

Customer Satisfaction and Service Quality  
In Alpha Bank

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**Abstract**

Service Quality is the variation between customer's perceptions of service and expectations". The quest for service quality has been an essential strategic component for organizations attempting to succeed and survive in today's fierce competitive environment. The purpose of this dissertation is to measure customer satisfaction and service quality provided by Alpha Bank. The introductory section gives a brief description of the service sector and service characteristics. Follows some literature review of Service Quality and Customer Satisfaction subjects and the development of the related hypotheses. Then, the methodology and data collection of the research paper are presented and analysed, as well as the results of the empirical analysis. The thesis concludes with several recommendations and implications concerning Alpha Bank's improvement.

## CHAPTER 1: INTRODUCTION

### 1.0 Services Characteristics

The last decades, there is a growing importance of the service sector in the world economy. Today, the service sector occupies a great majority of the markets in many countries. Services contributed a total of 66.3 per cent of world gross domestic product (GDP) in the year 2000. In addition, Organization for Economic Co-operation and Development (OECD) stated that more than 70 percent of people are employed in the service sector (Arasli; Mehtap-Smadi; Katircioglu, 2005). Additionally, Kotler (2003) stated that service is a form of product that consists of activities, benefits, or satisfactions offered for sale that are essentially intangible and do not result in the ownership of anything (Papasolomou; Vrontis, 2006)

Heizer and Render (1999) found in Arasli; Mehtap-Smadi; Katircioglu (2005), defined services as: “Those economic activities that typically produce an intangible product such as education, entertainment, food and lodging, transportation, insurance, trade, government, financial, real estate, medical repair and maintenance like occupations”. Moreover, the International Standardization Organization (ISO) defines a service as a part of the total production concept (Edvardsson, 1998)

Services have some unique characteristics that make them different from physical products (Zeithaml and Bitner, 1996) (Table 1). Services are often characterised by their intangibility, inseparability, heterogeneity, and perishability (Lovelock, 1996; Zeithaml and Bitner, 1996). The implications of these characteristics are that it is often difficult for the service provider to explain the actual content of the service, and manage the “evidence” and for the customer to assess (Mattsson, 1994). For customers to evaluate services at pre consumption, consumption and post-consumption stages of consumer decision making (Legg and Baker, 1996). Because of the intangible nature of services, it also becomes difficult for an organisation to understand how its customers perceive and evaluate the quality of its services (Zeithaml, 1981).



### Services characteristics

- ❖ Services are intangible and heterogeneous
- ❖ The production, distribution and consumption of services are simultaneous processes
- ❖ Service is an activity or process
- ❖ Service is a core value created in a buyer-seller interactions
- ❖ Customers participate in the production of services
- ❖ Services cannot be kept in stock
- ❖ There is no transfer of ownership in service transactions

**Table 1: Some common services characteristics (Source Zeitham and Bitner, 1996)**

The concept of service from a customer perspective is the total perception of the outcome. It forms the perception of quality and determines whether he is satisfied or not. Customers have different values and different grounds for assessment; they may perceive one and the same service in different ways. This places special demands on marketing to prevent wrong, often excessive expectations of the market that will affect customer's perception of the outcome (Edvardsson, 1998). Furthermore, services exist in real time: services are consumed at the very moment when they are made available to customers. They cannot be stored and quality checked like a physical product. Hence, every service production failure is likely to be experienced by a customer (Naser, Jamal and Khatib, 1999).

Service characteristics coupled with the growing prominence of the service sector have increased the need for better service quality as companies look for ways to improve financial performance and attract customers in a very competitive environment (Wang et al., 2003).

Pirsig (1975) defined quality as a feature of life and thought, which is identified by a process beyond thinking. He also illustrated a dilemma involved in defining it. Everyone has an idea of what it means, but nobody can define it, remaining thoroughly unambiguous (Edvardsson et al., 1998).

#### 1.1 Quality Factors

Quality development requires a well defined quality concept, for instance in the form of quality factors. A number of studies (Lewis and Entwistle, 1990; Thomasson, 1993; Zeithaml *et al.*, 1990; Thomasson 1993; Albrecht and Zemke 1985; Grönroos,

1990) found in Edvardsson, (1998) have mapped out the most significant factors which enable customers to form an opinion of service quality and are presented below:

- Trust/dependability.
- Simplicity/availability
- Recovery
- Employees' actions/roles in service production.
  - Customer treatment
  - Dependability and trust
  - Empathy
  - Handling of critical incidents and customer complaints

## **1.2 Quality Systems**

Severe competition as well as continuously quest from consumers about quality products has made service organizations to seek for quality standards so as to ensure customers about the high quality of their services. For that reasons there have been introduced many quality systems standard that may differ from country to country according to the needs and quality requirements of every market. Though, there are some standards that are common to every country and should be followed by every organization. The most familiar quality system standards are ISO 9000 about quality products/services and ISO 14000 about environmental quality inside and outside the organization. Those systems can be adopted by every organization in service industry.

