact upon the customer's decision making capabilities. Decisions are primarily derived from the cost and how much profit this investment can produce in terms of producing revenue. On balance the situation is that AT&T-T's target market, the telephone companies are becoming more sensitive to pricing, product reputation, user feedback, quality, and durability of products. Together these aspects plus more are evolving and gaining widespread attention within AT&T-T's market share. This means AT&T-T must maintain a close relationship and closely monitor these factors.

Some of the equipment could feasibly endure for years to come, while other types of products have a short life span due to technological advancements. The telephone is a prime illustration of a quality product that lasts indefinitely. Many of the telephones in homes and businesses today have been installed and have worked fine for long periods of time. The failure rate of telephone sets has always been at a minimum. This example of AT&T-T's product life and quality components demonstrates timing can be a significant factor in marketing programs that influence purchasing decisions.

The nature of demand is one area AT&T-T is notably not familiar with identifying and analyzing. This statement is found in the 1983 annual report. The market that AT&T-T wishes to

maintain is the telephone companies. AT&T-T strives to be the number one supplier of telecommunication equipment to their market segment.

The intent of analyzing supply and demand of AT&T-T's telecommunication equipment is to utilize the information so that it will be beneficial in formulating strategic and tactical marketing programs. Market segmentation can be further subdivided into three categories:

- Telecommunication users (weighing heavy versus light)
- 2. Communication processes
- Networks

Together these three areas comprise the market share that AT&T-T seeks to maintain.

There can be more than one market segment for a company the size of AT&T-T. If markets are identified, marketing programs can be developed for each segment.

happen again. It was the last year for this company's existence as "the Bell System". Income for this year decreased from the previous year, due to expenses allocated for reshaping and reorganizing the world's largest business enterprise into separate and independent organizations. The potential earnings for a newly reshaped company such as AT&T-T were projected as being tremendous. The size of AT&T-T's overall market could feasibly exceed the traditional telephone company once AT&T-T is able to enter other lines of business. The aggregate market potential for the AT&T Corporation is awesome considering that it could realize additional market segments.

Competition is a rather new environmental factor to AT&T-T.

In the past this company had very little concern about who else was a telecommunication supplier. Today the market is flooded with many varied services and products from powerful competitors such as IBM, Northern Telcom, ITT, Rolm, MCI, to name a few. The industrial buyer will not encounter tunnel vision anymore and just anchor itself to AT&T-T's product lines. The customer will from now on evaluate features relative to benefits as well as costs, and not base evaluations just because AT&T-T made it.

The financial resources at AT&T-T are a strong card that they hold. They also employ a highly educated and reputable developmental sector. They do encounter a few shortcomings in marketing and production skills. This is because they have never before had to function in a competitive manner.

Competition is currently very aware of AT&T-T inadequacies.

They are exploiting AT&T-T's deficiencies via television

commercials and advertisements. AT&T-T's competitors are at

times rather retaliatory in their attempts to capture some of the

telecommunication market.

The climate that faces AT&T-T has been volatile. Several of the economic trends have not been favorable. Political, social, and technological advances have been at times detrimental. The divestiture is the foremost significant environmental factor that has dramatically altered the course of not only AT&T Corporation but the course of telecommunications history.

AT&T-T is a company that has been in business for over 100 years. Most of their products have changed drastically yet

improved significantly over time. In the past, end user customers knew AT&T-T made a reliable product, and the local phone company was related to AT&T-T somehow. Since the divestiture not only did consumers start questioning AT&T, but were asking more questions due to all the changes. These alterations are bringing massive confusion to the public.

A company such as AT&T-T is enormous enough, that it employs various sorts of skilled personnel. The problem is in the Human Resource allocation and corporate culture. Past trends in employment reveal emphasis on technical employees, yet with the intrusion of competition more focus and attention is being drawn towards sharpening management skills and hiring marketing personnel. Still there appears to be a technical mindset at AT&T-T that has been reinforced for years.

The skills at AT&T-T are in the research and development sector as well as in the engineering universe. A company that is as large as AT&T (employs 370,000 personnel corporate wide⁵) will not be as efficient in some areas as smaller companies. The funds available at AT&T-T are there to support marketing programs. The concern is selecting the appropriate marketing mix.

The channels of distribution are an area AT&T has not had to focus much attention on and are presently experiencing difficulties with. Considerations have to be reviewed as to what channels exist plus what are the future options. The feasibility of changing or mixing channels has to be studied. Lastly, profit

margins have to be examined in order to arrive at an intelligent conclusion.

This situational analysis has indicated several areas of strengths as well as weaknesses that exist at AT&T. This type of investigation isolated several important factors that will be important in determining marketing conclusions in addition to arriving at recommendations.

AT&T-T's strengths are their noteworthy telecommunication reputation, research, and development posture, past relationships with operating telephone companies, financial resources, lengthy business tenure, various product and service lines of business, state-of-the-art engineering, and high quality standards.

A weakness that AT&T-T must strive to overcome is its inexperience as a marketer. The nature of the demand for industrial products presents challenges and opportunities for this company. The demand for AT&T-T's products is derived from ultimate consumer demand. The telephone companies are buying products in order to produce services for their own customers. Therefore, the demand for AT&T-T's product is derived from the telephone companies' customers not from the telephone company itself.

This fact is stressed, as it will be the key factor in AT&T-T's marketing posture. In the past, AT&T-T did not have to pay much attention to marketing concepts. Since divestiture, AT&T-T has had to prepare business strategies and tactics from a customer sensitive perspective. In order for this company to overcome any obstacles, they must understand their market buying

process, which is affected by numerous influences such as technical specifications, time lags, and complex buying motives.

The problem to resolve in this project's research is to examine the marketing complexities brought on because of the divestiture and to see if AT&T-T can adapt to these. Upon investigation of these areas, studies, research and strategic/tactical plans will be formulated in an attempt to rectify and resolve any deficiencies.

Before reviewing the literature, it would be beneficial to first understand AT&T-T's financial situation prior to divestiture.

A review of the financial stability of AT&T-T will show where AT&T-T has been and in what direction it will take in the future. Six areas will be examined: I. Liquidity, II. Leverage, III. Activity, IV. Profitability, V. Growth, and VI. Valuation.

Liquidity measures a company's ability to meet its maturing short term obligations. The current ratio measures short term solvency. This measure indicates the extent to which claims against company assets (liabilities) can be covered by the assets that can readily be converted to cash. The calculation of the current ratio is current assets divided by current liabilities.

The following table examines the years 1980 through 1982.

The sources utilized in obtaining these ratios were AT&T-T's annual reports, and for comparing Industry Averages the Dun and Bradstreet Industry norms and Key Business Ratios, SIC 3661-Telecommunications, telegraph apparatus was used.

FIGURE 1-4 CURRENT RATIO

	1980	1981	1982
Current Assets	\$5103	\$5101	\$4770
Current Liabilities	\$2164	\$1881	\$1669
Current Ratio	2.4 times	2.7 times	2.9 times

Note: \$ amounts in the millions

The current ratio compares favorably with the Industry Average. It appears that AT&T-T can easily satisfy their short term current liabilities. They are in the position of having their current assets outweigh their current liabilities by a comfortable margin.

The Quick Ratio measures a firm's ability to pay off short term obligations without relying on the sale of inventory. The formula for calculating this ratio is current assets less inventory divided by current liabilities.

	FIGURE 1-		
	1980	1981	1982
Current Assets Less Inventory	\$1588	\$1817	\$1825
Current Liabilities	\$2164	\$1881	\$1669
Quick Ratio	.73 times	.97 times	1.09 times
	Industry Ave		

AT&T-T's unfavorable quick ratio in 1980 is largely a result of a leveling off of sales in certain product lines. Expansion of the development of business and residence products lines in 1981 lead to an improving quick ratio. Due to the growing demand among the business and residential customers for more "novelty" phones and more sophisticated phone systems, AT&T-T began to realize additional sales due to the new product lines. This expansion could account for the improving quick ratio from a dismal .73 times in 1980 to a much improved 1.09 times in 1982.

The second area of a company's financial situation to examine is entitled Activity. This measures how effectively a firm utilizes its resources.

One ratio that helps to evaluate the company is the average collection period. This is the average length of time a firm must wait to receive cash after a sale. The formula for arriving at this figure is the Average Accounts Receivable divided by Sales Per Day.

FIGURE 1-6
AVERAGE COLLECTION PERIOD

	1980	1981	1982
Accounts Receivable	\$1541	\$1750	\$1724
Annual Sales	\$12032	\$13003	\$12579
Sales Per Day	\$3296	\$3563	\$3446
Average Collection Period	47 days	49 days	50 days
	Industry Av		

AT&T-T's average collection period for this three year period was above the industry average. This deserves some special attention due to the fact that accounts receivable has been steadily increasing. Although they meet the industry collection average of 47.8 days in 1980, a trend toward longer collection periods is evidenced by the 12 percent increase in accounts receivable during 1981 and 1982.

Another change brought about by Divestiture is handling of Accounts Receivable, credit and collections procedures. In addition, AT&T-T has negotiated individual Sales Agreements with each Regional Bell Operating Company (RBOC) which will also impact this area.

The next measurement is Inventory Turnover. This is calculated by taking Yearly Sales and dividing by Average Inventory.

	FIGURE 1-7 INVENTORY TURN		
	1980	1981	1982
Sales	\$12032	\$13003	\$12579
Inventory	\$3515	\$ 3284	\$2945
Inventory Turnover	3.4 times	4.0 times	4.3 times
	Industry Ave AT&T-T Avera		

AT&T-T's three year average falls below the industry average standard. The last two years indicate an upward trend due to stringent cost controls and decreases in inventories. The year 1980 has the lowest ratio due to the leveling off of product lines and the introduction of business and residence products. In the year 1983, it should continue this upward trend because of their efforts in eliminating inventories due to the divestiture.

The last activity area to examine is the Total Asset

Turnover. This measures the turnover of all assets. The formula

used is Sales divided by Total Assets.

