PREPARING FOR CUSTOMER SATISFACTION IN THE PRE-PURCHASE PHASE - A LOOK AT THE EXPRESS PACKAGE INDUSTRY

by

MIKE R. BEASLEY
B. S. Data Processing Technology, Weber State College
(1971)

and

HENRY LAMOTTE

Submitted to the Alfred P. Sloan School of Management
and the School of Engineering
in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

June 1991

SIGNATURE OF AUTHORS:

Alfred P. Sloan School of Management
May 10, 1991

Certified by:

Gabriel R. Bitran
Thesis Advisor

Accepted by:

Charles R. Grader
Director, Sloan Fellows Program

Accepted by:

Roger A. Samuel
Director, Management Of Technology Program

PREPARING FOR CUSTOMER SATISFACTION IN THE
PRE-PURCHASE PHASE - A LOOK AT THE EXPRESS PACKAGE INDUSTRY

by

MIKE BEASLEY

and

HENRY LAMOTTE

Submitted to the Alfred P. Sloan School of Management
and the School of Engineering on May 8th, 1991
in partial fulfillment of the requirements for the degree of
Master of Science in Management

ABSTRACT

Since quality is a customer determinant, it must be the ultimate goal of quality to have satisfied customers.No matter what management does, it is of no avail if it does not lead to increased customer satisfaction in the end.

This thesis focuses on how the pre-purchase phase of the total customer cycle impacts customer satisfaction and addresses the four major steps a firm should follow at this stage: 1.Determining customer needs and expectations. 2.Segmenting customers into those the firm can serve. 3.Analyzing the competition and learning through comparison (benchmarking). 4.Communicating with customers to shape expectations.

The relevant management science is reviewed and the practices of two corporations in the Express Package Industry are analyzed and contrasted. For this purpose, interviews were held with Federal Express Corporation and United Parcel Service.

Conclusions are drawn and recommendations made as to what can be done within the pre-purchase phase to improve customer satisfaction and the findings are related to the larger picture of quality.

Thesis Supervisor: Gabriel R. Bitran
Title: Professor of Management

TABLE OF CONTENTS

CHAPTER ONE

INTRODUCTION

1.1 OBJECTIVE OF THE THESIS

The objective of this thesis is to develop a framework of suggestions and guidelines which can help an organization to achieve customer satisfaction. It is the authors hope that by implementing the recommendations laid out in this thesis a company will be able to set targets enabling them to meet and possibly exceed customer expectations and thereby moving into the relatively uncharted frontier of actually delighting the customer.

Our thesis is predicated on previous research in the area of quality and customer satisfaction. We will use the customer satisfaction criteria of the Malcolm Baldrige National Quality Award as a foundation on which to build.

1.2 BACKGROUND

On August 20, 1987, President Ronald Reagan signed Public Law 100-107, legislation establishing the Malcolm Baldrige award to recognize U.S. companies that have attained world class quality. The intent was to encourage United States industry to improve quality and thereby regain its competitive advantage both in domestic and foreign markets.

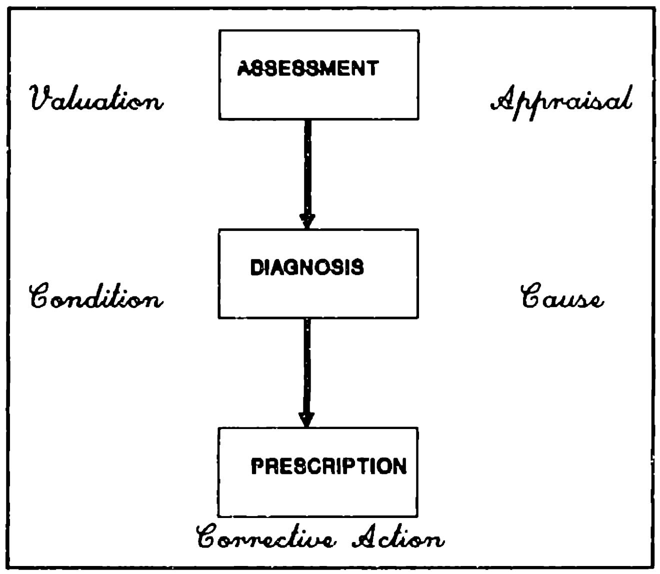

Figure 1.1

The previous MIT research on the Baldrige Award that has been done to date has only addressed assessment. Assessment only tells where you are, it does not explain how you got there or what needs to be done to achieve your goal. We hope that by building on the existing research, we can move further into the process of diagnosis and prescription. A detailed description of the Malcolm Baldrige National Quality Award is provided in Appendix A.

1.3 THESIS PLAN

Our focus is on customer satisfaction, section 7 of the Baldrige Award. We believe that the ultimate goal of quality is customer satisfaction:

> All of management's efforts boil down to two words: Customer Satisfaction. No matter what management does, it is of no avail if it does not lead to increased customer satisfaction in the end.[1]

Or, put it another way:

> Customers must get what they want, when they want it and how they want it. Your bosses may be ecstatic, the board of directors blissful and your company may be considered a legend on Wall Street. But if your customers are not delighted, you have not begun to achieve quality.[2]

Chapter Two describes our methodology. There we define the stages leading up to customer satisfaction,including the pre-purchase stage. We also explore the dynamics of our analysis tool, the "GAP Model". In Chapters Three and Four, the core of our thesis, we give a theoretical and then practical view of what can be done to improve customer satisfaction at the pre-purchase stage. Chapter Three provides underlying principles of management science theory as they relate to pre-purchase. Chapter Four describes the "best practices" of Federal

Express, a 1991 Baldrige award winner. In this chapter we also contrast the approaches taken by Federal Express with those of United Parcel Service (UPS). This chapter evolved out of visits and discussions with both companies. Finally, in Chapter Five, we describe what can be done within the pre-purchase phase to improve customer satisfaction and then relate that to the larger picture of total quality.

Our entire thesis is built on the premise that companies want to have satisfied customers. The difficulty and the challenge lies in how to get from the current circumstances to the desired results.

Our ultimate hope is that this paper would be used as a learning tool. A prescription that will assist the reader in taking the company from X -> Y.

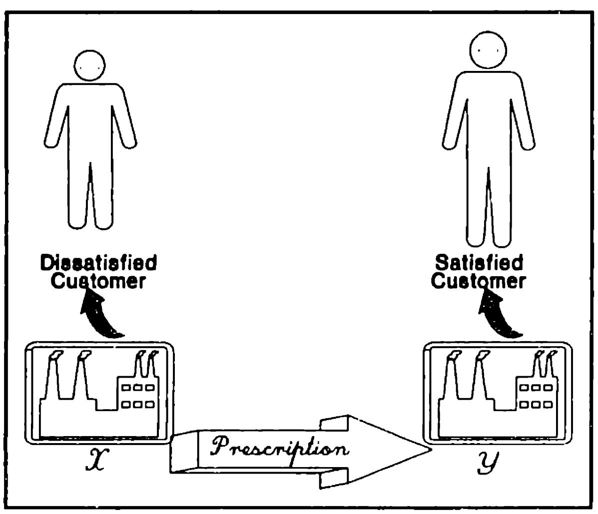

Figure 1.2

REFERENCES FOR CHAPTER ONE

1. Imai, Massaaki, Kaizen: The Key to Japan's Competitive Success, New York: Random House, 1986, p. 207.

2. Scholtes, Peter and Hacquebord, Heero, A Practical Approach to Quality, Joiner Associates Inc: 1987, p. 2.

CHAPTER TWO

METHODOLOGY

2.1 CUSTOMER SATISFACTION

The Customer Satisfaction category of the Malcolm Baldrige National Quality Award covers a company's knowledge of its customers, its, overall customer service systems, its responsiveness, and its ability to meet requirements and expectations. Specifically, the areas covered are:

7.1 Determining Customer Requirements and Expectations
7.2 Customer Relationship Management
7.3 Customer Service Standards
7.4 Commitment to Customers
7.5 Complaint Resolution for Quality Improvement
7.6 Determining Customer Satisfaction
7.7 Customer Satisfaction Results
7.8 Customer satisfaction comparison.

A complete description of the Customer Satisfaction category of the Malcolm Baldrige National Quality Award is given in Appendix A.

Within the Customer Satisfaction category, we have defined three logical stages : Pre-purchase, Purchase, and Post-purchase, as shown in Figure 2-1.

This separation was developed last year by Peter Glick and Billy Hatmaker in their thesis written on customer satisfaction.[1]

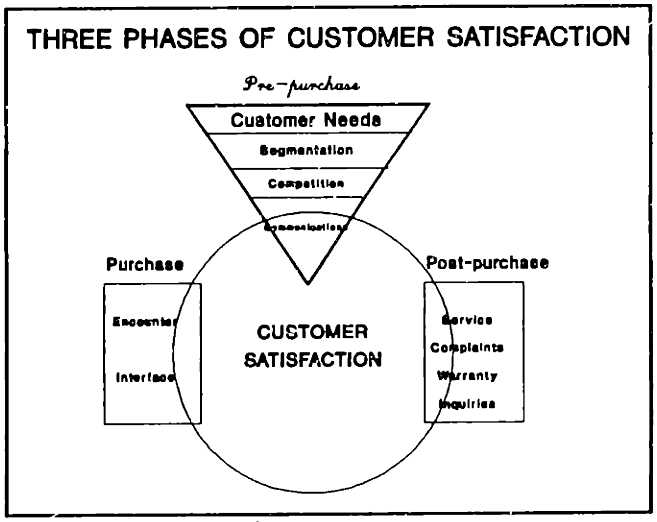

Figure 2-1

2.2 THE PRE-PURCHASE STAGE

We have chosen to focus our thesis on the pre-purchase stage of the overall customer satisfaction category. Within the pre-purchase area there are four major items to be addressed as displayed in Figure 2-2.

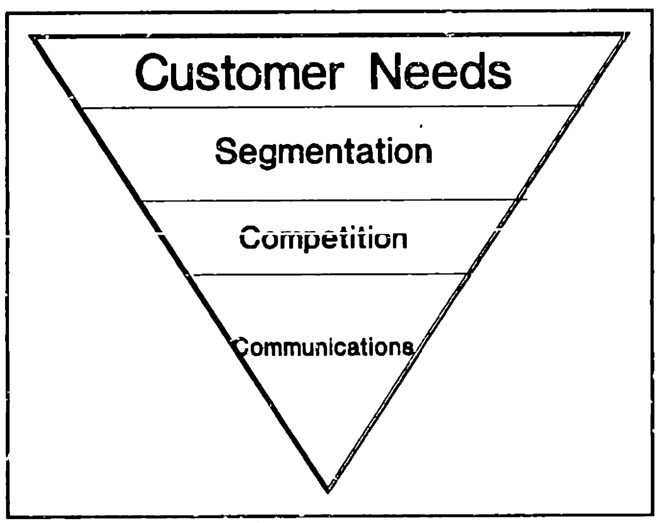

Figure 2-2

1. Determining customer needs. 2. Segmenting the market into those customers you can and want to serve. 3. Determining what the competition is doing and comparing the firm's activities

(benchmarking) against the best in the industry.

4. Communication with the customers, thereby shaping their expectations and perceptions of the company and its products.

Prior to the "moment of truth" -- the actual service encounter between the company and the customer -- the company, as a service provider, should go through a number of fundamental steps to ensure a successful encounter. Customer satisfaction will not be achieved without rigorous and detailed preparation of the pre-purchase phase. Such a preparation goes a long way toward ensuring that all subsequent efforts to meet the customers' expectations will succeed.

Before deciding on "how" to serve, the company must first determine "who" it wants to serve. An approach must be chosen which will deliver service excellence to customers. Only then can a service be designed and offered which conforms specifically with the customer's expectations and thus will be perceived as "quality service" by the customer if performed successfully.

A strong market orientation is needed from the very outset. A market-driven service strategy must be identified and implemented which permeates the entire organization. Properly done, it ensures that the "voice of the customer" is actually heard, understood and used to continually adapt at every stage of the value chain.

This should be a never-ending, dynamic process, equally important in both introducing new services and ventures, as well as, maintaining existing ones. While this may sound elementary, business history is full of examples of companies that have not followed a disciplined market orientation, have instead followed their own myopic vision of "how" and "who" to serve, and then have suffered severe setbacks or gone out of business because of this inability or unwillingness to research and "listen".

Therefore, a key to laying the base for customer satisfaction in the pre-purchase phase is understanding the needs and expectations of the customer. To acquire such understanding, a variety of information sources from both within and outside the company need to be tapped. In view of the heterogeneity of people's needs and expectations within the same overall market, a more focused analysis is necessary which defines the homogeneous characteristics of customer segments which need to be satisfied. This segmentation process lays the groundwork for the company's business definition and its marketing strategy.

Comparing one's own perception of the customer's expectation with that of competitors' is an important check. This provides an indication whether the company will be able to satisfy the customer's expectations or whether adjustments to its offering are necessary to successfully compete. Learning about "excellence standards" of competitiors and also in other industries can help to gain competitive advantage.

Once the needs and expectations of the relevant customer segments are defined, they must be translated into goals and measurable criteria that can be easily communicated within the organization and to the target customers and other stakeholders outside. This allows the company to manage the expectations of all parties involved and avoid misconceptions.

2.3 MANAGEMENT SCIENCE AND BEST PRACTICES

In Chapters Three and Four, we give both a theoretical and a practical view of what can be done to improve customer satisfaction. First we present briefly the details of management science theory as it relates to pre-purchase activities. Then we describe the practices of Federal Express and of United Parcel Service (UPS). By taking both theory and actual practice from two acknowledged world class corporations, who however differ substantially in culture and management practice, we believe we can reach a conclusion on what a firm can do to improve customer satisfaction. Our conclusions are based on a blend of theory and actual practice.

2.4 INTERVIEWS AND VISITS

After developing an academic base as a foundation for the theoretical view, we interviewed key corporate personnel from the three 1990 Baldrige winners, Federal Express, General Motors and IBM Corporations. We chose to concentrate our efforts on the express package sector to determine what is being performed in industry today. Our key interviews were with Federal Express and United Parcel Service (UPS).

2.5 THE GAP MODEL

Throughout our review of the Customer Satisfaction and Marketing Science literature, we found a number of models designed to improve these areas, but the one best-suited to our purposes was the "GAP Model".[2] We chose the "GAP Model" because of its diagnostic and prescriptive structure. it is developed around discrepancies or "GAPs" that need to be closed in order to achieve satisfied customers.

Gap One (NOT KNOWING WHAT THE CUSTOMER WANTS): The difference between the customer's expectations and the firm's perceptions of those expectations. This is a failure to understand the customer's needs and expectations due to some combination of inadequate market research and poor communication between the firm and customer.[3]

Gap Two (THE WRONG SERVICE-QUALITY STANDARD): The difference between the firm's perceptions of customer expectations and the firm's performance standards. This gap occurs when the firm understands the customer's needs but does not develop the specifications required to deliver the expected service. The reason for this potential gap between awareness of customer expectations and the translation of that awareness into appropriate service standard may be the absence of wholehearted management commitment to service quality.[4]

Gap Three (LACK OF SERVICE DELIVERY): The difference between the service designed by the firm and the service actually delivered. This measures the implementation of the firm's quality plans and is determined by the performance of the customer contact personnel's unwillingness and/or inability to meet the standard.[5]

Gap Four (PROMISES DO NOT MATCH DELIVERY): The difference between the service the customer actually receives and the service that the customer perceives as being received. This gap reflects an underlying breakdown in coordination between those responsible for delivering the service and those in charge of describing and/or promoting the service to customers. This relationship starts before the customer physically uses the firm's product or service and continues until after the product has been discarded. Where the firm's quality is not immediately apparent to the customer, the firm must develop a method to make quality tangible -- it must "materialize" the service.[6]

Gap Five (AGGREGATE OF ALL PREVIOUS GAPS): This represents the potential discrepancy between the expected and perceived service from the customers' standpoint.[7]

2.6 ANALYSIS

These gaps provide, as displayed in Figure 2-3, a clear model of customer satisfaction based on expectations and perceptions. We will use the "GAP Model" as an analysis tool and a framework throughout this thesis.

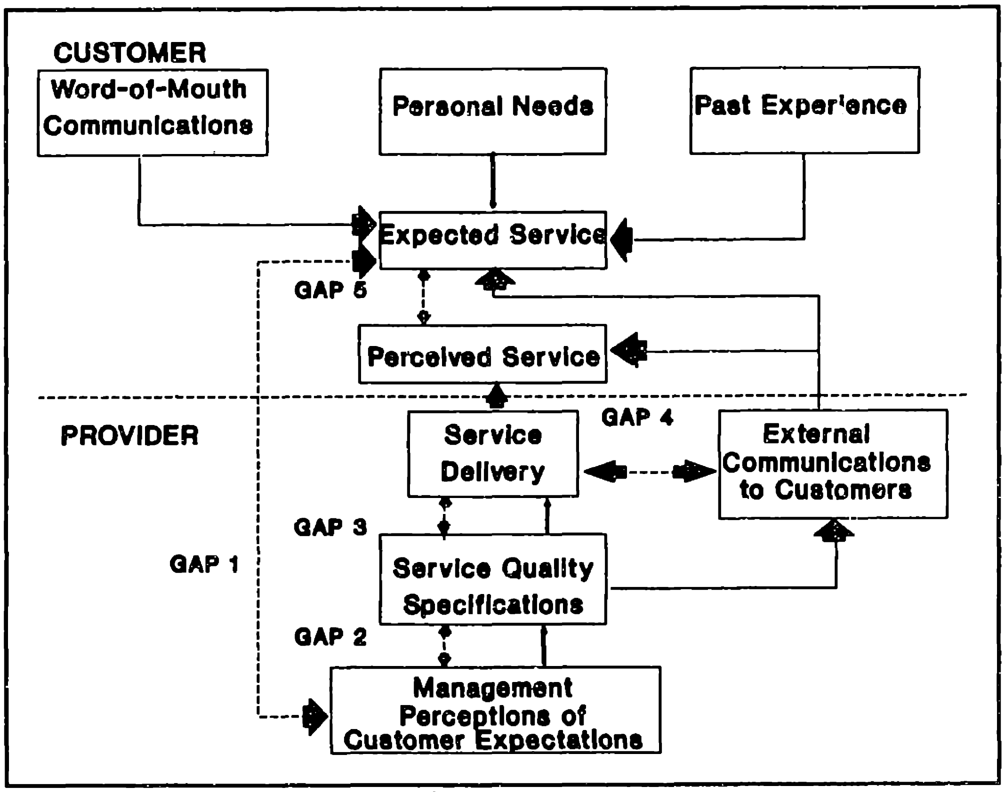

Figure 2-3
GAP MODEL

We believe this model is ideal for assisting us in meeting our objectives of diagnosis, prescription, and integration of findings. It is our intention to have the prescription show how to fill these gaps.

REFERENCES FOR CHAPTER TWO

1.Glick, Peter H. and Hatmaker, Billy L., "Customer Satisfaction In The Malcolm Baldrige National Quality Award: Understanding The Customer's Definition Of Quality", Master's thesis, Massachusetts Institute of Technology, 1990.

2.Zeithaml, Valarie; Parasuraman, A; and Berry, Leonard, Delivering Quality Service, New York: Free Press, 1990.

3.Ibid., p. 37.

4.Ibid., p. 39.

5.Ibid., p. 42.

6.Ibid., p. 43.

7.Ibid., p. 36.

CHAPTER THREE

MANAGEMENT SCIENCE

3.1 THE QUALITY ISSUE

Before addressing the specific issues relating to the pre-purchase phase, a general overview on the notion of customer satisfaction is necessary. The question of how to manage the pre-purchase phase of the total relationship cycle between a company and its customers can only be understood in this wider context. What is customer satisfaction and why has it become a "conditio sine qua non" for many leading companies. How does it relate to "quality" ? What distinguishes service companies from those in manufacturing in their strive for customer satisfaction and are there general principles of how to improve customer satisfaction? These are some of the key questions which have received considerable attention in this area of management science in the recent past.

3.1.1 Customer Satisfaction and the Marketing Concept

Customer satisfaction is the ultimate goal of any market driven company. It commits the company to focus on its final purpose, which is to satisfy the needs of its customers, and to do this more effectively and efficiently than competitors. This "state of mind" or philosophy has to penetrate the whole organization and needs to be the guiding force in all its activities. Top management's strategy formulation, HRM policy, R&D and Production and all other primary and support functions of a company need to gear their work and decisions to this one aim: to please the customer, i.e. create customer satisfaction.

What is needed is in essence a strong market and customer orientation of the firm for which marketing as a function provides the necessary tools. The implementation of the marketing concept gives the organization that focus:

> The marketing concept holds that the key to achieving organizational goals consists in determining the needs and wants of target markets and delivering the desired satisfactions more effectively and efficiently than competitors.[1]

Companies that are not orientating all activities towards this goal will develop a myopic culture. They do not accept the customer as the final arbiter and will eventually not survive the ultimate test in the market place, which is to attract customers and retain them through customer satisfaction.