## **1.3 Aim of the project and the objectives**

The purpose of this dissertation is to demonstrate the importance of Service Quality and Customer Satisfaction to service institutions for their future well being and competitiveness among other organizations. Moreover it will try to examine the level of customer satisfaction and the quality of the services that Alpha Bank provides. By this way the author will be able to reach a better understanding of the factors that influence customer satisfaction. This understanding will help to analyse

the issues related to the “how” and “what” ways Alpha Bank uses in order to satisfy its customers, what problems is facing and how possible gaps can be closed.

#### **1.4 Project Objectives**

- Service Quality and Customer Satisfaction Factors
- Service Quality and Customer Satisfaction Advantages
- Bank Selection Criteria
- Service Quality Models
- Research at which level customers of Alpha Bank are satisfied with the provided services.
- A comparison between Alpha's Bank branches regarding provided service quality to customers.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 Service quality**

The topic of service quality is increasingly recognized as being one of the key strategic values of organizations in both the manufacturing and service sectors (Lewis, 1991). The quest for service quality has been an essential strategic component for organizations attempting to succeed and survive in today's fierce competitive environment (Athanassopoulos, Gounaris and Stathakopoulos, 2000). It has also been a frequently studied topic in the service marketing literature and many efforts to understand and identify service quality have been undertaken in the last three decades (Kang and James, 2004).

Service quality has ignited a lively and heated debate with respect to definition and measurement. Many researchers tried to define service quality, according to their perceptions and research findings.

Early research efforts in the marketing literature focused on understanding the structure and psychological processes underlying perceived service quality. Customers' perceptions of service quality refer to the customers' assessment of the overall excellence or superiority of the service (Zeithaml, 1988). Parasuraman et al. (1985, 1988) conceptualised a customer's evaluation of overall service quality as the gap between expectations and perceptions of service performance levels.

#### **2.1.1 Definitions of Service Quality**

A common definition of service quality is that the service should correspond to the customers' expectations and satisfy their needs and requirements. The definition is customer-oriented, but should not be interpreted as meaning that the service provider should always comply with the customer and his wishes. That it is the customer who decides what is good or bad quality does not mean that the customer is always right or that the customer can always fully articulate or verbalize his needs and wishes (Newman and Cowling, 1996).

Grönroos (1983), described service quality as both technical and functional. The first is referred to what the customer gets and the latter how the customer receives the service.

Bo Edvardsson (1998) believed that the definition of quality is that “it satisfies needs and meets expectations; those of the customers, employees and owners”. It is essential to fully understand the various needs and expectations of these groups, how they are formed and how they change. When developing services, it is crucial to build in the right quality by balancing these partly contradictory demands on the service. Satisfied customers spread the good news quickly, something which is satisfying for the employees and most likely also for the owners.

Townsend and Gebhart (1986) speak of “quality in fact” and “quality in perception”. Quality in fact means that established specifications have been met. Quality in perception, on the other hand, means that the customer feels that he has received the quality he expected. Consequently, it does not suffice to attain quality in fact, if quality in perception is not achieved.

Parasuraman, along with Zeithaml and Berry, found in Newman and Cowling (1996), concentrated from the outset on service quality. Their so-called “Gap” school defined service quality as the “degree and direction of inconsistency between customer’s perceptions of service and expectations”. They concluded to the following:

- When expected service exceeds perceived service, quality is less than satisfactory.
- When expected service equals perceived service, perceived quality is satisfactory
- When expected service exceeds perceived service then service is more than satisfactory and might even tend towards customer delight.

Finally, Gummesson (1991) stresses that quality does not only describe relations between customer and service producer. Each company exists in a network where relations to other actors such as employees, suppliers, competitors, authorities etc. also are important and should not be underestimated. Good relations qualities can decrease the negative effects of shortcomings in the overall offered service quality (Santos 2002).

## **2.2 Service Quality Dimensions / Factors**

Whereas service quality is known to be based on multiple dimensions (Gronroos, 1982, 1990; Parasuraman et al., 1985), there is no general agreement as to the nature or content of these dimensions (Brady and Cronin, 2001).

However, a review of the service quality studies explicitly shows that European scholars have exerted a great influence on the study of service quality dimensions (Johnston, 1997).