	FIGURE 1-8 TOTAL ASSET TUR		
	1980	1981	1982
Sales	\$12032	\$13008	\$12579
Total Assets	\$8047	\$8448	\$8197
Total Asset Turnover	1.5 times	1.6 times	1.5 times

Note: \$ amount in the millions

Over these three years very little change has occurred in the ratios. This stabilization is due to the sum total of assets and its relationship to total sales and the fact that sales have increased at approximately the same ratio. This ratio indicates AT&T-T should increase asset usage. For example, they should focus on producing and utilizing assets on more profit making items. In the past, AT&T-T's role as sole supplier of certain items to the Telephone Companies required the attainment and

upkeep of a certain amount of assets in order to generate those supplies. Therefore, AT&T-T is now focusing on cutting low profit items that they have had to supply in the past and pushing efforts toward a more lucrative business.

The third area to examine is Leverage. This measures the extent to which a firm has been financed by debt. The Debt Ratio is the first area to review. This measures the percentage of total funds provided by creditors.

	FIGURE 1-9 DEBT RATIO		
	1980	1981	1982
Total Debt	\$3598	\$3347	\$3440
Total Assets	\$8047	\$8338	\$8197
Debt Ratio	45%	40%	42%
	AT&T-T Avera	ge <u>42%</u>	

Note: \$ amounts in the millions

The average for this three year period is 42 percent. AT&T-T should find it relatively easy to borrow additional funds without having to raise more equity capital first. Creditors will be more willing to lend money because of their low debt ratio.

The next area to examine is the Times Interest Earned Ratio.

This measures the extent to which earnings can decline without financial embarrassment to the firm because of its inability to meet annual interest costs.

FIGURE 1-10 TIMES INTEREST EARNED RATIO

	1980	1981	1982
Earnings before taxes and interest charges	\$1317	\$1307	\$508
Interest	\$159	\$186	\$125
Times Interest Earned Ratio	8.28 times	7.03 times	4.06 times
	AT&T-T Averag	e 6.45	

Note: \$ amounts in the millions

This ratio has fluctuated over the past three years. The interest charge increased in 1981 but fell significantly in 1982. In 1980 and 1981, an increase was realized while in 1982 it decreased by 40 percent. The reasoning behind such high interest charges is due in part to economic conditions and the fact that interest rates were at an all time high.

The fourth area to review is Profitability. This indicates management's overall effectiveness, shown by returns generated on sales and investments.

The calculation that reveals this measurement is called Profit Margin on Sales which is calculated by taking Net Income divided by Sales.

FIGURE 1-11
PROFIT MARGIN ON SALES

	1980	1981	1982
Net Income	\$693	\$711	\$336
Sales	\$12032	\$13008	\$12579
Profit Margin on Sales	6%	5%	3%
	Industry Av	verage 6.6% 4.6%	

Note: \$ amounts in the millions

This ratio reveals if a firm's pricing strategy is low or high. AT&T-T's falls below the industry average by 2 percent. This is partly due to the relatively high cost of goods sold. Because of higher operating expenses due to the divestiture ramifications, competition has the opportunity and advantage to introduce products at a comparatively lower price.

Return on Total Assets measures return on total investment.

The formula for calculating this ratio is Net Income divided by

Total Assets.

RE	FIGURE 1-		
	1980	1981	1982
Net Income	\$693	\$711	\$336
Total Assets	\$8047	\$8338	\$8197
Return on Total Assets	9%	9%	4%
	Industry A	verage 8.9% 7.3%	

In the years 1980 and 1981, the return found the industry average while 1982 fell somewhat below. The low percentage is due to a dramatic reduction of Net Income. This occurred because of the Facility Utilization Plan which was implemented to reduce long term costs in manufacturing. The 625 million dollar cost of the plan prevented AT&T-T from having an increase in Net Income. In addition to this, they changed retirement accounting procedures and methods which caused Net Income to decline by 47 percent. Also, this ratio results from a low profit margin on sales and from low turnover of total assets.

Return of Net Worth is the last area to examine. This measures the rate of return on stockholders' investment. This is found by Net Income divided by Net Worth.

	FIGURE 1- RETURN ON NET		
	1980	1981	1982
Net Income	\$693	\$711	\$336
Net Worth	\$4449	\$4991	\$4757
Return on Net Worth	16%	14%	7%
	·Industry Average 20.9% AT&T-T Average 12.3%		

Note: \$ amounts in the millions

Over this three year period, AT&T-T did not even realize the industry average. A declining trend can be noted over this three year period. The return is lower than standards because they have been operating under a regulatory climate. A decrease of

50 percent in 1982 can be attributed to the previously mentioned costs incurred by AT&T-T.

The fifth area to examine is Growth. This measures a company's ability to maintain its economic position in the growth of the economy and industry.

	GROSS		
1980	% Sales	1981 % Sales	1982 % Sales
\$1203	2 100%	\$13003 100%	\$12579 100%
(1058	2) 88%	(11579) 89%	(11359) 90%

11%

\$1220

10%

Note: \$ amounts in the millions

\$1450

12%

\$1424

Sales

Cost of Sales

Gross Margin

The trend in Gross Margins is declining; expenses and costs are increasing in the areas of selling and administration, as well as plant costs and products. AT&T-T is currently a strong supporter of Cost Reduction Programs. Programs such as this generated a savings of \$401 million in 1982.

Net Working Capital is another measurement of Growth. This captures the firm's investment in short term assets.

	FIGURE 1- NET WORKING O		
	1980	1981	1982
Current Assets	\$5103	\$5101	\$4770
Current Liabilities	\$2164	\$1881	\$1669
Working Capital	\$2939	\$3220	\$3101
Note: \$ amounts in the	e millions		

The trend is on the rise. Even in 1982 when Net Income was at an all time low, the current ratio illustrated that AT&T-T was able to satisfy their current obligations, yet they could increase current liabilities.

The sixth and last area to examine is Valuation. This is the measurement of performance that values the firm and shareholders' wealth.

AT&T-T's performance is evaluated through the AT&T stock.

AT&T is a triple A rated, blue chip stock. It has been traditionally known as a security investment. Since divestiture, the investment community views AT&T as a more speculative, less income producing investment.

The following figure exhibits the short and long term debt of AT&T-T.

	FIGURE 1-16 DEBT		
	1980	1981	1982
Long term debt	\$816	\$807	\$889
Short term debt	\$981	\$675	\$363

Note: \$ amounts in the millions

Long term debt increased in 1982 while short term debt decreased by a whopping 54 percent. This was largely due to the economic times; when the higher amounts of short term financing occurred, it was due to the market having high interest rates, and AT&T-T did not want to get locked into any long term commitment at high rates. Then, when interest rates began to

fall, the trend toward long term financing began to develop. In the future, it appears that this company is moving towards larger and longer term investments such as the purchase of the Gold Star Semiconductor Plant in South Korea. This is part of their marketing strategy of entering foreign areas.

By reviewing the financial performance of AT&T-T, it is important to realize that the next few years will be an indicator of how well they can compete in a marketing environment.

The ratios in this analysis have been a valuable insight into formulating future marketing programs.

The liquidity of AT&T-T is solid as portrayed in the current ratio. The activity ratios range from an increasing trend in accounts receivable to a decreasing trend in inventories. The leverage portrays a favorable debt ratio, while the interest earned ratio shows a very high level of expense. The profitability is low in relation to what it needs to exist in a competitive world. Growth has not occurred in sales or net income in 1982, which may be due to the divestiture.

There are three factors to be gleaned from this analysis in an attempt to formulate AT&T-T's marketing programs. They are customers, competition, and product cost.

Some efforts can't be measured in dollars and cents on a balance sheet and that is human resources.

AT&T-T maintains a very solid reputation. They possess several advantages and disadvantages which can be reviewed in the following exhibit.

FIGURE 1-17

Advantages

Part of AT&T.

Been a profitable business for over a century.

Number one telecommunication supplier in the world.

Dedicated research facilities.

Highly technical workforce.

Offers wide variety of products and services.

Disadvantages

Used to operating in a regulatory environment. No prior experience or exposure to competition. Not a marketing oriented company.

This analysis has examined the posture of AT&T-T and their past performance record. They have many areas to be cautious of as well as several opportunities to seize because of divestiture. They have the technological expertise needed to continue to be an industry leader yet lack some very essential exposure to marketing and competition. They have experienced many trends and survived many difficult economic conditions. Yet, the biggest challenge they will encounter is to maintain their current market share segment.

In conclusion, AT&T-T holds a fairly solid financial posture. It is important to review the financial performance of AT&T-T before attempting to formulate and recommend marketing proposals. AT&T-T is in a strong financial position, but this won't last forever if the wrong strategic and tactical marketing approaches are taken.

CHAPTER 2: LITERATURE REVIEW

Before attempting to analyze AT&T-T's marketing skills, an understanding of how industrial products are marketed is foremost. The definition of an industrial product is as follows: a product intended for use in producing other goods or in rendering services of a business.⁷

The composite of industrial marketing is to determine the needs and requirements of commercial enterprises coupled with developing the appropriate product, services, price, distribution channel, and communications to satisfy these demands. AT&T-T has for the majority of its existence been a regulated monopoly which has not had to enlist the industrial marketing concepts. Since divestiture, the environmental factors have significantly influenced AT&T-T's market share demand.

AT&T-T previously has not been too concerned with factors such as competition, economic conditions, or marketing ramifications. This type of observation is no longer valid.

AT&T-T is in the development process now of acquiring and refining these types of skills and knowledges.

Industrial marketing characteristics are more technically oriented than those found in consumer marketing. The industrial product is rather technical in nature and generally, accompanying services are very important. Pricing is competitive, while bids are elicited for certain types of products as well as price lists used for standard items. The promotional efforts emphasis is on personal selling. Distribution channels are shorter and more direct to the market, while customer relations are more enduring

and complex. The above account authored by industrial marketing expert Mr. Hutt clarifies the differences between consumer and industrial marketing concepts.9

The industrial marketing mix is composed of four variables, namely product, distribution channels, price, and promotion (personal selling, advertising, sales promotion). An effective total marketing strategy preceding the mix must include the corporate purpose and mission. It is important to assess the environmental trends when formulating this strategy mix.

Industrial marketing differs from consumer marketing in the model purchase decisions. The industrial consumer decision-making process is usually an involvement of groups of organization members. 10

In an effort to study marketing skills that prevail at AT&T-T, research was extracted from numerous publications.

