Selling of Pension—Aspects of Services Marketing

5.1 Introduction

Privatized pension plans have classical elements of service and also characteristics of goods. One neglected area of pension research has been the service aspect. Unlike other kinds of service where buyers can choose the level of service, in a compulsory plan the affiliates do not have that choice. The only choice they have is in which fund they invest (see Sinha et al., 1994).

Customer orientation argues that a firm can be more successful if it first considers the customers' needs and wants and then engages in a continuous program of market research in order to determine these. All activities within the firm need to be integrated so that all departments are working towards the same goals and objectives and are viewing themselves as part of one system which is in the business of delivering a service or idea to a set of customers. And if a firm operates as a total system, i.e., carries out continuous market research, has the customer in its focus and delivers the service or idea, the result will be customer satisfaction, which, in turn, will mean loyal customers, repeat business, growing market share and greater revenue.

The product we are studying here is *completely* new. There was nothing like it before. Obviously, the old IMSS was there but the workers did not have a *choice* of funds. Signing up for an AFORE is not like buying a typical financial service for two important reasons. The affiliates of an AFORE will not receive anything tangible for years to come, unlike a savings account. More importantly, a person has a choice of whether or not to ''buy'' financial products. Joining an AFORE is *mandatory* for all workers (at least in the formal sector). This mandatory nature of the product is absent in other kinds of services studied in the literature. Hence, in several respects, the product that we are studying is unlike any of the other services that have been studied in the literature.

Moreover, the model that we use (see the GAP Model below) has been little studied using survey instruments in other languages and cultures. This could be important. For example, before we embarked on our pilot study many observers commented that in some cultures, such as that of Mexico, negative commentary regarding a service is frowned upon. Therefore, we would not be able to use the proposed instruments. At the end, our results show that the model used is powerful enough to apply despite cultural boundaries.

For these reasons, our study was necessarily exploratory. As we continue to collect data over the years, we plan to refine our questionnaire to reflect what we learn from the past. The disadvantage of this approach is that we lose some degree of comparability of data over time.

We use the most prominent and accepted model currently available in services marketing, the GAP Model of Service Quality (defined below), to measure perceived service quality of AFOREs in the privatized Mexican pension industry. This model was developed by Parasuraman, Zeithaml, & Berry (1985) to address the need to define service quality and its dimensions. They state: ''Research has demonstrated the strategic benefits of quality in contributing to market share and return on investment as well as in lowering manufacturing costs and improving productivity'' (p. 41). They also state:

> Though marketers of tangible goods have defined and measured quality with increasing levels of precision marketers of services experience difficulty in understanding and controlling quality. Because services are performances rather than objects, precise manufacturing specifications for

> uniform quality rarely can be established and enforced by the firm. Quality in services is not engineered at the manufacturing plant, then delivered intact to the consumer. Most services cannot be counted, measured, inventoried, tested, and verified in advance of sale to ensure quality delivery. Furthermore, the performance of services—especially those with a high labor content—often differs among employees, among customers, and from day to day. In most services, quality occurs during service delivery, usually in an interaction between the customer and contact personnel of the service firm. For this reason service quality is highly dependent on the performance of employees, an organizational resource that cannot be controlled to the degree that components of tangible goods can be engineered.

(Zeithaml, Berry, & Parasuraman, 1988, p. 35)

The GAP Model can be used to measure service quality by examining the differences between customers' perceptions and expectations (these are defined in the section on the GAP Model) for a company's service. Parasuraman et al. (1988) developed a multi-item instrument, SERVQUAL, to measure service quality as perceived by the customer. They originally proposed 10 dimensions of service quality but refined these to the five most relevant: *tangibles*, *reliability*, *responsiveness*, *assurance*, and *empathy* (these are defined in the methodology section). The SERVQUAL instrument assesses these *five dimensions* of service quality and measures the magnitude and direction of the GAP (Customer GAP 5, see GAP Model below) between customer perceptions of a company's actual performance and expectations of performance.

Insurance companies need to understand the impact of service quality on profits. Companies want to know whether their customers will remain loyal and continue to purchase more services from them, or, if they are considering switching to a competitor, how do they retain them? Service quality is also considered a determinant of customer choice behavior or behavioral intention to remain loyal or to switch companies. Richard and Allaway (1993) state: ''Service quality is found to be a significant predictor of behavioral intention (e.g. likelihood of recommending, repeat purchase, switching, and/or complaining).'' Insurance marketing managers can use service quality to maintain good relationships with their customers and increase the likelihood of a customer remaining loyal and recommending the company to others. Managers can also use service quality as a tool to help retain customers who are considering switching to one of their competitors. Zeithaml et al. (1996) found strong empirical support that improving service quality can increase favorable behavioral intentions (stay with the company, purchase more, recommend to others) and decrease unfavorable intentions.

Relationship marketing is a managerial tool to improve and maintain favorable customer behavioral intentions. Relationship marketing is especially important for the Mexican pension industry (and the insurance industry in general) due to the long-term nature of this new product. Service quality should play a primary role in relationship marketing in the insurance industry. Relationship marketing is an essential element for closing the Company GAP 1 (see GAP Model below). Typically, companies are transaction-focused, and a primary goal is the attraction of new customers. However, relationship marketing requires a strategic focus on attracting, keeping and improving the relationship with current customers, rather than having a primary emphasis on acquiring new customers. The underlying assumption is that customers prefer an ongoing relationship with one company. This is especially true in the insurance industry where the product is extremely difficult for the customer to evaluate. The lifetime value of a loyal customer is far greater than the cost of continually attracting new customers. In the case of a compulsory pension, there is no additional market, no new customers. It is vital to retain your customer base. When customers perceive high service quality and are satisfied with the service, they will often recommend the service to others and remain a loyal customer.

We use a modified SERVQUAL to assess service quality over a three-year period, 1998–2000, for Mexico's privatized pension scheme. First, we will give a brief summary of fundamental insurance marketing concepts, followed by an overview of the GAPs Model of service quality. Methodology and results sections will be detailed. In the discussion section, we use the GAPs Model as a foundation for a profit strategy as well as an insurance-marketing-managerial-decision-making tool. We expand the model showing how service quality leads to customer satisfaction; through behavioral intentions, and offensive and defensive marketing tactics, it leads to increased sales and profits. We then conclude with a section in which we put it all together and propose a marketing research program for insurance products, such as pension plans. This section highlights the lessons from Mexico.

5.2 Insurance Marketing Basics

To stay competitive and to increase market share, insurance companies must practice the modern marketing concept. This is even more important for a compulsory pension product like Mexico's, as the only way to increase market share is to have superior service quality, leading to a superior product—thus causing potential customers to switch companies. Successful companies today practice the modern marketing concept (this can be reviewed in any standard marketing text) which views the customer as the focal point of all marketing activities. There are four premises to the marketing concept. (1) There is a customer orientation that argues that a firm can be more successful if it first considers the customers' needs and wants. This sounds simple in theory. But in actual practice, it is difficult to implement, as the company is often driven by its own needs and wants, which can differ vastly from those of the customer. (2) To correctly identify the customers' needs and wants requires a continuous program of market research. It is important to ask the customers what they need and want. Too often companies and management merely assume they know what the customers need and want. Why a continuous market research program? This is because the customers, the competitors and the companies' micro and macro environments change. (3) All activities within the firm need to be integrated so that all departments function like a team working towards the same goals and objectives. Each department must see itself as an integral part of the team that is in the business of delivering a service to a set of customers. Departments within a company often have their own goals and objectives. If these are not well integrated, they can leave individual departments functioning at odds with the goal of delivering the service so that it best fulfills the needs and wants of the customer, thus losing customers to the competition. (4) If a firm operates as if it were a team, carries out continuous market research, has the customer as its focal point and delivers the service to best fulfill the customers' needs and wants—this provides a quality service, which leads to customer satisfaction, which in turn will lead to loyal customers, repeat business, growing market share and greater revenue.

Zeithaml and Bitner (1996, p. 21–22) highlight challenges and questions facing service marketers. These issues provide vital challenges to the insurance industry.

> Because of these basic differences between goods and services, marketers of services face some very real and distinctive challenges. The challenges revolve around understanding customer needs and expectations for service, tangibilizing the service offering, dealing with a myriad of people and delivery issues, and keeping promises made to customers. Answers to questions such as the ones listed here still elude managers of services.

One useful tool the insurance manager can use (to help answer these questions) is the services marketing triangle, which is briefly reviewed below.

- How can service quality be defined and improved when the product is intangible and non-standardized?
- How can new services be designed and tested effectively when the service is essentially an intangible process?
- How can the firm be certain it is communicating a consistent and relevant image when so many elements of the marketing mix communicate to customers, and some of these elements are the service providers themselves?
- How does the firm accommodate fluctuating demand when capacity is fixed and the service itself is perishable?
- How can the firm best motivate and select service employees who, because the service is delivered in real time, become a critical part of the product itself?
- How should prices be set when it is difficult to determine actual costs of production, and price may be inextricably intertwined with perceptions of quality?
- How should the firm be organized so that good strategic and tactical decisions are made when a decision in any of the functional areas of marketing, operations, and human resources may have significant impact on the other two areas?
- How can the balance between standardization and personalization be determined to maximize both the efficiency of the organization and the satisfaction of its customers?
- How can the organization protect new service concepts from competitors when service processes cannot be legally patented?
- How does the firm communicate quality and value to consumers when the offering is intangible and cannot be readily tried or displayed [or understood]?
- How can the organization ensure the delivery of consistent quality service when both the organiza-

tion's employees and the customers themselves can affect the service outcome?