Gronroos (1982) identified two service quality dimensions, the technical aspect (“what” service is provided) and the functional aspect (“how” the service is provided). The customers perceive what he receives as the outcome of the process in which the resources are used, i.e. the technical or outcome quality of the process. But he also perceives how the process itself functions, i.e. the functional or process quality dimension (Kang and James, 2004).

Gronroos also emphasized the importance of corporate image in the experience of service quality. Lehtinen (1982) has also proposed a similar idea. A favourable and well-known image is an asset for any organisation because image has an impact on customer perceptions of the communication and operations of the organisation in many respects. If a service provider has a positive image in the minds of customers, minor mistakes (not in a regular base) will be forgiven. If a provider’s image is negative, the impact of any mistake will often be magnified in the consumer’s mind. Therefore, the image concept was introduced as another important component in the perceived service quality model (Wang; Lo and Hui, 2003).

Lehtinen (1982) found in Kang and James (2004), also defined service quality in terms of physical quality, interactive quality and corporate (image) quality. Physical quality relates to the tangible aspects of the service. Interactive quality involves the interactive nature of services and refers to the two-way flow that occurs between the customer and the service provider, or his/her representative, including both automated and animated interactions. Corporate quality refers to the image attributed to a service provider by its current and potential customers, as well as other publics. He also suggested that when compared with the other two quality dimensions, corporate quality tended to be more stable over time.

Parasuraman et al. (1985) suggested that quality evaluations are not made solely on the outcome of service; they also involve evaluations of the service delivery process. While the dimensions are intercorrelated, the primary basis for the dichotomy rests with when the evaluation occurs. For process quality, the evaluation occurs while the service is being performed. For outcome quality, evaluation happens after service performance and focuses on “what” service is delivered.

A more recent conceptualization of the service quality dimensions was proposed by Rust and Oliver (1994). They proposed a three-component model in which the overall perception of service quality is based on a customer's evaluation of three dimensions of the service encounter:

- The customer-employee interaction (i.e. functional or process quality)
- The service environment and
- The outcome (i.e. technical quality)

While research supports the contention that the service environment affects service quality perceptions (Bitner, 1992; Spangenberg et al., 1996), it is conceptually difficult to distinguish the notion of service environment from the concept of functional quality. For example, Brady and Cronin (2001) proposed three factors comprising the service environment, ambient conditions, facility design, and social factors. The definition offered by Brady and Cronin (2001) suggests, however, that the service environments are elements of the service delivery process. In short, in the interest of prudence it seems best to include elements of the service environment as components of the functional dimension.

There has also been some work to assess the importance and effect of the service quality factors. Many researchers tried to identify the most important factors that affect service quality. Some of their findings are summarized below.

Berry, Parasuraman and Zeithaml are among the best-known researchers on service quality. In their studies found in Johnston (1997), service quality was described by means of ten factors: dependability, willingness, competence, availability, courtesy, communication, trustworthiness, assurance, empathy and tangibility. In a later study, the research team found a high degree of correlation between communication, competence, courtesy, credibility and security, and between access and understanding and so they combined them into two broad dimensions of assurance and empathy, claiming that these in general terms are valid (Appendix 1):

- Tangibility;
- Accessibility;
- Dependability;
- Responsiveness (willingness, readiness);
- Assurance;
- Empathy, insight

Tangibility refers to the physical environment in the service organization; premises, equipment, personnel and dress code, generally what it is easy for the customer to observe.

Accessibility is the service provider's ability – through its location, operating hours, employees and operational systems – to design and deliver the service capable of adjusting to the demands and wishes of customers in a flexible way.

Dependability is the company's ability to fulfil its commitments. Price agreements and other conditions are to be fulfilled, time limits kept and the service is to be carried out correctly from the beginning.

Responsiveness (willingness and readiness) mean carrying out the service punctually and quickly, being there for the customer and being available when he needs assistance.

Assurance refers to the employees' knowledge and competence and their ability to inspire reliance and trust.

Empathy and insight has to do with genuine interest in the customer. It entails personal attentiveness, an ability "to enter" into and identify with another person's situation.

Another important factor is recovery, which stands for the company's ability to handle critical situations (Albrecht and Zemke 1985; Grönroos, 1990). Yet another factor is the handling of critical incidents and customer complaints. That means the ability to see that a customer is disappointed with the service and that one can master the situation and set things right (Edvardsson, 1998).

In terms of the factors effect on satisfaction and dissatisfaction Silvestro and Johnston (1990), identified three types of factors; hygiene (dissatisfiers), enhancing (satisfiers) and dual factors (factors capable of both satisfying and dissatisfying).