Primary research was conducted via employee surveys.

Marketing articles published from 1978 through 1985 were used so that the ramifications and impact of divestiture could be realized. The events leading to the divestiture agreement are significant factors that can affect marketing-oriented systems.

The emphasis of literature researched during predivestiture predicted that change was going to happen. AT&T-T was beginning to feel this thereby altering corporate strategies.

One significant change that was felt during this period of time was the changing of the chairman. On October 18, 1978, John deButts retired as Chairman of the Board of Directors. Charles Brown was named deButts successor as Chairman and CEO

designate. Brown was charged with overseeing many future transitions.

Turbulent changes were felt throughout the following years leading up to the historical decision made on January 8, 1982. This verdict dramatically altered the course of telecommunication history.

Literature was plentiful during the years 1982, 1983, 1984, and beginning of 1985 regarding divestiture. Predictions, theories, and analyzations commenced once the divestiture agreement was official.

Divestiture was to be completed by January 1, 1984. This meant a lot of change had to be accomplished in the year following the announcement. This agreement was deciphered by AT&T-T employees that jobs would move, as well as options having to be selected. Employees at AT&T-T appeared to react and to be as stunned as the public. The most frequently asked question was—what's going to happen?

Headlines raced across newspapers, magazines, and press releases on January 8, 1982, proclaiming that "AT&T accepts government proposal, justice department antitrust suit consent decree filed."11

Most of the public did not realize the impact that this new settlement brought. Various news-reporting sources began to exploit the breaking up of AT&T which historically was known as the Bell System. News traveled quickly remarking on the associated divestiture ramifications. Telecommunication analysts predicted that new phone services would skyrocket, while rates

would surely rise, and in general stockholders could benefit from the settlement.

To summarize the result of the divestiture, AT&T agreed to divest itself of its network of 22 local operating telephone companies. In return for this, AT&T would be allowed to enter computer and electronic data fields it had been barred from since 1956.12

Issues were immediately raised regarding phone bills, long distance rates, quality of service, telephone problems, billing, future offerings, and organization restructuring. Quite a bit of grief was generated during this period of time. Yet many opportunities were beginning to surface for both the operating companies and the new AT&T-T. Now each company would be able to explore a new freedom as separate business entities. AT&T-T was free to enter any kind of business whereas previously it operated under regulatory constraints imposed by the 1956 consent decree.

The literature review for the remainder of 1982 expounded upon the intense competition surrounding AT&T-T. Competition was spreading like wildfire. The intent of the divestiture agreement was to promote competition in the telecommunication industry and to dissolve the monopoly.

For once, AT&T-T was forced to realize the marketing aspect of the business. The telecommunication market as a whole was in a state of chaos while this restructuring commenced.

At the time of divestiture, AT&T maintained 80 percent of the telecommunication market share. 13 As a monopoly, AT&T was

required to establish rates as well as have them approved. From now on they won't have this constraint to deal with. This will be one important factor to consider in the formulation of AT&T-T's marketing mix.

It took very little time for competitors to realize they could easily undercut AT&T-T prices in the high-volume product and service areas. 14 Part of AT&T-T's new freedom entitled them to the maintenance of their own pricing. AT&T-T immediately will be viewed as a commodity business with price being its distinguishing factor. This fact sends shock waves through its corporate culture because before they were service driven with little or no attention given to pricing issues.

Probably the most difficult task for a deregulated company such as AT&T-T to achieve is to learn how to sell rather than just taking orders. This statement is backed by the following market share illustrations. 15

FIGURE 2-1 MARKET SHARE ANALYSIS

AT&T Pre-Divestiture
1981 TELECOMMUNICATION MARKET DEMAND

- 45% Long Distance
- 5% Private Lines
- 5% Directories
- 3% Equipment Independent Suppliers
- 42% Local Services

AT&T Post-Divestiture plus all competitors
1986 TELECOMMUNICATION MARKET PROJECTIONS

- 46% Long Distance
 - 5% Private Lines
- 5% Directories
- 5% Equipment Independent Suppliers
- 39% Local Services

According to this illustration, AT&T-T must begin to find new values for their products. An example of this concept would be to promote Wide Area Telephone Service (WATS) as an answer to the companies wanting to reduce travel budgets. They must tailor their product/service to customers' needs, instead of subscribing to the old theory of take-it-or-leave-it. This sort of conclusion is echoed by several telecommunication experts. In order for AT&T-T to protect its dominant share, they need to focus marketing and designing efforts on general purpose services.

The above market share breakdown brings attention to the question of the industrial customer. While the telephone company will remain AT&T-T's primary target market, new industrial marketing concepts must be utilized to maintain this relationship. This derived market must be kept in mind when participating in the decision making process.

AT&T-T believes their biggest strength is the close relationship maintained between them and the operating telephone companies. Now these companies are experiencing a much wider range of needs and choices. 16 Therefore, if AT&T-T strives to nurture a close relationship as well as keeping these companies as their target market, they will have an edge over competition. This is an easy statement to make yet difficult to understand due to the culture found at AT&T-T. A company in this position must comprehend that it is no longer vertically integrated with the telephone companies, and in addition, it must position itself to becoming more sensitive and responsive to the market needs.

During 1983 this literature review revealed many authors citing the implications of AT&T-T's corporate reorganization.

The financial security of the investor was scrutinized. Yet the stock market seemed to be waiting and predicting the divestiture proceedings with zest.

When AT&T divested itself of the operating companies, decisions had to be made regarding how to divide up the assets. The operating companies were awarded 75 percent of AT&T's total assets of \$145 billion in addition to the responsibility for providing local telephone service. 17

This redistribution called for changes to occur in the allocation of AT&T stock. A plan was devised so that every shareholder who held ten shares of AT&T stock would acquire one share of each of the newly formed seven operating companies.

The twenty-two telephone companies reorganized into seven regional centers. The following figure provides a view of how the companies reorganized. 18

FIGURE 2-1
THE OPERATING COMPANIES REORGANIZED

	Operating Company	Holding Companies
1.	New York Telephone	
2.	New England	NYNEX
3.	New Jersey Bell	
4.	Bell Telephone of Pennsylvania	
5.	Chesapeake and Potomac Telephone	
6.	Diamond State Telephone	
7.	Chesapeake and Potomac Telephone of MD	
7. 8.	Chesapeake and Potomac Telephone of VA	
9.	Chesapeake and Potomac Telephone of W.V	/A Bell Atlantic
10.	Southern Bell	
11.	South Central Bell	BELLSOUTH

FIGURE 2-1 (Continued) THE OPERATING COMPANIES REORGANIZED

	Operating Company	Holding Companies	
12. 13. 14.	Illinois Bell Indiana Bell Michigan Bell		
15.	Ohio Bell		
16.	Wisconsin Bell	Ameritech	
17.	Southwestern Bell	Southwestern Bell Corporation	
18.	Mountain States Telephone		
19.	Northern Bell		
20.	Pacific Northwest Bell	US WEST	
21.	Pacific Telephone		
22.	Bell of Nevada	Pacific Telesis	

Although new opportunities await the stockholders, AT&T stock will be more of a riskier investment. For those who are willing to accept more risk, these shares could be an attractive commitment.

AT&T-T management during 1983 was assigned tasks of redefining jobs, teaching new skills, and changing employee mindsets. It is a huge endeavor to revamp and restructure an organization of this magnitude. Actually, this type of a duty can be viewed as a dual challenge. Just the task of reassigning employees is monumental. AT&T personnel were deployed to the telephone companies as well as to other segments.

Figure 2-2 demonstrates the impact of the massive reassignment of AT&T employees. 19

FIGURE 2-2 EMPLOYEE REASSIGNMENTS WITH AT&T-T

AT&T JANUARY 1, 1982 Number of Employees

AT&T Corporate Headquarters	13,302
Long Lines	42,834
AT&T International	530
Bell Labs	24,000
Western Electric	159,682
22 Operating Companies	798,000
Total	1,038,348

AT&T JANUARY 1, 1984 Number of Employees

AT&T Corporate Headquarters	2,000
AT&T Communications	120,000
AT&T International	900
Bell Labs	19,000
Western Electric	135,000
Central Service Organization	8,800*
AT&T Information Systems	110,000
Total	395,700

*Central Service Organization research and systems engineer group owned by seven regions.

The thrust of 1983 indicated change. Culture could not be changed too quickly because in effect the people will reject the concepts. Time is another variable AT&T-T did not have to spare. Competition was intensifying while AT&T-T was trying to get through not only the challenge of divestiture but the rebuilding of a company.

AT&T-T was beginning to revise their strategies in an attempt to meet customers' fast changing needs and requirements. This premise was displayed by AT&T-T expanding its distribution channels to Sears Retail Stores. Phone Center booths were installed at most Sears locations. Other strategies being employed were increased advertising both in television and printed media, as well as the beefing up of the sales force.

When the divestiture agreement was first announced, industry experts thought the operating telephone companies would suffer the most. Yet since the agreement, both these companies and the new AT&T are confident that they have as much potential as the former AT&T.20

Subsequent to divestiture, several of AT&T-T's plants were closed. The older out-of-date manufacturing locations were being phased out. In addition to the shutting down of these locations, AT&T created new enterprises to aid post divestiture operations. Name changes occurred such as Western Electric to AT&T Technologies, Inc. The decision was made to keep "Western Electric" as the brand trademark.

The acute competition and staggering economy were not kind to AT&T-T during 1983. Sales were down and AT&T-T was viewed as being controlled like a utility management that does not fully understand that manufacturing takes a different type of directorate. 21

During August of 1983, the divestiture agreement was approved by U.S. District Judge Harold H. Greene, this was the judge who prevailed during the seven year long antitrust trial. The final approval did not come quickly from the Justice Department. Judge Greene meticulously read over 8,000 pages of comments plus he interviewed over 600 witnesses.²² AT&T-T received a new logo in 1983. The new trademark signified their past heritage and future goals. The previous identity mark, Bell symbol, could no longer be used by AT&T-T. So after much research, the globe with graphic representation of an illuminated sphere was born.