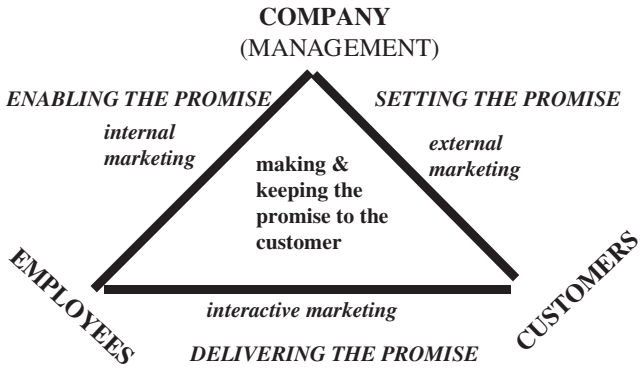
5.3 Services/Insurance Marketing Triangle

The services marketing triangle (see below, Kotler, 1994, p. 470) illustrates that there are three types of marketing that must be carried out for an insurance company to succeed. Our central premise to the customer is making a promise about how the service will be delivered and the type of quality that can be expected.

On the left side of the triangle, we have internal marketing. This involves the marketing efforts a company must perform with its employees. This includes how the company attracts the right employees, their hiring practices, the training procedures, and motivation and employee rewards. The employees must be able and willing to deliver the promise as made by the company to the customer. The primary assumption underlying internal marketing is that employee satisfaction and customer satisfaction are inextricably linked. Thus, creating employee satisfaction is as important as creating customer satisfaction.

On the right side of the triangle, we have external marketing. This includes all the activities and marketing mix elements a company uses to communicate to the customer before the service is actually delivered. This is how the company tells its customers what it is promising to deliver. External marketing plays a vital role in the formation of customer expectations of the service they hope to receive.

SERVICES MARKETING TRIANGLE



On the bottom of the triangle, we have interactive marketing, which is often referred to as real-time marketing. This includes all the deeds, processes and actual service performance that is delivered by an employee to a customer. It includes every employee-customer interaction. This is the marketing process where the customer actually receives what the company promised to deliver.

These three types of marketing are inextricably linked; without one a total marketing effort cannot be supported. Each side of the triangle represents significant challenges for the insurance marketing manager. Insurance marketing managers need to consider the 7 Ps of the services marketing mix (which can be reviewed in any services marketing textbook), and the unique challenges and questions facing services marketing managers. They need to address the issues highlighted by the services marketing triangle.

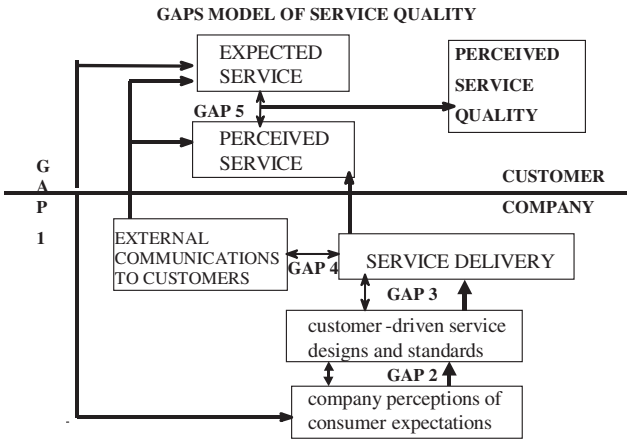
5.4 The Basic GAP Model of Service Quality

The GAP Model of Service Quality (Zeithaml & Bitner, 1996, ch. 2) is a conceptual model that positions the essential concepts, strategies and decisions in services marketing. It is a tool that will help insurance marketing managers make effective decisions about how to manage the difficult issues outlined above.

The GAP Model has five gaps: one customer GAP and four company GAPs. GAP 5 is the customer gap above the line in the model (see below). It is defined as the difference between what the customer perceives he or she received, and what he or she actually expected to receive. The closer a customer's perception is to his or her expectation, the better the service quality—leading to a more satisfied customer. If the customer forms a high expectation about a service based on advertising, and what they hear about the company, when they actually purchase the service, their level of satisfaction or dissatisfaction will be based on how they perceive the service was as good or not as good as they had expected.

If the world were perfect, this gap would not exist and a customer's perceptions and expectations would be the same, the customer would perceive that he or she received what he or she thought the service should and would be. Closing Customer GAP 5 is the insurance marketer's goal.

The four company GAPs are below the line in the model and are the causes of discrepancies within the company that lead to a poorer quality service and directly contribute to Customer GAP 5. Closing GAPs 1–4 are the keys to closing Customer GAP 5. It is critical to understand how customers choose and evaluate service products to be able to begin to close the GAPs.



Company GAP 1 is the result of not understanding what the customer expects from the service. This occurs when the company forms perceptions of what the customer expects based on assumptions and company experience, but without actually asking the customer. Service policies and procedures are often made by people within a company who have little or no direct contact or communication with the customer. Policymakers are often reluctant to ask the customer about expectations because they may assume they know what the customer needs and wants better than the customer does; alternatively, they may not want to know what the customer has to say, as they may be unprepared to make changes based on what they learn from their customers. Key elements to close Company GAP 1 would include: (1) an ongoing market research program with a service quality focus; (2) an upward communication program to ensure that all employees, from customer contact employees to senior executives, learn what the customer has to say; and (3) develop a relationship marketing focus with your customers rather than focusing solely on the transaction.

Company GAP 2 is the result of a company not selecting appropriate service designs and standards that will allow delivery of a quality service, which will adequately meet customer expectations. Typically company performance standards are established to meet company goals and needs, such as efficiency. In an insurance company performance, standards must be driven by customers' expectations and priorities. Zeithaml & Bitner (1996, p. 41) state: ''A recurring theme in service companies is the difficulty executives, managers, and other policy-setters experience in translating their understanding of customers' expectations into service quality specifications.'' The customer-contact employees should be evaluated and compensated on customer-driven performance standards, to ensure the service quality will meet the customers' expectations. A company's market research program needs to include measures of customer perceptions, expectations and satisfaction that will then be aligned with primary operational and performance indicators. Key elements to close GAP 2 would include: (1) establish a management focus on customer requirements for the development of customer-driven service standards; (2) establish service leadership from the top down; and (3) ensure that service design and service positioning are aligned with customer expectations.

Company GAP 3 exists when the service delivery employees fail to deliver the service according to the service designs and standards that have been established. Even when service designs and standards have been developed from a customer focus, they are often not delivered according to those standards by the customer service employees. Employees may fail to deliver the service according to the standards when the company does not provide appropriate resources. The right people must be selected for the job; performance standards for employee evaluation must reflect the service standards; employees have to be educated and trained to deliver the service according to the standards; employees can be in conflict between the customers and management, lack of technology; and employees may lack the authority to make decisions to deliver a quality service. The human resources department in a company has a critical role in needing to be well integrated with the marketing area to properly align employees, job design, training, etc. with service designs and standards. The customer can also have an impact on the delivery of a quality service. A difficult or problem customer can cause the quality of the service to be poor, even when the employee is doing his or her job well. Key elements to close GAP 3 would include: (1) the development of human resource policies aligned with service design and standard, and (2) a customer education program.

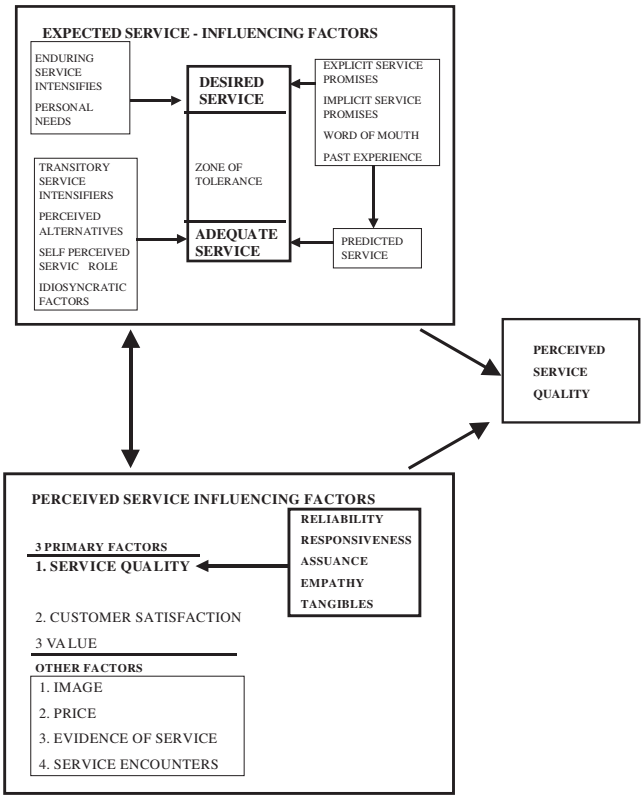
Company GAP 4 exists when promises made through a company's external communications program do not match with the service actually delivered. A company's communication program can raise expectations above the standards that have been set or they may promise something that cannot be delivered. Promising more than can actually be delivered by the service delivery employees usually results from poor coordination between operations and marketing. Key elements for closing GAP 4 would include: (1) establish a communications program to reflect service designs and standards, and (2) establish horizontal communications between marketing, operations and human resources.