They defined dissatisfying factors as those factors which if in evidence will cause dissatisfaction, however if they are not evident will not be a source of delight. For example a dirty banking hall may dissatisfy customers, however, while a "clean" one does not mean that will delight customers. Satisfiers are those factors which when improved beyond adequacy have a positive effect on perceptions. However, when these factors are either not in evidence, or poorly performed, their performance does not detract from customer perceptions of service quality. Critical factors are those which can be both satisfying and dissatisfying and therefore any changes in levels of performance can have both a negative and a positive effect.



Cadotte and Turgeon (1988) identified another category; the neutral factors. Neutral factors are the least sensitive to changes in performance. Any change in levels of performance in these factors will have little impact on perceptions (Johnston, 1997).

### 2.3 Service Quality Advantages

Service quality is being recognized as one of the key strategic values of organizations in the services sector, as it brings many advantages to organizations (Lewis, 1991). Service quality relates to costs (Crosby, 1979), financial performance of the organization (increased sales and market shares, reduced turnover rates) (Buzzell and Gale, 1987; Greising, 1994; Rust et al., 1995) found in Athanassopoulos; Gounaris and Stathakopoulos (2000), opportunities for cross-selling, customer satisfaction (Spreng et al., 1996), customer and employee empowerment and retention (repeat purchase behaviour and brand loyalty) (Reichheld and Sasser, 1990), switching behaviour (new customers are attracted through positive word-of-mouth) (Keaveney, 1995; Boulding et al., 1993; Cronin and Taylor, 1992; Caruana 2002) and differential competitive advantage (Iacobucci et al., 1994), found in Arasli; Smadi; Katircioglu (2005).

Quality superiority provides significant performance related advantages such as customer loyalty, responsiveness to demand, market share growth and productivity (Berry et al., 1985; Capon et al., 1990; Berry and Parasuraman, 1991; Anderson et al., 1994; Fornell and Lehmann, 1994; Rust et al., 1994; Barnes and Cumby, 1995; Lassar et al., 2000; Roberts et al., 2003). In addition, service managers realise that to successfully leverage service quality as a competitive edge, they first need to correctly identify the antecedents of what the consumer perceive as service “quality”.

Due to cultural and environmental effects in general, consumers of services in different countries have different perception of what service quality is. Indeed, studies conducted by Furrer et al., 2000; Witkowski and Wolfinbarger, 2000 that examine the banking sector, have identified culture as a key variable influencing service quality perceptions. Thus, managers who seek to develop international service standards may not succeed unless they are aware of the value of environmental differences between countries in terms of economic development, political ideology, cultural value system and level of sector maturity and accordingly emphasise the various dimensions of

service quality differently. In addition they can focus on commonalities to introduce global or regional quality initiatives (Wang; Lo and Hui, 2003).

## **2.4 Customer Satisfaction**

During the last decades, satisfaction has been considered as one of the most important theoretical as well as practical issues for most marketers and customer researchers (Jamal, 2004). Customer satisfaction is another important aspect for service organizations and is highly related with service quality (Bolton and Drew, 1991; Cronin and Taylor, 1992; Taylor and Baker, 1994; Spreng and MacKoy, 1996).

However, no single definition of satisfaction has been unanimously accepted by literature related to the matter. According to Homburg et al. (2006), previous research has recognized that both cognition (Oliver, 1980; Bearden and Teel, 1983; LaBarbera and Mazursky, 1983; Oliver and DeSarbo, 1988) and affect (Westbrook, 1987; Westbrook and Oliver, 1991; Mano and Oliver, 1993) significantly predict satisfaction judgments (Molina; Consuegra and Esteban, 2007).

Within literature on services marketing, satisfaction has traditionally been defined as a cognitive-based phenomenon (Westbrook, 1987). Cognition has been studied mainly in terms of the expectations/disconfirmation paradigm; also known as the confirmation/disconfirmation paradigm, which states that expectations originate from the customer's beliefs about the level of performance that a product/service would provide (Oliver, 1980). Also, various models and theories that have been developed (Oliver, 1980; Swan and Trawick, 1980; Tse and Wilton, 1988; Anderson and Sullivan, 1993; Patterson et al., 1997), indicate that customer satisfaction is related to the size and direction of disconfirmation, which is defined as the difference between the post-purchase and post-usage evaluation of the performance of the product/service and the expectations held prior to the purchase (Molina; Consuegra and Esteban, 2007).

All definitions proposed, however, agree that the concept of satisfaction implies the necessary presence of a goal that the consumer wants to achieve.