AT&T-T maintains a reputation for manufacturing 80 percent of all the telephone equipment used in the United States.²³ Also, if AT&T-T were to be ranked among the Fortune 500, it would rank among the top five.²⁴

AT&T-T is striving to keep this leadership position. The question that is asked frequently by most industry strategists is can AT&T-T overcome the staid corporate culture and become a hard charging competitor?²⁵

This comment set the tone for the literature review of 1984.

During 1984, AT&T-T faced new challenges as they proceeded with their business operations. During this period of time, resources revealed many analysts having trouble getting a grip on AT&T-T's capabilities. 26 The overarching goal echoed throughout 1984 was to ensure customer satisfaction plus reward shareholders. 27

On June 26, 1984 AT&T made their entry into the personal computer marketplace. 28 This new product debut indicated that AT&T was preparing to utilize their new freedom. The onset of this product started industry analysts critiquing.

The perceived weakness proclaimed by analysts was that AT&T-T could not market their products effectively in the current competitive environment.²⁹ The concept AT&T-T failed to recognize during this period was regardless of how good a product

is, marketing is the key to success in a highly competitive environment. The failure to implement this concept was the major weakness for AT&T-T as well as other sectors of the company. The strengths that AT&T-T preserved was their designing capabilities, Bell Labs, and the technological advancements in their manufacturing.

Goals were established to guide AT&T-T toward becoming more responsive to the marketplace. Market strategies were starting to focus on these objectives. Literature sources revealed in article after article that the divestiture did not create competition it merely unleashed it. 30

At this point in time, two years after the announcement, questions were starting to surface regarding the ramifications caused by the Bell System breakup. Various publications were beginning to comment on the profitability of the divestiture in addition to remarking on whether the breakup was really worth the cost to customers. In the December 3, 1984 issue of Business Week magazine, a special dedicated profile examined the divestiture. The article was entitled, "Did it make sense to break up AT&T?"31 This sort of sentiment was starting to appear more often in newspapers, magazines, and television editorials. Figure 2-3 captures quotes from this period of time which were expressed in the Business Week article.

FIGURE 2-3 A SCORECARD ON THE DIVESTITURE

Benefits:

*Faster introduction of new technologies and services.

*Lower long distance rates.

*Easier access to discount long distance carriers.

*Lower equipment costs for phone companies.

*More equitable pricing of phone service.

Drawbacks:

*Loss of one step telephone service.

*Higher residential phone rates.

*Lower overall service quality.

*Higher costs for equipment installation and service.

*More customer confusion over telephone bills.

SOURCE: Business Week, December 3, 1984, page 88.

The Harris Poll surveyed the public to ascertain if they perceived the Bell System breakup as a "good idea". The results were that 64 percent thought it was a bad idea, 25 percent good idea, 11 percent not sure. Fewer than 25 percent believed that the divestiture was in the public's best interest. In addition to the public being bewildered, the operating companies, AT&T-T's biggest customers, were also confused. Proprietary information is being safeguarded closely, and data is just not as available or open to them as it was in the past. The operating companies were puzzled as to the appropriate avenues and channels to assume. 32

AT&T-T encountered severe struggles in 1984. Product shortages, customer defections, and service "snafus" plagued

it. This year AT&T-T is losing ground on their market share in the long distance area and in the selling of equipment to the operating companies, which accounted for 75 percent of its revenue in 1983.34

Industry experts agree that in order for AT&T-T to keep its telecommunication manufacturing posture they must alter their corporate culture. AT&T employs 370,000 people who have been used to the slow moving world of a regulated utility with guaranteed earnings and little competition. Now all of the promises are gone, and the employees will have to develop a mindset characteristic of a marketing mentality.

Management during 1984 was quick to respond to marketing criticisms. AT&T Information Systems was developed with the mission of becoming the company's marketing wizard. This development coupled with the changing of corporate strategies marked an era of a new telecommunication industry.

AT&T-T is responsible for marketing its products to the customers, including business and the operating company market segments. The operating companies accounted for 55 percent of AT&T-T's equipment sales. This is a sizable market share for AT&T-T to maintain and preserve, and they are feeling the pinch as they discover this market share shopping elsewhere.

The outlook for the telecommunication industry for 1985 can be summed up in one word: Turmoil.³⁶ AT&T-T realized that the years succeeding divestiture were not going to be easy ones.

AT&T-T is observed to be rather calcified after decades of operating in a monopolistic environment. They severely

underestimated the difficulty of adjusting to life in the stiff wind of competition.³⁷ This type of thought prevailed from 1984 into 1985. As stated earlier, if effective and efficient change is to occur, then time is needed to make the transition. Therefore, two years after divestiture, the benefits and drawbacks become sharply focused.

The year 1985 began with not only sharp criticism from customers and industry analysts but the recognition of nearly 400 telecommunication firms bidding for a piece of the pie. 38

Industry experts project that within the next decade only five or six telecommunication firms will be able to survive the market. Hence, 1985 will be an interesting year to examine. Before terminating this literature review for this period of time, a view of 1985's top five priorities for AT&T-T is appropriate as follows. 39

- 1. Bring costs in line with manufacturing realities.
- Make customer satisfaction an obsession of every organization.
- Focus anew on the importance of, and concern for, our people.
- 4. Develop a strong international perspective in all lines of business operations.
- 5. Leverage the strengths of our technological resources.

In closing this literature review of industrial marketing concepts and AT&T-T, we find a historical account of events. By focusing resources at years 1982 through 1985, the direction of future marketing strategies can be designed after scrutinizing former events.

CHAPTER 3: HYPOTHESIS STATEMENT AND SUMMARY OF RESEARCH Hypothesis

The employees at AT&T-T are aware of the company's mission since divestiture and do currently possess attitudes in becoming marketing oriented.

Primary Research

Feedback will be elicited via personal surveys.

Secondary Research

Published readings such as newspaper articles, books, magazines, trade journals, documentaries, as well as published AT&T materials, will complement the primary research.

Survey Purpose

- To indicate if employees maintain customer sensitivity.
- To serve as a vehicle for employees to express impressions and suggestions anonymously.
- To try to ascertain if employees are marketing or production oriented.
- 4. To try to give direction for a sales-training-needs analysis.

HYPOTHESIS:

The employees at AT&T-T are aware of the company's mission since divestiture and do possess adequate attitudes in becoming marketing oriented. This hypothesis was derived to demonstrate the marketing culture that currently resides at AT&T-T. This company was selected for the primary research center because of logistics. The Southwestern Regional Headquarters was the

location where the survey was conducted. This research as well as various literature sources complemented this survey.

The literature review as well as industry trends indicated the telecommunication environment is becoming extremely volatile and competitive. For AT&T-T to preserve its market share, let alone survive, they must engage in marketing-oriented strategies and tactics via management thinking and adoption of a marketing perspective.

Therefore, by examining the employees' viewpoints, this feedback will give an accurate account of how successful AT&T-T's marketing awareness measures have been. In addition to this assessment, this survey will pave the way for future predictions of marketing plans.

This hypothesis was constructed to demonstrate the marketing as well as corporate culture, and it will support, reject, or modify the data in this research. The questions in this research will reflect if the employees communicate with customers and if so how often, other questions address how the employees feel towards management. There is a question to allow the respondent an opportunity to express their perception of the company's mission, while another encourages the employee to view the goals of the company from an internal perspective by recommending meaningful alterations.

While employing this hypothesis, it is important to review past marketing endeavors. When January 1, 1984 arrived, AT&T-T was no longer the smooth old pro of the telephone business. 40 A new corporation emerged, revamping, and renaming lines of

business, along with replacing the traditional Bell logo. Just what sort of statement was this transmitting to the employees and customers? Early on it was suggested that change cannot occur too quickly or, in effect, people will resist. Change was indeed under way at a very hastened pace in a company that was used to existing in a regulated entity and being told when to do something and how. Organizations changed locations so fast that phone books and charts just could not keep up.41

Change was a reality at AT&T-T. When employees would call a former colleague who now worked in the divested part of the business, instead of the old cordiality, they were greeted with a distinct iciness. 42 This situation, along with factory closings, frozen salaries, and voluntary retirement incentives were just a few of the types of changes being felt by employees in the post-divestiture world. Feelings of uncertainty and fear were prevalent with most employees. Also, those who were optimistic and ready for change were receiving different signals from the aforementioned events. Top executives felt they had to deliver the bad news while maintaining a persistent optimism. 43

To assure that the latest news moved quickly to employees, upper management was trying to become more visible by visiting job locations all over the country. While traveling, these officials were preaching AT&T-T's new doctrine.44

- 1. Know the customer.
- 2. Drive down costs.
- 3. Know and respect the competition.
- Change the corporate culture to benefit a young, fast-moving business.

To complement this message, new marketing strategies and tactics plus research and development advances were happening. New product announcements were commencing as evidenced by the introduction of the AT&T personal computer, the "PC". Stock market analysts saw AT&T's efforts as a determination to compete in this new deregulated environment. 45

With all the different types of changes in strategies and plans, the question being asked most frequently was whether or not the new corporate-mission message was getting through to everyone. This question is the basis for constructing a hypothesis such as the one stated at the opening of this chapter.

The goal of this primary research is designed to elicit feedback from surveying fifty employees at AT&T-T's Southwestern Regional Headquarters. Secondary research will be elicited from newspaper articles, books, magazines, documentaries, and published AT&T material to complement the survey efforts.

Together this research will be supported, rejected, or modified.

CHAPTER 4: RESEARCH METHODS

There are five key steps that will ensure that all important areas are covered when constructing a survey. These five are planning, preparation, field work, tabulating, and reporting. 46

The purpose of the survey utilized with this research was twofold: to capture the employees' attitudes about AT&T-T's corporate mission and to analyze the marketing mentality. This research will help explain the company's communication channels, organization behavior, and marketing mindset. The preparation associated with this project was to write a survey that would meet the objectives of testing the hypothesis.

The field work consisted of conducting 50 surveys with AT&T-T employees at the Southwestern Region location. Surveys were conducted because of the nature of the project and to ensure a complete understanding of the task. Tabulating will be by the use of statistics, thereby noting each "yes" and "no" response and "production" versus "marketing" responses.

The last step, reporting, will comment on any problems that have been revealed. This step constitutes analyzing feedback so recommendations as well as conclusions can be generated towards formulating marketing programs.