When a company recognizes it has a Customer GAP 5 and it begins a program to improve its services marketing and service quality, they should begin with Company GAP 1 and continue working through all the gaps with Company GAP 4 being the last. This provides the optimal approach to making the best improvements.

5.4.1 Customer GAP 5 Expanded

Understanding the factors that influence the formation of customer perceptions and expectations is critical for an insurance marketing manager. By understanding the influencing factors, the insurance marketing manager can develop strategies to influence the development of the customers' perceptions and expectations in the right direction and deliver a quality service correctly—that is so the actual service quality given by the company will match the customers' expectations. Lets take a look at an expanded version of the Customer GAP 5 (below) and examine perceptions and expectations, how are they formed by the customer, and the dimensions and factors that influence perceptions and expectations. Zeithaml & Bitner (1996) discuss in detail how perceptions and expectations are formed. It is assumed that perceptions and expectations are formed in the same manner for both internal and external customers (employees and clients).

EXPANDED CUSTOMER GAP 5



5.4.2 Perceptions

Customer perceptions are defined as the subjective assessments of actual service experiences (Zeithaml et. al, 1996, p. 115). As we can see above, perceptions of service (how the customer evaluates the service) are organized into three primary components: service quality, customer satisfaction, and value, and several other factors (service encounters, evidence of service, image and price). The three primary factors of service quality, customer satisfaction and value are key competitive trends where companies can compete more effectively by distinguishing and/or positioning themselves on these three factors.

We can also define service quality as a focused evaluation that reflects the customer's perception of the *five dimensions* of service quality (that is how the customer organizes information about service quality in their minds): *reliability*, *responsiveness*, *assurance*, *empathy,* and *tangibles*. These five dimensions were found relevant for banking, insurance, appliance repair & maintenance, securities brokering and some other industries in early research done with the GAP Model and the SERVQUAL instrument. The definitions of these five dimensions are from Zeithaml & Bitner (1996, pp. 119–122), but they were originally defined by Parasuraman et al. (1988):

- **RELIABILITY** is defined as the ability to perform the promised service dependably and accurately. In its broadest sense, reliability means that the company delivers on its promises—promises about delivery, service provision, problem resolution, and pricing. Customers want to do business with companies that keep their promises, particularly their promises about the core service attributes.
- **RESPONSIVENESS** is the willingness to help customers and to provide prompt service. This dimension emphasizes attentiveness and promptness in dealing with customer requests, questions, complaints, and problems. . . . Responsiveness is communicated to customers by the length of time they have to wait for assistance, answers to questions, or attention to problems. Responsiveness also captures the notion of flexibility and ability to customize the service to customer needs.
- **ASSURANCE** is defined as employees' knowledge, courtesy, and the ability of the firm and its employees to inspire trust and confidence. This di-

mension is likely to be particularly important for services that the customer perceives as involving high risk and/or about which they feel uncertain about their ability to evaluate outcomes.

- **EMPATHY** is defined as the caring, individualized attention the firm provides its customers. The essence of empathy is conveying, through personalized or customized service, that customers are unique and special. Customers want to feel understood by and important to firms that provide service to them.
- **TANGIBLES** are defined as the appearance of physical facilities, equipment, personnel, and communication materials. All of these provide physical representations or images of the service that customers, particularly new customers, will use to evaluate quality.

The following are examples of the five dimensions of service quality relevant for a pension product in the insurance industry.

- **RELIABILITY**—account details are correct, affiliates are informed on time about the state of their account, having the right amount of money transferred from their SAR account, etc.
- **RESPONSIVENESS**—if mistakes occur they are promptly corrected, allowing affiliates to add additional deposits in their retirement account, quickly settling accounts in cases of incapacity or death, timely payments, etc.
- **EMPATHY**—when affiliates need clarification then the customer contact personnel has all detail of the customers account so they can provide a personalized service, having sufficient staff numbers to personally handle customer accounts, providing staff training to deliver a personalized service of consistent quality, etc.
- **ASSURANCE**—employees provide quick, accurate and understandable information about rate of return, charges, account settlement procedures, and comparison of funds; provide information about the financial soundness of the company, etc.
- **TANGIBLES**—statements, informational materials, office buildings, office furnishings and equipment, employees' dress and appearance, etc.

Managers can improve the service quality of their company through an analysis of their strengths and weaknesses on these dimensions with the GAP Model and SERVQUAL.

The second primary factor of customer perceptions is customer satisfaction. Customer satisfaction is considered to be a broader concept than service quality (service quality assessment is focused on the five dimensions) and is influenced by: perceptions of service quality, product quality, price, idiosyncratic factors (the original model uses situational factors; we have redefined this factor and included a broader concept of micro-environmental factors, see the section on service quality as a profit strategy) and personal factors (Zeithaml & Bitner, 1996). Another distinguishing factor between customer satisfaction and perceived service quality is the timing of when these assessments can be experienced or formed. Perceptions of service quality can be formed in the minds of the customers or potential customers without any actual experience with the company. In addition, customer satisfaction can only be assessed by the customer after they have an actual service experience with the company.

Perceived value is the third primary factor influencing customer perceptions. ''Value is defined as the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given. Value is intimately tied to customer perceptions of benefits received versus cost in terms of dollars, time, and effort. A customer may perceive that an organization offers good quality, and may be satisfied with her experiences with the organization, but she may perceive that value isn't there in terms of cost-benefit trade-off (Zeithaml & Bitner, 1996, p. 124).'' Perceptions of value are also intricately linked to the customers' perceptions of price and the company's pricing strategies.

The other factors influencing customer perceptions of service are:

- **service encounters**, that is how each contact the customer has with the company or a company employee is handled;
- **evidence of service**, this is comprised of the 3 extra marketing P's for services—people, process and physical evidence;
- **image**, the companies image or reputation and how it is reflected in the associations the customer holds in his or her memory about the company;
- and **price**, which is often used as a substitute indicator that influences how the customer assesses quality in his or her expectations and perceptions.

5.4.3 Expectations

Customer expectations are beliefs about service delivery that function as standards or reference points against which performance is judged. Because customers compare their perceptions of performance with these reference points when

evaluating service quality, thorough knowledge about customer expectations is critical to insurance marketers.

(Zeithaml & Bitner, 1996, p. 76).

As we can see in the expanded Customer GAP 5 above, customer expectations are made up of two different types of expectations for assessing service performance: what they desire and what they would accept.

- **Desired service**, ''is defined as the level of service the customer hopes to receive—the 'wished for' level of performance. Desired service is a blend of what the customer believes 'can be' and 'should be'; . . . expectations of adequate service is the level of service the customer will accept. . . .
- **Adequate service** represents the 'minimum tolerable expectation,' the bottom level of performance acceptable to the customer, and reflects the level of service customers believe they will get on the basis of their experience with services (Zeithaml & Bitner, 1996, pp. 77–78).''

We have two types of customer expectations because the customer always wishes or hopes to achieve his or her service desires (the best service possible), but customers recognize that this is not always possible. Because customers understand it is not always possible to get the very best, they hold a lower level of expectation for what is the minimum level of service they will consider acceptable.

In the model above, we see that between desired service and adequate service, we have a zone of tolerance. When service levels, as assessed by the customer, fall below their desired service level, but above the adequate service level, customers tend to find the service acceptable. When service levels fall below adequate or above desired service levels, the customer pays attention from a negative or positive perspective. The zone of tolerance occurs because of the heterogeneous nature of the service performance in that it may vary across companies, across employees within the same company, and even within the same employee—thus creating variations in the service performance.

There are many factors that influence customers' desired service expectations and the customers' adequate service expectations. Zeithaml & Bitner (1996, pp. 82–90) have defined these factors.

- **Desired service is influenced by:**
  1. **personal needs**—things that are vital to a person's physical or psychological well being and are fundamental in shaping desired service levels; example: financial security for retirement, peace of mind.
  2. **enduring service intensifiers**—factors that are unique to the individual causing some customers to be more demanding, to have greater sensitivity or to have higher expectations than other customers. Example: the individual's degree of risk aversion, level of income, level of education, social status.
- **Several factors influence both desired and predicted service expectations:**
  1. **explicit service promises** are communications from the company to the customer. This is one of the few factors that is completely in the control of the company; example: advertising and promotional communications from the company.
  2. **implicit service promises** are cues the customer uses that will allow him or her to make inferences about what the service should and will be like; they are primarily price and tangibles; example: price, implicitly promised rate of return, tangibles.
  3. **word of mouth communications** are statements made about the company but are not made by the company; examples: positive and negative statements made by coworkers, family and friends who have had some experience with the company.
  4. and **past experience** with a similar or related service; example: any service experiences with the same company but for a different product, service experiences with other insurance or financial companies.
- **Adequate service expectations are influenced by:**
  1. **transitory service intensifiers**, which are factors unique to the individual customer and of a short-term nature that heighten the customer's need or awareness of a need for the service; example: when parents retire they have inadequate financial resources.
  2. **perceived service alternatives** are the customers' other options or companies from whom they can obtain the service; examples: other companies with pension products, other types of financial investments such as bonds or mutual funds, investment in property, universal life insurance.
  3. **customer's self-perceived service role** relates to the customers' perception of the degree to which they can influence the level of service they receive; example: customers who do not complain about a mistake in their statement will

be more dissatisfied than a customer who complains and receives prompt attention.