### **2.4.1 Linking Customer Satisfaction to Service Quality**

The link between service quality and customer satisfaction has been submitted to intense scrutiny by leading service quality researchers (Bitner and Hubbert, 1994; Bolton and Drew, 1994), as well as the links between quality, customer satisfaction,

customer retention and profitability (Storbacka *et al.*, 1994). The connection between service quality and corporate profitability is now seen to depend on high levels of customer satisfaction, the successful targeting of “quality” customers and the retention of those customers. “Complete customer satisfaction” is the key to securing customer loyalty and generating superior long term financial performance” (Jones and Sasser, 1995). Customer retention is now perceived to have a significant impact on the bottom line (Newman and Cowling, 1996).

Additionally, the major US market research firm In-Touch Survey Systems after a research conducted in 2003 stated that customer satisfaction is the key to success and makes the emphatic statement that a satisfied customer is a repeat customer (Bennett and Rundle-Thiele, 2004).

From the above it can be developed the following Proposition:

**P1. Service Quality and customer satisfaction are closely related.**

#### **2.4.2 Customer Satisfaction Factors**

According to Muffatto and Panizzolo (1995), there are a lot of factors for analysing the processes through which customer satisfaction is achieved. These factors are:

Customer focus. A high level of customer satisfaction is obtained only by supplying products/services whose characteristics are such that they will satisfy the customers’ requirements and desires. Customer satisfaction is therefore judged by the customer only.

Product and process design. All services that contribute value to the customer and lead to customer satisfaction and preference must be dealt with in the design activity. Not only the service attributes that meet basic requirements (defect and error reduction, meeting specifications, reducing complaints) but also those that enhance the service and differentiate them from competing offerings.

Continuous improvement cycles. Design activity requires a well-defined and well-executed approach to continuous improvement. The process of continuous improvement must contain regular cycles of planning, execution, and evaluation.

Organizational changes. Organizations which seek to excel in terms of customer satisfaction need a fully committed, well-trained, and involved workforce. Reward and recognition systems should reinforce full participation in the company’s customer

satisfaction objectives. Employees require education and training in quality skills related to performing quality work and understanding and solving quality-related problems.

Top management commitment. Top management commitment is essential in order to obtain total participation of human resources. This commitment should envisage the organization, allocate resources and activate the planning of a customer satisfaction strategy. Customer satisfaction ought to be included in the mission statement of the organization and supported by policy deployment.

Monitoring. Meeting the quality and performance goals of the company requires reliable information, data, and analysis regarding customers, and service performance, operations, suppliers and competitive comparisons. A major consideration, relating to the use of data and analysis to improve competitive performance, involves the creation and use of the performance indicators which best represent the factors that determine customer satisfaction and operational performance.

Process orientation. If a customer satisfaction orientation is to be successfully introduced there must be a change in the management culture to permit the adoption of a process engineering approach. This has to be achieved by focusing on sequential and reciprocal interdependencies, by accepting the importance of the customer in the definition of the characteristics of the process, and by considering only those activities that provide real value.

### **2.4.3 Customer Satisfaction Advantages**

It is well established that satisfied customers are key to long term business success (Kristensen et al., 1992; Zeithaml et al., 1996; McColl-Kennedy and Schneider, 2000). Many researches pointed out that organizations can gain lot of benefits by keeping long-term relationships with their customers due to increased satisfaction (Molina; Martin-Consuegra and Esteban, 2007).

According to Lympelopoulos; Chaniotakis and Soureli (2006), the development of long-term relationships offer marketers useful knowledge of their customers and deep understanding of their entire value chain (holistic needs), not only as it is today but also as it evolves over time, so that they can keep them satisfied and decrease the possibilities of defection. In addition, as Beatty et al (1996) supported organizations should be more interested in keeping stable relationships with their customers than in

accumulating occasional exchanges because building strong customer relationships constitutes a competitive advantage (McKenna, 1991) by means of greater sales volumes, secures repeat sales, lower marketing expenses, better operating efficiencies and lower cost per transaction (Beatty et al, 1996; Buttle, 1996).

Companies that have a more satisfied customer base experience higher economic returns (Aaker and Jacobson, 1994; Bolton, 1998; Yeung et al., 2002). High consumer satisfaction leads to greater customer loyalty (Yi, 1991; Anderson and Sullivan, 1993; Boulding et al., 1993) which, in turn, leads to future revenue (Fornell, 1992; Bolton, 1998). Organizations having superior service quality have been found to be market leaders in terms of sales and long-term customer loyalty and retention (Gilbert and Veloutsou, 2006).