As Theodore Levitt puts it in his marketing classic "The Marketing Imagination":

> The view that an industry is a customer-satisfying process, not a goods-producing process, is vital for all businessmen to understand. An industry begins with the customer and his needs, not with a patent, a raw material, or a selling skill. Given the customer's needs, the industry develops backwards, first concerning itself with physical delivery of customer satisfaction.[2]

Satisfied customers will buy again. As it is estimated to be about five times as expensive to attract a new customer than to retain a current one, it is obvious why customer satisfaction is of primary importance.

Kotler summarizes the importance of customer satisfaction:

A satisfied customer:

1. buys again
2. talks favorably to others about the company
3. pays less attention to competing brands and advertising
4. buys other products that the company later adds to its line[3]

and later:

> Profits could go up or down in a particular year for many reasons, including rising cost, falling prices, major investments, and so on, but the ultimate sign of a healthy company is that its customer satisfaction index is high and keeps

> rising. Customer satisfaction is the best indicator of the company's future profits.[4]

While it may seem a banal statement that the customer is the final judge of any company's success and future, the business history is full of examples of companies that lost sight of their customer, developing products they were in "love" with but which nobody wanted and being late in responding to changes in their customers' needs and expectations.

Even more then thirty years after the marketing concept, which defines customer orientation as its central tenet, was introduced as a business philosophy, the threat of "marketing myopia" is a real one for many well established and successful companies. The reemergence of "customer satisfaction" as a buzzword and the new emphasis organizations put on customer service as a source of competitive advantage (the "ultimate weapon") prove the relevance of this basic proposition in today's business environment.

Increased global marketing and the deregulation of major industries have forged intense competitive arenas that force companies to refocus on the basics. Consumers have more choice and have become more demanding and sophisticated and a growing number of companies have realized the opportunity of using customer satisfaction as a strategic weapon.

The application structure of the Malcolm Baldrige Award, as displayed in Figure 3-1, likewise reflects the customer focus. Not only does the customer satisfaction module carry the highest rating (30%), but its relationship with the other six modules clearly represents this market driven, customer oriented philosophy.[5]

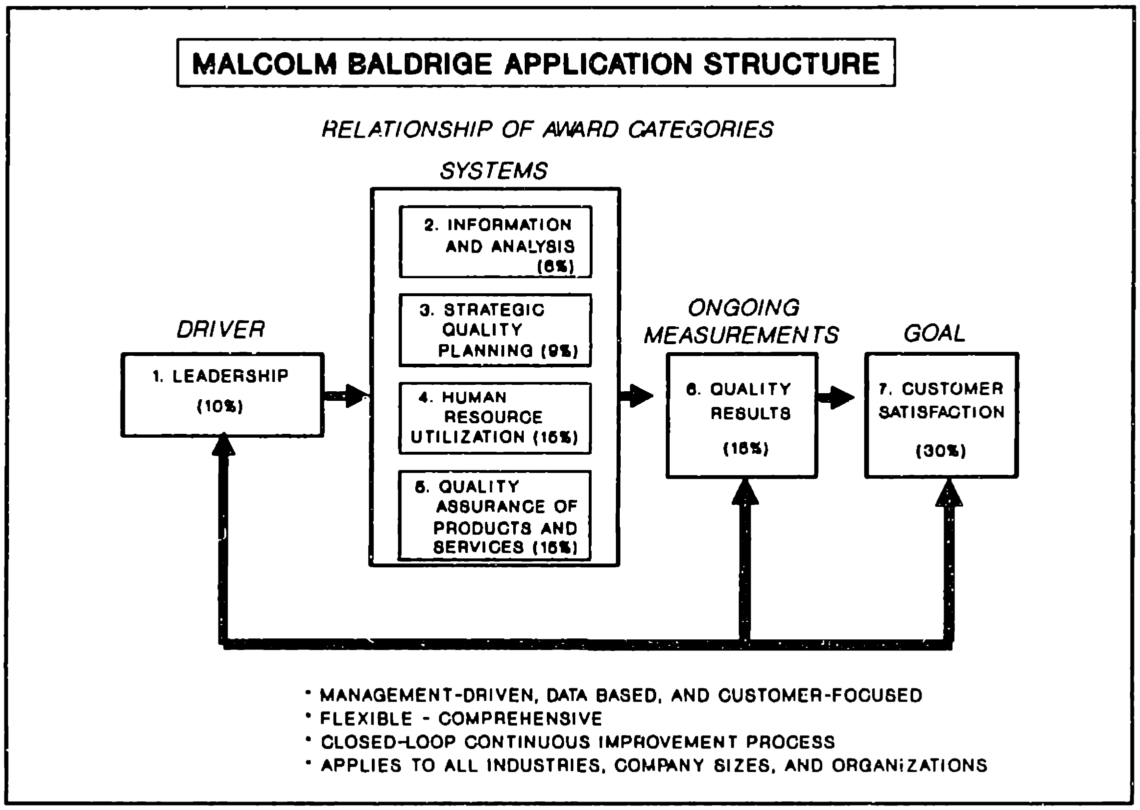

Figure 3-1

3.1.2 Quality - the Customer Definition

From the many definitions of "quality" that have been proposed, two key characteristics can be distilled:

- Quality is defined by the relative absence of defects
- Quality means meeting the customer's requirements, i.e. it is defined as creating customer satisfaction

While Crosby defines quality as "conformance to requirements"[6] and Juran uses the description "fitness for use", it is only since Feigenbaum's unambiguous definition, that quality is understood as a customer's determination.

> Quality is a customer determination, not an engineer's determination, not a marketing determination or a general management determination. It is based on the customer's actual experience with the product or service, measured against his or her requirements- stated or unstated, conscious or merely sensed, technically operational or entirely subjective - and always representing a moving target in a competitive market.[7]

This definition sees the customer as the judge of quality. When his expectations are met or exceeded, i.e. when he perceives satisfaction, he will consider the product or service as being of quality. Thus, quality can have a very different appearance, depending on the customer and his expectation vis-a-vis his perception. If it meets his expectation, a meal at a fast food restaurant can be perceived of equal quality as an elaborate gourmet experience at a five star restaurant.

It is the customer's definition that counts, and it is therefore of utmost importance for the firm to define quality the same way customer do, i.e. to understand the customer's quality (= satisfaction) criteria.

Consumers' perceptions of quality however will change over time due to changing, mostly rising expectations, added information and increased competition. Quality therefor clearly is of a dynamic nature and thus is unlikely to ever be a "non issue". Markets have to measure customer satisfaction over time and adjust their product and promotion strategy to these changing views.

3.1.3 Quality pays

While the many studies that have been designed to test the assumption of a positive relationship between price and quality have provided inconclusive results[8], a study based on the large Profit Impact of Market Strategy (PIMS) data base proves that "there is no doubt that relative perceived quality and profitability are strongly related. Whether the profit measure is return on sales or return on investment, business with superior product/service offering clearly outperform those with inferior quality"[9]. The study shows, that superior perceived quality will indeed allow for premium prices in the short run, and that in the long run, companies that achieve higher customer satisfaction will enjoy both, market expansion and gains in market share. Furthermore, the study also confirms that in the long run, gains in economy of scale can offset the short term cost of higher quality and that therefore high quality and low cost can be achieved simultaneously.

The powerful impact of customer retention on the bottom line is of particular importance to service companies. In some industries, "companies can boost profits by almost 100% by retaining just 5% more of their customers"[10].

Business consultants and market research companies are now offering sophisticated models and high technology data analysis that measure the impact of quality on profits. Prof. Claes Fornell has developed a system which is being used by the Oldsmobile Division of General Motors and claims a very high level of accuracy. It is "able to pinpoint what the bottom line effect of increased customer satisfaction is and identify those aspects of service and/or product quality whose improvement will bring about the largest gain"[11] . Faster and more accurate adjustments and a more effective resource allocation to improve the various aspects of service are the main advantages this system provides.

3.1.4 The Issues of Service Quality

Managing services is a particular challenge. The main characteristics of services are their intangibility, the simultaneity of production and consumption (which also means they are perishable and can not be inventoried) and their heterogeneity. The latter is caused by the inherent variability of services and the shear endless variety of consumer perceptions. This is particularly the case with labor intensive, less industrialized and therefore less standardized services.

These attributes make it particularly difficult to manage the quality of services. No advance control is possible and service providers have to be able to instantaneously respond to a wide variety of individual requirements and perceptions in order to ensure customer satisfaction.

In addition to the technical quality of the outcome (what), the consumer evaluates the functional quality of the process (how) in which he is often either actively or passively involved. There are little if any tangible criteria for consumers to confirm their service expectation and their evaluation of quality is therefore largely based on perception and thus highly subjective.

Obviously, service providers try to shape the expectation of their customers to create a good match between what they expect and what the company can provide. Active market communication in the form of advertising, sales, public relations etc. as well as word of mouth, image and of course the consumer's needs shape his expected quality. If these expectations are realistic and the service provider lives up to the communicated standard, then the total perceived quality will be high. Groenroos has summarized this relationship in his "Total Perceived Quality" model shown in Figure 3-2.[12]

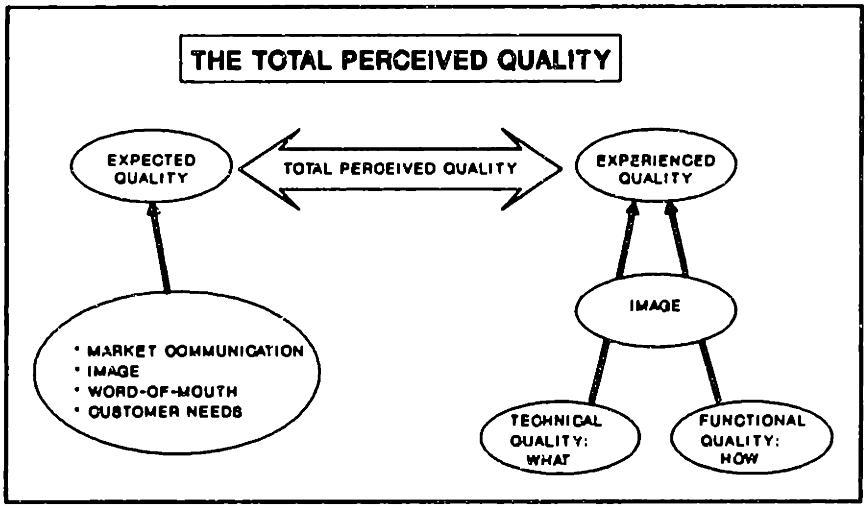

Figure 3-2

The final criteria for measuring service quality is thus the same as in the goods industry. As Zeithaml, Parasuraman and Berry state in their book "Delivering Quality Service":

> The only criteria that count in evaluating service quality are defined by customers. Only customers judge quality; all other judgements are essentially irrelevant. Specifically, the service quality perception stem from how well a provider performs vis-a-vis customers' expectations about how the provider should perform.[13]

It should also be pointed out, that while the mentioned attributes of services demand particular attention in service companies, their importance has spilled over to also the goods industries. The concern for good customer service exemplifies the growing awareness that in fact all industries are in the service business. As Theodore Levitt put it:

> There are no such thing as service industries. There are only industries whose service components are greater than those of other industries. Everybody is in service.[14]

Models developed to provide a framework for analyzing service quality, like the Gap Model and the Groenroos Model, thus have relevance in both industry sectors.

Berry, Zeithaml and Parasuraman have done extensive research to establish the major dimensions a customer applies to evaluate service quality. Their original 10 dimensions, which are the result of a qualitative study (focus group interviews), were subsequently consolidated into five dimensions for the purpose of constructing an instrument for measuring service quality ("SERVQUAL"). This was applied in a quantitative study (customer surveys) in five different service sectors.

The outcome in the order of importance can be summarized as follows:[15]

SERVQUAL Dimensions	Original Ten Dimensions	Definition
Reliability	same	Ability to perform the promised service dependably and accurately
Responsiveness	same	Willingness to help customers and provide prompt service
Assurance	Competence Courtesy Credibility Security	Knowledge and courtesy of employees and their ability to convey trust and confidence
Empathy	Access Communication Understanding the Customer	Caring, individualized attention the firm provides its customers
Tangibles	same	Appearance of physical facilities, equipment, personnel, and communication materials

3.1.5 The Principles of Quality Improvement - the "Big "Q""

As this thesis is focusing on the point of interaction between a company and its customers' and more specifically at what a company should do in the pre-purchase phase of this relationship to provide satisfaction, a very brief overview of the other areas that need to be addressed in a quality improvement program is necessary to understand the full scope of this issue.

The "Big "Q"" is a term often used to stress the fact that quality is not an issue that can be confined to one particular management discipline or business function. While it finally comes to light in whether a company is able to meet its customers' expectations, marketing could do little without the concerted effort of all other departments that are adding value to reach or improve a defined quality standard.
The most important other areas, which also represent modules of the Malcolm Baldrige Quality Award application, are briefly introduced in the folllowing.

Leadership

Top Management must demonstrate its commitment to quality in an active and highly visible ("missionary") way. It has to initiate the change in corporate culture and provide the quality vision, policy and goals. At least one member of top management, preferably the CEO, should be clearly identifiable as the champion of quality.
Leaders should promote quality as a business strategy and should put the need for continuous quality improvement ahead of profits, market penetration, sales, and stock price - believing it enhances all of these.

Information and Analysis

A quality data management system is required for all levels of the organization to be able to take prompt and accurate action. Goals are set and quality is measured at various points of the value chain. Quality data is continuously collected, analyzed and disseminated so that areas that need action can be promptly identified.

Strategic Quality Planning

Formal quality planning is essential, and the output is integrated into the business plans. The plan emphasizes continuous quality and has concrete plans to insure continuous action. A policy statement (mission, policy) exists and has a clear linkage to business planing. Quality plans consider both the one-year operating plan and the strategic plan. Mechanisms exist and are active for linking planning to implementation.

Human Resource Utilization

"Customer relations mirror employee relations". Without motivated, well trained and involved employees, no quality output can be achieved over a longer period of time. The "Human Resource" is the most important factor in any organization as all functions and processes depend on it. Company leaders have to give full attention to ensure that employees are enabled to produce quality. Quality recruiting, training, and responsive compensation is needed. Total involvement and identification with the strive for excellence and awareness of the relevance of the individual function to the business goal is a prerequisite. Team work and empowerment of customer contact personnel characterize quality companies.

3.2 IDENTIFYING CUSTOMER NEEDS

3.2.1 The Starting Point

The starting point for the marketing concept and customer orientation is the act of determining customer needs, wants, and expectations.[16]

First, an organization must identify its customers and then define their needs. If quality of service and customer satisfaction are the ultimate goal, the firm must remain continually in touch with the customer as a means of monitoring the achievements of those goals. This means knowing what the customer does and understanding how he will use the products or services. If there are problems resulting directly from defective service, or related problems experienced even when the product is functioning properly, these must be uncovered and handled. There is very little possibility for satisfied customers until there is a clear definition of who they are and their needs and expectations.

3.2.2 Identifying the Customer

Customers are usually defined as those who buy the product or service but the complete definition encompasses everyone who is impacted by the product or service. So customers can be separated into two categories -- internal and external.

Internal customers are those people that are impacted by the work product but who do not necessarily purchase it, (see Figure 3-3). This also includes people who are indirectly affected by the product or service.

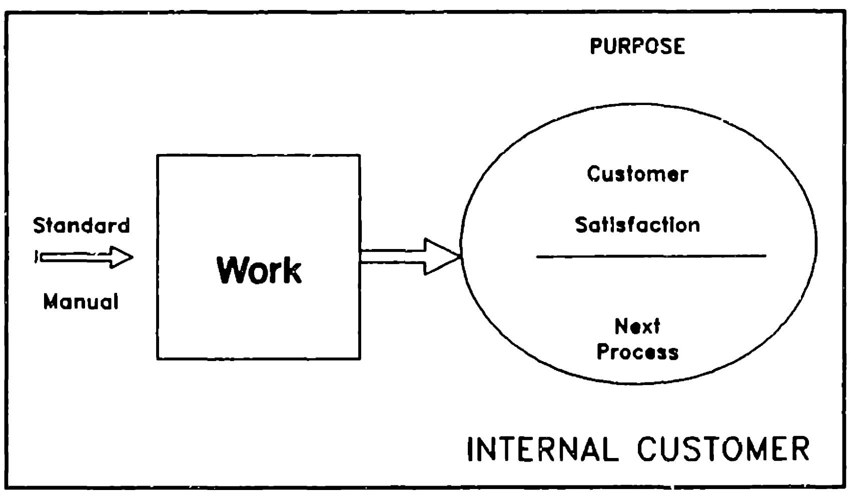

Figure 3-3

External customers are those usually outside of the company who are willing to buy the product or service. They are the source of the firms existence. Juran calls these external customers "clients", people who buy from the company and are its source of income.[17]

The most effective way to identify a customer is to follow the product or service to see where it goes and who it affects along the way.

3.2.3 Understanding Customer Needs and Expectations

During the 1980s, the corporate drive for perfection focused on improving the product. Now the need for a competitive edge has shifted corporate focus to one of honing the caliber of customer service. But a growing number of companies are finding that giving customers what they want isn't nearly as hard as identifying what it is they want[18].

The goal is to gain a complete assessment of what is important to the customer, not only their likes but their dislikes as well.

Quite often customers will state their needs in terms of a product they want to buy, when their real need is for the end service that the product offers. For example, very few businessmen want a computer. What they are really looking for is a service such as automated payroll, automated inventory, or immediate access to information. It's quite understandable and acceptable that customers state their needs based from their reference point. An excellent example of this was given in a recent classroom videotape. A customer complained that the store did not carry fresh fish. This infuriated the produce manager because he went to great lengths to ensure that the store had fresh fish each day. When the customer was asked why she felt the fish was not fresh, her answer was that the store's fish was wrapped in cellophane while fresh fish, according to her expectation, is laid out on ice.[19]

Customer needs, especially those of internal customers, go beyond products and processes. They include needs for job security, self respect, respect of others, continuity of familiar habit patterns, and other elements of what is broadly called "cultural values". While such needs are real, they are seldom stated openly. Instead, they are stated in a form that is not readily clear or apparent.[20]

Identifying customer needs is dynamic, difficult, time-consuming and very expensive, but it can be accomplished through some form of market research.

3.2.4 Market Research Approaches

Kotler states that there are four broad methods of collecting the primary data that a firm will need to determine customer needs;[21]

OBSERVATIONAL RESEARCH: New data that can be gathered by observing the relevant people and settings. Kotler's example is an airline researcher who spends time around airports, airline offices, and travel agencies to hear how travelers talk about the different airlines and how agents handle flight arrangements. The researcher can fly on the competition's airline and observe the service and listen to customer opinions. This method also allows for one-on-one interviews which provide richer results than focus groups.[22]

FOCUS-GROUP RESEARCH: A focus group is generally a small group of six to ten people who spend a few hours with a skilled interviewer. The focus group is used for exploratory data gathering. It usually begins with broad questions and then moves into more detailed questions. It is hoped that group dynamics will help reveal deep feelings and thoughts. The difficulty inherent in this method is avoiding the pitfall of generalizing the responses of the participants. It is much more useful if precise data feeds back to the marketing, research, and product development teams so they can act on facts versus generalized abstract data.

SURVEY RESEARCH: This method is used to learn about people's preferences, knowledge, and satisfaction. As the name implies, surveys are used to gather data from a larger sample than could be gathered by either observation or focus groups. A questionnaire is the most common instrument used in survey research.

EXPERIMENTAL RESEARCH: This is the most scientifically valid research. This method involves comparisons between a base group and an experimental group, subjecting them to different treatments, controlling extraneous variables, and checking whether observed response differences are statistically significant. The purpose of experimental research is to capture cause-and-effect relationships for the purpose of comparison.

As usual, when market research is discussed it is directed at the external customer, but it is just as important to do market research on internal customer needs. When looking at internal customer needs, one tends not to call it market research; rather it is usually called a process study, an opinion survey, or some variety of internal suggestion program.

The use of any or all of these methods do not guarantee success. At best one can improve the odds of collecting correct, coherent information about the customer's needs and wants.

3.2.5 Marketing Intelligence Systems

In the current business world it is becoming more difficult for a firm to separate today's needs from tomorrow's wants. They are continually shifting and changing. What may be satisfactory today may not be satisfactory tomorrow. Therefore it becomes extremely important to have in place a dynamic system that helps the firm to recognize customer need changes. Given the dynamic nature of customer needs, it is important to develop a decision support system which allows the "voice of the customer" to be heard throughout the entire company on a real time basis. Such a system should allow access by every function of the organization, and should be in a form that allows analysis to be performed by each function.