4. **idiosyncratic factors** are elements that randomly affect some of the customers but are never systematic and they are the conditions surrounding the performance of a service but are beyond the control of the company, examples: death, dismemberment, loss of capacity to work due to illness.
5. and **predicted service,** which is the level of service the customers believe that they are likely to receive (recall predicted service is also influenced by four of the factors that influence the level of desired service expectation).

The SERVQUAL instrument can be modified to measure desired and adequate expectations (not just one measure of expectations) along with perceptions. By making this type of modification and including a more comprehensive set of questions on behavioral intentions, regression analysis can be used to determine the customers' sensitivity to service quality improvements (Zeithaml, Berry, & Parasuraman, 1996). It is not enough to merely spend money on service quality. Managers need to know where the cost of service improvements provides the greatest benefit—thus avoiding the fate of merely spending on service quality improvements and never knowing if the costs are justified. This can be achieved by developing an appropriate services marketing program to be used in conjunction with the expanded model—financial consequences of service quality (presented below).

5.5 Methodology

Our sample in 1998 consisted of 195 students enrolled in a Master's Degree Program at the Instituto Tecnológico Autónomo de México in Mexico City, Mexico. In 1999, our sample consisted of 98 students from the same institution who were enrolled in Master's Degree Programs. The final sample of 61 students for 2000 comes from the same universe. All subjects worked full time.

We modified the SERVQUAL instrument (see Table 5.1 in results indicates the dimensions) for the privatized pension plans in Mexico. We then translated the instrument into Spanish and then had it back-translated into English. We then used our Spanish version of SERVQUAL to measure the perceived service quality of the privatized AFOREs in the Mexican pension industry.

For this investigation we are primarily concerned with measuring Customer GAP 5 which gives us our measure of perceived service quality. Perceived service quality is thus defined as Customer GAP 5. It is the difference between customer perceptions (denoted by p in the model below) and expectations (denoted by e in the model below). Customer GAP 5 depends on the size and direction of the four company gaps that are associated with the delivery of service by the company (Zeithaml el. al, 1988, p. 36).

As discussed above, there are five dimensions to measure the Customer GAP 5: *reliability*, *responsiveness*, *assurance*, *empathy,* and *tangibles*. Each dimension is in turn measured using several questions. In total, we have 20 questions to measure the five dimensions. Since Customer GAP 5 is measured as the difference between customer expectations and perceptions, we have an additional 20 questions to measure expectations. In the literature, there is some controversy about how expectations should be measured. After testing several formulations, we measure expectations in terms of what the affiliates think about the ''best'' AFORE. The idea is that given the affiliates choose their own AFOREs, they will always use the yardstick of the best to judge the quality of their own AFORE. Denoting by p the perception of their own AFORE and by e the expectation (that is, e represents the characteristic of the best AFORE), *the difference* ***p-e*** *represents a gap in service quality*. If the affiliates perceive their AFORE to be the best, the difference between p and e will disappear and the gap will be closed. Thus, for five dimensions we have asked 20 questions to measure perceptions and another twenty questions to measure expectations.

From the discussion in the introduction, we know that service quality is explicitly related to profits of the company through loyalty of affiliates. Therefore, in our questionnaire we introduce two measures of loyalty of the affiliates: (1) we ask them how likely they are to switch from their existing AFORE and (2) how likely are they to recommend their own AFORE to others. These questions are what we call questions on ''behavioral intentions.'' If the difference p-e is really measuring the gap in service quality, there should be a strong relationship between the gap in service quality and the behavioral intentions. Specifically, a bigger gap should lead to a higher propensity to switch AFOREs and a lower propensity to recommend their AFORE.

Thus, in the following section, we test the hypotheses:

HYPOTHESES: There is a *positive* relationship between the size of the service quality gap and

TABLE 5.1
SUMMARY FINDINGS FROM SURVEYS

Dimension	Information	98 result	99 result	00 result
Reliability	Sending timely information (P)	4.67	4.76	4.93
Reliability	Sending timely information (E)	6.68	6.86	6.64
Reliability	Care about resolving problems (P)	4.57	4.38	4.70
Reliability	Care about resolving problems (E)	5.81	6.37	6.11
Reliability	Correct documentation (P)	5.42	5.47	5.16
Reliability	Correct documentation (E)	6.28	6.71	6.56
Reliability	Timeliness of services (P)	5.35	5.68	5.89
Reliability	Timeliness of services (E)	6.19	6.67	6.66
Reliability	When services will be performed (P)	4.58	4.20	4.50
Reliability	When services will be performed (E)	6.25	6.43	6.47
Responsiveness	Employees give prompt service (P)	4.73	4.52	4.81
Responsiveness	Employees give prompt service (E)	6.21	6.60	6.37
Responsiveness	Employees always willing to help (P)	5.13	4.93	5.10
Responsiveness	Employees always willing to help (E)	6.15	6.68	6.53
Responsiveness	Employees not too busy to help (P)	4.79	4.72	4.86
Responsiveness	Employees not too busy to help (E)	6.22	6.58	6.48
Assurance	Employees behavior instills trust (P)	4.96	5.26	5.29
Assurance	Employees behavior instills trust (E)	6.37	6.67	6.70
Assurance	Feeling safe about transactions (P)	5.05	5.12	5.44
Assurance	Feeling safe about transactions (E)	6.27	6.63	6.52
Assurance	Employees consistently courteous (P)	5.35	5.43	5.51
Assurance	Employees consistently courteous (E)	6.36	6.65	6.54
Assurance	Employees are knowledgeable (P)	4.92	4.85	5.35
Assurance	Employees are knowledgeable (E)	6.31	6.59	6.59
Empathy	Company pays personal attention (P)	4.63	4.77	4.95
Empathy	Company pays personal attention (E)	6.11	6.32	6.23
Empathy	Employees pay personal attention (P)	4.66	4.88	5.17
Empathy	Employees pay personal attention (E)	6.13	6.41	6.25
Empathy	Company cares about your best interest (P)	4.23	4.17	4.35
Empathy	Company cares about your best interest (E)	5.96	6.32	6.39
Empathy	Employees understand your own needs (P)	3.84	3.70	3.83
Empathy	Employees understand your own needs (E)	5.88	6.02	6.25
Tangibles	Information material visually appealing (P)	4.94	5.03	5.11
Tangibles	Information material visually appealing (E)	6.11	6.17	6.33
Tangibles	Convenient business hours (P)	4.88	5.16	5.30
Tangibles	Convenient business hours (E)	6.12	6.21	6.39
Tangibles	Facilities are modern and pleasing (P)	4.50	5.23	5.16
Tangibles	Facilities are modern and pleasing (E)	5.66	5.94	5.84
Tangibles	Employees appear neat and tidy (P)	5.02	5.55	5.38
Tangibles	Employees appear neat and tidy (E)	6.03	6.22	6.07

the propensity to switch AFOREs. There is a *negative* relationship between a service quality gap and the propensity to recommend an AFORE. The GAPs diminish over time as people learn about what they would get from the AFOREs.

To operationalize the five dimensions of *reliability*, *responsiveness*, *assurance*, *empathy,* and *tangibles* from 20 questions, we had to combine responses to several questions to form one dimension (for example, reliability is a composite of five questions). How do we know that each component of a given dimension is of equal importance? If, for example, we simply ''add'' all the responses in a given dimension, we are implicitly assuming that all questions are of equal importance. Since the product we are testing with this model is completely new, we decided to investigate the issue of additivity of the responses.

One simple way of doing that is to ask the respondent (corresponding to each of the 20 perception/expectation questions), how important that question is for the respondent (we call them weights). Then, we

can test to see if the weighted composite response (where the weights are the level of importance attached to the question by the respondent) is significantly different from the unweighted (or more accurately—equally weighted) responses. Suppose we denote the weight of question i by w_i and p_i is the perception about the specific AFORE for question i and e_i is the expected response to the best AFORE. Then, this question boils down to exploring the relationship between $\Sigma w_i(p_i-e_i)$ and $\Sigma(p_i-e_i)$ where the summation is taken over the appropriate set of questions (for example, for the variable reliability it is the sum of the first five questions).

We have collected our data in three distinct waves. The first wave of data was collected immediately after the introduction of the new pension system in Mexico. Therefore, in the first set of responses, the affiliates did not have much experience with the AFORE. For example, they had not yet received any financial statement (estado de la cuenta) from the AFORE. The second wave of responses were collected at least one year after the affiliates have been with an AFORE. By law, every AFORE has to send at least one financial statement per year. Therefore, the affiliates were able to have at least one service encounter with their AFOREs before we collected the second wave of data. Finally, we have collected the third wave of data from a time (year 2000) when the system has become mature (it has captured a vast majority of the formal labor market, see chapter 4). Therefore, we were able to track what happens to service quality measures, their importance, and the behavioral intentions when a new product is introduced in the market.

Because we collected the data in three separate waves at different points in time, we were able to further explore if the relative importance of each dimension was changing over time. This was accomplished by examining the sum of the weights Σw_i.