Lovelock et al. (1998) listed the virtues of customer satisfaction. First, satisfaction is inextricably linked to customer loyalty and relationship commitment. Second, highly satisfied customers spread positive word-of-mouth and in effect become a walking, talking advertisement for an organisation whose service has pleased them. Third, highly satisfied customers may be more forgiving. Someone who has enjoyed good service delivery many times in the past is more likely to believe that service failure is a deviation from the norm. Hence, it may take more than one unsatisfactory incident for strongly loyal customers to change their perceptions and consider switching to an alternative supplier. Other studies have shown that delighted customers are less susceptible to competitive offerings (Ndubisi and Wah, 2005; Hansemark and Albinsson, 2004).

Dissatisfied customers according to Naser; Jamal; Khatib (1999), on the other hand, are likely to switch brands and engage in negative word of mouth advertising. The significance of customer satisfaction and customer retention in strategy development for a “market oriented” and “customer focused” organisation thus cannot be underestimated (Kohli and Jaworski, 1990).

Globalization of the market gave customers a variety of options to choose among a variety of offered products and services making easy exit of any organization. Having satisfied customers is the key for the survival of every organization in the turbulent economic environment.

#### **2.4.4 Customer Satisfaction and Loyalty**

There is a common assumption in the literature that satisfaction is likely to increase loyalty (Oliver, 1980; Patterson et al., 1997; Bolton, 1998; Page and Eddy, 1999; Jones and Suh, 2000).

According to Bennett and Rundle-Thiele, (2004), there are three key issues regarding the relationship between satisfaction and loyalty:

1. Satisfaction and loyalty are related constructs;
2. There are moderating factors for the relationship; and
3. The methodology influences the outcome of the research.

On the other hand, some researchers support that customer satisfaction is not necessary for repeat loyalty. In fact, in a survey conducted by Bennett and Rundle-Thiele in 2004, 70 percent of the customers of these banks are attitudinally loyal: they intend to repurchase from their current bank despite being dissatisfied. These examples suggest the nature of the relationship between satisfaction and loyalty is complex.

Yet marketing literature suggests that it is quite simple: satisfaction leads to attitudinal loyalty (Lovelock et al., 2001). Defined as the intention to make future purchases (Oliver, 1980; Patterson et al., 1997; Bolton, 1998; Page and Eddy, 1999; Jones and Suh, 2000), it is assumed that high levels of attitudinal loyalty are an outcome of high levels of satisfaction. Satisfaction is defined as an emotional post-consumption response that may occur as the result of comparing expected and actual performance, or it can be an outcome that occurs without comparing expectations (Oliver, 1996).

Though, the relationship between satisfaction and loyalty in many cases is moderated by other factors. The relationship between satisfaction and loyalty is moderated by involvement (Bloemer and Kasper, 1995), and by personal characteristics such as demographic variables and the propensity to seek variety (Heskett et al., 1997).

##### **2.4.3.1 Advantages of Loyalty**

The rewards to firms that establish a loyal customer base have been well documented (Armstrong and Symonds, 1991; Heskett *et al.*, 1994; Reichheld and Sasser, 1990). In general, increased loyalty leads to lower costs of servicing the firm's customers, reduced marketing expenditures, increased business from the existing

customer base and greater profits. These rewards are particularly true in the retail banking sector. By increasing loyalty, a retail bank:

- Reduces its servicing costs (i.e. accounts do not have to be opened or closed, and credit ratings do not have to be established);
- Gains knowledge of the financial affairs and needs of its customers (thereby allowing effective and efficient targeting); and
- Has an opportunity to cross-sell existing and new products and services.

In one case, a retail bank that increased its customer retention rates by 5 per cent increased its profits by 85 per cent (Reichheld and Sasser, 1990).

Improving customer satisfaction, according to Levesque; Laurier; McDougall, (1996) and thereby retention rates, can come from a variety of activities available to the firm. The existing evidence suggests that major gains in customer satisfaction are likely to come from improvements in:

- Service quality;
- Service features;
- Customer complaint handling.

## 2.5 Internal Satisfaction

The Internal Marketing ideas suggest that in order to take care of your customers, you must first take care of those who take care of the customers hence, your employees. Happy and satisfied employees create happy and satisfied customers (Figure 1). Employee feelings of satisfaction will reflect on the level of service delivered to internal and external customers (Papasolomou; Vrontis, 2006).

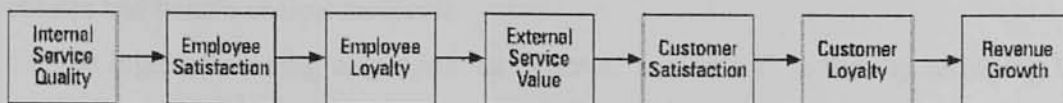


Figure 1: Internal Satisfaction

Source: Rust, Stewart, Miller and Pielack, 1996

Managers and employees share the view that the notion of “internal customers” creates service mentality within banks because it encourages individuals to focus on delivering high quality in their internal service encounters. The successful practice of Internal Marketing has the potential to develop and demonstrate a strong link between customer and service orientation, which provide the foundation for building and sustaining a strong corporate brand (Rust; Stewart; Miller and Pielack, 1996).