The survey population at Southwestern Region consists largely of an engineering- and accounting-saturated universe. Efforts were utilized to survey an even number of all disciplines, such as marketing, sales, and support groups. Prior to divestiture, AT&T-T, the former Western Electric Inc., maintained a reputation for being an engineering and manufacturing-driven company.



Hence, sentiments may still be in existence from this direction and this observation may affect employees' perceptions of corporate culture at AT&T-T. Prior to divestiture, the thrust of AT&T-T was manufacturing with little concern for marketing ramifications.

This survey will either support, reject, or modify the hypothesis. The level of service, experience, and job assignment may be a significant factor regarding communication. This research may reinforce the phenomenon that the higher levels are able to extract more information than those at lower level jobs.

The purpose of this survey was to capture a realistic view of feelings that impact upon marketing efforts and knowledges. This survey was composed primarily as a vehicle for employees to express anonymously their feelings and suggestions regarding AT&T-T.

This survey is divided into five areas for purposes of analysis. They are separated into the following segments:

1) Employee status, 2) Customer awareness, 3) Management perception, 4) Corporate culture, and 5) Marketing- versus production-oriented statements.

It has been ascertained that to have an effective survey a variety of questions need to be used. A mix of structural, open-ended, matching, and fill-in-the-blank questions were chosen. For those who could readily express their feelings open-ended questions were provided. Structured and matching questions were utilized in order to use statistical analysis.

The first prerequisite in establishing the foundation of this survey was for the respondent to indicate their title and length of service. This question is asked to ensure a sample of each organization resident at AT&T-T Southwestern Region Headquarters, in addition to correlating titles and years of service to determine the levels of significance. The length of service could be an important variable in analyzing the results of this research. This inquiry may be an indicator of organizational behavior patterns.

The next two questions address Customer perception. These responses will reflect if the employees, and how many employees do so, maintain any type of Customer communication. Questions three and four elicit how the employee feels towards management. This type of question reflects organizational behavior attitudes. The fifth question encourages the employee to define their view of management objectives. This type of open-ended, probing question encourages the employee to view the company's goals from an internal perspective by recommending meaningful alterations.

The sixth question allows the employee to choose one statement from six regarding this company's corporate mission. Six statements were selected, including this company's past mission plus their present goal. The last portion of this survey asks how the employee perceives the company should be run, either marketing or production oriented. This series of questions will also allow each employee to consider the mission of the company, while searching for a choice.

This method of research was originated to inspect the current pulse of the employees' attitudes. By capturing employee attitudes it will illustrate their perception of company goals, while exposing some of the factors they believe to be important. After analyzing the feedback, marketing recommendations can then be formulated.

Now that the requirement for conducting this research has been established, it is time to receive data collection. The information collected from the employees will be tabulated using codes for statistical analysis. Codes will be applied to every question. Each "yes/no" response will be encoded as will each statement selection.

The process utilized in collecting data was to disseminate the survey at Southwestern Regional Headquarters. An effective mix of segments was obtained. Each respondent will be given the survey, plus an explanation of the purpose, and will then be instructed to proceed.

Once the data is collected, the processing begins. The editing involves reviewing the surveys for legibility, consistency, and completeness. Codes have been established for "yes/no" responses, mission selection, and marketing— and production—oriented statements.

After the feedback has been inspected, it will be analyzed. The results will then be presented via marketing plans, proposals, and recommendations.

It is stressed by most marketing experts that there are some major differences in marketing research for industrial

organizations versus consumer marketing. Despite any differences, the skills and methods are the same. Both disciplines concern themselves with problem definition, research design, use of secondary data, measurement, field work, data processing analyzing, and the presentation of results.⁴⁷

The primary data used in this research is the survey of fifty employees at the Southwestern Region. The secondary data utilized is published articles from trade magazines, newspapers, and industrial resources.

The data will be analyzed using statistical analysis. The open-ended responses will be analyzed by categories with percentages to determine levels of significance. Therefore the percentages supplemented by statistical information will help support, reject, or modify the foundation of this hypothesis.

The measurement process is correlating the employees job title and years of service to response characteristics. Ratios from this measurement will help reinforce the foundation of this survey.

When the research has been concluded, a report will be generated and the findings will be presented via the form of a marketing analysis. An evaluation of the results will be the key focus in formulating recommendations as well as suggested action items.

The following figures show the research steps used for this project and the survey.

FIGURE 4-1 MARKETING RESEARCH PROFILE STEPS

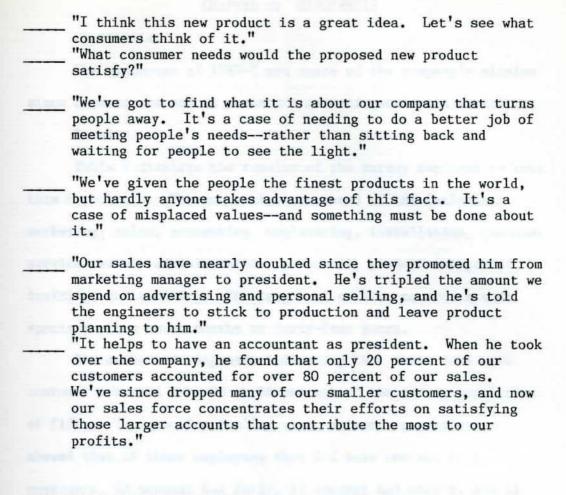
- 1. Establish need for information: AT&T-T recent divestiture caused marketing ramifications.
- Specify research objectives: Survey employee population to capture employee's perception of the company's mission, while analyzing corporate culture.
- 3. Determine sources of data: External secondary data was used from sources such as industrial publications, trade associations, periodicals, and published reports.
- 4. Develop data collection forms: Survey was originated and hypothesis developed to determine the employee's attitudes towards the company's communication channels, organization behavior, and marketing mindset.
- Design Sample: Ten percent of the survey population was given the survey prior to the dissemination to the survey population of fifty.
- 6. Collect data: Data was collected via written survey.
- 7. Process data: Via the use of coding.
- 8. Analyze data: This analyzation will prove or disprove the hypothesis as well as be the basis for documenting observations and formulating recommendations.
- 9. Present results: Results will be made in a conclusive manner.

FIGURE 4-2 EMPLOYEE SURVEY

**********	*****	******
Please answe:	r each question. ********	*******
Job title	in off front	
Length of service		Lare to 111 law
Is your job assignment customer	oriented? Yes _	No
If yes, how often do you commun	icate with custom	Weekly Monthly
Do you feel management keeps ever issues? Yes No		egarding current
Do you feel this company helps Yes No		career path?
If you were in a position to rec policies, what suggestions would	commend changes r d you make?	egarding business
Which one of the following state impression of this company's mis		
Quality at a good price	Productivity	through people.
Universal service.	Customer Sati	sfaction.
Customer Awareness.	Strive for te	chnical perfection

These are eleven pairs of statements about different aspects of a business. Select one statement from each pair which you feel is the better way of dealing with this aspect of the business.

	"We try to sell the products that we make." "We try to make the products that the customers need and want to buy."
	"Our customers don't always want to pay for a really high quality item." "It costs us a lot to produce that product."
-	_ It costs us a lot to produce that product.
	"Our inventory costs are too high. We'll have to cut down on inventory, even if it means running out of stock." "Sure our inventory costs are high. But how many customers would we lose if we kept running out of stock?"
	"It would cost us too much to lease a store in the shopping center. We'll locate our store a few blocks away where the land is cheaper. We can depend on our low prices and the popularity of our own brands to bring the customers to us." "People today want the convenience of one-stop shopping and we've got to go where the customers are. It will cost us more to lease a building in the shopping center, but we'll do a larger volume and that's the key to profit in the business."
	"We're not using all of our resources. Let's see if Research and Development has invented any new products for us to sell."
	"We're not using all of our resources. Let's do some marketing research to see if any new products are needed that we could produce."
	"How much money will we save if we do not build the new warehouse? "How much will it improve our customer service if we build the new warehouse?"
	_ "Our sales are down. We had better advertise more and increase our sales commissions."
	"Our sales are down. We had better find out why customers
	have stopped buying our products."
-	_ "Our profits have been declining. Perhaps we should search
	for ways to cut costs and make more efficient use of our resources."
	_ "Our profits have been declining. Perhaps we should search for new opportunities to satisfy unfulfilled needs."



THANK YOU

CHAPTER 5: HYPOTHESIS

Hypothesis:

The employees of AT&T-T are aware of the company's mission since divestiture and do possess a marketing-oriented mentality.

Results:

Table V displays the results of the survey employed to test this hypothesis. The job titles consisted of the following: marketing, sales, accounting, engineering, installation, customer service, safety administration, personnel, project management, drafting, and training. The length of service covered a wide spectrum—from seven months to forty-four years.

The number of responses indicating that their jobs were customer oriented were 29 or 58 percent of the survey population of fifty. The question dealing with customer communication showed that of those employees that did have contact with customers, 62 percent had daily, 17 percent had weekly, and 21 percent had monthly contact.

A variety of categories of responses were elicited from employees regarding business policies they would like to see implemented. The following figure exhibits a synopsis of the suggestions elicited during this survey.

FIGURE 5-1 SURVEY SYNOPSIS RECOMMENDATIONS REGARDING BUSINESS POLICIES

More training programs.

Encourage communications between all levels of management especially obtaining more input from lower levels.

Use employee attitude surveys to study morale.

FIGURE 5-1 (Continued) SURVEY SYNOPSIS RECOMMENDATIONS REGARDING BUSINESS POLICIES

Establish corporate objectives to be more clearly communicated during the MBO (Management by Objectives) process.

Solicit feedback from customers concentrating on their needs and wants relative to equipment and services.

Top down MBO form of evaluation with emphasis on top.

Increase marketing awareness, focusing on demand, inventory, and stronger more sensitive customer orientation.

Increase middle management responsibilities.

Eliminate promotional policies of all universes.

Advance decision making to lower levels.

Standardize support functions such as accounting and salary structures.

Reorganize the sales force on a geographical concept instead of by product type.

Rearrange employee floor plan regarding desk arrangement.

Make all employees more customer oriented by changing ways and measuring employee efficiency and performance.

Need to change to a competitive marketing strategy.

Develop and implement current industrial marketing and manufacturing strategies.