One of the criticisms of the SERVQUAL is that it may not be able to capture all the important dimensions of service quality. To be able to explore that possibility, we also asked an open-ended question about other characteristics the subjects felt were important.

5.6 Results

We analyze the data we have collected in 1998, 1999 and in 2000. First, we note that samples are very similar in terms of background information. The median age of all the samples is between 26 and 30 years with similar variances. The median income for the samples is between 10,001 and 20,000 pesos per month with similar variances. Choices of the AFOREs are distributed roughly in the same proportion as we see in the general population. Specifically, the top four AFOREs account for 75% of the total. The high degree of concentration, though not surprising, has been criticized by some researchers for being responsible for persistently high management fees (for example, see Sinha, 1998). Since we have not over-sampled the affiliates of the smaller AFOREs, our results will not reflect if there is something peculiar about the smaller AFOREs.

From the SERVQUAL instrument, we note that *reliability* is a composite measure of five different items (see Table 5.1 for a guide to the kinds of items that constitute the measures). Similarly, *responsiveness* has 3 items; *assurance*, *empathy*, and *tangibles* have 4 items each.

In Table 5.2, below, we see for all the three years that all p-e scores are negative indicating the presence of Customer GAP 5. This indicates clearly that the AFOREs did not provide the service the customers expected to receive. This is a clear indication that the other four Company GAPs exist. To make the most cost-effective changes in service quality, the insurance marketing manager needs to work through the issues fundamental to the Company GAPs, starting with GAP 1 and working systematically through to GAP 4.

We conducted a paired t-test of the equality of the p-e scores to determine if they are statistically significantly different from each other. For 1998, it is interesting to note that the size of the GAPs for the dimensions of *reliability*, *responsiveness*, *assurance*, and *tangibles* are statistically significantly not different from each other at the 5% level of significance. However, they are all statistically significantly different from *empathy* at the 5% level of significance. From this, we could conclude that the industry in general exhibits a low level of service quality from the customer's perspective. For a new service product high in credence properties, such as the Mexican AFORE, the most important service quality characteristic relates to the customer's desire for caring personalized attention—*empathy*. As the members had little experience with their AFORE, they did not appear to discriminate between the other dimensions, they were rated equally low in service quality. As it was mandatory to join an AFORE, the members' primary concern in 1998 may have been to sign up. This could account for the service GAP in the *empathy* dimension being so much larger than the other GAPs.

TABLE 5.2
ANALYSIS OF CUSTOMER GAP 5: P-E SCORES

Year	Reliability	Responsiveness	Assurance	Empathy	Tangibles
98 results	−1.32	−1.30	−1.25	−1.67	−1.14
99 results	−1.71	−1.89	−1.47	−1.88	−0.89
00 results	−0.68	−0.79	−0.64	−0.89	−0.50

The results for 1999 show an even larger GAP in service quality on all dimensions except tangibles. The *tangibles* dimension is statistically significantly different from all the dimensions at the 5% level of significance. The AFORE members have more experience with the product and tangibles have become a less important dimension on which they can assess service quality. The *assurance* dimension is statistically significant from *responsiveness* and *empathy* at the 5% level of significance. The rest of the dimensions are not statistically significantly different from each other, but the GAPs are all very large except for *tangibles*. The AFORE members have had at least one service experience with their AFORE within the last year. Thus, their understanding of the product should have increased. This could account for the large increase in the size of the service quality GAPs as the members' expectations of service have increased with their greater experience and understanding of the product. However, without research evidence and a clear picture of how service quality improvements can increase profitability, it is unlikely that many companies have made actual service quality improvements. It is unlikely that the actual service quality within the industry has changed for better or worse.

Finally, comparing the results for 1999 and 2000, we see that across all dimensions the GAPs are closing. There is a sharper decline in GAPs in four dimensions: reliability, assurance, responsiveness and empathy.

What we have is a clear picture of low service quality (service failure) within the industry. However, as the AFORE members have more experience with the product and gain a greater understanding, their expectations have increased (while the actual service has remained the same), thus widening the GAPs.

In addition to the basic SERVQUAL instrument we also included importance questions (that is, a question that says, "how important is this particular item for you?") which match the 20 questions covering each of the dimensions as stated above. Therefore, we can define:

$$reliability = \sum_{i=1}^{5} w_i(p_i - e_i) \quad (1)$$

$$responsiveness = \sum_{i=6}^{8} w_i(p_i - e_i) \quad (2)$$

$$assurance = \sum_{i=9}^{12} w_i(p_i - e_i) \quad (3)$$

$$empathy = \sum_{i=13}^{16} w_i(p_i - e_i) \quad (4)$$

$$tangibles = \sum_{i=17}^{20} w_i(p_i - e_i) \quad (5)$$

(where w_i is the weight corresponding to the importance the person attaches to question i. We could define the dimensions without the corresponding weights:

$$reliability = \sum_{i=1}^{5} (p_i - e_i) \quad (6)$$

$$responsiveness = \sum_{i=6}^{8} (p_i - e_i) \quad (7)$$

$$assurance = \sum_{i=9}^{12} (p_i - e_i) \quad (8)$$

$$empathy = \sum_{i=13}^{16} (p_i - e_i) \quad (9)$$

$$tangibles = \sum_{i=17}^{20} (p_i - e_i) \quad (10)$$

Cronin and Taylor (1992) have argued that if we define each dimension without the weights, we might get different answers from what we get with weights. We investigate this question. In our study, we have a measure for w_i for each subject for each period. In Table 5.3 below, we summarize the findings about the w_is for each period. A statistical test shows that it is not possible to reject the hypothesis that weights of service qualities are changing. This shows the stability in our dimensions.

The results above show that it makes little difference in whether we use a weighted version of the

TABLE 5.3
ANALYSIS OF WEIGHTS OF SERVICE QUALITY DIMENSIONS (VALUES OF w_iS)

Year	Reliability	Responsiveness	Assurance	Empathy	Tangibles
1998	6.394872	6.189744	6.170513	5.976923	5.534615
1999	6.595918	6.397959	6.191327	5.964286	5.367347
2000	6.580328	6.508197	6.307377	6.131148	5.610656

model (as in equations 1 through 5) or an unweighted version of the model (as in equations 6 through 10). Hence, in what follows, we use an unweighted version.

Dynamics of Change in Perceptions and Expectations

Table 5.2, above, shows how Σp_i and Σe_i have changed between 1998, 1999 and 2000. Because equations (5) through (10) have been expressed as the difference between Σp_i and Σe_i, any change may come from changes in p's or e's. Therefore, we have actually compiled the Σp_i and Σe_i separately in that table. Results show that even though perceptions about the AFORE have improved, expectations have gone up at a faster rate, making the Customer GAP 5 bigger. The table also reminds us that higher service quality itself does not mean anything—the only relevance of service quality is through a comparison with a benchmark.

5.7 Channels of Change in Market Share

There are two important channels through which the market share of an AFORE in the future will be determined: through switching of unhappy customers and through recommendations by others. We capture these two channels through two ''behavioral intentions'' questions. In other services there is a third channel through which the customer base expands: expansion of market size itself. However, as the AFOREs are a compulsory product, the market will not expand beyond a natural increase in the labor force in the formal sector of the economy or from switching of workers from the informal to the formal sector. Historically, the growth of the labor force in the formal sector has not been rapid. Also, there has been a tendency of movement in the labor force from the formal to the informal sector in Latin America and not vice versa (with the exception of Chile).

We fit a multivariate regression model to see what determinants would affect two (related) behavioral intentions: desire to change the AFORE (called the variable ''**change**'') and desire to recommend their AFOREs to others (called the variable ''**recommend**'').

The actual models take the following form:

Change = constant + b_1.age + b_2.assurance + b_3.empathy + b_4.income + b_5.reliability + b_6.responsiveness + b_7.sex + b_8.tangibles

From the discussion about the hypotheses in the methodology section, we would expect b_2, b_3, b_5, b_6 and b_8 to be negative because positive feeling about the company would make it less likely to change the AFORE. We have no a-priori reason to put signs on b_1, b_4 or b_7. Note also that b_7 is an indicator variable (it only takes two values).

and

Recommend = constant + c_1.age + c_2.assurance + c_3.empathy + c_4.income + c_5.reliability + c_6.responsiveness + c_7.sex + c_8.tangible

We would also expect (again from our discussion in the methodology section) c_2, c_3, c_5, c_6 and c_8 to be positive because positive feeling about the company would make more people likely to recommend the AFORE. We have no a-priori reason to put signs on c_1, c_4 or c_7. Note also that c_7 is an indicator variable (it only takes two values).