The customer's picture of the service company's employees, their experience, knowledge and competence combined with their commitment and willingness to serve, affects customer-perceived quality. It is a matter of both ability and willingness to serve – the latter not least important. Dependability and trust are central components of the quality concept from the perspective of the customer. He wants to rest assured that the service will be delivered as agreed, that what he gets conforms to what has been promised and meets with his expectations. The employees must inspire confidence and give him a feeling of credibility and trustworthiness. All in all, he must feel that the supplying company has the capacity and competence to deliver the service requested (Edvardsson, 1998).

Schmenner (1986) found in Olorunniwo and Hsu (2006), suggested that in a mass service, constant attention is needed in the employee hiring and training process to ensure that "wastes" in the service delivery process do not slow down the throughput time. "Wastes" can occur if the documentations (e.g. receipts, bank transaction records, information on interest rate of mortgage or loans) are inaccurate, if the products are not available, or facility locations (e.g. bank/ATM locations) are not convenient or in easily accessible points in certain geographical areas, etc. All these issues translate to quality dimensions such as reliability, accessibility, and responsiveness (Anderson and Sullivan, 1993).

Service quality is often highly dependent on the customer's contacts and relations with the employees. His trust is often more related to a specific person than to the company (Thomasson, 1993). Trust between the actors is a prerequisite for good relations. Trust in an organisation make personnel tied to their ability to solve problems and handle critical incidents.

The logic of viewing employees as "internal customers" is that by satisfying the needs of internal customers, a firm should be in a better position to deliver the quality desired to satisfy external customers. Implicit in this logic is the underlying assumption that the satisfaction of employee needs enhances employee motivation and retention, and subsequently the higher the degree of employee satisfaction the higher the possibility of achieving external satisfaction and retention (Edvardsson, 1998).

The notion of viewing employees as "internal customers", helps banks to demonstrate a caring attitude aimed at motivating employees to be customer and service orientated. The analysis of the employees' data reveals that employees need to



be treated in a caring way by their superiors and the organisation in order to feel valued. Demonstrating managers a caring attitude towards their subordinates will in turn motivate employees to demonstrate positive attitudes towards the external customers.

Findings of Papasolomou, Vrontis's (2006) research suggest that it is not enough to train and motivate the front-line service providers into being customer focused and service oriented, while the rest of the personnel go their own way. Every individual should strive to achieve service quality in every internal customer/supplier interaction as a prerequisite for enabling the customer-contact personnel to deliver high quality customer service. The notion that everybody has "internal customers" to serve, helps staff to understand that everybody's role impacts on the level of service delivered to external customers.

Successful service provision is dependent on interpersonal exchanges between service personnel and subsequently, between the provider and the customer. Internal services are defined as services provided by distinct organisational units or the people working in these departments, to other units or employees within the organisation (Stauss, 1995). Staff engages in many service encounters to satisfy the many needs they have in the course of carrying out their job responsibilities. These internal service interactions include relationships between customer contact staff and back office personnel, managers and the customer-contact staff, managers and back office personnel and in large organisations between the head office and the branch network (Lewis and Entwistle, 1990). Hence, the provision of good internal service to employees is crucial to the overall success of an organisation (Heskett, 1987; Schlesinger and Heskett, 1991; Schneider and Bowen, 1985). By selling the notion of "internal customers" to the internal market the banks studied aim to achieve internal customer satisfaction that is perceived by both employees and branch managers to be a prerequisite for external customer satisfaction (Papasolomou; Vrontis, 2006).

## **2.6 Employee Reward**

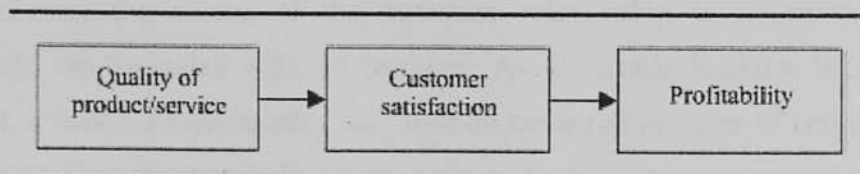
Most banks were eager to align corporate and individual goals via a complex rewards system in order to instil confidence that the extra energy that individuals voluntarily invest will be reflected in their performance appraisals and their rewards. Banks offered both tangible and intangible rewards for reaching organisational goals

and creating as well as nourishing a sense of ownership. Berry (1999, p. 174) states that employees who feel as part-owners of an organisation are more willing to work towards sustaining the corporation's success, as they have more to gain. There seemed to be a strong emphasis on the use of monetary rewards especially for front line employee (branch managers included), with respect to the opening of new accounts and sales achieved against set targets. Such monetary rewards took the form of bonuses and short-term commissions (Papasolomou; Vrontis, 2006).