Establish career training seminars.

Inform employees of companies short and long term strategic and tactical goals.

Implement goal oriented career planning.

Improve inventory, production, and planning abilities based on customer needs.

Eliminate red tape.

Study areas such as older lines of business in an attempt to eliminate.

Make room for more creative thinking and action.

The results of the employees' impression of the company's mission were as follows:

24 percent - Customer Satisfaction.

20 percent - Quality at a good price.

16 percent - Universal Service.

14 percent - Productivity through people.

14 percent - Strive for technical perfection.

12 percent - Customer Awareness.

As stated in the 1984 AT&T annual report by Mr. C.L. Brown, "Most of all, we expect to continue in all we do to meet what is our overriding goal: that is, to satisfy our customers, one by one." The results of this portion of the survey indicate most of employees do not perceive Customer Satisfaction as this company's goal. Therefore, this statistical evidence from the research rejects the portion of the hypothesis that states the employees are aware of this company's mission.

The last section of the survey consisted of eleven pairs of marketing and production oriented statements. Each employee was requested to select one statement from each pair indicating their preference over the two as the better way of dealing with this aspect of the business. The intention of soliciting each employee reply via this structure was to capture the attitudes be it marketing or production oriented.

The first set of responses was 80 percent marketing and 20 percent production. These statements dealt with the way a company would market their products.

The second pair concerned quality and price of a product.

The results were 78 percent marketing and 22 percent production.

The third set of statements regarded inventory
maintenance. Employees' responses were 42 percent marketing and
58 percent production.

The fourth area addressed location. The responses indicated 14 percent marketing and 86 percent production.

The fifth set of statements revolved around the concept of allocating resources for research and development. The results were 72 percent marketing and 28 percent production.

The sixth set of statements examined financial decision making abilities. The responses indicated 70 percent marketing and 30 percent production.

The seventh area expounded on sales and promotional efforts. The responses reflected 94 percent marketing and 6 percent production.

The eighth set of statements addressed profit analyzation.

The employees responded 50 percent marketing and 50 percent production.

The ninth set addressed marketing research. The employees responded 74 percent marketing and 26 percent production.

The tenth set of statements reviewed a company scenario reflecting marketing strategy decision making. The employees indicated 76 percent marketing and 24 percent production.

The eleventh and last of the series of statements captures the employee marketing management perspective. The employees indicated 58 percent marketing and 42 percent production.

The purpose of this survey was to disseminate it to fifty employees. Then, each employee could privately and anonymously provide feedback. What occurred in several situations was that the employee felt the need to vocalize and elucidate their feedback. This survey was perceived by most of the respondents as a communication channel which they utilized. This survey exposed some other types of sentiments such as causing a few employees to reveal feelings of anxiety and frustration. An example of this observation was expressed verbally on a number of occasions when employees related their perplexities over their selection of a response during the series of marketing and production oriented statements. One respondent communicated that if he was to fill out the survey according to the way this company ran the business it would be different responses. Another respondent indicated their preference and perception of conducting a business would not always be appropriate according to marketing theories.

Instructions were given to all employees, that their identity would remain confidential and there were no right or wrong responses. It was thoroughly explained to each individual that the survey was only a vehicle to measure the employees' perception of the company.

The respondents in most cases were eager to participate in this research. Some employees even requested to be contacted when the results were tabulated. One aspect that this survey reinforced was that the employees are concerned about this company's goals, objectives, and standards, which was demonstrated by their eagerness to participate.

Each of the larger populated areas were analyzed for results. The five customer service employees' results can be found in Figure 5-2.

FIGURE 5-2 CUSTOMER SERVICE RESULTS

Survey Pop	ulation: _5			
Average Le	ngth of Service: 19	years		
Customer O	riented Job: 100 pe	ercent yes		
Customer C	Customer Communication:			
Daily 100 percent				
Weekly				
Monthly				
Management Communication:				
Yes 60 percent No 40 percent				
Career Path Development:				
Yes		No 100 pe	rcent	
Company Mi	ssion:			
40 percent	Quality at a good price.	20 percent	Productivity through people.	
	Universal service.	20 percent	Customer Satisfaction.	
Certain 1	Customer Awareness.	20 percent	Strive for technical perfection.	
62 percent	Total Marketing Orie	nted Statem	ents	
38 percent Total Production Oriented Statements				

The results of the survey support the statement that the customer service employees are aware of their job assignments being customer oriented. They reinforce this awareness by maintaining daily communication with the Customer.

It appears by a narrow margin that management is not keeping them informed about current issues. A unanimous 100 percent agreement reveals that this organization perceives this company as not helping an employee develop a career path.

The results of company mission identification were widespread. Only 20 percent selected the mission Customer Satisfaction.

The eleven marketing and production oriented statements reflected a 62 percent marketing versus a 38 percent production response. This organization can narrowly be viewed as maintaining a strong marketing mentality.

The next area to review is the Accounting Universe. Eight employees completed this survey. The responses can be reviewed in Figure 5-3.

FIGURE 5-3 ACCOUNTING ORGANIZATION RESULTS

Survey Population: 8

Average Length of Service: 16 years

Customer Oriented Job:

Yes 12 percent No 88 percent

FIGURE 5-3 (Continued) ACCOUNTING ORGANIZATION RESULTS

Customer Communication:

	Daily 100 percent
	Weekly
	Monthly
Management Communication	on:
Yes 38 percent	No 62 percent
Career Path Development	:1
Yes 25 percent	No 75 percent
Company Mission:	
12.5 percent Quality at	a good price.
Productive	ity through people.
50 percent Universal	service.
12.5 percent Customer S	Satisfaction.
12.5 percent Customer A	wareness.
12.5 percent Strive for	technical perfection.
82 percent Total Market	ting Oriented Statements
18 percent Total Produc	tion Oriented Statements

The accounting universe for the most part perceive their job as not being customer oriented. The margin quickly narrows to a 62 percent believing management communicates issues while 75 percent responded that the company was not helping to develop a career path.

The company mission of customer satisfaction was not identified, rather the majority of this universe identified with

the former mission, universal service. The results for marketing versus production oriented thinking proves that the accounting universe possesses a marketing mentality.

The project management universe consisted of nine respondents. This is an area that interfaces with various aspects of the telecommunication environment. The results of this organization can be examined in the following figure.

FIGURE 5-4 PROJECT MANAGEMENT RESULTS

Survey Population: 9	
Average Length of Service: 16 years	
Customer Oriented Job:	
Yes 78 percent No 22 percent	
Customer Communication:	
Daily 14 percent	
Weekly 57 percent	
Monthly 29 percent	
Management Communication: Yes 44 percent No	56 percent
Career Path Development: Yes 44 percent No	56 percent
Company Mission:	
11 percent Quality at a good Productivi people.	ty through
12 percent Universal service. 44 percent Customer S	atisfaction.
22 percent Customer Awareness. 11 percent Strive for perfection	
79 percent Total Marketing Oriented Statements	
21 percent Total Production Oriented Statements	

The majority of the project management population comprehend their job assignment as customer oriented. The margin is evenly distributed regarding management communication and career path development. Customer Satisfaction was depicted by approximately half of this universe. Project management responses also support more of a marketing oriented mentality than production oriented.

The largest area surveyed was the engineering organization. This was the largest population organization. The results of this organization's responses can be found in Figure 5-5.

FIGURE 5-5 ENGINEERING RESULTS

Survey Population: 11

Average Length of Service: 15 years

Customer Oriented Job:

Yes 91 percent No 9 percent

Customer Communication:

Daily 80 percent

Weekly 10 percent

Monthly 10 percent

Management Communication:

Yes 18 percent No 82 percent

Career Path Development:

Yes No 100 percent

FIGURE 5-5 (Continued) ENGINEERING RESULTS

CO	mpany Mis	ssion:		
36	percent	Quality at a good price.	36 percent	Productivity through people.
		Universal service.		Customer Satisfaction
10	percent	Customer Awareness.	18 percent	Strive for technical perfection.
69	percent	Total Marketing Orie	nted Stateme	ents
31	percent	Total Production Ori	ented Stater	nents

The engineering results support some interesting conclusions. The employees surveyed feel their job assignment is customer oriented. They expressed by a wide margin that management does not communicate current issues nor does the company help them develop a career path. The company mission was perceived by this organization as quality and productivity oriented. None of the respondents selected Customer Satisfaction. The marketing and production oriented statements revealed a trend toward a marketing oriented mentality.

The last of the larger population areas surveyed was the marketing sales universe. The results of this organization can be found in the following figure.

FIGURE 5-6 MARKETING/SALES RESULTS

Survey Population: 9

Average Length of Service: 6 years

Customer Oriented Job:

Yes 55 percent No 45 percent

FIGURE 5-6 (Continued) MARKETING/SALES RESULTS

Customer Communication:

Daily _	30 percent
Weekly .	
Monthly	20 percent

Management Communication:

Yes 33 percent No 67 percent

Career Path Development:

Yes 22 percent No 78 percent

Company Mission:

22 percent Quality at a good _____ Productivity through people.

11 percent Universal service. 44 percent Customer Satisfaction.

11 percent Customer Awareness. 12 percent Strive for technical perfection.

78 percent Total Marketing Oriented Statements

22 percent Total Production Oriented Statements

It appears that the marketing and sales organization falls in line with the other organizations' statistics. Surprisingly, the survey population indicated 55 percent customer oriented job assignments versus 45 percent not. This statistic may be attributed to the lower years of service average or even further dissection of the job level or assignment. This universe echoed similar feelings toward the management communication and career path development questions: both questions majorities fell into the no ranges. The area of marketing oriented statements captured 78 percent of the responses.

These five organizations, Customer Service, Accounting,
Engineering, Project Management, and Marketing, represent 84

percent of the survey population. The conclusion from this
analyzation is that no one segment is better supplied with
marketing attitudes or at being customer sensitive.

The marketing oriented statements tend to support the portion of the hypothesis relative to the maintenance of a marketing mindset. Further research is recommended in improving the management communication issues. It can be ascertained that management dialogue is vital to the maintenance of an effective marketing mix.

It was discovered in the engineering sector that several employees selected engineering oriented missions. While in many cases the accounting driven segments selected financial oriented company mission statements.