For 1998, the results are

CHANGE = 0.1186544471 ● AGE − 0.08253629151 ● ASSURANCE + 0.03218903582 ● EMPATHY − 0.1374616084 ● INCOME − 0.2535806172 ● RELIABILITY − 0.3450222847 ● RESPONSIVENESS − 0.04223239434 ● SEX + 0.03186276942 ● TANGIBLE + 2.499933162

From Table 5.4, it can be seen that the only variable that is significant for change, at the 5% level of significance, is *responsiveness*. It has the expected negative sign. This result shows that service quality does

TABLE 5.4
REGRESSION RESULTS FOR 1998

Dependent Variable: CHANGE
Method: Least Squares
Included observations: 195

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AGE	0.118654	0.137641	0.862054	0.3898
ASSURANCE	−0.082536	0.163163	−0.505852	0.6136
EMPATHY	0.032189	0.142550	0.225808	0.8216
INCOME	−0.137462	0.113786	−1.208071	0.2286
RELIABILITY	−0.253581	0.150026	−1.690239	0.0927
RESPONSIVENESS	−0.345022	0.163331	−2.112413	0.0360
SEX	−0.042232	0.306115	−0.137962	0.8904
TANGIBLE	0.031863	0.144997	0.219747	0.8263
C	2.499933	0.657497	3.802196	0.0002
R-squared	0.183485	Mean dependent var		3.066667
Adjusted R-squared	0.148366	S.D. dependent var		2.088423
S.E. of regression	1.927281	Akaike info criterion		4.195153
Sum squared resid	690.8809	Schwarz criterion		4.346214
Log likelihood	−400.0274	F-statistic		5.224661
Durbin-Watson stat	1.841290	Prob(F-statistic)		0.000007

Dependent Variable: RECOMMEND
Method: Least Squares
Included observations: 195

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AGE	−0.172882	0.139973	−1.235110	0.2183
ASSURANCE	−0.096465	0.165927	−0.581369	0.5617
EMPATHY	0.145639	0.144965	1.004652	0.3164
INCOME	0.237309	0.115713	2.050838	0.0417
RELIABILITY	0.179186	0.152568	1.174472	0.2417
RESPONSIVENESS	0.168973	0.166097	1.017312	0.3103
SEX	−0.167412	0.311300	−0.537782	0.5914
TANGIBLE	0.161759	0.147453	1.097021	0.2741
C	4.681711	0.668634	7.001902	0.0000
R-squared	0.156142	Mean dependent var		4.082051
Adjusted R-squared	0.119847	S.D. dependent var		2.089107
S.E. of regression	1.959926	Akaike info criterion		4.228746
Sum squared resid	714.4839	Schwarz criterion		4.379807
Log likelihood	−403.3027	F-statistic		4.302022
Durbin-Watson stat	1.820002	Prob(F-statistic)		0.000090

have an impact on the behavioral intention of changing AFORE in 1998. What does not show up in the result is that not all dimensions of service quality are significant. In this case, four out of five were not important enough.

RECOMMEND = −0.1728818942 ● AGE − 0.09646467551 ● ASSURANCE + 0.1456391911 ● EMPATHY + 0.2373093359 ● INCOME + 0.1791864952 ● RELIABILITY + 0.1689729646 ● RESPONSIVENESS − 0.1674117682 ● SEX + 0.1617594414 ● TANGIBLE + 4.681710835

From Table 5.4, it can be seen that the only variable that is significant for recommend, at the 5% level of significance, is income. None of the dimensions of *assurance*, *empathy*, *reliability*, *responsiveness* and *tangibles* is a significant factor. However, they have the expected positive sign (except *assurance*).

For 1999, the results are:

CHANGE = −0.03183177247 ● AGE − 0.557348292 ● ASSURANCE − 0.005635648534 ● EMPATHY − 0.07141740485 ● INCOME − 0.3383265129 ● RELIABILITY − 0.02798123788 ● RESPONSIVENESS − 0.1309559291 ● SEX + 0.1229104596 ● TANGIBLE + 3.20454524

From Table 5.5, we note that *assurance* has become the only significant (and negative as expected) ex-

TABLE 5.5
REGRESSION RESULTS FOR 1999

Dependent Variable: CHANGE
Method: Least Squares
Included observations: 98

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AGE	−0.031832	0.241219	−0.131962	0.8953
ASSURANCE	−0.557348	0.254172	−2.192802	0.0309
EMPATHY	−0.005636	0.209667	−0.026879	0.9786
INCOME	−0.071417	0.171048	−0.417527	0.6773
RELIABILITY	−0.338327	0.189946	−1.781167	0.0783
RESPONSIVENESS	−0.027981	0.192735	−0.145180	0.8849
SEX	−0.130956	0.514779	−0.254392	0.7998
TANGIBLE	0.122910	0.220407	0.557652	0.5785
C	3.204545	1.027039	3.120178	0.0024
R-squared	0.267282	Mean dependent var		4.071429
Adjusted R-squared	0.201420	S.D. dependent var		2.077121
S.E. of regression	1.856185	Akaike info criterion		4.162266
Sum squared resid	306.6426	Schwarz criterion		4.399661
Log likelihood	−194.9510	F-statistic		4.058191
Durbin-Watson stat	1.813346	Prob(F-statistic)		0.000376

Dependent Variable: RECOMMEND
Method: Least Squares
Included observations: 98

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AGE	−0.195587	0.180547	−1.083306	0.2816
ASSURANCE	0.797909	0.190241	4.194190	0.0001
EMPATHY	−0.004391	0.156931	−0.027978	0.9777
INCOME	0.091504	0.128026	0.714733	0.4766
RELIABILITY	0.268885	0.142170	1.891288	0.0618
RESPONSIVENESS	0.143787	0.144258	0.996738	0.3216
SEX	0.104664	0.385300	0.271643	0.7865
TANGIBLE	−0.221497	0.164969	−1.342652	0.1828
C	6.378363	0.768714	8.297443	0.0000
R-squared	0.520710	Mean dependent var		4.704082
Adjusted R-squared	0.477628	S.D. dependent var		1.922247
S.E. of regression	1.389310	Akaike info criterion		3.582834
Sum squared resid	171.7862	Schwarz criterion		3.820229
Log likelihood	−166.5589	F-statistic		12.08643
Durbin-Watson stat	1.908568	Prob(F-statistic)		0.000000

planatory variable for change (see below for interpretation of this result).

RECOMMEND = −0.1955871351 • AGE + 0.7979088869 • ASSURANCE − 0.004390566056 • EMPATHY + 0.09150423721 • INCOME + 0.2688852444 • RELIABILITY + 0.1437872637 • RESPONSIVENESS + 0.10466399 • SEX − 0.2214966334 • TANGIBLE + 6.37836319

From Table 5.5, we see again, *assurance* has become the single most strongly influential variable for recommend (see below for an interpretation of the result).

We would expect *reliability* to be an important factor (services marketing theory and research show *reliability* to be typically the most important factor). However, as this was a brand new product in 1998, the subjects would have had virtually no experience with the company except to have someone sign them up. This could indicate the most important factor for the affiliates was a quick response to their questions and problems. However, in 1999, with some experience with the company, the issue of assurance has become more important. Is this result reasonable? The answer is yes. The product (pension) really requires a long-term commitment on the part of the affiliates. Hence, in the end, trust has become a more important factor. Therefore, *assurance* rather than *reliability* has

TABLE 5.5—*Continued*
REGRESSION RESULTS FOR 1999

Results for 2000
Dependent Variable: CHANGE
Method: Least Squares
Included observations: 58
Excluded observations: 3

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AGE	−0.822575	0.442281	−1.859847	0.0689
ASSURANCE	−0.375742	0.717314	−0.523818	0.6028
EMPATHY	0.277170	0.609005	−0.455120	0.6510
RELIABILITY	−0.020344	0.598215	−0.034009	0.9730
RESPONSIBILITY	−0.506382	0.434934	−1.164273	0.2500
SALARY	0.380015	0.227279	1.672022	0.1009
SEX	0.052249	0.660086	−0.079154	0.9372
TANGIBLE	−0.381591	0.492626	−0.774606	0.4423
C	2.735567	1.978765	1.382462	0.1731
R-squared	0.272231	Mean dependent var		3.431034
Adjusted R-squared	0.153412	S.D. dependent var		2.086818
S.E. of regression	1.920086	Akaike info criterion		4.284339
Sum squared resid	180.6497	Schwarz criterion		4.604063
Log likelihood	115.2458	F-statistic		2.291137
Durbin-Watson stat	1.849082	Prob(F-statistic)		0.035958

CHANGE = −0.8225747594*AGE − 0.3757422837*ASSURAN − 0.2771703808*EMPATHY − 0.02034445505*RELIAB − 0.5063817652*RESP + 0.3800147634*SALARY − 0.05224860908*SEX − 0.3815905904*TANGIBLE + 2.735567038

Dependent Variable: RECOMMEND
Sample: 1 61
Included observations: 58
Excluded observations: 3

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AGE	0.261425	0.371471	−0.703758	0.4849
ASSURANCE	1.279475	0.602471	2.123713	0.0388
EMPATHY	−0.454191	0.511502	−0.887957	0.3789
RELIABILITY	1.117614	0.502440	2.224374	0.0308
RESPONSIBILITY	0.021792	0.365300	0.059654	0.9527
SALARY	−0.097378	0.190891	−0.510125	0.6123
SEX	−0.726371	0.554404	−1.310183	0.1962
TANGIBLE	0.237094	0.413755	0.573030	0.5692
C	8.170027	1.661960	4.915900	0.0000
R-squared	0.315435	Mean dependent var		4.879310
Adjusted R-squared	0.203669	S.D. dependent var		1.807175
S.E. of regression	1.612675	Akaike info criterion		3.935388
Sum squared resid	127.4354	Schwarz criterion		4.255112
Log likelihood	−105.1263	F-statistic		2.822284
Durbin-Watson stat	2.076003	Prob(F-statistic)		0.011734

taken the prime place. To be sure, other factors play an important role—the correlations among the five dimensions are quite high. However, the impact of the other dimensions is indirectly through the *assurance* variable. Assurance and reliability continue to be important in 2000. Note that for ''change'' variable none of the factors seems to be important any more. Unlike Chile, in Mexico, changing pension funds is a rarity. Indeed, less than 0.3% of affiliates have changed their AFOREs in the first three years. Thus, it is natural that we would not find the variable ''change'' to correlate with anything as the system becomes stable.