3.2.6 Translation of Customer Needs

Once customer needs have been identified, then they must be translated into specifics that the firm can use to develop a product or service. One approach that has been used by a number of successful firms is a system which allows customer needs to drive the design and production process. This system is called Quality Function Deployment (QFD). It is a concept that provides a means of translating customer requirements into the appropriate technical requirements for each stage of product development and production.[23] John Hauser and Don Clausing term this approach "The House of Quality", a tool that allows marketing people, design engineers, manufacturing staff, and service personnel to work closely together from the time the product or service is first conceived.[24]

3.3 SEGMENTATION

3.3.1 Segmentation - an Organizing Principle

Having identified the various customer needs and expectations, a company must choose a customer base whose needs match the firm's capabilities.

In principle there are three different approaches available for sellers to market their goods or services. The first would be to mass-produce and mass-distribute. The Model T Ford is the classical example for this strategy. The second option is to provide two or more services or products that are differentiated in for example brand name, color, personal attention, price etc.. The idea is to offer the buyer a limited variety rather than to appeal to identifiable market segments. General Motors, selling cars that are very similar in features and style under different brand names is an example of this approach. The third approach for marketing goods and services is to identify and choose one or more of the market segments that make up the total market and target it with customized products or services and a tailored marketing program.

Increasing competition has forced a growing number of firms to switch to a target marketing strategy, meeting the specific requirements of smaller groups rather then providing "mass services" that leave individual expectations unsatisfied and thus are prone to competitive erosion. Most industries are simply too complex and customers' needs and expectations vary too widely and thus their definition of quality is too heterogeneous for a company to be able to satisfy all sets of expectations competitively. As James L. Heskett puts it when discussing services:

> A service cannot be all things to all people. Unlike product manufacturing, service organizations can have considerable difficulty delivering more than one "product", more than one type or level of service, at one time. Groups or "segments" of customers must be singled out for a particular service, their needs determined, and a service concept developed that provides a competitive advantage for the server in the eyes of those to be served...Segmentation is the process of identifying groups of customers with enough characteristics in common to make possible the design and presentation of a product or service each group needs.[25]

Thus, the market research data pool has to be organized along meaningful criteria to reflect the different groups of customers that jointly make up the total demand.

The segmentation method puts customers into groups with homogeneous expectations. It helps the service provider to decide which of these expectations he can best match with his internal capabilities (strengths, resources, core competencies) to allow for the best possible fit. Rather then providing a standardized , homogeneous service to a heterogeneous group of customers, the heterogeneity of demand is matched with a heterogeneous , i.e. "customized" supply. With this, the ground is prepared for a successful service encounter in which the service expectations can be met.

Obviously, structuring customers into segments of similar needs and expectations also reduces the risk of "wasting" service on customers who would be more then happy with less, i.e. whose service expectations are lower then those of others and who can thus be satisfied at lower cost. Customers will leave if too little service is offered or if it is of the wrong kind. However they will eventually also be lost if a company provides too much as customers will not be prepared to pay for the excess and the company will price itself out of the market. The law of diminishing returns is applicable here as from a ceratin point onward, each additional investment in more service will yield less return than the one before. Segmentation is the answer to find the point at which service supply and demand can be in equilibrium. Finding the point of best possible fit does not only reduce the risk of dissatisfying customers but also of wasting company resources.

3.3.2 Segmentation Criteria

Major segmentation variables are either based on consumer characteristics or on consumer responses.
Consumer characteristics for example include geographic, demographic and psychographic variables. Consumer responses on the other hand divide customers into groups that seek similar benefits or show similar brand loyalties. Both approaches are of equal importance for a company to identity its target market and develop a marketing strategy and decide on the right marketing mix for the execution of that strategy. In fact, a company will use different segmentation criteria, depending on the purpose of its market investigation.

To identify segments of similar service expectations however, we rely on consumer responses to identify the service attributes that customers expect, i.e. the benefits they are seeking. Only after these segments have been defined will it be of interest to examine any possible relationship between these service expectations and certain consumer characteristics (e.g. geographic and demographic data) which will help to refine the target market definition.

To understand the customer expectations, market research data that provides insight into the customers' perception is required. This can either be satisfaction measures of a company's or its competitors' existing customers or research data collected for the introduction of new services. In both cases is it of utmost importance to use the attributes the customer is choosing to differentiate one service or product from another. Successful segmentation requires that one adopts the customer's perception of ones product or service as a basis for organizing customers into homogeneous segments.

As a company will endeavor to retain existing customers and attract new customers at the same time, it is often helpful to separate these two groups and treat them as different segments. New customers should be interviewed soon after their first encounter in order to identify any possible problems and establish the degree of their satisfaction. The company will want to stay in close contact with these customers and may want to make adjustments in its service where necessary to induce them to use the service again and become loyal customers. New customers are particularly impressionable and have the highest risk of leaving.

Existing customers need different attention. Close relationship selling is necessary to keep track of the customer's changing expectations, detect possible inroads by the competition and notice his perception of the company's service over a longer period of time. A different marketing mix should be applied to these two segments to ensure optimum customer satisfaction.

The more careful this segmentation process is done, the more likely will a company perceive the customer's expectations correctly. This will then provide a reliable base for a successful customer relationship.

3.3.3 Determining the Segment Size

Large market shares can be a hinderance to provide optimum customer satisfaction if customers' heterogeneous tastes are not being satisfied by an equally heterogeneous supply. The pursuit of market share can thus lead to problems with quality if the company does not widen its scope of service characteristics and combinations but only provides a homogeneous, standardized offer to an ever larger circle of customers. Obviously, this reduces the consumer's switching barriers to turn to a competitor who follows a focus strategy and is able to provide a better match with a specific segment. Reversely, a company that provides high quality, i.e. achieves high customer satisfaction will be protected by switching barriers as it would obviously be unattractive for a customer to change to a competitor who offers less satisfaction and costly for a competitor to take away that firm's customers. This trade off between the advantages of high market share, primarily economies of scale, and customer focus represents one of the most critical decisions any successful company has to make. If it defines its segments too narrowly, it will not take full advantages of the economies of scale that can be obtained through standardized "industrial" service. However, if it defines its segments too broadly, it will be exposed to competitors who are willing to serve a smaller customer base and cater to their particular needs.

Companies therefore need to keep track of their customers expectations and the service elasticity of their demand. If their expectations shift and show a higher price sensitivity, then a broader approach, emphasizing cost leadership and market share should be chosen (learning curve of customers). If they however become more demanding and seek a service that fits their individual needs, then a focused strategy is required that follows scope rather then scale.

3.3.4 Segmentation Techniques

All segmentation methods organize customers along certain criteria that are based on market research data. These can be grouped into categories, like those that cover consumer characteristics (geographic, demographic, psychographic) and those that show consumer responses, i.e. behavioral variables (occasions, benefits, usage, attitudes).

Industrial markets are principally segmented along the same variables as consumer markets. Bonoma and Shapiro have developed the "nested approach" to organize industrial markets [26] (Figure 3-4).

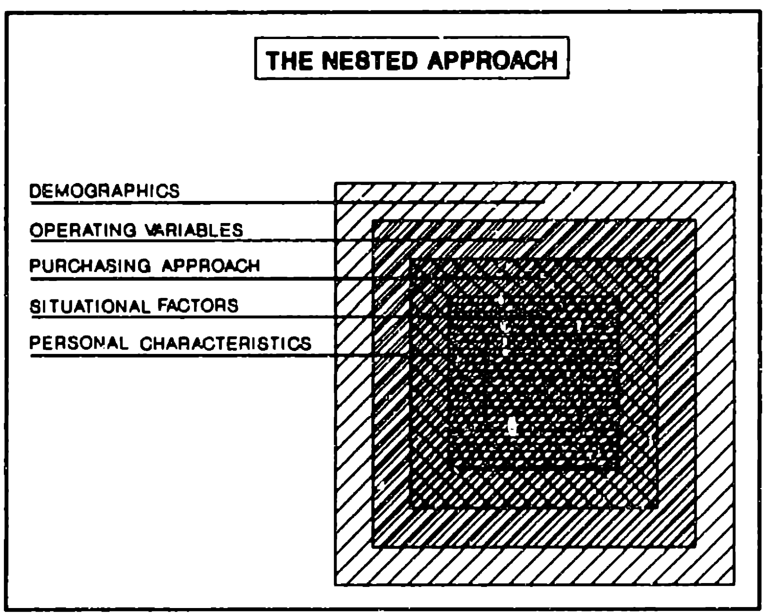

Figure 3-4

They suggest to move from the outermost nest with the most general segmentation criteria, being the location and size of clients in a defined industry, to the innermost nest which groups the personal characteristics of individuals responsible for industrial purchases. This can be complicated if more then one person is participating in the buying process as the needs of each individual respectively its department can vary in addition to the personal characteristics. In these cases it can be beneficial to group the different participants respectively the departments interest they are representing into separate segments, i.e. to create segments that cut through company boundaries and divide the same company into different segments that are then individually targeted.

To determine groups of homogeneous quality expectations however, we are interested in the different expectations of customers. To define those expectations, we need to establish the different benefits customers are seeking respectively how they differ in the perception of certain benefits. Air line passengers for example are certainly seeking different benefits depending on whether they are business travellers or tourists and their service expectation for example in terms of leg room, on time arrival or in flight entertainment certainly differ. They would perceive the same service quite differently and thus can be grouped along those differences to enable the airline to customize the service along their expectation.

The most widely used technique to organize customers expectations is to draw perceptual maps that provide a visual summary of how customers perceive and judge services or products along primary customer needs. Obviously, the value of these maps directly depends on the quality of the data that is being used, i.e. how thoroughly the customer's needs and expectations were researched. Again, it is absolutely essential that these needs are identified through the customers perspective, using his description and word of his needs, wants and expectations. The quality of the market research outlined in the previous chapter lays the ground.

As the perceptual map demands a two or at most three dimensional evaluation, the multiple customer needs have to be reduced to two respectively three primary strategic needs which define the axes of the perceptual map. The correlation of the customer needs and the two primary needs stipulate the location of the particular service or product (respectively the need for one) on the map and thus visually defines the separate segments.

As an example, the perceptual map of transportation services would look as follows [27]:

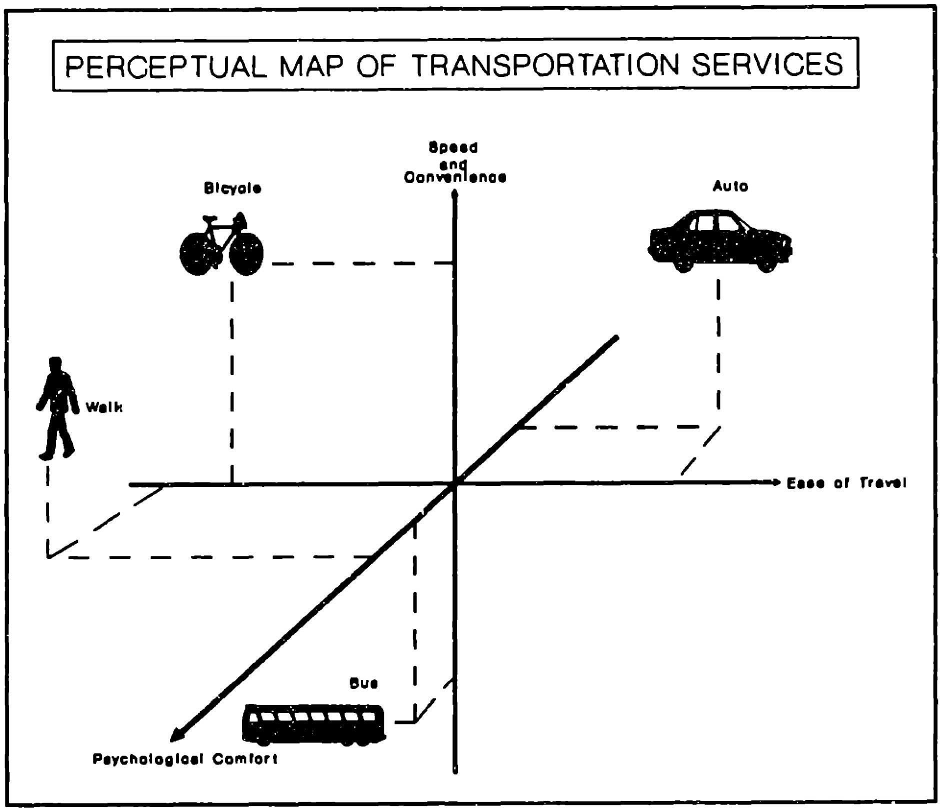

Figure 3-5

In this case, a three dimensional map is shown, using the three primary needs "speed and convenience", "ease of travel" and "psychological comfort". It clearly visualizes that the existing bus service needs to be drastically improved to be attractive to the segment that has high expectations with regard to ease of travel and convenience and speed.

Urban and Hauser summarize the use of perceptual maps as follows:

> To develop creative strategies and the core benefit proposition, the new product team uses the perceptual map to internalize and visualize the market along its primary dimensions. Fortunately there is evidence that customers tend to simplify judgments by reducing dimensionality to prevent cognitive strain and information overload.[28]

3.3.5 Using Segmentation

Once meaningful customer segments have been established, a company can use this insight for a number of purposes.
The most fundamental step is to choose the segment or segments the firm wants to target. It can now determine the customer base whose needs match the firm's capabilities. It can now also refine its product/service package to satisfy the specific expectations of the chosen customer segment. By choosing the target, the firm automatically refines its business definition. In addition to its capability to provide customer satisfaction, the firm obviously also has to look at the economics of serving that segment and at its long term strategy. According to Kotler it has to determine the (1) segment size and growth, (2) segment structural attractiveness, and (3) company objectives and resources [29]. This will determine how wide or narrow the segments will be

defined respectively how many of the segments the firm will target. The marketing strategy will be developed as a result of this and the marketing mix is tailored around the chosen segments.

Segmentation provides the platform on which the firm builds its marketing mix. One of the marketing tools available to the firm to realize its marketing strategy in the chosen target market is promotion, or better "communication" to stress the two way nature of this tool. It allows the firm to communicate its capabilities to the consumer, thereby creating the appropriate level of expectation, and it attempts to ensure that only those customers are reached whose expectations the firm has assessed as being compatible to its capabilities. Communication is the key to managing the customer's expectations, once the firm has decided what to serve or sell to whom and how.

Before addressing this issue however, we need to look at one other factor that clearly impacts the customer's expectations and therefor the firm's decision which segment it should target and how it should position its product and/or service. As we assume that we are competing in a market economy, there will be others who are competing for the same consumer. To fully appreciate the customer's expectations and to ensure that the firm can successfully satisfy them, it needs to analyze its competitors.

3.4 COMPETITION

3.4.1. Comparison to Competition

As every firm in a market economy is competing with others for the customer's preference, it is obvious that any company that is either considering to enter a particular market or is already actively competing with its products or services, needs to closely monitor and research its competitors. The more comprehensive and up to date the knowledge of its competitive environment, the better the firm can formulate and execute its strategies to battle with its rivals. This is not to say that the firm should allow its competitors to dictate its market strategy. What is needed is a combination between customer- and competitor orientation into market orientation. Kotler summarizes:

> As important as a competitive orientation is in today's markets, companies should not overdo their focus on competitors. Companies are more likely to be hurt by emerging consumer needs and latent competitors than by their existing competitors. Companies that manage to factor in a good balance of consumer and competitor consideration are practicing a true market orientation.[30]

When assessing a firms competitive position in providing customer satisfaction, two basic aspects need to be analyzed. To achieve customer satisfaction, the firm will have to meet or better exceed the customer's expectations as effectively and efficiently as its competitors. It should have at least as good a perception of the customers expectations and should also have at least the same capabilities to meet these expectations.

Juran differentiates between the analysis of "product features" and "process features" and states that this methodology is not limited to aspects of product development but applicable to all business operations[31]. It is quite simply the question of what products or service features a competitor is providing and how he is processing or producing these internally.

The service component of a company's offering has become of increasing importance in the competitive analysis. Companies have realized that due to increasing competition and diminishing competitive advantages in the fields of product quality, manufacturing efficiency and marketing expertise, customer service has become the battle ground for the leading competitors. Davidow and Uttal point out, that "over time the competitive battleground in most industries tends to shift from the tangible and toward the intangible" and are advocating "total customer service" as "the ultimate weapon"[32]. From this follows, that the degree of competitive threat is dependent on the stage of the product's or service's life cycle. If it is still in the introduction or growth stage and thus well differentiated through features or marketing capabilities, it can afford to be lagging in some other area, e.g. customer service. The closer it gets however to the maturity stage, the more important it becomes to excel in all areas and to gain advantage through customer service as the "last frontier" in the competitive battle.

3.4.2 Learning from the Competitor's Perception

To be able to satisfy its customers' expectations at least as effectively as its competitors, a company will have to have a perception of these expectations that is at least as accurate as that of its rivals. For this reason, it will want to learn how others and in particular its competitors are perceiving consumers' expectations. The market intelligence needed for this can be gained from various sources of information, primarily from the competitor's own release of information (e.g. advertising) and his business definition, but also by

analyzing his product or service which should reflect the competitor's perception of the customer's expectations.
This can be a valuable source of market and customer intelligence which the firm will compare with its own data and perception.

In addition, the firm will want to know whether the competitor's perception is indeed superior to its own and will try to measure the customer satisfaction achieved by its competitors. Market research provides various techniques to establish customer preferences, among others through comparative questionnaires, focus group interviews, sample testing and "ghost shopping", where the competing firm pretends to be a customer and goes through the entire purchasing cycle.

It is essential also at this point to ensure that the customer's criteria for preferring one product or service over an other are being used. Only his perception and the degree of his satisfaction is of importance when comparing competing products or services and companies need to beware not to blindly adopt what they perceive as a superior feature or service execution. This is where a competitor centered focus has to be balanced with customer orientation.

The starting point of an analysis or comparison can either be a known product or service of a competitor and the need to determine his customers' degree of satisfaction derived from it, or a high quality reputation of the competitor and the desire to find out the reasons or origins of that positive image.

Techniques used to organize and visualize the differences are essentially the same as those applied in the market segmentation process. Strategic mapping of key competitors respectively their products or services along customer criteria is the most popular tool to provide usable information.

The result of this analysis will provide new insights into the strength or weakness of the firm versus its competitors. If possible, it will adjust its service or product features should the competitor have superior insight into the consumer's expectations and deliver higher satisfaction. This is where marketing interacts with product development as the newly gained information on customers' requirements is used as input for the product development process. Conversely, if it discovers shortcomings in the competitor's perception respectively his product or service, it will focus its strategy on this weakness to exploit its competitive advantage.

3.4.3 Competitive Benchmarking

To deliver quality and create customer satisfaction, a company has not only to create the right product or service but also has to have the right internal processes in place. It must have functional capabilities that allow it to process its products or services at least as efficiently as its competitors.

While marketing and research functions usually provide the necessary input to stimulate innovation required to develop the product or service that will satisfy the external customers, it provides little input for improving the processes that support the internal customers, which have a substantial impact on the quality of the final output.
Competitive benchmarking fills this gap. It is a dynamic process adaptable to all functions of a business to measure products, services and practices against direct competitors or companies that have demonstrated leadership in a particular functional discipline. It is a tool to compare the degree to which other organizations satisfy their customers (internal

and external), to learn where improvements are required and to adopt superior practices. Rather than using only internal targets based on historic performance or other extrapolations, benchmarking enables companies to break free of this myopia and apply external market standards, in most cases those of the best practitioners.

When benchmarking emerged in the late '70s, pioneered by manufacturing companies like XEROX and Ford, it was confined to comparing product features and manufacturing processes and adopting results to catch up with the competitor. Later, this technique was extended to comparing processes in all areas of an organization, namely customer service, accounting, distribution, warehousing, and other non manufacturing departments with competitors who do it best.

Not only to be on par with competitors but even stay ahead or increase the lead over others, benchmarking today is routinely applied across industry boundaries. GTE for example has emulated its billing system after that of American Express and L.L. Bean has given advice to a number of companies from different industries how to optimize their distribution system.

This development demonstrates the increasing competitive pressure of the marketplace and the need to innovate proactively to constantly regain competitive advantages. Consumer's expectations continue to rise and benchmarking has become a key instrument which provides the ability to focus externally to compare the firm's strengths and weaknesses in meeting customers' expectation relative to the best performers. The goal is not only to identify the output results but to determine the underlying reasons for these results and detect cause-and-effect relationships that can be translated into specific action items.

It is important to ensure that comparisons within the same industry are based on the company's clearly defined current or aspired marketing strategy. The activities that are chosen for benchmarking must not only be relevant to this strategy but the level of performance against which the firm is benchmarking has to be in conformance with it as well. As an example, K-Mart should not benchmark its distribution system or service standard against that of Sears as it is competing in a different segment of the industry and is targeting at a different clientele. Wallmart, being a direct competitor would be a suitable benchmark. Of course, Sears may have specific functional competencies that may be relevant to K-Mart, but only in so far as they fit into their overall strategy. The company for the same reason would emulate superior standards of companies in other industries if those are of key importance, i.e. have been identified as critical success factors to its strategy and competitive advantage.