These two universes are mentioned due to the statement made earlier that this survey location consisted primarily of engineering and accounting backgrounds.

The open-ended portion of the survey revealed some interesting comments as was shown previously in Figure 5-1. Most of the respondents completed this section with constructive feedback concerning predominantly their area of assignment.

The length of service factor did not reinforce any trends.

It was noted via observation techniques that those who were employed for more years were less enthusiastic towards the survey than those with lesser years of service.

This survey has allowed this author to draw several conclusions regarding marketing, sales efforts, and organization behavior. Statistical analysis and observations supplement the information retrieved from the literature review.

It is intriguing to note that 42 percent of the survey population perceived their job assignment as not being customer oriented. Since divestiture, the company has made several changes not only in the corporate and regional structure but in the strategies of the business. The question to ask is, are the employees receiving any signals based on the new direction of the company?

This survey only scratches the surface on several issues that require further investigative research. These topics will be specifically addressed in Chapter Six.

If this survey and literature findings are an accurate measure of AT&T-T's direction, several positive conclusions can be drawn.

Now that the survey results have been tabulated and reviewed, it is time to review the secondary research associated with this project. Since AT&T-T is now working in a new market, it faces many new challenges. One of the most stimulating is their new position in the telecommunication marketplace.

Competition is one of the most important environmental factors that faces AT&T-T. The major competitors that are trying to capture some of AT&T-T's marketshare are GT&E (General Telephone and Electronics), IBM (International Business Machines), ITT, Ericson, MCI (MCI Communications Corporation), Nippon Electric

Company, Northern Telecom, Siemens, and Thomson.⁴⁸ These emerging competitors are forcing AT&T-T into becoming more aware of marketing concepts.

Probably the most challenging of all the competitors is

IBM. This observation calls for an examination of IBM Business strategies and tactics.

Several articles throughout the post divestiture era focused on contrasting and comparing IBM to AT&T. Since January 1982 when the antitrust suit was settled, the doors for opportunities at AT&T-T opened. Many opportunities and weaknesses were quickly identified for AT&T-T.

IBM soon emerged after this announcement as AT&T-T's major competitor. IBM purchased Rolm Corporation which signaled they were expanding in the field of telecommunications.

IBM's strengths were ascertained as being the master of marketing and manufacturing whereas AT&T-T is in technology and research and development. On balance, IBM's greatest talent was marketing not technology, while AT&T-T's sensitivity to the telecommunication market was propelling.⁴⁹

IBM's strategic goal is to preserve its dominance of the industry by remaining a complete data company. They offer communication equipment and the networks to transmit data as well as providing the hardware and software to access the system and make it work. 50

IBM's main interest in marketing their products contrary to AT&T-T's is in those parts of the business that tie directly in with data. 51

The market share tactic that IBM is focusing on is those customers who are too small to buy large equipment such as a mainframe.

IBM's strategy is to seize this portion of the market and to maintain an Information System. This type of system builds and manages custom networks which allows several groups of remote users to perform complex data processing functions.⁵² Overall, IBM's strategy is to venture into the communications portion of the business that AT&T-T is not experienced in.

IBM has made market decisions in the past that didn't turn out as planned, such as the business entries like Satellite
Business System (SBS). Analysts predicted by 1985 45 percent all
long distance transmission would occur by SBS. Yet SBS in the
mid-1970's found less than 5 percent of this marketshare. IBM
has learned tremendously from this sort of telecommunication
market experience.

On balance, the situation for IBM is that if anybody wants to figure out IBM'strategy just remember to go where the money is. 53 In addition to management supporting marketing goals, IBM maintains a reputation as being a leader in marketing and a service company that is a low cost manufacturer of data processing equipment. 54 IBM's major goal is to move into markets that are embryonic or dominated by other companies and is planning on hitting growth areas.

IBM's network control room in Tampa already resembles a phone company's. 55 This profound observation signals to AT&T-T that IBM is a serious competitor. AT&T-T must maintain a high

level of awareness regarding other companies' strategic and tactical marketing goals. To date, it appears IBM is positioned as the strongest competitor against AT&T-T. But, what about tomorrow?

In an attempt to meet the converging competition, AT&T-T quickly began intensifying their marketing approaches.

Not long after divestiture, AT&T-T was announcing new product offerings in the personal computer market. In addition, they were accelerating promotional efforts on product lines such as their switching product line. The 5ESS (Electronic Switching System) was being promoted more to the telephone companies as well as being the main attraction at trade shows.

The 5ESS switch is a revolutionary switching system, the most advanced in all the world and one that could change the telecommunication industry for all time. 56 This is because it is the first product for AT&T-T where it is able to market its technology in hardware and software capacities. This product represents a flagship product, one that will benchmark against others in years to come. The 5ESS switch is an example of a state-of-the-art product that can play a major role in maintaining an aggressive marketing posture.

The 5ESS switch is one strength that reinforces AT&T-T's marketplace position of manufacturing the world's most advanced digital switch. This product is being marketed to the industrial user as a machine that will grow, shrink, or travel. 57 A tactical approach such as this reveals the growing customer sensitivity occurring at AT&T-T. The reasoning behind the market

strategy of grow, shrink, and travel is that this product can grow by the addition of switching modules, shrink by removing the appropriate number of modules if reduced capacity is required, and travel because of the remoteness of its features.

The 5ESS switch is seen as being a strong product that AT&T-T will be able to market differently from others. The prime target market customer will be the Regional Bell Operating Companies. This product is a technology leader in the telecommunications industry.

AT&T-T marketing strategies examine their market share and find customers' needs changing. In this post divestiture era, customer contracts and approaches are changing. AT&T-T is finding that the telephone companies are purchasing products that are cost effective and will generate revenue. 58

Therefore, the key to marketing this flagship product is positioning. The features of the 5ESS must be communicated to the customer as being state-of-the-art, high quality, and lastly, an economical and versatile product. Promotional efforts for this product have increased. Advertising, press coverage, and publications are some of the media used to communicate their product message. Sales representatives have been supplied with various materials in order to demonstrate the 5ESS capabilities.

In conclusion, the results of this survey employed at AT&T-T's Southwestern Regional headquarter indicate that further research as well as an examination of marketing goals and attitudes is needed. The number one resource in this business is human resources. It appears through the testing of this

project's hypothesis that there are some areas needing improvement. Areas such as management communication of vital issues, career enhancement incentives, company mission and customer awareness, and sales training.

Through examining and reviewing several books and articles, it can be stated that AT&T-T has many strengths and many areas that require improvement. The goal of this thesis was to focus on one weak area, the marketing mentality of AT&T-T employees. Upon the completion of this research endeavor, this author believes that portions of the hypothesis were proven while other parts were rejected. In conclusion, the hypothesis should be modified to read that AT&T-T employees at the Southwestern do possess some marketing attitudes yet do not feel equipped because of management's lack of communication to know or carry out the company's mission and goals.

CHAPTER 6: SUMMARY AND CONCLUSIONS

As this research endeavor concludes an unusual situation prevails at AT&T-T. Even though AT&T-T is over one hundred years old, it is barely one year old. This irony exists because when the Bell System broke up a new AT&T-T emerged on January 1, 1984. Therefore during the year 1984, one of the oldest companies in the United States became one of the newest information companies. In addition to being known for telephones, AT&T-T is now associated with computers, digital network systems, business automation systems, and processing devices.

AT&T-T's values still remain intact; they are simply quality and reliability.

The survey results from conducting this research proved that the employees need more information. In an attempt to rectify this situation, it is suggested a training needs analysis be employed. This needs analysis focus should be driven by changing environmental factors. Overall, the analysis must cover the following eight steps: 1) Identify needs of AT&T-T,

- 2) Define training objectives, 3) Develop courses, 4) Select appropriate methods and materials, 5) Acquire resources,
- 6) Attain participants, 7) Conduct training, 8) Evaluate and provide feedback.⁵⁹ It is imperative for an effective training needs analysis that these steps be adhered to. In the past, a company would view a needs analysis as a way of finding out what was going on and match it against what should go on.⁶⁰

The gap that resulted from this analysis would determine the type of needed training. Gary A. Rummler has conducted and researched several training needs analyses. He casts the training needs analysis into an interesting perspective. He states "the training needs analysis should be viewed as a performance audit, that is, a framework for viewing human performance problems and a set of procedures for systematically determining the worth of correcting the problem, then finding the causes and designing the solutions to the problem."61 This opinion is a more systematic approach to determining training needs than past proven methods. Also, this viewpoint shows how important a training needs analysis can be while it clarifies that it is an essential tool in managing and getting the most out of human resources.

Since the population at AT&T-T is so widespread, it is recommended that when distributing surveys and obtaining information employees from all sectors be interviewed. The breakdown for obtaining employee feedback will therefore be dictated by areas, population, and levels within each organization. This method is aimed at uncovering attitudes, feelings, and responses toward the company as well as training programs.

A questionnaire should be designed to identify needs in the following areas: lack of skills, knowledge or ability, finding out if there are any attitude problems and if one possesses any certain skills or knowledge not being effectively applied.

The feedback must be processed in a very timely manner.

Other reports and records should be reviewed and examined. This type of investigation may uncover valuable information.

This proposed training needs analysis is a recommendation based upon this research. A training study of this nature will help increase AT&T-T's marketing skills and knowledge.

Another recommended area to pursue is formulating a marketing plan for AT&T-T and disseminating it to all employees. This suggestion would fill the need for communication that was indicated in the employee survey.

The following figure demonstrates a proposed outline plan for AT&T-T to emulate.

FIGURE 6-1 AT&T-T MARKETING PLAN

- 1. Define corporate mission and firm objectives.
- 2. List opportunities.
- Analyze buying behavior of selected target market segments and evaluate.
- Develop industrial marketing strategy.
- Set marketing objectives.
- 6. Determine marketing mix.
- 7. Formulate marketing program.
- 8. Evaluate and control plan.

This marketing plan is proposed for AT&T-T to follow and is required in order to make decisions and effectively manage their

industrial marketing strategies. This research has determined three major industrial marketing components for AT&T-T:

- 1) commercial enterprises, 2) governmental agencies, and
- institutions.