Are the responses for recommend and change consistent with one another? The correlation between recommend and change are negative and significant. They are becoming more negative over time. If affil-

iates have a vague idea about their expectations with a new product, then they do not know much about recommending a company that they themselves have chosen. As they have more experience with the product, their perceptions and expectations change leading to more fixed ideas about the company. Therefore, their opinions gel and lead to an amplification of the negative relation between recommend and choice variables.

The regression analysis with recommend for 1998 shows the only significant variable to be income with a positive relationship. We have the following interpretation for this result. Knowing little about the product and the company, the five determinants had little significance in 1998. We could interpret that income is a proxy for knowledge and therefore this could mean that recommendation is related to knowledge. In 1999, things have changed with the AFORE members having more experience with the product and the company. The results show that the only significant variable that positively relates to recommend with a very high level of significance is *assurance*. This means that once affiliates have made their choice, income no longer has an impact on further changes in their assessment on recommendation. Assurance is still significant in 2000 (but less so).

In addition to the linear models reported in this paper, we have also considered other types of models. Diagnostic tests (not shown) for the model were run. Nonlinear models did not perform any better.

5.8 Discussion: The Full Monty, Financial Consequences of Service Quality

As we have discussed above, developing good marketing strategy with a service quality focus is a difficult and challenging task for the insurance marketing manager. Service quality is a profit strategy for the insurance company; however, the relationship between service quality and profits is neither linear or simple. Executives have to believe and be able to validate that investment in service quality will have a positive financial impact. It is often as challenging for the companies' executives to see and understand the relationship between service quality and profits as it is for the insurance marketing manager to develop good marketing strategy with a service quality focus. Some of the positive financial benefits of investment in service quality are: increased market share, higher than normal market share growth, ability to charge more than competitors, cost reduction, greater customer retention, and higher than normal profit (Storbacka et. al., 1994; Ford Motor Company, 1990; Mendelowitz, 1992; Phillips et. al., 1993; Gale, 1992; Koska, 1990).

In the model (see below), we show the links between the GAP Model of service quality and profits through offensive and defensive marketing effects, (Zahorik & Rust, 1992; Rust & Zahorik, 1993; Fornell & Wernerfelt, 1988), macro environmental factors, and behavioral intentions.

> The benefits of quality improvements come in two forms. One effect is the improved ability of the firm to attract new customers, due to word of mouth, as well as the firm's ability to advertise the quality of its offerings. This effect is in many ways analogous to product repositioning and is part of ''offensive marketing''—those actions that seek to attract new customers.
> (Rust et. al., 1995, p. 59)

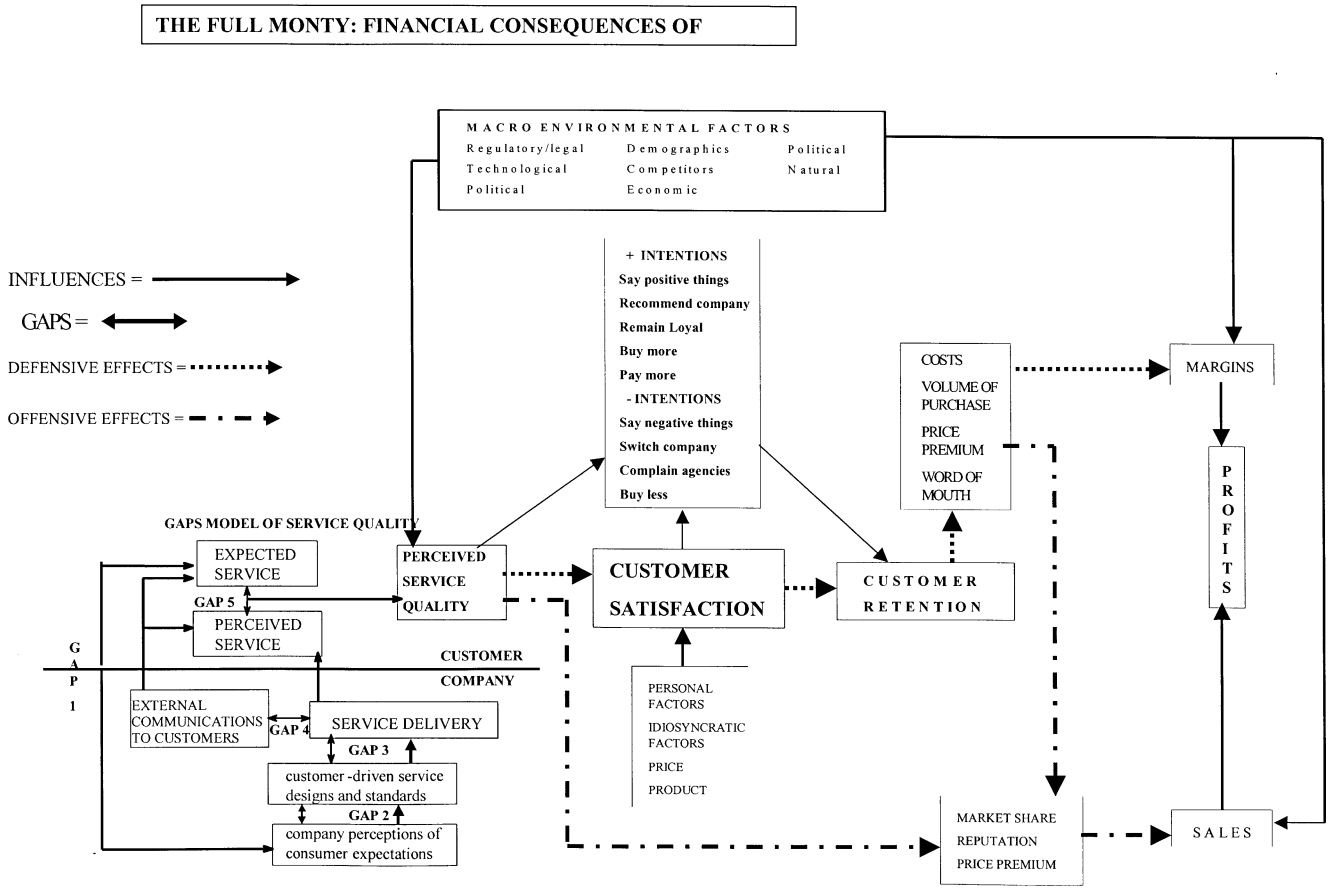
Companies gain a good reputation and a positive image in the market when service quality is good. A good reputation is essential in attracting new customers and gaining market share. The combination of good service quality and a good reputation may allow some service companies to charge a price premium for their services in comparison with their competitors.

> The second result is that when current customers are more satisfied with the products they buy, they become repeat customers. Small increases in retention rates can have a dramatic effect on the profits of a company for several reasons: existing customers tend to purchase more than new customers, the efficiencies in dealing with them is greater, and, compared with the cost of winning new customers, selling costs are much lower—said to be on average only 20% as much. . . . . Retaining current customers through higher levels of satisfaction is called ''defensive marketing.''
> (Rust et. al., 1995, p. 59)

Through service quality you influence customer satisfaction, which leads to customer retention—which is the primary defensive effect. Defensive effects increase profitability in four ways:

- **LOWER COSTS**—research shows that it is five times as costly to gain a new customer as it is to retain an existing one (Peters & Austin, 1989).

FIGURE 5.1
THE FULL MONTY: FINANCIAL CONSEQUENCES OF



- **VOLUME OF PURCHASES**—when service quality and customer satisfaction is high customers will often purchase more of a company's services.
- **PRICE PREMIUM**—for some services customers who value the quality and are satisfied will pay a premium.
- **WORD OF MOUTH**—positive comments from satisfied customers is more credible to potential new customers than communications from the company, and this saves the company the marketing costs of attracting new customers.

Ultimately this leads to better margins and increasing profits.

We also see from the model that some of the defensive effects are influencing factors for increasing offensive effects. All of this leads to more new customers, which increases sales and profits. When customers defect to your competitors they must be replaced and attracting new customers is expensive, especially in the insurance industry where new customers are often unprofitable for some time after acquisition. Reichheld & Sasser (1990, p. 106) report that: "Served correctly, customers generate increasingly more profits each year they stay with a company. Across a wide range of businesses, the pattern is the same: the longer a company keeps a customer, the more money it stands to make."

The last part of the model is the macro environmental factors that influence service expectations, customer satisfaction, margins and sales. Macro environmental factors are the elements that are systemic; that is, they affect the entire structure of the market. The following are examples of each of the macro environmental factors relevant for pension products in the insurance industry.