Figure 3-6 shows a systematic approach for the benchmarking process.

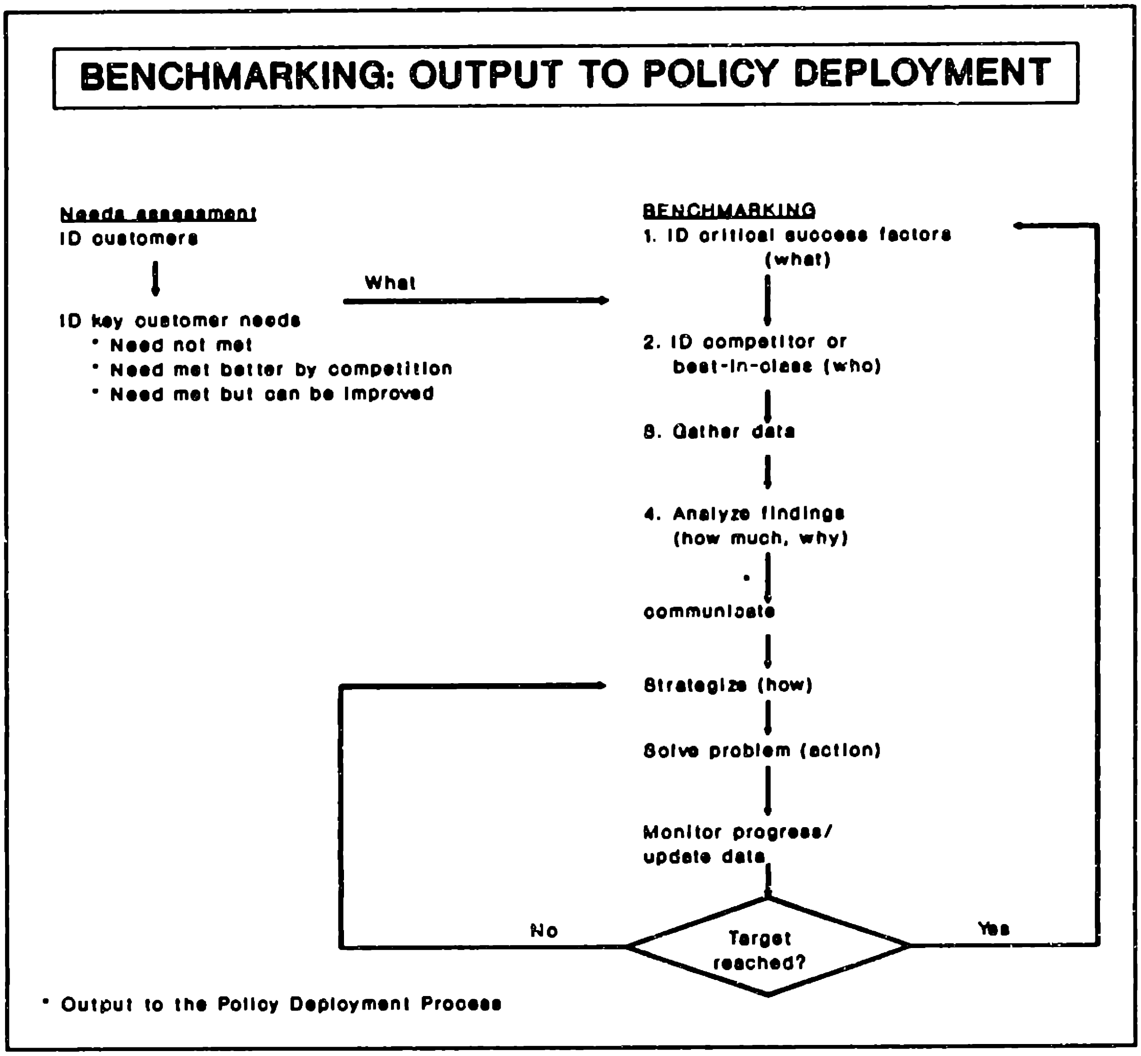

Figure 3-6

3.5 COMMUNICATIONS

The competitive arena for the 1990s will be in the area of quality, driven by the customer's definition and measured through his perception of how well companies meet or exceed his requirements and expectations.[33] Customer satisfaction results when what customers think will happen (expectation) interacting with what customers think did happen (perceptions).[34]

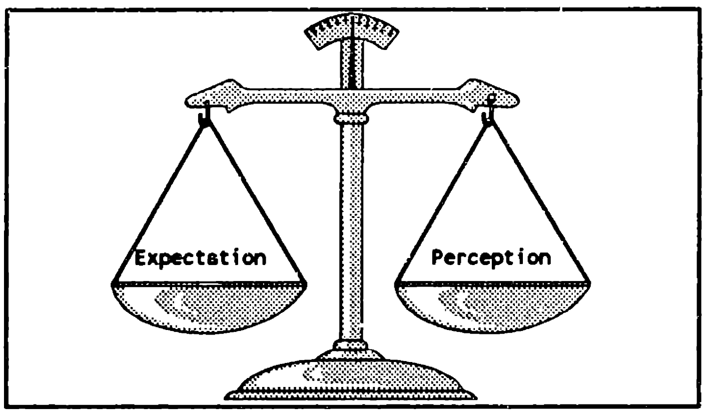

Figure 3-7

By understanding that customer satisfaction is determined by perception and not necessarily by reality, understanding what should be communicated and how that communication should take place becomes paramount. In the marketing arena, two methods of communication are important: advertising and public relations.

3.5.1 Advertising

Advertising is defined as the presentation of a product or service to a potential buyer. The traditi nal purpose of advertising is to persuade consumers to buy the product or service. The aspect of advertising we will address is the perception and expectation placed in the customer's mind while attempting to influence the purchase of the product or service.

While acknowledging that the original reason for advertising is to convince the consumer to purchase, it also is clear that the firm must get the attention of prospective customers before the advertising can result in increased sales. But if the advertising creates an expectation in the buyer's mind that the product is unable to fulfill, then a problem exists. In other words, if the perception and the expectation do not match, the result is a dissatisfied customer.

As competitive pressures increase, so does the pressures to be more aggressive with advertising. Raising customer expectations to unrealistic levels may lead to more initial business, but invariably fosters customer disappointment and discourages repeat business[35]. A delighted customer is a more effective advertisement than any media-based advertisement.

3.5.2 Public Relations

Another form of advertising is public relations. Whereas advertising is used to directly persuade the potential customer, public relations communications is used to inform the potential customer. This is an opportunity for the firm to reach out and influence potential customers through such things as the news media and other publications.

Public relations are intended to attract attention and promote a better understanding of the firm's corporate image.

3.5.3 Corporate Image

Today more than ever, corporate image is important because of the globalization of markets. U.S. executives increasingly viewing corporate image as a mainstream business activity[36]. Corporate image normally refers to the specific management of the way an organization's activities are perceived. Every organization needs to have a clear corporate statement that outlines its reason for existence.

There are five key elements that define this image;

1. Organizational history, ethics, philosophy, culture, and policies
2) current preferences of owners and management
3) environmental considerations
4) organization's resources
5) organization's distinctive competencies[37]

Corporate image plays a major role in the buying behavior of the public and the product or service image feeds into the corporate image. For example, most people no longer buy jeans to perform manual labor. And for the most part they are not used to simply cover the body. People are buying jeans now as a statement about who they are -- e.g., tough, rugged, sophisticated, frugal, glamorous, or a style setter.

Given this new aspect of buyer behavior, corporate image plays a major role in setting the customer's expectations through direct advertising and public relations.

3.5.4 Communications with Internal Customers (Employees)

Perception is as powerful inside a company as in the marketplace. A business that cannot manage internal perceptions often ends up with unhappy, unproductive employees. It is a vicious cycle: external customers will not continue to buy from the firm unless it offers a product or service that is satisfactory. The firm usually cannot deliver a satisfactory product or service unless the internal customers (employees) are satisfied. Satisfied employees can lead to satisfied customers, but dissatisfied employees do not lead to satisfied customers.

It is also important that the corporate image be expressed inside the firm thereby enabling the organization to outline its major policies, inspire the workforce, and give the company a value system for treatment of employees, as well as customers, suppliers, distributors, competitors, and the general public. Once developed, the organization's image must be communicated so that everyone recognizes it.

3.5.5 A new Way of Thinking

Companies are beginning to appreciate the impact of perception. They recognize that managing the way people think and feel about a company is the most potent marketing skill of all. Product quality or competitive price is almost valueless if a customer's perceptions of the company are negative or ill-informed. The company that views itself as successful, honest, entrepreneurial, and effective usually becomes those things over time.

Managing of perceptions is the ability to build public relationships and a corresponding image that creates an environment which enhances its ability to sell its products.[38] Factors influencing expectations are:

1. what customers hear from other customers -- i.e., word of mouth communications.
2. personal needs of customers which moderate their expectations to a certain degree.
3. past experiences.
4. external communications from service providers who also shape customer expectations.[39]

Price will also play a roll in shaping expectations.

Customer perception can be managed either by lowering expectations or by raising perceptions. The expectations a firm sets through its communications with the customer will be a major factor in determining whether the customer is satisfied or dissatisfied with the product or service.

Managing perceptions builds public relationships, creates a mission for the company, and induces an environment in which every employee -- and ultimately the customer -- lives the mission and believes it.

REFERENCES FOR CHAPTER THREE

1.Kotler, Philip, Marketing Management, Sixth Edition, Englewood Cliffs, NJ: Prentice Hall, 1988, p. 17.

2.Levitt, Theodore, The Marketing Imagination, New York: The Free Press, 1986, p. 164.

3.Kotler, op. cit., pp. 18-19.

4.Ibid., p. 19.

5.IBM Rochester, Application Business Systems Rochester, Minnesota, Presentation Material

6.Crosby, Philip B., Quality is Free, New York: New American Library, 1979, p.15.

7.Feigenbaum, A. V., Total Quality Control, Third Edition, New York: McGraw-Hill Book Company, 1983, p. 7.

8.Zeithaml, Valarie A., "Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence", Journal of Marketing, Vol. 52 (July 1988), p. 11.

9.The Ernest & Young Quality Improvement Consulting Group, Total Quality, an Executive's Guide for the 1990's, Homewood,ILL: Dow Jones-Irwin, 1990, p. 5.

10.Reichheld, Frederick F. and Sasser, Jr, W. Earl, "Zero Defections: Quality Comes to Services", Harvard Business Review, September-October 1990, p.105.

11.Fornell, Claes, "A method for improving customer satisfaction and measuring its impact on profitability", unpublished executive summary, 1991.

12.Groenroos, Christian, Service Management and Marketing, Lexington,MA: Lexington Press 1990, p. 41.

13.Zeithaml, Valarie; Parasuraman, A.; Berry, Leonard, Delivering Quality Service, New York: Free Press, 1990, p. 16.

14.Levitt, op. cit. p. 476.

15.Zeithaml, Parasuaman, Berry, op. cit., pp. 25-26.

16.Kotler, Philip, Marketing Management, Englewood Cliffs, NJ: Prentice Hall, 1991, p. 5.

17.Juran, Joseph M., Juran on Planning for Quality, New York: The Free Press, 1988, p. 15.

18."Making The Grade With Customers", Wall Street Journal, November 12, 1990.

19.Stu Leonard Videotape, Marketing Management Course - 15.814, Fall 1990.

20.Kotler, op. cit., p. 37.

21.Ibid., p. 106.

22.Griffin, Abbie and Hauser, John, "The Voice of the Customer", Massachusetts Institute of Technology, Working Paper 91-2, January 1991, pp. 1-19.

23.Sullivan, L. P., "Quality Function Deployment", working papers, June 1986.

24.Clausing, Don and Hauser, John, "The House of Quality", Harvard Business Review, May-June 1988.

25.Heskett, "Managing in the Service Economy", as cited in Davidow, W. H., Uttal, B., Total Customer Service, New York: Harper & Row, 1989, pp. 54-55.

26.Shapiro, Benson P. and Bonoma, Thomas V., "How to segment industrial markets", Harvard Business Review, May-June 1984.p. 109.

27.Urban and Hauser, chapter 9, prepublication edition, 1991, p.7.

28.Ibid. , pp. 12 - 13.

29.Kotler, op. cit., p. 298.

30.Kotler, op. cit., pp. 254-255.

31.Juran, op. cit., p. 119.

32.Davidow, William H. and Uttal, Bro, Total Customer Service, New York, NY: Harper and Row, 1989, p. 211.

33.Sarazen, Stephen, "Voice of The Customer The Competitive Imperative of the '90s - A Management Education Perspective", Manage, Vol. 42, No. 1, July 1990, pp. 28-36.

34.Gulledge, Larry, "Simplify Complexity of Satisfying Customers", Marketing News, Vol. 4, No. 1, January, 1990, pp. 6-7.

35.Berry, Leonard L. and George, William R., "Guidelines For Advertising of Services", Business Horizons, May - June 1981, pp. 52-56.

36.Chajet, Clive, "The Making of a New Corporate Image", Journal of Business Strategy, Vol. 10, No. 3, May-June 1989, pp. 18-20.

37.Lidstone, John, "Projected Image: Making Corporate Identity Work", Director (UK), Vol. 42, No. 11, May 1989, pp. 88-93.

38.Barrow, Peter, "The Potent Skill of Managing Perceptions", Canadian Manager, Vol. 14, No. 3, September 1989, pp. 24-25.

39.Zeithaml, Parasuraman, Berry, op. cit., p. 19.

CHAPTER FOUR

CASE STUDY

4.1 OVERVIEW OF THE EXPRESS PACKAGE INDUSTRY

Sending documents or packages by priority mail is now viewed, in some circumstances, as a necessity rather than a luxury.[1] According to consultant Dallas K. Sherman, the total express market accounts for about $11 billion annually, the domestic market approximately $9.5 billion a year, and the international market approximately $1.5 billion. The major integrated express carriers are Federal Express, United Parcel Service (UPS), Airborne Express, DHL Worldwide Express, Emery Worldwide, TNT Skypak, and the U.S. Postal Service.[2] Federal Express remains the dominant player in the domestic market, as shown in Figure 4-1.

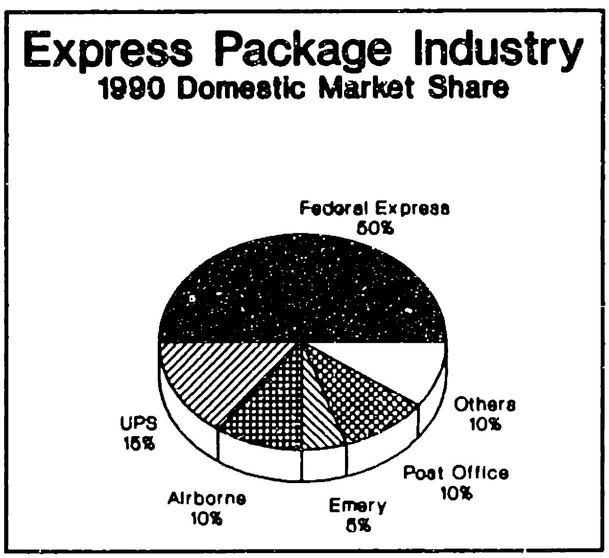

FIGURE 4-1

4.2. FEDERAL EXPRESS

Few companies have achieved legendary status as quickly as Federal Express. It has one of the world's largest airlines, with a fleet of some 350 aircraft. Comprised of 170 large aircraft (21 Boeing 747s, 25 McDonnell-Douglas DC-10s, 118 Boeing 727s, and 6 DC-8s) and another 180 feeder aircraft used for shorter-distance operations.

It is the world's largest express package firm, handling 1.4 million daily shipments to 127 countries with 1,530 staffed facilities worldwide. The firm operates over 22,000 vans and almost 2,000 large trucks in the U.S., plus another 6,300 vehicles in international locations.[3]

Federal Express was also the first U.S. service company to win the Malcolm Baldrige National Quality Award.

4.2.1 History of Operations

Twenty years ago a 27-year-old named Fred Smith conceived what would come to be a customer service legend. Smith became convinced early on that there was a significant market for a small-package air service, flying primarily at night, on routes that would meet the needs of freight shippers.[4] He hired consulting firms to study the nature of the market for small-package air service and they found that a considerable market did exist. They found that freight shippers had small, urgent packages needing delivery outside the large geographic markets and this need was not being met.

The market for domestic packages was divided into three segments; Emergency, Rush, and Routine. A 1974 estimate of these three markets is displayed in Figure 4.2. All three markets were growing rapidly, together averaging an estimated 20% increase per year.

MARKET	Shipments (millions)	Average $ per Shipment	Total $Vol (millions)
Emergency	2.5	$30	$75
Rush	15.5	$10	$155
Routine	122.3	$4	$490

Table 4-2
1974 Market Estimate

When the consulting firms validated his original idea, Smith set about acquiring $90 million in private financing, which became the largest single venture capital start-up in the history of American business.

The Federal Express corporation formally began on April 17, 1973. It started by serving 22 cities with 10 aircraft and 150 employees. The first night it carried 15 packages and by October of that year, it carried 2,500 packages.[5] By mid-1975, Federal Express passed the break-even point and by May 31, 1976, the company had achieved a net profit of $3.7 million on revenues of $75 million.[6] Within 10 years of the company's founding, annual revenues had topped $1 billion, an exceptional achievement.

The company's strategy was to fly small jets and handle only small packages of a maximum weight of 70 pounds with a length of 108 inches. The company conceived a unique delivery system. The "hub" of the system was located in Memphis, Tennessee. Aircraft stationed throughout the U.S. left their home cities every week night with packages and flew to Memphis where all the packages were unloaded, sorted by destination city, and reloaded. In the early hours of the morning the aircraft then returned to their home cities caring packages for delivery in that city. Packages were then delivered within a 25-mile radius of the airport by company van. From door to door, the package remained in Federal Express hands.

4.2.2 Culture

Federal Express is committed to a philosophy of People-Service-Profit -- P-S-P. It feels such a commitment will produce outstanding financial returns by providing a reliable, competitive delivery service. The company's philosophy is one of balancing the needs of employees, customers, and shareholders, considering each in making plans and policies. By first considering the effects of policy decisions on its employees, it has found that employees will deliver a superior service which the customer will, in turn, utilize. This results in the profitability which ensures the company's continued existence, future opportunities, and employment.[7]

4.3 UNITED PARCEL SERVICE

UPS is one of the best known companies in the U.S.A. and has been an integral part of American industry for more than eighty years. With more than 1.2 million customer transactions and shipping almost 12 million parcels every day, serving business as well as individual consumers, "Big Brown" is known to virtually every American as the reliable, efficient package delivery company. The company that brings the christmas presents and ships the mail order merchandise in its unique brown trucks to every address in the fifty states of the country.

As the preeminent parcel carrier on the ground, UPS has expanded into the air express business during the 1980's, serving all 50 states and more than 180 countries worldwide. UPS is the only carrier offering ground, air express and international transportation services. Operating 375 aircraft, 116,000 vehicles and 245,000 employees and with total revenues of $12.4 billion in 1989, UPS is the largest package delivery company in the world.

4.3.1 History of Operation

James E. Casey started the company that would develop into UPS in 1907 in Seattle, Washington as a messenger service, six years before the U.S. Postal Service began operation.
UPS soon focused on package delivery, primarily serving department stores, and expanded first along the west coast and later into cities throughout the East and Midwest.

A critical strategic decision was made in the early 1950's when it became clear that the growth potential for contract services was limited as stores curtailed delivery services and

shopping centers emerged which made it easy for customers to carry their packages home in their own automobiles.
Reacting to these threats, UPS decided to compete directly with the United States Postal Service. It acquired common carrier rights to deliver packages between all addresses for any customer, private citizen or business. As federal authority was needed for each state it took till 1987 when UPS was able as the first private package delivery company to offer service to every address in the United States.
Despite the fact that its major competitor on the ground, the U.S. Postal Service, is subsidized and operates tax free, UPS was able to gain customers' preference and grew into the nations largest package delivery company.