A strategic and tactical marketing plan such as the one displayed in Figure 6-1 is recommended for AT&T-T to pursue. Change is a rather new variable to AT&T-T, and if they are to overcome their inexperience as a marketer, marketing plans must be constantly watched, updated, and communicated to all employees.

Communication was one area recognized as needing improvement from the employee survey. Improved management communication is needed. The survey proves that employees feel it is not there.

It is recommended that in order to fill this void they expand the Regional newsletter. This type of newsletter could contain letters from employees. The suggested format for this new type of communication is for the employees to establish the dialogue, such as selecting the topics or questions. The newsletter focus would be directed toward the employees' wants and needs.

The next recommendation to improve communication is to institute a promotional program for all employees. A program of this nature would benefit all the organizations. This type of program would encourage comradery as well as educating employees as to the purposes of other organizational goals and objectives.

In an attempt to improve employees' perceptions of the company mission, it is recommended that AT&T-T initiate an orientation program to include the company mission. This recommendation is twofold; first of all, when the employee starts their job they learn the company mission, then they learn how their job relates to the overall goals of the company.

Lastly, in an effort to improve communication channels it is recommended that each employee be given a specific job description so that they can relate it to how their assignment impacts the customer.

In conclusion, this project has shed some light on the marketing efforts currently displayed at AT&T-T. Through the primary research efforts, this author was able to perform a study to arrive at the conclusion that the employees are indeed receiving mixed signals as to what the exact mission is at AT&T-T.

Furthermore, more research is recommended in an attempt to complement this project. As was stated throughout this research, this project is just a start. Change has never occurred so fast and far reaching as it currently is at this company. Therefore, more help is needed.

Specific needs have been identified by conducting various analyses throughout this project. Needs such as more communication from management, clearer identification of goals, and marketing oriented programs have been identified.

Even though the survey did reveal some encouraging thoughts such as a majority of marketing oriented attitudes, help is still

required if AT&T-T is to continue to be the leader it has always been.

In summary, AT&T-T possesses many strong features that have been demonstrated throughout this paper, yet no matter how good your product is or technologically advanced it is, marketing is the key to success in a highly competitive environment!

TABLES

TABLE I T-T&TA SEVEN YEAR TREND OF RATIOS

	1976	1977	1978	1979	1980	1981	1982
I. LIQUIDITY	-TO (H)	1 11					
CURRENT RATIO	3.2t	2.5	2.9	2.6	2.4	2.7	2.9
QUICK RATIO	1.28t	.90	1.06	.88	.73	.97	1.09
II. ACTIVITY							
AVERAGE COLLECTION PERIOD		53	48	49	47	40	F0
PERIOD	57d	53	48	49	47	49	50
INVENTORY TURN- OVER	3.9t	3.6	4.1	3.7	3.4	4.0	4.3
TOTAL ASSET TURNOVER	1.3t	1.4	1.5	1.5	1.5	1.6	1.5
III. LEVERAGE							
DEBT RATIO	37%	43%	43%	44%	45%	40%	42%
TIMES INTEREST EARNED	6.08t	16.81	13.77	11.56	8.28	7.03	4.06
	0.000	10.01	13.77	11.50	0.20	1.05	4.00
IV. PROFITABILITY							
PROFIT MARGIN							
ON SALES	3%	6%	6%	6%	6%	5%	3%
RETURN ON TOTAL							
SALES	4%	9%	9%	9%	9%	9%	4%
RETURN ON NEW WORTH	6%	15%	16%	16%	16%	14%	7%

Note: t is equal to times d is equal to days

SOURCE: AT&T Financial Reports

TABLE II AT&T-T FINANCIAL REVIEW

SALES	1980 \$12,580	1981 \$13,008	1982 \$12,032
PROFIT FROM SALES	1,220	1,458	1,450
PROVISION RELATED TO FACILITY UTILIZATION PLAN	625	A 2.5- 1	-
INTEREST EXPENSE	126	187	159
OTHER INCOME-NET	39	36	27
INCOME TAXES	149	596	625
INCOME BEFORE CHANGE IN ACCOUNTING POLICY	359	711	693
PER DOLLAR OF SALES	2.9¢	5.5¢	5.8¢
CUMMULATIVE EFFECT ON PRIOR			
YEARS OF CHANGE DUE TO ACCOUNTING POLICY	(22)	_	-
NET INCOME	337	711	693
PER DOLLAR OF SALES	2.7¢	5.5€	5.8¢
DIVIDENDS	576	525	470
DEPRECIATION AND AMORTIZATION	392	384	323
PLANT AND EQUIPMENT	570	606	585
INVENTORIES	2,946	3,284	3,515
WORKING CAPITAL	3,101	3,220	2,939
PLANT AND EQUIPMENT-NET	2,937	2,868	2,654
INVESTED CAPITAL-END OF PERIOD			
DEBT	1,253	1,482	1,798
EQUITY	4,757	4,991	4,449
RETURN ON AVERAGE TOTAL CAPITAL	6.9%	13.5%	14.0%
PAYMENTS TO SUPPLIERS	4,501	5,020	5,263
EMPLOYMENT COSTS	5,350	5,340	5,198
AVERAGE NUMBER OF EMPLOYEES (THOUSANDS)	153	168	177
SOURCE: AT&T Financial Reports			

TABLE III AT&T HIGHLIGHTS

	_1981	1982
EARNINGS PER SHARE	\$ 8.40	\$ 8.47
DIVIDENDS DECLARED PER COMMON SHARE	\$ 5.40	\$ 5.40
REVENUES, INCLUDING OTHER INCOME (IN MILLIONS)	\$65,757	\$59,081
EXPENSES, INCLUDING ACCOUNTING CHANGE (IN MILLIONS)	\$58,478	\$52,258
NET INCOME IN MILLIONS	\$ 7,279	\$ 6,823
RATE OF RETURN ON AVERAGE TOTAL CAPITAL	10%	10.3%

SOURCE: AT&T Financial Reports

TABLE IV AT&T-T EMPLOYEE SURVEY BREAKDOWN

PARTICIPATING ORGANIZATIONS

MARKETING	9
ACCOUNTING	8
ENGINEERING	11
INSTALLATION	1
CUSTOMER SERVICE	5
SAFETY ADMINISTRATION	1
PERSONNEL	1
PROJECT MANAGEMENT	9
DRAFTING	1
TRAINING	1
ADMINISTRATIVE ASSISTANT	_3
	50 EMPLOYEES

LENGTH OF SERVICE

1 MONTH - 4 YEARS	10
5 YEARS - 9 YEARS	9
10 YEARS - 14 YEARS	5
15 YEARS - 19 YEARS	13
20 YEARS - 24 YEARS	6
25 YEARS - 29 YEARS	3
30 YEARS - 34 YEARS	3
35 YEARS - 44 YEARS	1
	50 EMPLOYEES
	30 Em E015E5

TABLE V EMPLOYEE SURVEY SURVEY POPULATION 50

	**************************************	wer e	ach question.	
Job	title refer to TABLE I	V		
Leng	th of service <u>refer to</u>	TABL	E IV	
Is y	our job assignment custom	er or	iented? Yes 29	No <u>21</u>
If y	es, how often do you comm	unica	te with customers?	Daily <u>18</u>
				Weekly _5_
			1	Monthly 6
Do y issu	ou feel management keeps es? Yes <u>18</u> No <u>32</u>	every	one informed regard	ling current
Do у	ou feel this company help Yes 9 No 41	s you	to develop a care	er path?
	ou were in a position to cies, what suggestions wo	uld y		ling business
Whic impr	h one of the following sta ession of this company's a	ateme missi	nts best describes on: (only select o	your one)
10	Quality at a good price.	_ 7	Productivity throu	igh people.
8	Universal service.	12	Customer Satisfact	ion.
6	Customer Awareness.	_ 7	Strive for technic	al perfection.
***	********	****	*******	******

Please continue >

These are eleven pairs of statements about different aspects of a business. Select one statement from each pair which you feel is the better way of dealing with this aspect of the business.

- 10 "We try to sell the products that we make."
- 40 "We try to make the products that the customers need and want to buy."
- 39 "Our customers don't always want to pay for a really high quality item."
- 11 "It costs us a lot to produce that product."
- 21 "Our inventory costs are too high. We'll have to cut down on inventory, even if it means running out of stock."
- 29 "Sure our inventory costs are high. But how many customers would we lose if we kept running out of stock?"
- "It would cost us too much to lease a store in the shopping center. We'll locate our store a few blocks away where the land is cheaper. We can depend on our low prices and the popularity of our own brands to bring the customers to us."
- "People today want the convenience of one-stop shopping and we've got to go where the customers are. It will cost us more to lease a building in the shopping center, but we'll do a larger volume and that's the key to profit in the business."
- "We're not using all of our resources. Let's see if
 Research and Development has invented any new products for
 us to sell."
- "We're not using all of our resources. Let's do some marketing research to see if any new products are needed that we could produce."
- 15 "How much money will we save if we do not build the new warehouse?
- 35 "How much will it improve our customer service if we build the new warehouse?"
- 3 "Our sales are down. We had better advertise more and increase our sales commissions."
- "Our sales are down. We had better find out why customers have stopped buying our products."
- 25 "Our profits have been declining. Perhaps we should search for ways to cut costs and make more efficient use of our resources."
- 25 "Our profits have been declining. Perhaps we should search for new opportunities to satisfy unfulfilled needs."

- 13 "I think this new product is a great idea. Let's see what consumers think of it."
- 37 "What consumer needs would the proposed new product satisfy?"
- "We've got to find what it is about our company that turns people away. It's a case of needing to do a better job of meeting people's needs—rather than sitting back and waiting for people to see the light."
- 12 "We've given the people the finest products in the world, but hardly anyone takes advantage of this fact. It's a case of misplaced values—and something must be done about it."
- "Our sales have nearly doubled since they promoted him from marketing manager to president. He's tripled the amount we spend on advertising and personal selling, and he's told the engineers to stick to production and leave product planning to him."
- 21 "It helps to have an accountant as president. When he took over the company, he found that only 20 percent of our customers accounted for over 80 percent of our sales. We've since dropped many of our smaller customers, and now our sales force concentrates their efforts on satisfying those larger accounts that contribute the most to our profits."

THANK YOU

ENDNOTES

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