- **DEMOGRAPHICS**—changing proportion of the retiring population relative to the working population, the major effect is in sales if there are more older people the demand for retirement products go up

- **TECHNOLOGICAL**—changes in computer technology and software development for the insurance industry could affect operational aspects of service delivery and competitiveness, this could lead to cost reduction and an increase in sales
- **COMPETITORS**—affect market share and shape industry standards
- **REGULATORY/LEGAL**—the national insurance commission in each country sets out minimum operating standards, supervises operations and verifies accounting procedures; legislation for mandatory nature of the pension plan
- **ECONOMIC**—level of economic development, per capita income, degree of competition
- **POLITICAL**—interference of state agencies, change of political system, war
- **NATURAL**—earthquake, hurricane, volcanic eruption, floods

We now have the whole picture. It is vital in shaping insurance marketing strategy to understand the influencing factors that shape customers' perceptions and expectations, which lead to the assessment of perceived service quality. This is a rich and complex picture of how service quality leads to profitability. A strategic research program is a vital managerial tool in understanding and managing the complexity of relationships between service quality and profitability.

5.9 Lessons from Mexico: Insurance Marketing Research—A Strategic Approach

We have shown how service quality leads to profits and how certain aspects of service quality lead to the retention of customers and help in acquiring new customers. This knowledge of the market can help the company by concentrating its expenditure only on those aspects of service quality that are important for customer retention and increasing profitability. Providing continuous service quality requires a continuous strategic insurance marketing research program.

> Continuous data collection and dissemination informs and educates decision makers about the patterns of change—for example, customers' shifting service priorities and declining or improving performance in the company's or the competitors' service. An effective service quality-information system [the research program] offers a company's executives a larger view of service quality along with a composite of many smaller pictures. It teaches decision-makers which service attributes are important to customers and prospects, what parts of the firm's service system are working well or breaking down, and which service investments are paying off.
> (Berry & Parasuraman, 1997, p. 65)

One of the main criticisms of the new privatized pension plans in Mexico is that management fees are extremely high (relative to pay-as-you-go such as the one in the United States). It is well known that one of the main sources of such high cost of management is the cost of advertising and marketing. There is evidence that additional money spent on marketing in general, by AFOREs, does not lead to a larger number of customers (Sinha, 1999). The program outlined below can be used to contain expenditure on marketing and allow the companies to spend money only where it produces actual results in terms of retention of existing customers and acquisition of new customers.

Market research is often poorly developed and interpreted. Managers will often criticize research studies (when they don't like the results), by saying they're biased, poorly designed, and the researchers don't know what they are doing. It is also equally likely for a manager to approach the researcher, before the project, and insist that research to be conducted will show support for their position. Research programs must be properly designed and conducted so the results reflect an improved understanding of the customer.

Another problem area occurs once the management has approved a market research project or program. Often research is conducted without defining goals and objectives for the program. It is vital to clearly define the purpose of the program, to establish clear goals and objectives. These are your strategic tools to ensure your research dollars are used most effectively and they provide the benchmarks against which you can judge the effectiveness of your program. If you don't know what the purpose and goals of your program are, you will never know if your program is functioning successfully.

Research objectives translate into action questions and determine the type of research that is necessary to answer the questions. Zeithaml & Bitner (1996, p. 140) provide a list of the most common research objectives in services marketing:

- To identify dissatisfied customers, so that service recovery can be attempted
- To discover customer requirements or expectations of service

- To monitor and track service performance
- To assess overall company performance compared with that of competition
- To assess gaps between customer expectations and perceptions
- To gauge effectiveness of changes in service delivery
- To appraise the service performance of individuals or teams for evaluation, recognition, and rewards
- To determine customer expectations for a new service
- To monitor changing customer expectations in an industry
- To forecast future expectations of customers

Once you have defined the program's purpose, goals and objectives, you can identify the type of research designs that will be most effective in answering the questions you are asking in the most cost-effective manner. For the unique nature of the new Mexican insurance product, the AFORE, specifically the mandatory and long term nature of this product we would consider a basic research program with four components (but as the industry develops and the customers gain more experience with and knowledge of the product more components might be added):

1. RELATIONSHIP SURVEYS

- Relationship surveys ask questions about all aspects of the customer's relationship with the service. They will provide the answers to what the customer needs, wants, and expects from the service as well as measuring customer perceptions. They provide information needed to address the research objectives of:
  - To monitor and track service performance
  - To assess overall company performance compared with that of competition
  - To assess gaps between customer expectations and perceptions, and
- To determine links between satisfaction and behavioral intentions

The SERVQUAL instrument is a relationship survey. SERVQUAL is statistically valid, it shows priorities, it requires moderate monetary and time investments, it provides quantitative data, and only needs to be conducted annually. Our research has shown it robust cross culturally.

Our research with the GAP Model of Service Quality and the SERVQUAL instrument was exploratory in nature due to the nature of the AFOREs being a new and unique product, and to test if SERVQUAL would remain robust cross culturally. As we continue our research with the AFOREs, we will make several modifications to the SERVQUAL instrument we developed. The first will be to change a few questions on some of the five dimensions (as an open-ended question indicated there were other service aspects that were very important to the customer that we had not included). The second change will be to measure adequate and desired levels of service expectation (versus only a single expectation measure) and perceptions of service. As we discussed above when we expanded the Customer Gap to look in detail at customer expectations, we saw it is comprised of desired expectations, a zone of tolerance, and adequate expectations (this plus behavioral intentions questions help determine maximum benefit for minimum costs in service quality improvements). Third, we will further develop and test a behavioral intentions instrument (as developed by Zeithaml, Berry & Parasuraman 1996; in our pilot study we have only two questions of behavioral intention). We would recommend the same changes to others using relationship surveys.

2. COMPLAINT SOLICITATION

- Complaint solicitation is probably the most common type of research used by companies. It is a simple technique of systematically collecting complaints from the customers. Often this technique is not used to its full benefit. Complaint solicitation should include positive comments, negative comments, questions, and suggestions from many different sources. All information collected must be systematically documented. Research objectives it addresses are:
  - To identify dissatisfied customers
  - To resolve problems of dissatisfied customers and retain them
  - To identify problem areas in service delivery, where there are service failures

Complaint solicitation research is low in time and monetary requirements; it should be conducted on a continuous basis; and it identifies customer perceptions. The information collected through this manner could be part of an upward communication program where weekly or monthly reports are distributed to all employees to be sure everyone from the top to the bottom is hearing what the customer has to say. Moreover, of course the information must be used to take corrective action in service quality improvements and customer retention.

3. LOST CUSTOMER RESEARCH

- Lost customer research would deliberately research customers who have defected to the competition. Techniques used could be in-depth open-ended questions in an interview format; some form of standardized survey instrument, or focus groups. This can be used to decrease your customer defection rates and can be used to calculate the cost of lost customers. The primary research objective addressed by lost customer research is:
  - To identify reasons for customers' defection.

Lost customer research is low in monetary and time costs; it should be conducted on a continuous basis; and it identifies perceptions and expectations.

4. EMPLOYEE SURVEYS

These are surveys that examine the service employees give, the service the employees receive from the company, and the quality of their work lives. Different techniques could be used to collect this information, such as: questionnaires, modified SERVQUAL, and focus groups. The primary research objectives addressed by employee surveys is:

- To measure the service quality of internal marketing
- To identify employee perceived obstacles to improved service
- To understand why service performance is what it is
- To monitor employee morale and attitudes

This type of research should be conducted on a quarterly basis; it could measure perceptions and expectations depending on techniques used.

The results of a research program will lead to areas where service quality needs improving, where service quality is good, and it will identify other areas that may need to be researched. To be truly effective the results of the research program must be used to take further actions and to educate and inform all employees about their roles in delivering a quality service to the customers. Berry & Parasuraman (1997) report that the primary test of a research program for a service organization is the extent to which the information collected informs and guides service improvement decision making. A secondary test is how well the program motivates both managerial and non-managerial employees to improve service. There are five guidelines for developing a research program that will meet these tests:

- **Measure service expectations and perceptions**—this can be done with relationship surveys and is a primary tool in assessing service quality.
- **Emphasize information quality**—developing research objectives and goals will ensure that the information collected is relevant, precise, useful, in-context, credible, understandable, and timely.
- **Capture customers' words**—by using the customers' words it helps all employees and managers to truly hear what the customer is saying, from the customers' perspective.
- **Link service performance to business results**—the research program should provide a measurement of market gains and damage linked to service quality. It can do this in a number of ways; for example, it could provide the number and percentage of new customers who choose a company for service related reasons; it should provide information why customers are buying less or switching to the competition which allows the estimation of revenue lost due to poor service; the costs of service failures can be calculated or the cost of not doing the service right the first time and having to perform it the second time; when customers complain and an effort is made to address the customers' complaints the profit impact can be measured by assessing their behavioral intentions to remain loyal or switch to a competitor; and another way to examine the market impact of service quality is to look at a larger battery of behavioral intentions such as recommend the company, buy more etc..; behavioral intentions can be regressed against perceptions of service quality to understand the relationship between the customers service experience and future intentions.
- **Reach every employee**—a research program is only beneficial if the decision-makers use it. This can be aided by determining the best way to present the information collected (generally the results will need to be presented in different ways depending on who is receiving the information). The research program must function as a communication system reaching all levels of employees and management.

The results of our research show that customer retention in the Mexican pension industry is related to specific dimensions of service quality. In the long run, the financial viability of insurance companies depends

critically on how successful they are in retaining the existing customers and attracting new customers from the competition. Insurance companies should develop an appropriate service research program that is used in conjunction with the model of financial consequences of service quality. This approach should lead to improved managerial decision making, thus leading to higher profitability.