In addition to its core business, being the domestic ground transportation of parcels, UPS has diversified into the air express business and has expanded globally over the past ten years. After operating a two-day air delivery service for about thirty years, relying primarily on passenger aircraft for movement of their parcels, the company bought its first aircraft in 1981. Responding to new competitive pressure, especially from the air express innovator and market leader Federal Express, as well as to changing customer requirements and increased expectations, UPS upgraded its air service dramatically during the 1980's and invested heavily in a whole new fleet of aircrafts. It also opened its own air hub at Louisville, Kentucky and upgraded its computerized systems to better sort and track packages. Having introduced its "UPS Next Day Air" service in 1982, it was ready in 1985 to offer this overnight service to virtually every address in the U.S.. Also in 1985, the company entered the international air package and document service business and today is operating a vast global network serving more than 180 countries via their own international air hubs in Cologne/Bonn, West Germany and Hongkong. More than 800 domestic and 400 international flight segments are performed daily, serving about 400 domestic and 200 international airports. The latest upgrade of its express service was introduced in October last year when UPS began to offer guaranteed delivery of overnight shipments by 10:30 am the next morning. With this, UPS matched this highly promoted service advantage of its chief rival Federal Express.

The company's financial policy is considered very conservative. Its huge investment in the air express and international business could basically be financed out of the companies cash flow thanks to the highly profitable ground business. Despite these investments UPS could maintain a low debt burden of just above 10% of assets. Still, profits have fallen as a result of the expansion and the company has stated that profits will be down for some time due to its strategy of rapid international expansion where it is not expecting to generate a return for some years to come. Its financial independence is supported by the company's unique employee-ownership structure. The company is owned by some 18,000 of its managers and is therefor of little interest to Wall Street and the investment community.

4.3.2 Service and Culture

UPS developed a unique and very strong corporate culture during its more than eighty years history. Its founder's business philosophy and the long period of unchallenged leadership on the ground, during which competition was limited to the U.S. Postal Service who could be outperformed by a more sophisticated, reliable and efficient operation, has clearly left its mark. Jim Casey's credo "Best Service and Lowest Rate", as well as the advertising slogan "UPS, the tightest ship in the shipping business" epitomize the company's focus on operational excellence and perfection. "Efficiency" is promoted as the UPS watchword, and a long list of innovative achievements in systems engineering are held in pride. Endless time-and-motion studies, where fractions of seconds are used as units of measure, and persnickety attention to detail characterize the UPS style and are the key to the company's efficiency and its operational success.

A second ingredient of the UPS culture is its people orientation. The company is known for its long standing philosophy of "promotion from within". Most managers started as part time package sorters or drivers during their college years and worked their way up through the ranks. High pay, gain-sharing for all employees, outstanding industrial relations, and above all the opportunity to advance into management and become a shareholder make UPS stand out in its ability to attract, develop, and keep talented people. Not "prima donnas" but generalists are groomed and workers are said to "have almost a Japanese-like identification with the company"[8].

Casey's dictum, that the company should be "owned by its managers and managed by its owners" is realized in the unique employee-ownership which has also been described by one director as an experiment in "managerial socialism"[9]. A strong sense of common purpose and mutual economic interest permeates the whole organization and forms the bedrock of the UPS service culture.

It is obvious that the company's long successful history and the culture it formed has created a strong operational focus. Looking at "making one-tenth of a cent improvement"[10] lead UPS to concentrate more on itself than its customers and their changing requirements. "We saw a very efficient giant who had lost touch with its customer"[11] is how RPS, their main niche competitor on the ground, described their opportunity to challenge the leader. "As UPS spent the early 1980s oiling its own mousetrap, Federal Express Corp. invented a better one. Customers wanted overnight service, the ability to track packages en route, and volume discounts" [12] is how "Business Week" put it, and as UPS chairman Kent C. Nelson admitted, his company was skeptical at first but "it finally sunk in that Federal was right"[13].

While the strong operational impetus prevails, UPS today is in the process of becoming a more marketing driven organization. Senior management has clearly recognized the need and is confronting the organization and its culture with this new focus. A new corporate mission has been developed, numerous organizational changes have already been implemented, and an urgency to adjust to a more competitive environment can be felt. UPS has charted the course to become a more proactive company that accepts continuous change to best serve the evolving requirements of its customers. The challenge for its leaders is to promote this change without undermining the company's strong operational core and its exceptional service culture.

4.4 PRE-PURCHASE ACTIVITIES

4.4.1 Identifying Customer Needs

Although Federal Express considers itself the leader in the express package industry, it instituted a formal Quality Improvement Program (QIP) throughout the entire corporation with the explicit purpose of meeting customer needs. It also established a Service Quality Indicator (SQI) to measure the customer's perception of its service quality.

SQI measures a number of key service factors from the customer's point of view and then weights them by how seriously the customer will view a failure of any of those attributes. For example, if FedEx missed picking up a customer's package, that failure is weighted by a factor of 10. If a package is delivered late but on the correct day, it's weighted a factor of one. If the package was a day late, the weight factor is five. FedEx feels SQI gives a better measurement than simply using a percentage. Because of their continual increase in the number of packages handled, just improving or staying at the same percentage would result in thousands of unhappy customers. FedEx's daily challenge is to meet a service goal of 100 percent customer satisfaction, as defined by the customer.

This area highlights some of the differences between FedEx and UPS. For many years UPS took a much different approach to meeting customer needs. UPS felt that because of their longevity in the business they completely understood the customers' needs, and in fact generally maintained standards higher than customers expected.

This approach produced great results while their main competitor was the U.S. Postal Service. But soon other competitors began putting considerable effort and resources into identifying customers needs. Meanwhile, UPS continued to fine-tune <u>their</u> perception of what the customer wanted and in the process missed the voice of the customer. For example, customers wanted overnight service, volume discounts, and point-to-point package tracking.

The consensus around the industry and among customers was that UPS's internal concentration rather than an outward orientation toward its customers made it a very efficient giant who ultimately lost contact with its customers.

Now that competition is no longer confined to the Postal Service, UPS has finally recognized that it must concentrate on areas such as marketing research which had been ignored in the past.

Changes are occurring at UPS as they move closer to a market-orientated approach. First, it has begun developing its own internal marketing research. Two years ago they hired their own internal marketing research person. Before that all marketing research had been subcontracted to vendors.

Next, they approved a $1.4 billion dollar budget for developing a computerized system that will track packages from door-to-door. The system is designed to leapfrog FedEx's in terms of capability and quickness; however, it won't be fully operational for three years.[14]

Finally, UPS has begun to offer discounts to selected customers, based on volume and net return from the account.

Federal Express spends a considerable amount of money researching its customer needs, wants, and expectations. Their justification is that it costs five times as much to gain a new customer as it does to retain a current one. Thus, if their research is effective, they feel it's well worth the time and money spent.

Federal Express includes its customers in both formal and informal research. Organized focus groups of ten customers are brought together to discuss existing and new products, service features, and to evaluate their perceived importance to the customer. These meetings are often followed up by telephone calls or personal interviews that give FedEx an even clearer idea of what customers want.

For example, when FedEx was considering the implementation of a Collect-On-Delivery (COD) service, they turned to their customers to see if the need existed and on what basis. Customers were asked to evaluate the 22 service features, rating them in importance from 1 [not at all important] to 5 [extremely important].[15]

After gathering a substantial amount of data through the customer satisfaction study and sales calls, FedEx put together a "straw man" concept to help fine-tune the product. Ideas were bounced off the customer focus groups for their reactions, suggestions for change, and perceived benefits. It was found that time was the most important need. People were used to waiting days to get their money back.[16]

Armed with that feed back, Federal was able to create a C.O.D product that guaranteed delivery of those funds by the next business day.

Internal Customers

Federal Express feels strongly that it's not only necessary to satisfy the external customers, but to recognize and meet the needs of the internal customers -- "other Federal Express employees with whom we exchange information, products, and services everyday . All of us have people who depend on us for products or services to do their jobs and each of us depends on services or products from others in order to do our jobs."[17]

To make the work process flow smoothly thereby enabling the delivery of a quality product to external customers, it is necessary to build positive working relationships with other employees, the internal customers. This can be accomplished by asking three questions:

What do you need from me?
How do you use what I give you?
Are there any gaps between what I give you and what you need?

The answers to these questions are the basis for a FedEx employee motto: "Doing Right Things Right."[18]

Federal believes that all of its people must rely on each other through every stage of the process. Each person's job is to support someone else so that the internal customer remains satisfied. As a result, when the product or service reaches the external customer, quality is built in at every step and becomes permanent.

4.4.2 Customer Segmentation

The history of package delivery services is a history of dispersing customer needs and requirements to which the industry has reacted with an ever growing variety of different services.

From the origin as a messenger service business in the post telephone era, delivering "communication" as well as documents and parcels, to the highly sophisticated global express air operations with a multitude of related services offered today, the industry has changed dramatically, accomodating and in some cases even preempting ever more quickly emerging customer requirements.

The twc prime competitors, UPS and Federal Express, are both excellent examples of companies that have used the proliferation of customer needs to their advantage. They both have clearly chosen a strategy of target marketing. At Federal Express, this has already been the case for some time, with a large number of differentiated services, targeted at particular customer segments already in place. UPS on the other hand is in the process of breaking up its traditional mass marketing approach in order to become more competitive and benefit from the growth in the scope of services demanded by the consumer. With over one million customers daily and under increasing competitive pressure from a number of niche players, UPS has realized that it can not be all things to all people. Especially in the relatively young air express business, in which the two companies are competing head on, a continued proliferation of services can be expected. The global air express operations provide fast-cycle transportation services to modern businesses, whose strategies are increasingly based on "collapsing" time and distance. As more and more industries are becoming aware of this competitive factor, the air express carriers not only expect that the global "48 hours market" will mean increased volume but also increased variety of customer requirements which need to be satisfied.

Our research of the two companies has produced a multitude of different segments they use to organize their business.
The broadest business segments are defined for both along their line of basic activities. In the case of UPS, this is the ground, express air and international service and for Federal Express it is the domestic air, which includes Canada, and the international air business. Both separate the relatively new international business from the domestic services at this first level, presumably more for the internal reason to ensure special focus is given to this major undertaking than for reasons that international customers have fundamentally different requirements. These business segments broadly define the businesses both companies are engaged in and thus are used as the platform for segmenting customer needs and requirements.

At the first level of customer segmentation, private citizens are separated from business shippers. For both companies, business customers make up the lion share. While in the case of Federal Express 95% of the total volume is shipped between businesses, this percentage is smaller for UPS due to their ground operation. There is no information available on whether and how the private shipper market is segmented and targeted and our analysis is therefor concentrating on the business market environment.

The different products offered by both companies reflect the basic customer segments both are catering to. These services reflect the corresponding customers' different requirements along a variety of variables. Speed, reliability, economy, ease of delivery to the carrier, need for special services (e.g. transportation of hazardous goods, package design, JIT logistic support) and required geographical scope are the main criteria. The core services are summarized as follows:

United Parcel Service	Federal Express	criteria
ground service (1-5 days transit)	n.a.	most economical, time flexible
next day air (10:30 am delivery)	priority over night (10:30 am delivery)	utmost urgency, total reliability, less price sensitive
	standard over night (p.m. delivery)	less urgent, more economical, total reliability
2nd day air	standard air	not urgent, economical, reliability
international air	international air	wide scope, urgency reliability

Table 4-2

Federal Express is also grouping its customers along pickup requirements into those that have daily shipments and represent a regular stop on their drivers' daily round, so called "on-call" shippers that call for a pick-up, those that use their drop boxes and finally customers that come to their maned centers to drop off shipment after regular pickup deadlines. UPS has a similar rank order but has only recently introduced a same-day "on-call" pickup service for irregular customers.

Responding to the negative marks customers gave UPS for its sales efforts, the company not only increased its sales force but also introduced a separate sales group for its international business to give this major new segment special focus. The company is debating whether it should introduce special sales forces for other products but has so far decided against this option as shippers using the whole spectrum of UPS services would not want to deal with a different sales executive for each product.

Obviously, both have categorized their customers into groups of similar weekly volume and revenue on which the degree and quality of sales attention is based. To better understand their requirements, Federal Express segments customers into "package generators" and "package implementors", arguing that for example the chief executive of a company, who dictates a letter needs to be targeted separately from the secretary or mailing clerk who is actually responsible for sending the document. Similarly, customers are grouped into shippers, in

most cases being also the freight payers, and consignees, who often have a strong influence on the choice of carrier.
UPS provides special training for senior sales executives responsible for large corporate accounts who in addition are visited by a designated member of the company's top management.

Market research is also done separately for the document and non-document (=parcel) users which is of particular importance to Federal Express in view of their high dependence on document shipments (about 70% versus 18% for UPS) and the fact that growth in this segment has slowed predominantly by the emergence of facsimile transmission.

Federal Express is also grouping customers into exclusive, primary and secondary users and is using research information to design marketing and sales strategies to best retain these customers and improve increase their support. Executive Service people are designated to larger shippers with special needs who have the authority to do "everything possible" to get a shipment out; up to and including the chartering of private aircraft.

The large variety of value added services offered by Federal Express, which have their origin in the company's extensive market research, demonstrate the high degree of customer segmentation this company has achieved. Whether it is packaging testing and design, shipments of hazardous goods, the signature security service (requiring signed receipts from everyone having custody of a package), special Saturday delivery service, sophisticated just in time (JIT) logistic advice or providing inventory management and distribution through its newly developed "Parts Bank", all these are identified service needs of particular customer segments and are institutionalized and operationalized in the organization. Even minor items, like providing a special phone service for hearing impaired customers or making sure that customer service personnel properly pronounce town and street names to customers in a distant region (to avoid that the New Jersey customer be taken aback by the Southern accent of a Memphis customer service agent), indicate the attention to detail in tailoring the Federal Express service to customers segments of similar requirements.

Today, customized services are increasingly targeted at the smallest part of a segment, namely the individual customer. "A time-sensitive world demands unique solutions. Enter Federal Express, where creating customer partnerships has become the logical extension of customer service"[19] is how the company advertises its strategy, citing a number of examples from shipping live lobsters overnight for Boston's Legal Sea Foods to flying Jaguar auto spare parts from London for distribution to dealerships throughout the U.S. and some parts of Europe.

While Federal Express is pushing aggressively ahead to maintain its lead in the rapidly growing and diversifying air express business, UPS is undergoing a dramatic conversion to a more market and customer oriented organization that can support its equally ambitious expansion into the global air express market. Being substantially larger in total size and following the strategy of providing "one stop shopping" for the transportation needs of its customers, UPS is facing a tremendous challenge in orchestrating a marketing strategy that better focuses the needs of well defined customer segments. As the company had to recognize by the successful "niche" strategies of its competitors, size and market share are not necessarily always of advantage. These new competitors were able to better identify, target, communicate with and serve newly evolving segments of the express package market which used to be exclusively controlled by UPS and its less serious competitor, the U.S. Postal Services.

UPS has boosted its marketing efforts over the recent years with the aim to better understand its customer's present and future requirements. Competitive pressure demands that the company reacts more promptly, or better even pro-acts to new trends and provides value added services to customer segments and individual accounts that satisfy their transportation requirements. According to our findings, UPS is still in the early stages of this continuous process. But the company has clearly acknowledged the challenge and is committed to become more responsive and pro-active. As one executive put it: "marketing will be the next billion dollars for UPS".

4.4.3 Competition

UPS and Federal Express have both become leading companies in the transportation industry not only because they identified customer needs and were able to satisfy them efficiently, but also because they successfully challenged competitors who were unfit to fulfill customer expectations. They both saw the window of opportunity to grow and compete and succeeded by offering quality.

The rise of UPS to the country's premier parcel shipping company began in the early 1950s when it decided to compete directly with the United States Postal Service. It introduced the efficiency and customer orientation of private enterprise to the domestic parcel shipping business and the consumer responded to the extent, that UPS has been the clear market leader in this market segment for decades. Its market share in the parcel business stands at more than 80%.

When Fred Smith started Federal Express in 1972, he not only introduced a revolutionary operating concept and identified the requirement of shipping customers to reliably ship parcels overnight to any destination in the country, but also saw that the airfreight forwarder industry was unable to serve these needs and would thus be easy prey for his gigantic undertaking. Federal Express was not the first to introduce the Overnight Letter but successfully targeted the United States Postal Service and today is controlling a commanding share in excess of 60 % of the domestic air express market. UPS was slow in reacting to the innovation introduced by Federal Express. It was unable to see that the air express service did not just attract a niche clientele but was setting a new standard in the market place, thereby threatening a substantial segment of its ground service. The need for the fastest possible transportation over the largest possible area was always latent and the new operation had irreversibly changed customer's expectations. By its own admittance it took UPS too long to properly interpret the competitive signals till the company eventually decided to completely reassess its marketing strategy. The lack of competitive awareness of UPS, for which the long absence of any serious challenger may be the reason, is manifested also in the successful penetration of a niche competitor, "Roadway Package Systems, Inc." (RPS). Only recently has UPS responded to this competitor by waiving its long resistance to price discounting for large volume shippers who are being successfully targeted by RPS. UPS had lost touch with the requirements of its customers who it is now trying to gain back. Both examples show, that a lack of competitor orientation often also indicates a simultaneous lack of customer orientation. What is missing is in fact a true market orientation and UPS can be viewed as a classical example of marketing myopia that can easily develop when a company has gone through a long period of success with little challenge from neither its competitors nor its customers. The company unquestionably maintained its leadership in operational efficiency, however it had no marketing competency to inject new customer requirements into the product development process. Marketing was a stepchild in the UPS organization at a time when its upcoming rival Federal Express was putting major emphasis on establishing internal processes like market research, benchmarking and customer service which are essential for a market oriented company.

While UPS is well aware of the competitive challenge today, no systematic analysis of its competitors seems to be in place. The company does gather and monitor competitive information from publicly available sources (including data bank searching) and does collect competitive data through "ghost shopping", however no systematic approach to analyze the strengths and weaknesses of its competitors is used.
UPS does not use the benchmarking metnod.

It remains questionable whether the company today is better prepared to detect new products and processes that are being developed or introduced by its competitors to increase customer satisfaction.
At Federal Express, competitor evaluation is an integral part of market research. Customers are asked to rate the company versus the other most used competitor on a number of attributes which allow it to draw conclusions on how customers perceive the Federal Express service compared to the competition. Similarly to UPS, competitive audits of the services of seven competitors are carried out about once a year.

The benchmarking method was used when Federal Express had to react to serious deficiencies in its customer service operation in the mid 1970s and decided to centralize this function in a few call centers with the help of a huge data-communication network. As the company decided to leapfrog its competitors, recognizing the strategic potential of customer service, it had to benchmark itself against companies in other industries, in this case in the commercial airline and car rental industry. The reservation system developed by Avis and Hertz was used by Federal Express as a benchmark in the design of its own system to handle orders and requests. It laid the ground for the company's COSMOS system which today is one of the worlds most advanced fully integrated real time information systems.

Being a customer and technology driven company has somewhat limited the competitor orientation of Federal Express. It sees itself as "the industry leader in the use of high technology to improve its services"[20], seeking to maintain its leadership by developing and providing innovative services for the transportation and distribution of priority goods and documents. In this uncharted front line of innovation, valuable competitive information is scarce. Information on technological brake-throughs and trends and their implication for business, like the shrinking of the world's markets into one global market place due to advanced communication and transportation methods that are linking the continents, are the driving forces for change and largely replace the competitor orientation. If there is little to learn from competitors, a company has to rely on its customer orientation and qualified assumptions on their future expectations.

To ensure that this strong orientation towards future innovation does not distract from the necessity to compete in satisfying customers today, the company has installed the rigorous service quality measuring system "SQI", which is serving as an internal benchmark against complacency.

4.4.4 Communications

Advertising

Federal Express has had a history of matching their advertising with their core competence and corporate goals. In 1975 FedEx came out with a bold advertising claim that boasted: Federal Express -- Twice as good as the best in the business. This advertisement was based on data it had acquired through research of its then leading

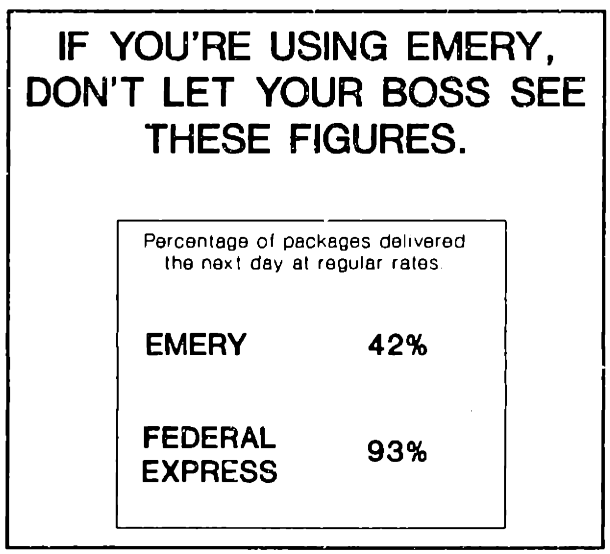

Figure 4-4

competitor, Emery Air Freight. The message of the advertisement was;

> "The word is out. Federal Express is faster and cheaper than Emery. At least, in a recent test we were faster and cheaper than they were, and the test was as fair and as realistic as could be devised. We hired an independent research organization to send identical packages between 47 cities via Emery and Federal Express at each company's regular rates. The numbers above tell the story."

The slogan, "Absolutely, Positively Overnight" displays FedEx's commitment to reliability and it's overall goal. There was other advertising that poked at the competition: "Why fool around with anybody else?" This set of strategic advertisements also positioned FedEx for the new corporate manufacturing moves into the "just-in-time" process used to maintain inventory.

FedEx's early advertising campaigns, including its now-famous slogan "When it absolutely, positively has to be there overnight" turned FedEx into a national by word. The word "Fedex" became a new generic word that meant to ship the package over night. "Fedex" now occupies a place with other generic terms such as "Xerox a copy", "let's have a Coke" and "I need a Kleenex".

AS the Federal Express - UPS battle heats up, UPS has taken a page from Federal and has now turned to advertising to publicize its air service. UPS felt that most people knew of its excellent ground service but were unaware of its air service. They have taken dead aim at this problem. UPS's advertising budget has increased dramatically from $75,000 in 1981 to $18 million in 1990. It needed to convince people that air delivery was part of its business. UPS advertisements are now as common as a Federal Express advertisements.

For three days running, from October 20-22, 1990, UPS and Federal Express "slugged it out" over national television in an expensive, high-stakes advertising war that inundated the World Series as well as various collegiate and professional football games.[21] One minute a UPS ad would tout its new, guaranteed 10:30 a.m. delivery, leaving viewers with the image of an armada of trucks not unlike the allied fleet sailing across the English Channel on D-Day. The next minute, a FedEx spot, overlaid with stirring music composition, reminded viewers that it "was absolutely, positively, still the best in the business."[22]

Internal Communications

Regular communication with employees has always been part of Federal's P-S-P philosophy. As the company grew in numbers and geographic scope, it increasingly relied on videotaped messages. In 1987, FedEx launched FXTV, a real-time business television network broadcasting daily by satellite to over 700 locations in the U.S. and Canada from studios in Memphis.

Using its SQI methodology, Federal Express internally monitors its performance in a number of critical areas. Performance levels are posted daily, and publicized over FXTV. The firm uses its satellite network, corporate news letters and meetings as major tools for internal communications. Meeting are cross-divisional and departmental teams are chartered to dig out root causes of problems that are interfering with company-wide goals.

FedEx's customer contact people are responsible for passing on everything they learn out in the field to management, marketing, finance, and any number of service quality improvement teams. The objective is to share any information that can possibly be helpful in better understanding the customers' needs and expectations. They have also instituted an award for "Best use of line employees". This award is for gathering information directly from line people closest to the process.

REFERENCES FOR CHAPTER FOUR

1.Curry, Gloria M., "Package Delivery Services: The Options Are Plentiful", <u>Office</u>, August 1989, pp. 60-62.

2.Bradley, Peter, "Package Express: A Study In How Free Markets Work", <u>Purchasing</u>, September 27, 1990, pp. 68-76.

3.Lovelock, Christopher H., "Federal Express; Quality Improvement Program", <u>International Institute for Management Development</u>, 1990.

4.Lovelock, Christopher H., "Federal Express (B)", <u>Harvard Business School</u>, 579-040, p. 2.

5.Lovelock, Christopher H., "Federal Express (A)", <u>Harvard Business School</u>, 577-042, p. 3.

6.Ibid., p. 3.

7.Federal Express's Internal Mission Statement

8.Zemke, Ron, <u>The Service Edge</u>, New York, NY: Plume, 1990, p. 483.

9.Ibid., p. 484.

10.Vogel, Todd, citing John W. Alden, UPS Senior Vice President for Business Development in "Can UPS deliver the goods in a new world?", <u>Business Week</u>, June 4, 1990, p. 81.

11.Ibid., citing Bram B. Johnson, p.81.

12.Ibid., p.80.

13.Ibid.

14.Vogel, Todd, "Can UPS Deliver The Goods In A New World?," <u>BusinessWeek</u>, June 4, 1990, pp. 80-82.

15.Presentation given by Mike Glenn from Federal Express, January 24, 1991.

16.Ibid.

17.Federal Express's internal document: "Quality Means Doing Right Things Right The First Time".

18.Ibid.

19.Federal Express, Annual Report 1989, p. 12.

20.Federal Express, Federal Express Background, Federal Express Public Relations, FXAPL.147, January 1990, p. 2.

21.Solomon, Mark B., "UPS Treads On FedEx's Turf By Upping Delivery Deadline.", Traffic World, October 29, 1990, pp. 7-10.

22.Ibid., pp. 7-10

CHAPTER FIVE

CONCLUSION

5.1 PRESCRIPTION

Having reviewed the management science literature on issues relevant to the pre-purchase phase as defined in Chapter 3, and after having investigated in some depth how two well known companies are managing the critical issues of the pre-purchase phase, some conclusions can be drawn by integrating the knowledge derived from theory with the insights gained from the case study.

Our conclusions are based on essentially anecdotal rather than scientific, statistical evidence. It should also be pointed out, that our studies related to UPS and Federal Express are largely based on publicly available information, albeit much enriched by our extensive interviews at the two companies' headquarters, and thus do not draw on intimate and confidential knowledge.

In order to limit the risk of drawing totally unwarranted conclusions, we are using the GAP-Model and the structure of the Baldrige-Award application guidelines as orientation frameworks. The GAP-Model is based on field research conducted of U.S. companies ("SERVQUAL") and has been extremely well received by many business practitioners in the U.S. and other countries as a diagnostic as well as prescriptive tool. The Baldrige-Award structure is designed to assess companies on the degree of quality achieved and is being used by many U.S. companies as an assessment tool. Both can be integrated and provide a sound guideline for drawing conclusions on our findings in the express package industry.

5.1.1 Closing the Gaps in the Pre-Purchase Phase

The essential tasks in the pre-purchase phase were defined earlier as (1) to identify customer needs and expectations, (2) to segment customers into homogeneous groups and to target a segment (or segments) that fits the capabilities of the firm, (3) to analyze the competition to learn about their perceptions of customer expectations and how they satisfy them, and (4) to communicate with customers and all other stockholders of a company, especially the internal customers (= employees) to shape their expectations.

These four steps can be integrated into the Gap-Model. The corresponding gaps are Gap 1, defined as the mismatch between customer expectations and management perceptions of those customer expectations, and Gap 4, defined as the discrepancy between what the firm communicates to the external customers to shape their expectation and what it actually delivers.

Closing GAP 1

The key factors contributing to Gap 1 and identified by Berry, Zeithaml and Parasuraman (BZP, the authors of the Gap-Model), are listed in Figure 5-1[1]:

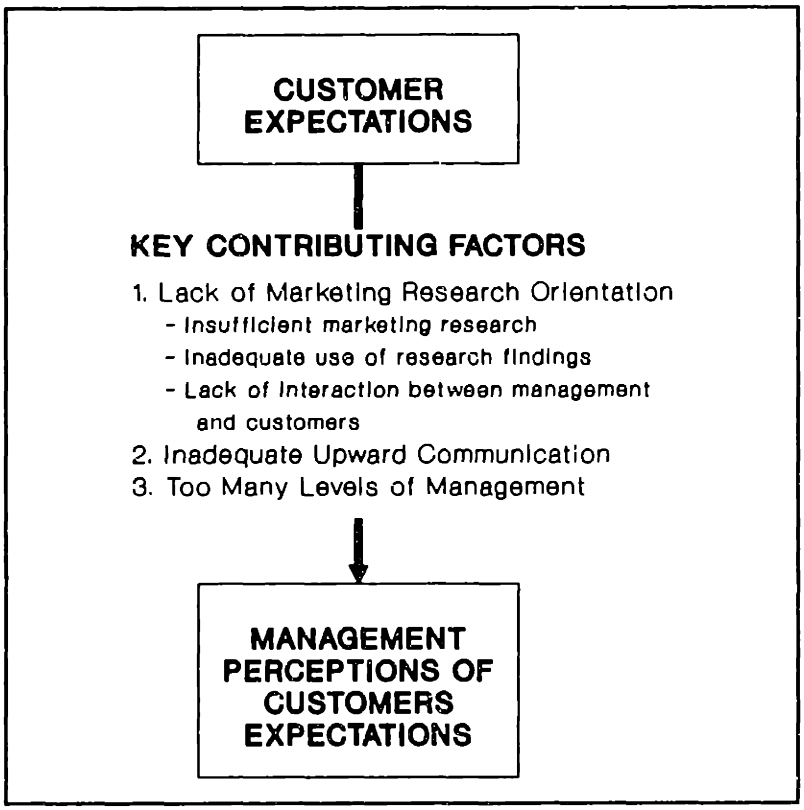

FIGURE 5-1

Our analysis of the two companies in the express package industry has confirmed the first criteria as a major factor contributing to Gap 1.

The history of market research, the emphasis given to marketing in general and its integration in all functional areas of the business clearly separates Federal Express from UPS. BZP comment on their findings regarding the status of marketing research in service firms, stating that " in fact, many service organizations are new to everything about marketing, believing that the operations function is more critical to success in the business"[2] and they continue "an operations orientation diverts focus from customers and reduces efforts to understand their needs and expectations".[3]

This observation applies well to UPS. Obviously, marketing research is not a totally new issue for UPS, but its initiative to upgrade its research efforts over the past three years, recognizing its deficiencies in understanding what the customer wants, is a powerful confirmation of the essential need for in depth marketing research to avoid or close Gap 1. The use of market research likewise differs between the two firms. While not expressively mentioned in the Gap-Model, the segmentation process should be regarded as a fundamental tool

to close Gap 1, as it uses market research findings to define customer segments that match the business definition.
Federal Express has reached an advanced stage in customizing its services while UPS, recognizing the need to develop a more segmented marketing strategy, is trying to catch up.
The SQI system developed by Federal Express represents another powerful use of research data as it aligns the whole organization to understand and focus on customer's expectations. Using its own FXTV business television network, it has a very effective tool in place to communicate the "customer's voice" throughout the organization.

While it was confirmed by UPS that one of their current challenges is to generate momentum for a stronger orientation towards customer needs at all and in particular the lower levels of the company, there is to date no equivalent system in place at UPS that ensures that customers' expectations are understood throughout the company.

Competitive analysis is another tool available to minimize Gap 1. While not explicitly mentioned by BZP, it clearly adds to a better understanding of the customer's expectations.
Federal Express has made considerable use of this tool to better gauge the evolution of customer's expectations.
Promoting the need to learn from other industries and to

assimilate change in the technological and business environment into its service offering as early as possible separates the innovator from the follower.

UPS has recognized the need to regain "the cutting edge" to anticipate and then meet expectations as soon as they arise. The goal is not only to reduce the existing gap but to avoid the creation of gaps between future expectations of customers and management's perception of these expectations due to a slow awareness and adjustment process.

As to the second and third key contributing factors to Gap 1 identified by BZP, no fundamental differences could be observed between the two companies. Both put much importance on open upward communication channels, with various formal systems that encourage suggestions from customer contact personnel and improvement working groups (e.g. CORE groups at UPS) that develop proposals for management consideration.
Both companies are well known for their strong people orientation and have been successful in generating a loyal and dedicated work force that identifies strongly with the company and communicates informally across hierarchical levels.

In conclusion, our case study supports the lack of marketing research orientation as a major cause for managements' insufficient or incorrect understanding of customers' expectations. Not only should a company do sufficient and the right kind of market research, but it should also closely monitor competitors and should use research findings to tune the entire organization towards customers' expectations.
Customer segmentation is a fundamental tool to define and focus the customer orientation by identifying homogeneous customer groups which fit the firm's capabilities.
Direct interaction between management and customers, open communication both up- and downward and a management organization structure that ensures that the top can hear the "voice of the customer" are prerequisites for a marketing driven company that puts meeting the customer's expectations first.

<u>Closing Gap 4</u>

The validity of Gap 4 as a cause for discrepancy between what the consumer expects and finally perceives when the service is delivered (=Gap 5) is clearly supported by our findings. This is not to say that either of the two companies dissatisfy their customers by overstating their capabilities to serve. Both, UPS and Federal Express are well known for their service

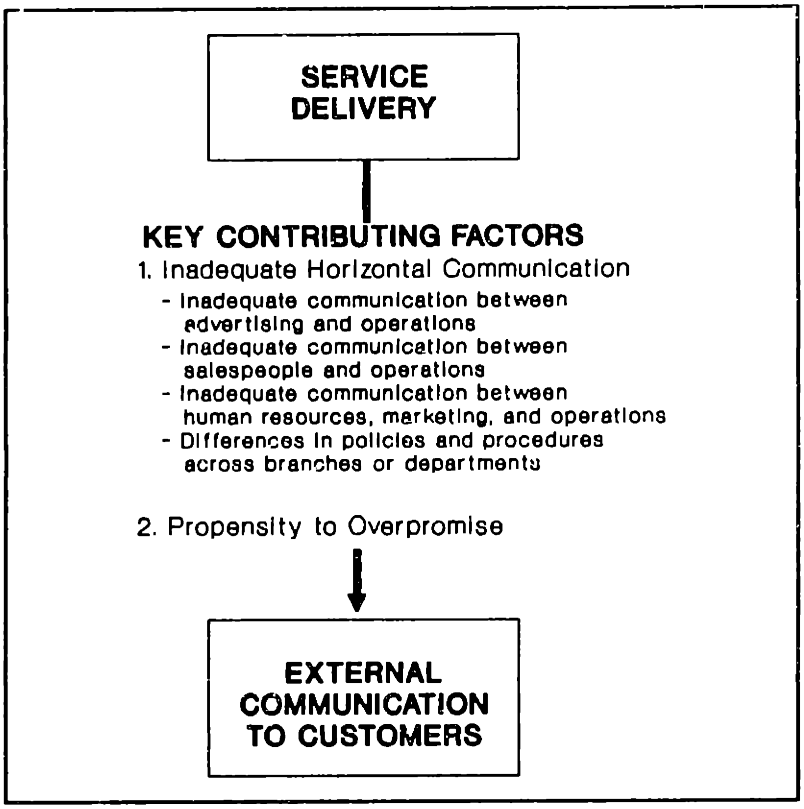

FIGURE 5-2[4]

excellence and have the reputation of highly reliable and dependable business partners. Despite the current highly charged advertising battle between the two companies, characterized by ever more stringent commitments and on time guarantees, no accusation of "over promising" can be made as they both live up to their claims with remarkable operating efficiency.

The support for our conclusion instead is again to be found in how Federal Express gained leadership and what initiatives UPS undertook to fight back. Federal Express had all along been putting much emphasis on advertising, sales and PR to shape the customer's expectation. In contrast, for UPS advertising was basically a non-issue till the mid 1980s. UPS simply did not see a requirement to manage the customer's expectation till they realized how powerful this tool was working for Federal Express and as a logical consequence how negative the effect was on the perception of their own service.

BZP point out "that Gap 4 can also occur when companies neglect to inform customers of special quality assurance efforts that are not visible to customers" and that "the firm that explicitly communicates the guarantee may be selected over others by a customer who is uncertain about the quality of service". They stress that "customers who are aware that a firm is taking concrete steps to serve their best interests are likely to perceive a delivered service in a more favorable way"[5].

Federal Express soon became aware that mass advertising on national TV was the ideal tool to "materialize" their intangible service in the customer's mind. Offering guaranteed reliability and punctuality made people aware and confident of what to expect. The highly promoted guaranteed 10:30 am arrival and the advertised tracking system, giving comfort to the customer that his shipment is in the capable hand of professionals, are two examples.

The management of customer expectations is not only important to gain customers but at least as important to retain them. Theodore Levitt states that "to keep customers for regularly delivered and consumed intangible products, they have to be regularly reminded of what they're getting" and "..., sellers of intangible products reinstate their presence and performance in the customers' minds, reminding them of their continuing presence and the value of what is constantly, and silently, being produced".[6]

UPS has recognized its deficiencies in the management of their customers' expectations. They have realized that their image is still that of a low tech, "blue collar" shipping company. Especially in the document producing "white collar" industries (e.g. insurance, banking, trading) they are not perceived as a high tech, global all round carrier that is also in the air express business. UPS has addressed this problem by dramatically increasing their advertising and sales efforts. The firm has understood that they have to shape and manage their customers' perception to close Gap 4 in order to successfully meet the competition of Federal Express.

Other key factors contributing to Gap 4 identified by BZP refer to inadequate horizontal communication. We have no detailed information on how the two companies facilitate horizontal communication. Complaints however were voiced at UPS that the linkage between marketing and operations generally is still imperfect. This no doubt needs to be seen in the context of the overall cultural change at UPS from an operating focused to a more marketing driven organization. The classical conflict between marketing and operations, which is particularly pronounced in service companies as services are instantaneously produced and consumed, can be detected. Generally however, both companies are renown for their highly dedicated employees and a strong team culture. There is no evidence that either company has serious deficiencies in the area of horizontal communication that could be a contributing factor to Gap 4.

In summary, accurate and appropriate company communication - advertising,personal selling and public relations that do not overpromise or misrepresent - is essential to delivering services that customers perceive as high quality. Companies that do not actively manage their customers expectations are likely to be confronted with a mismatch between what customers expect and what they perceive when the service is actually rendered. In the case of intangible routine services, like the transportation of express packages, expectations need to be constantly stimulated in order to ensure that customers do actually perceive the service and it is not performed unnoticed. Companies that use advertising and other forms of communication with their customers to materialize their service will be recognized as high in quality and are more likely to have satisfied customers.

It is essential, that all claims communicated to the outside of a firm are fully supported by its capabilities. Internal communication between all functional areas is necessary to ensure that the organization speaks with one voice and can live up to its promises.

5.1.2 The Need to look at the total System - the "BIG "Q""

The two companies chosen for our examination lent themselves well for a comparison with practical management theory. Both of them enjoy an excellent reputation for high operational efficiency, financial stability and modern management practices. However, they differ, quite markedly on the level of market- and customer orientation, and linked to that their approach to quality.

Federal Express, so far the only service company to have won the Baldrige Award (1990), has clearly progressed further ahead in this area. While its initial success could be explained by the fact that it was a new entrant choosing a niche of the transportation market and focusing its energy and resources on one particular customer segment - the advantages of being small, creative and flexible - its phenomenal growth and sustained success over nearly twenty years demands a different explanation. Customer satisfaction is not a phenomenon but a well planned and decisively managed achievement.

Quality had been implicit in Federal's strategy and marketing efforts almost from the beginning, but it did not begin to institutionalize a total quality improvement mechanism till 1985. The first initiative in fact failed as it was purely based on statistical measurement methods to control the conformance to specifications. Only in mid-1987, after further growth had led to serious service problems in the sales and customer service divisions was the quality issue reproached, this time putting emphasis on the thought process and involvement of the people within the company in delivering quality programs[7]. The "formalization of the natural quality consciousness"[8] through a "Quality Improvement Process" has lead to a remarkable coordination and alignment of all policies and functions of the organization. A highly visible leadership that drives this process, a well communicated customer oriented strategy that uses cutting edge information technology to measure the level of quality and to communicate it to the entire organization, and the "People-Service-Profit" dictum that understands that customer satisfaction has to begin with employee satisfaction, are all connected and oriented to the final goal to create customer satisfaction. Figure 5-3 shows the linkages as they are followed in the Baldrige Assessment process:

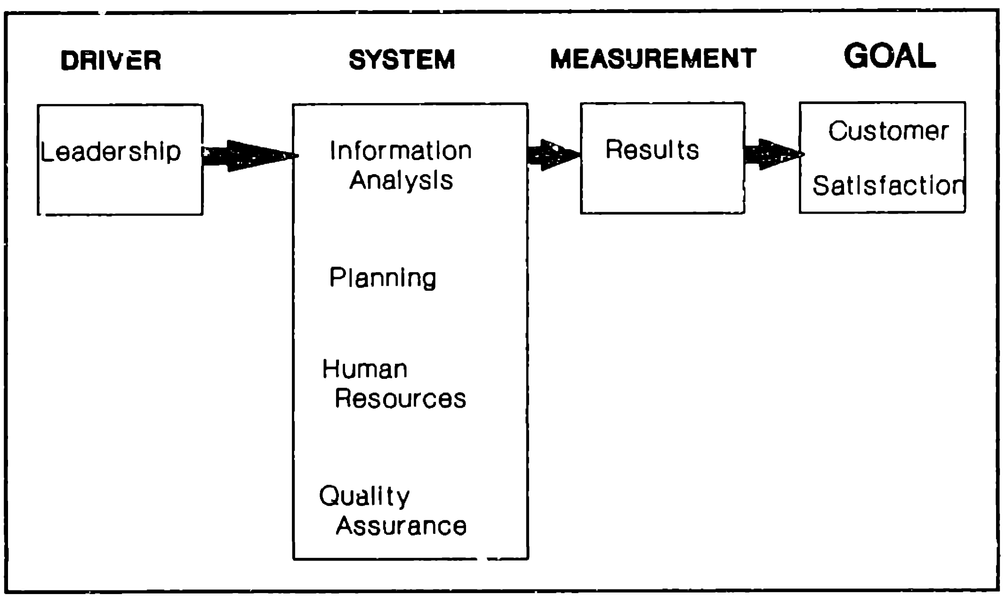

FIGURE 5-3

UPS has no equivalent comprehensive system that provides an institutionalized orientation of the entire organization towards customer satisfaction. They have achieved excellence in various individual functional areas, like for example in human resource management and in operations, however these are stand alone achievements that are not fully integrated to serve the final goal. To better understand and manage customers' expectations UPS has upgraded its marketing, but there is no framework that integrates customer orientation into other functional areas. It is a partial improvement in one area, namely the marketing department which can only indirectly and most likely insufficiently mobilize other areas of the organization in the drive for customer satisfaction. In this context, it is interesting to note that UPS has not used the Baldrige Award as an assessment tool and "alignment process" and there are no quality improvement programs or alike in place. These are tools that help to organize a total quality approach in a visible and communicable way and thereby can greatly enhance a change in corporate culture.

The "BIG "Q"" is often used as an acronym to stress that quality is not an area that can be limited to just one functional area in a corporation. Quality is not just a manufacturing or operational issue, but involves the company as a whole and every activity within it. "You must enlist the support of the entire employee group toward quality goals or you will not be successful"[9] is how Fred Smith summarizes it. As we have shown in this thesis, marketing plays a vital role in that it provides the tools to define the goal, being customer satisfaction. It is essential as a function to continuously inject a customer and market orientation into the organization. However, to become a market driven company that organizes all functions and aligns all internal policies so as to best serve the customer requires leadership that understands quality as the most important issue within the firm. Leadership that sets up the company internally to satisfy customers by empowering people, satisfying internal customers, setting clear goals and reinforcing them with actions. Leadership, that understand that "there is no better guarantee of continued success than an insistence that the customer always remain the engine that drives the train"[10].

REFERENCE FOR CHAPTER FIVE

1.Zeithaml, Valarie; Parasuraman, A; Berry, Leonard; Delivering Quality Service, New York: Free Press, 1990, p.52.

2.Ibid.

3.Ibid., p. 53.

4.Ibid., p. 116.

5.Ibid., p. 115-116.

6.Levitt, Theodore, The Marketing Imagination, New York: The Free Press, 1986, pp. 105-107.

7.Lovelock, Christopher H., "Federal Express; Quality Improvement Program", International Institute for Management Development (IMD), Lausanne, Switzerland: 1990, p.12.

8.Federal Express, Annual Report 1989, p. 3.

9.Karabatsos, Nancy, "Absolutely, Positively Quality", Quality Progress, May 1990.

10.Federal Express, Annual Report 1989, p. 16.

<u>BIBLIOGRAPHY</u>

<u>Board of Examiners</u>, Malcolm Baldrige National Quality Award, work book.

Bradley, Peter, "Package Express: A Study In How Free Markets Work", <u>Purchasing</u>, September 27, 1990.

Carmine, Sheila, "Commitment to quality offers many rewards," <u>Southern Connecticut Business Journal</u>, 7 September 1987.

Clausing, Don and Hauser, John, "The House of Quality", <u>Harvard Business Review</u>, May-June 1988.

Crosby, Philip B., <u>Quality is Free</u>, New York: New American Library, 1979.

Curry, Gloria M., "Package Delivery Services: The Options Are Plentiful", <u>Office</u>, August 1989.

Federal Express, <u>Annual Report</u> 1989.

Federal Express, <u>Federal Express Background</u>, Federal Express Public Relations, FXAPL.147, January 1990.

Federal Express's Internal Document: "Quality Means Doing Right Things Right The First Time".

Federal Express's Internal Mission Statement.

Feigenbaum, A. V., <u>Total Quality Control</u>, Third Edition, New York: McGraw-Hill Book Company, 1983.

Fornell, Claes, "A method for improving customer satisfaction and measuring its impact on profitability", unpublished executive summary, 1991.

Glick, Peter H. and Hatmaker, Billy L., "Customer Satisfaction In The Malcolm Baldrige National Quality Award: Understanding The Customer's Definition Of Quality", Master's thesis, Massachusetts Institute of Technology, 1990.

Griffin, Abbie and Hauser, John, "The Voice of the Customer", Massachusetts Institute of Technology, Working Paper 91-2, January 1991.

Groenroos, Christian, Service Management and Marketing, Lexington,MA: Lexington Press 1990.

Heskett, "Managing in the Service Economy", as cited in Davidow, W. H., Uttal, B., Total Customer Service, New York: Harper & Row, 1989.

IBM Rochester, Application Business Systems Rochester, Minnesota, Presentation Material.

Imai, Massaaki, Kaizen: The Key to Japan's Competitive Success, New York: Random House, 1986.

Juran, Joseph M., Juran on Planning for Quality, New York: The Free Press, 1988.

Karabatsos, Nancy, "Absolutely, Positively Quality", Quality Progress, May 1990.

Kotler, Philip, Marketing Management, Seventh Edition, Englewood Cliffs, NJ: Prentice Hall, 1991.

Levitt, Theodore, The Marketing Imagination, New York: The Free Press, 1986.

Lovelock, Christopher H., "Federal Express; Quality Improvement Program", International Institute for Management Development, 1990.

Lovelock, Christopher H., "Federal Express (B)", Harvard Business School, 579-040.

Lovelock, Christopher H., "Federal Express (A)", Harvard Business School, 577-042.

"Making The Grade With Customers", Wall Street Journal, November 12, 1990.

Malcolm Baldrige National Quality Improvement Act of 1987, Senate Report No. 100-143.

Phillips, Braden, "State to reward firms for quality work," The Advocate, Stamford, CT, 31 May 1988.

Presentation given by Mike Glenn from Federal Express, January 24, 1991.

"Quality Award News Briefing".

Reichheld, Frederick F. and Sasser, Jr, W. Earl, "Zero Defections: Quality Comes to Services", Harvard Business Review, September-October 1990.

Reimann, Curt W., "Malcolm Baldrige National Quality Award," presentation, 19 December 1989, Gaithersburg, MD, Handouts.

Reimann, Curt W., "Quality Award News Briefing," Remarks by C.W. Reimann, 2 November 1989.

Scholtes, Peter and Hacquebord, Heero, A Practical Approach to Quality, Joiner Associates Inc: 1987.

Shapiro, Benson P. and Bonoma, Thomas V., "How to segment industrial markets", Harvard Business Review, May-June 1984.

Solomon, Mark B., "UPS Treads On FedEx's Turf By Upping Delivery Deadline.", Traffic World, October 29, 1990.

Stu Leonard Videotape, Marketing Management Course - 15.814, Fall 1990.

Sullivan, L. P., "Quality Function Deployment", working papers, June 1986.

The Ernest & Young Quality Improvement Consulting Group, Total Quality, an Executive's Guide for the 1990's, Homewood,ILL: Dow Jones-Irwin, 1990.

"The Foundation for the Malcolm Baldrige National Quality Award," Business America, 5 December 1988.

U.S. Congress. House. Committee on Science, Space, and Technology, Hearing on the Privatization of the National Technical Information Service, and H.R. 812, the National Quality Improvement Award Act of 1987; Hearing before the Subcommittee on Science, Research and Technology, 100th Cong., 1st Sess., 4 March 1987.

U.S. Congress, Senate, "Malcolm Baldrige National Quality Improvement Act of 1987," 100th Cong., 1st Sess., H.R. 812, Senate Report No. 100-143, "U.S. Code Congressional and Administrative News", Vol. 2, 723.

Urban and Hauser, Chapter 9, prepublication edition, 1991.

Vogel, Todd, citing John W. Alden, UPS Senior Vice President for Business Development in "Can UPS deliver the goods in a new world?", Business Week, June 4, 1990.

Vogel, Todd, "Can UPS Deliver The Goods In A New World?," BusinessWeek, June 4, 1990.

Zeithaml, Valarie A., "Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence", Journal of Marketing, Vol. 52 (July 1988).

Zeithaml, Valarie; Parasuraman, A; and Berry, Leonard, Delivering Quality Service, New York: Free Press, 1990.

Zemke, Ron, The Service Edge, New York, Plume, 1990.

APPENDIX A

GENERAL INTRODUCTION

A project group formed within the Sloan School of Management at Massachusetts Institute of Technology (MIT) under the supervision of the Nippon Telegraph and Telephone Professor of Management, Gabriel R. Bitran, Ph.D. Each member of the group became involved with the project in an effort to satisfy a thesis requirement in partial fulfillment of degree requirements at MIT.

Professor Bitran developed an outline of the Malcolm Baldrige National Quality Award (MBNQA) evaluation categories, dimensions, and criteria titled "Fit to Win." "Fit to Win" stimulated early discussions and served as a vehicle to establish a framework for allocation of responsibilities within the project team. Ultimately the project team segregated responsibility for the seven categories of the MBNQA criteria as follows:

1. Leadership,
   Andrew J. Atkinson and Teresa A. Wahlert;
2. Information and Analysis,
   Marcelo B. Saad;
3. Strategic Quality Planning,
   John P. Casey;

4. Human Resource Planning,
David P. Hess;

5. Quality Assurance of Products and Services,
Jeffrey J. Fenton and Karl A. Reuther, II;

6. Quality Results,
Gerald E. Dixon;

7. Customer Satisfaction,
Peter H. Glick and Billy L. Hatmaker.

The project team established the following tasks as team objectives:

1. Thoroughly research the history of the Malcolm Baldrige National Quality Award.
2. Research, contact, and visit companies recognized as leaders in the field of quality.
3. Research literature in the field of quality.
4. Research literature in the respective management disciplines that constitute the MBNQA criteria.
5. Prepare a thesis documenting the results of the above tasks including recommended suggestions for future research.

The collective theses submitted in fulfillment of these project goals provide comprehensive documentation of information necessary to perform a self-diagnosis in accordance with the MBNQA criteria and other current management techniques. The information contained herein is fundamental to the long-term success of any organization. In particular there is emphasis on differences between service and manufacturing organizations when deemed significant.

This Appendix is intended to provide a general background to the project and to the MBNQA process through its history, organization, criteria, and award recipients.

The Malcolm Baldrige National Quality Award Process

Legislation-History

Malcolm Baldrige Secretary of Commerce

> Malcolm Baldrige served as Secretary of Commerce from January 20, 1981, until his untimely death on July 25, 1987. Prior to joining the Cabinet, Mr. Baldrige served as chairman and chief executive officer of Scovill, Inc., which then operated eighty-one manufacturing plants in the United States and twenty-two other countries around the world.[1]

Mr. Baldrige is credited with helping to write the version of H.R. 812 which passed the U.S. House of Representatives on June 8, 1987 and the U.S. Senate on August 5, 1987 with one amendment.

> Sen. Ernest F. Hollings (D-SC) renamed the legislation the "Malcolm Baldrige National Quality Improvement Act of 1987" and the award established by HR 812 the "Malcolm Baldrige National Quality Award."[2]

President Ronald Reagan signed the bill into law on August 20, 1987.

<u>House Resolution 812, Public Law 100-107, Malcolm Baldrige National Quality Improvement Act of 1987</u>

Congressmen Walgren (D-PA) and Boehlert (R-NY) introduced H.R. 812 in the House of Representatives on January 28, 1987. A hearing that identified many of the issues germane to the passage of HR 812 was held before the Subcommittee on Science, Research and Technology of the Committee on Science, Space, and Technology House of Representatives on March 4, 1987. Witnesses before the committee included John J. Hudiberg, CEO, Florida Power & Light Co.; Dr. Frank M. Gryna, Vice President, Juran Institute, Inc.; and William W. Eggleston, Vice President for Quality, International Business Machines, Inc.

A summary of the major provisions in H.R. 812 follows:

1. Amend the Stevenson-Wydler Technology Innovation Act of 1980 (Public Law 96-480) by

adding a new section which establishes the Malcolm Baldrige National Quality Award.

2. Direct the President (on the basis of recommendations received from the Department of Commerce), or the Secretary of Commerce (Secretary), to make the award periodically to companies and other organizations which, in the judgement of the President or Secretary, have significantly benefited the economic or social well-being of the United States through improvements in the quality of their goods or services.

3. Provide that organizations may qualify for an award by applying to the Director of the Commerce Department's National Bureau of Standards (NBS) [currently National Institute of Standards and Technology (NIST)] and by permitting a rigorous evaluation of its quality programs. The Director shall elect one or more non-profit organizations familiar with quality management techniques to perform the evaluations.

4. Direct NBS [NIST] to provide information about successful quality improvement strategies and programs of the award-winning participants.

5. As no Federal funds are authorized for the program, provide that the Secretary may seek and accept gifts, and if additional sums are needed to cover the full cost of the program, the Secretary shall impose fees upon the organizations applying for the awards.[3]

The legislation was precipitated by a fact-finding pilgrimage to several Far East countries in January 1986, headed by Don Fuqua, then a U.S. representative (D-FL). Unsubstantiated evidence obtained by this author indicates that John J. Hudiberg sponsored the mission in the name of Florida Power & Light Co. In order to gain insight into the thrust behind the legislation it is helpful to review the testimony from the March 4, 1987 hearing.

During Hudiberg's testimony he emphasized three key points behind establishment of a National Quality Award:

> First, it should be prestigious. By having the President, himself, present the award, we could be sending a message to the world that "made in the U.S.A." is more than just a label, it is a proud boast.
>
> Second, I think the award should be self-funding. We have all too often been accused of short-changing the American consumer in the past years, and in my judgement, we certainly have no right to ask the American taxpayers to foot the

> bill when it comes to recognition of quality.
>
> Third, and the core of the whole thing, the Award must be won the old-fashioned way, it must be earned.... The criteria must be rigorous, requiring intensive evaluation by a panel of highly qualified judges, as well as on-site audit and verification of accomplishments to be considered.[4]

Dr. Gyrna substituted for Dr. Joseph Juran at the hearing and presented a written statement by Dr. Juran. The statement emphasizes real-life examples of Quality Improvement in Japanese plants. The examples cite visits by American managers and engineers to affiliated Japanese companies. Juran writes,

> ...The Americans were well-versed in the technology of the business. To their trained eyes the Japanese plant was technologically like their own home plant in the USA. The Japanese were using similar machinery, processes, instruments, materials. However, the results which came out of the Japanese plants were dramatically different.
>
> The Japanese products were strongly preferred by the marketplace because they delivered better quality for the price. In addition, the Japanese costs were distinctly lower [measured in material quantity and labor hours to avoid exchange rate influences]...[5]

Juran's statement supports claims that the U.S. cannot sustain itself in global competition unless it is prepared to meet this challenge head-on. Dumping and unfair trade practices will become moot issues in Juran's view. Juran's explanation of the methods used to attain superior results borrow from Hudiberg's experience at FP&L. Juran explains:

> ...If the FP&L facilities and people remained essentially unchanged during those six years, why did the results change so dramatically? In my observation the reason is clear. During those six years FP&L created over 1400 specific improvements in quality... To create that revolution required that FP&L devote an unprecedented amount of time to improving quality... The example of FP&L goes to explain the mystery of how so many Japanese companies have been able to outperform their U.S. counterparts in quality. The Japanese spend much more time on quality improvement, and they make improvements at a pace much greater than that of their American counterparts.[6]

The testimony of William W. Eggleston focuses on the results obtained at IBM through implementation of what he calls "sort of our own mix of what we call quality process management which we apply to all work."[7]

Basic concepts cited by Eggleston include, "dedicated management action, participation by all employees and continuous work improvement through error and defect reduction.[8] In specifying the efforts of Quality Process Management at IBM, Eggleston states:

> It views all work activity as a process, with continuous improvement of that activity as a goal. Ownership of the process is established early, followed by analysis, measurement, customer feedback and improvement through work change, elimination and simplification, the ultimate objective is to design for quality by understanding and meeting customer requirements, and thus in the end, to dramatically improve our competitiveness.[9]

Eggleston concludes his testimony by identifying the following characteristics that an effective national quality award should contain:

- It must be based upon marketplace results.
- It should require no additional or bureaucratic activity. No reporting structure should be established for the sole purpose of compliance with award requirements.
- Data requested will most likely be confidential, must be held in trust, and therefore, must be the minimum required to judge performance.
- A panel of judges must be carefully selected o achieve impartiality and to avoid conflict of interest.

- An existing knowledgeable organization such as the American Society for Quality Control (ASQC), or the American Productivity Center or a combination should be used to administer the award process.
- The award must be given by the President. Anything else will be inadequate in lending the prestige required to motivate the actions desired.
- We must beware of the temptation to copy the Japanese approach. While some parts might fit a U.S. environment, due to differences in culture and government/industry relationships, other aspects could be disruptive.
- The award must come as a by-product of quality management performance. That is, we should judge on the basis of results, not on the presence of techniques, however good or well-accepted those techniques are.[10]

These points raised by Eggleston succinctly summarize the objectives of the current award. The Committee expressed concern on behalf of potential applicants in terms of additional costs for the auditing process. These costs were dismissed as immaterial when compared to total training costs, for example, that are required to operate a quality driven company. Hudiberg stated that FP&L was spending $6 million on training alone that year (1987). Other concerns involve administrative details of the award rather than the substance. Dr. Gryna's concluding response regarding the global competitiveness questions raised by the Committee serve to conclude this section on the historical development of the MBNQA. He provided data to the Committee that "establishes a clear relationship between where an organization stands in the marketplace on quality and their share of market and return on investment."[11] He concludes,

> There is a growing, strong trend now for organizations to extend the quality concepts far beyond the manufacturing floor itself, and go into all the other areas that he mentioned. The other counterpart of that, of course, is the wonderful work on quality being done in the service industries...[12]

Organization

H.R. 812 became law as the Malcolm Baldrige National Quality Improvement Act of 1987 (Public Law 100-107). The Department of Commerce administers the award through the National

Institute of Standards and Technology. Curt W. Reimann is Associate Director for Quality Programs at the National Institute of Standards and Technology (NIST). He also is Director of the Malcolm Baldrige National Quality Award Program. In this role he hosted the thesis project team at the NIST facility in Gaithersburg, Maryland, and for that we are grateful.

A consortium, Malcolm Baldrige National Quality Award Consortium, Inc., was formed to help administer the program in accordance with recommendations given during the aforementioned testimony (see Figure A-1). Both the American Society for Quality Control (ASQC) and the American Productivity & Quality Center (APQC) are part of the Consortium, as seen in the figure. The ASQC, with its experience in administering the National Aeronautics and Space Administration Excellence Award for Quality and Productivity, was selected to receive MBNQA applications; review, train, and collect reports from examiners and judges; and maintain computer systems to enhance management of the program. The APQC, for its part, is responsible for administering the communications for the program, including: videocassette production and dissemination; media coverage coordination; long-term program administration; and public and dissemination of Award guidelines and brochures.

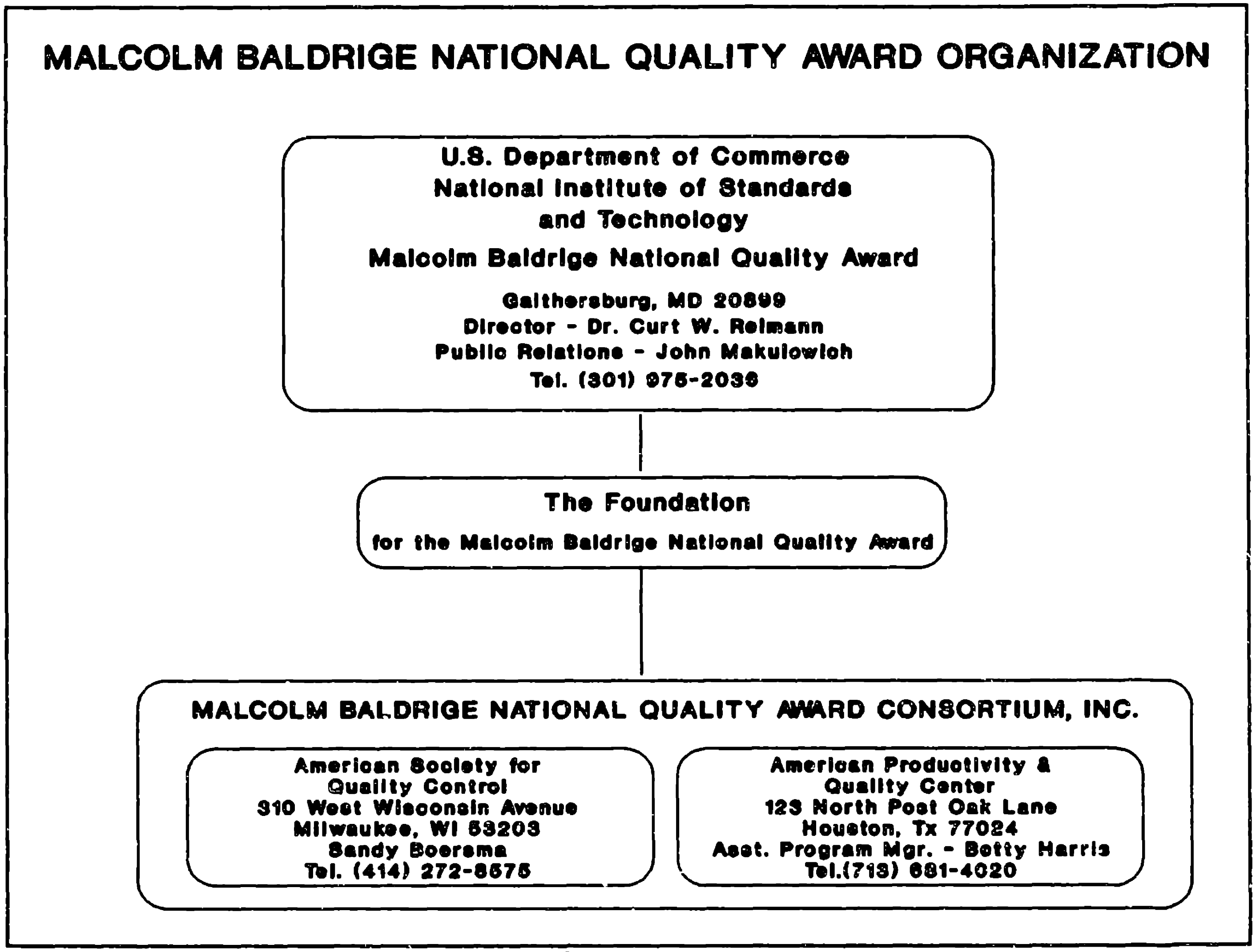
MALCOLM BALDRIGE NATIONAL QUALITY AWARD ORGANIZATION
U.S. Department of Commerce
National Institute of Standards
and Technology
Malcolm Baldrige National Quality Award
Gaithersburg, MD 20899
Director - Dr. Curt W. Reimann
Public Relations - John Makulowich
Tel. (301) 975-2036
The Foundation
for the Malcolm Baldrige National Quality Award
MALCOLM BALDRIGE NATIONAL QUALITY AWARD CONSORTIUM, INC.
American Society for
Quality Control
310 West Wisconsin Avenue
Milwaukee, WI 53203
Sandy Boersma
Tel. (414) 272-8575
American Productivity &
Quality Center
123 North Post Oak Lane
Houston, Tx 77024
Asst. Program Mgr. - Betty Harris
Tel.(713) 681-4020

Figure A-1

In addition, the

> ...Foundation for the Malcolm Baldrige National Quality Award was created to provide the private sector a means of accomplishing the following Award objectives: raise sufficient funds to establish an endowment which, when supplemented by fees from Award applicants, will permanently fund the Award Program; oversee the investment of endowment funds; review Award Program accomplishments and disburse required funds to the National Institute; and review the plans and approve associated funds requirements for subsequent years to assure a successful Awards Program.[13]

State Sponsored Programs

States are following the initiative of the federal government and rewarding firms for quality work. Connecticut is in the forefront.

Sheila Carmine, a public relations specialist based in Stamford, Connecticut, discovered the efforts underway in Congress to establish a national quality award and became inspired. She initiated a program in Connecticut:

> "The state has a new award program, the Connecticut Quality Improvement Award, to recognize 'outstanding improvements' in quality and 'effective quality management' in the training and involvement of employees. The program is modeled after the Malcolm Baldrige National Quality Award..."[14]

The Connecticut Award has been granted in 1988 to Northeast Utilities as a large service company and Pitney Bowes Business Systems as a large manufacturing company; and in 1989 to IBM Credit Corporation and Perkin-Elmer Instrument Division, respectively.

MBNQA Guidelines and Categories

During the presentation made by Curt W. Reimann, the program details were reviewed. The following information is based on that presentation.

Three categories - Manufacturing, Service, and Small Business - with a maximum of two awards per category per year are authorized. Peer evaluations by a 134-member board are utilized to select the award recipients.

The Award criteria has been strategically designed to firmly establish a U.S.-based quality "value system". The criteria is used both as a basis for internal and external diagnosis and to foster information transfer between U.S. firms and other organizations.

The criteria is expected to continually evolve and become increasingly used not only to establish MBNQA recipients but as a methodology for other awards, self-assessment, training, etc . The seven categories constituting the award criteria and some insight into each follows.

1. Leadership: The leadership category assess the commitment and involvement on the part of senior management in the firm. The quality values embedded in corporate culture, the management system used to instill those values, and the firm's overt attention to its public responsibilities are the critical aspects of this category.

2. Information/Analysis: This category requires that a firm understand the importance of providing the full scope of information and data that it uses to measure quality performance. The management of the data as well as the analysis and use of the data must be documented.

3. Planning: The process used for strategic planning; the actual plans for leadership in quality, including appropriate benchmarks; and priorities within those plans should be documented.

4. Human Resources: The management of the most critical resource in any firm, its employees, must be thoroughly

reviewed and documented. This includes the involvement of employees in changes and in decision making; their education and training; formal recognition of exemplary employees and the stale but appropriate phrase, "quality of worklife."

5. Quality Assurance: The incorporation of quality in the design and introduction of products and services must be demonstrated. Some of these issues fall within the more traditional definition of quality but cannot be omitted. Quality must proliferate in all operations and processes; measurements and standards; audits; documentation of product acceptability; documentation of business process acceptability; and active programs to communicate and foster quality and relationships between the firm and its suppliers (all external providers of goods and services).

6. Results: The best of intentions do not guarantee good results. This category requires a firm to determine and articulate the quality of its products and services. Competitive comparisons should be used including benchmarks of products. Improvements in operational and business processes must be evidenced. Finally, the improvement obtained in supplier quality must be shown.

7. Customer Satisfaction: The distinctive thrust of the quality criteria is the emphasis on customer satisfaction. Successful firms must present evidence of pervasive knowledge of their customer's requirements and expectations; the relationship between customers and management; a commitment to the customer; effective management of customer complaints; procedures for determining customer satisfaction; and trends that indicate improving customer satisfaction.

Examination Process

The framework for the examination process is indicated by the flow in Figure A-2.

The seven categories described above and shown in the flow-chart identify 44 examination items and 192 areas that a firm must address in considering preparedness. Specific information on the categories can be found in the guidelines brochure and in the respective thesis on that topic.

Reimann recommends that a firm conduct a self-evaluation before commencing a formal application. During the self-evaluation, a firm should ensure that all functions within the firm have a full understanding of the criteria and scoring system that will be used. Competitive comparisons should be complete most likely using benchmarking. Outside evaluators' opinions should be solicited to help the firm practice scoring to find and correct weak areas.

Reimann recommends that the application be thorough but that information be condensed. Factual information should be included without public relations information. Anecdotal indicators should be avoided. The company should demonstrate an integrated program that effects continual improvements resulting in objective evidence of excellence.

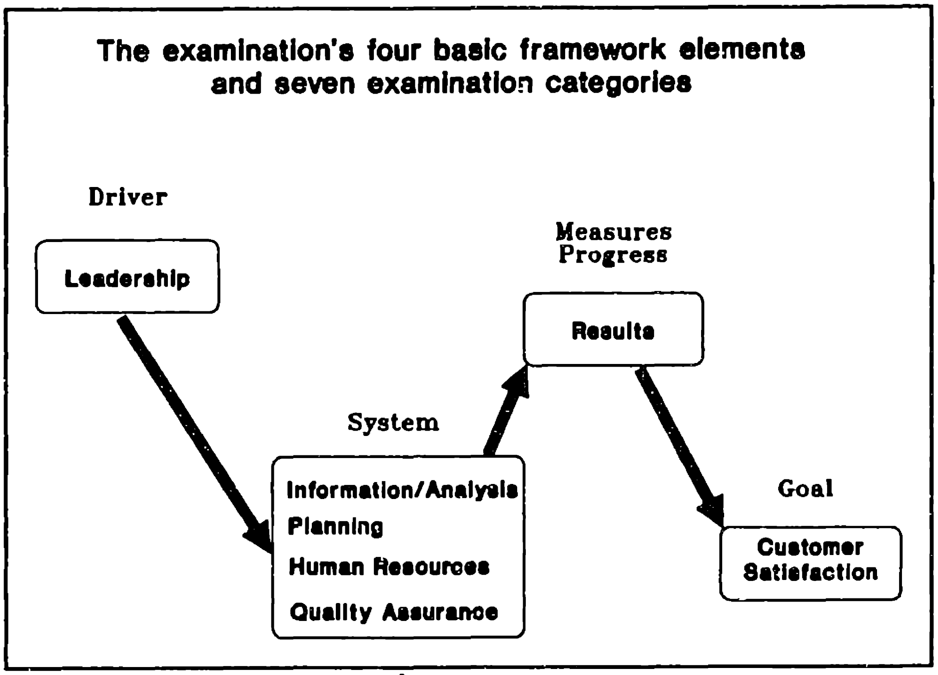

Figure A-2

Board of Examiners

It is estimated by Reimann that NIST has received over 800 referrals of those interested in becoming examiners. The board consisted of 134 members in 1989 and is expected to total approximately 160 in 1990.

Examiners are selected based on their breadth of expertise and experience, their diagnostic experience, and their ability to make a time commitment. According to Reimann they should have broad experience in quality but the selection process maintains a balance between manufacturing and service organizations, business types, professional organizations, companies, consultants, practitioners, and other groups.

Examiners are provided with three days of intensive training when they undergo case study indoctrination in an effort to reduce variability in scoring and to begin team building. The training also ensures that the criteria, processes, and conflict rules are thoroughly understood.

In a November 2, 1989 news briefing Reimann states:

> Rigorous conflict rules are observed. Assignments of examiners and judges are precluded when linkage to the application exists. Conflicts that may be created by employment, client status, significant stock ownership, or competitive relationship are taken into account. In such cases, examiners and judges make no input, receive no information, and make no judgements that could affect the application for which linkage exists. Indeed, it is even a violation of our conflict rules for examiners and judges to seek information regarding the status of applications.[15]

<u>The Scoring Process</u>

Each examiner is provided with an Examiner Application Scorebook which describes a three-dimensional system for scoring: approach, deployment, and results. These three dimensions are reproduced here:

APPROACH

Approach refers to the methods the company uses to achieve the purposes addressed in the examination items. The scoring criteria used to evaluate approaches include one or more of the following:

- The degree to which the approach is prevention-based;
- the appropriateness of the tools, techniques, and methods to the application;
- the effectiveness of the use of tools, techniques, and methods;
- the degree to which the approach is systematic, integrated, and consistent;
- the degree to which the approach embodies effective self-evaluation, feedback, and adaptation cycles to sustain continuous improvement;
- the degree to which the approach is based upon qualitative information that is objective and reliable;
- the indicators of unique and innovative approaches, including significant and effective new adaptations of tools and techniques used in other applications or types of business.

DEPLOYMENT

Deployment refers to the extent to which the approaches are applied to all relevant areas and activities addressed and implied in the examination items. The scoring criteria used to evaluate deployment include one or more of the following:

- the appropriate and effective application to all transactions and interactions with customers, providers of goods and service, and the public;
- the appropriate and effective application to all internal processes, activities, facilities, and employees;
- the appropriate and effective application to all product and service characteristics.

RESULTS

Results refers to outcomes and effects in achieving the purposes addressed and implied in the examination items. The scoring criteria used to evaluate results include one or more of the following:

- the quality levels demonstrated;
- the contributions of the outcomes and effects to quality improvement;
- the quality improvement gains;
- the demonstration of sustained gains;
- the breadth of quality improvement gains;
- the significance of gains in terms of their importance to the company's business;
- the comparison with industry and world leaders;
- the company's ability to account for gains in terms of specific quality improvement actions.[16]

Having described the scoring attributes the scoring process can be described. The stages of the review process are: first stage review; consensus review; site visits; judges recommendations; feedback reports.

First Stage Review

Sixteen key indicator items have been selected from the seven major categories. They are listed here and enumerated with the appropriate application guideline reference.

(Note: There are some inconsistencies between the 1989 and 1990 guidelines.)

First Stage Review Indicator Items

1.1.1 Senior Management

2.1.1 Scope of Data and Information

2.3.1 Analysis and Use of Data for Decision Making

3.1.1 Planning Process

4.2.2 Employee Involvement

4.3.1 Quality Education and Training

5.1.1 Design and Introduction of Products and services

5.2.1 Operation of Processes

6.1.1 Trends in Quality of Products and Services

6.1.2 Comparison With Leaders in Quality of Products and Services

6.2.1 Operational and Business Process Quality Improvement

6.2.2 Supplier Quality

7.1.1 Knowledge of Customer Requirements and Expectations

7.3.1 Customer Satisfaction Methods of Measurement

7.3.2 Customer Satisfaction Results

7.3.3 Customer Satisfaction Competitive Comparison

The top scoring applicants (Group I), approximately thirty according to examiner training literature, are separated from the remaining applicants (Group II) by the judges.

Second Stage Review (Consensus Review)

Group I applications are assigned to a team of three examiners and a senior examiner who independently score all forty-four items defined in the guidelines. Site visit issues are identified individually by team members. A total score is developed by consensus focusing on areas of disagreement without averaging. The senior examiner develops the final score and prepares a commentary for submittal to the judges.

The Group II applications are assigned to a senior examiner or examiner for preparation of a feedback report.

Site Visits

The judges select the applicants who will receive a site visit after reviewing the Group I scores and comments from the senior examiners. The typical site visit team consists of a senior examiner and three examiners. Attempts are made to include at least some of the original scorers on the visit team. In 1989 ten firms received site visits. In addition to the award recipients: Ford; IBM; Timken-Bearings; Corning; GM-Cadillac; and Westinghouse-Furniture were among those visited. In some cases divisions of these companies were applicants.

The Site Visit process is a six-step process:

1. Notification
2. Advanced Preparation
3. Site Visit Preparation
4. Conduct of Site Visit
5. Report Preparation
6. Transmittal of Report.

In preparation for site visits, it is recommended by Reimann that companies have ready access to all data referenced in the application. Ready access to all people should be provided with the understanding that the examination team is in charge of the agenda. Public Relations should be avoided and companies should remain flexible. It was observed during the project team visits that successful companies actually had helicopters and jets available to provide examiners access to any facility desired.

Judges' Recommendations

The judges conduct a detailed review of the scoring of the applicants including the original application, the Stage Two reports, and the Site Visit reports. They conduct interviews with the senior examiners and evaluate the applicants by category. Their emphasis is on the top candidates' overall strengths and areas requiring improvement. They must answer the question, "Is a given applicant appropriate as a national example?" Ultimately, the judges' panel makes a recommendation for award recipient. The Secretary of Commerce makes the final recommendations to the President who grants the award as indicated in the Act.

Feedback Reports

Feedback reports are provided to every applicant in an effort to identify strengths and areas for improvement. Information in the feedback report typically will include the range in which the company scored, specific summary information on the examiner's perception of strengths and areas requiring improvement. The report is not intended to represent anything similar to a consultant's report but high-level feedback is provided. It will likely help a firm develop visionary thrusts but will not help in the establishment of specific action programs.

Award Recipients

The 1988 Award recipients were Globe Metallurgical, Inc.; Commercial Nuclear Fuel Division of Westinghouse Electric Corp.; and Motorola, Inc. The 1989 Award recipients were Milliken & Co. and Xerox Corporation's Business Products and Systems. Globe is in the small business category, but no service company has received the award to date. All of the other award recipients are in the large manufacturing category. In 1989 forty companies applied for the award:

Manufacturing - 23

Small Business - 11

Service - 6

Specifics of these companies' success can be found in Chapter Five of this thesis.

Generic attributes that are found in all high scores for each of the seven categories according to Reimann include:

Leadership

- Highly visible ("Missionary")
- Aggressive ("Leapfrog") Goals
- Strong Cycle Time Driver
- Clear, easily remembered values
- Flatter Organization
- "Nondenominational"
- "We can learn from everyone"
- Contact with customers
- Managers as coaches

Information/Analysis

- Quantitative orientation
- Interlinking Measures - External and Internal
- Widely Deployed, Accessible

Planning

- Quality Planning integrated with Business Planning
- Long-term horizon
- Aggressive planning "Drivers" (Benchmarks) derived from World Leaders
- Covers Products and Services
- Key targets derived from customer requirements... Deployed to all Units

- Linked to External Providers of Goods and Services

Human Resource Utilization

- "Internal Customer"
- Comprehensive Training and Education
- Empowerment, flexible assignment
- Team and individual recognition
- Exposure to the customer
- Lower turnover, accidents, absenteeism

Quality Assurance

- Quality in design
- Focus on Response Time
- Products, services, and business processes
- Integration of prevention and correction with daily operations
- Linkage to suppliers

Quality Results

- Broad base of improvement - products, services, operations
- Improvement trends in all areas
- Comparative analysis within and outside of industry

- Improvement in Supplier Quality

Customer Satisfaction

- Proactive customer system
  - Survey
  - Complaints
  - Product/Service follow-up
  - Use of all "Listening Posts"
- Market Segmentation - Key features
- Front-line empowerment
- Service standards linked to Key Customer Requirements. Employees contribute to standards
- Careful attention to hiring and training of front-line employees
- Strategic infrastructure support for front-line employees
- Market Segmentation - Needs assessment
  Surveys go beyond current customers
- Customer awards
- Positive trends in satisfaction.[17]

SUMMARY

For more complete information on the points, scoring, or criteria, it is suggested that the reader obtain a copy of the Guidelines and review the theses that cumulatively cover these topics. This Appendix serves to introduce the reader to the Malcolm Baldrige National Quality Award and the MIT project that was undertaken to study it. The body of this thesis is devoted to Strategic Quality Planning. It is fitting that this Appendix conclude with Reimann's perception of the items that have been learned through implementation of the Award Program:

- Quality is a market differentiator and basis for market share growth;
- Quality is the preferred route to productivity gains of 15-40% are not uncommon among companies leading the way in quality;
- Strong leadership is crucial to creating and sustaining a quality culture;
- The quality of the leading companies depends in large part on the quality of their suppliers. Accordingly, such companies are narrowing their supplier base, limiting business to suppliers which can meet demanding quality requirements. This is a principal

mechanism for transmitting the pressures of international competition to thousands of companies, many of them businesses, which may not themselves participate in export markets;

- Leading quality companies find that they need to make, and are making, major investments in training and education. A significant fraction of this investment is on basic skills - and represents societal costs borne by U.S. businesses;
- The leading quality companies are driven by competitive comparisons which they derive from studying the successes of companies around the world;
- Quality efforts in leading companies give workers more responsibility and authority, contributing to reduced turnover, absenteeism and accidents. Businesses are finding a high correlation between worker satisfaction and customer satisfaction.
- Grass roots quality efforts are springing up at state and local levels. Job base and business climate are key issues pushing quality.

- The industry/government partnership is working. Businesses have contributed more than $10M [million] in funds and extensive volunteer efforts. Participants come from all sectors. The message is reaching all corners of the U.S.[18]

REFERENCES FOR APPENDIX A

1. U.S. Congress, Senate, "Malcolm Baldrige National Quality Improvement Act of 1987," 100th Cong., 1st Sess., H.R. 812, Senate Report No. 100-143, "U.S. Code Congressional and Administrative News", Vol. 2, 723.

2. Carmine, Sheila, "Commitment to quality offers many rewards," Southern Connecticut Business Journal, 7 September 1987.

3. Malcolm Baldrige National Quality Improvement Act of 1987, Senate Report No. 100-143, p. 724.

4. U.S. Congress. House. Committee on Science, Space, and Technology, Hearing on the Privatization of the National Technical Information Service, and H.R. 812, the National Quality Improvement Award Act of 1987; Hearing before the Subcommittee on Science, Research and Technology, 100th Cong., 1st Sess., 4 March 1987, p. 181.

5. Ibid, p. 198.

6. Ibid, p. 200.

7. Ibid, p. 204.

8. Ibid, p. 207.

9. Ibid, p. 208

10. Ibid, pp. 211-212.

11. Ibid, p. 220.

12. Ibid, p. 221.

13. "The Foundation for the Malcolm Baldrige National Quality Award," Business America, 5 December 1988, p. 12.

14. Phillips, Braden, "State to reward firms for quality work," The Advocate, Stamford, CT, 31 May 1988.

15. Reimann, Curt W., "Quality Award News Briefing," Remarks by C.W. Reimann, 2 November 1989.

16.Board of Examiners, Malcolm Baldrige National Quality Award, work book.

17.Reimann, Curt W., "Malcolm Baldrige National Quality Award," presentation, 19 December 1989, Gaithersburg, MD, Handouts.

18."Quality Award News Briefing".