Monetary incentives are an important element of the internal marketing practice in motivating branch managers and customer-contact personnel to achieve their quantitative targets. Though, the reward system discourages team building by rewarding individuals and divides people by creating status difference. Another problem with using this method is that a customer contact employee who aims to maximise his/her commission earnings is often not concerned with the quality of the service production/delivery process and thus, not in a position to maximise customer satisfaction and thereby secure repeat business (Papasolomou; Vrontis, 2006).

## 2.7 Service Quality and Customer Satisfaction in Banking Industry

In today's global and competitive banking environment banks now know that delivering quality service to customers is essential for success and survival (Wang et al., 2003) found in Arasli; Mehtap-Smadi; Katircioglu (2005). Excellent service quality is not an optional competitive strategy which may, or may not, be adopted to differentiate one bank from another: it is essential to corporate profitability and survival (Newman and Cowling, 1996) (Figure 2).



**Figure 2: Dependence between quality, satisfaction and profitab (Source: Fecikova, 2004)**

Avkiran, 1994; Le Blanc and Nguyen, 1988; Blanchard and Galloway, 1994, found in Arasli; Mehtap-Smadi; Katircioglu (2005), stated that service quality has been linked with customer satisfaction within the banking industry.

From the above the first proposition has been re-formed

P1 Service quality is linked to customer satisfaction in the banking industry.

Banking is a demand and constantly changing driven industry, which constitute an important part of the services industry (Mishkin, 2001). Many changes such as regulatory, structural and technological, have taken place within the world banking industry, in line with the trend towards a more integrated global banking environment (Angur et al., 1999). Those changes have forced banks to re-evaluate their current business practices (Brown and Kleiner, 1997).

Rapid advancement in technology facilitates the development of new banking products and services. Information technology is heavily used as a competitive weapon by changing the critical factors of competition such as cost, price, service and quality. Regulatory changes have reduced or eliminated barriers to cross-border expansion, creating a more competitive and integrated global banking market (Li; Zhao and Lee, 2001).

Expansion of banks across borders, lead them to offer a diverse portfolio of competitive services and to restructure of their services in order to make use of rapid technology and to meet the changing needs of customer (Smith and Peters, 1998). The EU has played an important role in facilitating global banking. Financial services within the EU have been regulated and restructured in an effort to integrate the sector by eliminating impediments to cross border branching practices (Bisignano, 1992). Because of these measures, the nature of banking services and customer relations are undergoing change.

Perceived quality of service tends to play an important role in high involvement industries like banking services. Banks have traditionally placed a high value on customer relationships with both commercial and retail customers.

However, the nature of the customer relationship is constantly changing, particularly on the retail side of banking. As electronic banking becomes more prevalent, a bank's service quality may well be measured in terms of personal support rather than technical support. In other words, as banks become more and more "high-tech," their technical services are becoming standardized, reducing the importance of such services as a differentiating factor; thus, consumers will evaluate banks based more on their "high-touch" factors than on their "high-tech" factors. This is evidenced by the fact that although many banks have provide financial incentives for consumers to utilize automatic teller machines, such as teller fees, the "unique selling proposition" of a bank still appears to be personal banking services (Angur; Nataraajan and Jr Jahera, 1999).

Not only regulatory, technological and structural changes lead to better service quality but as customers become more educated, they demand new products, better delivery channels and more reliable and responsive services. Improvement in service standards in other industries also raises the expectations of banking customers. Banks need to deal with a generation of more demanding customers. To improve competitiveness, banks have to satisfy their customers by providing higher quality services. Another major change in the banking industry concerns changes in culture. Customers are more aware of their rights and are more willing to voice their opinions or complaints than before. With rapid development in mass media, any complaints or negative feelings from dissatisfied customers would be propagated rapidly and easily. Therefore, banks have to be more proactive to prevent complaints and criticism (Li, Zhao and Lee, 2001).

Banking sector face constant and increasing service challenge to deliver added value, and focus on the customer. To meet these challenges, banks seek intimate and constant customer contact, using this deep knowledge in designing services, sometimes involving customers themselves in this design process (Smith and Peters, 1998).

## **2.8 The Greek Banking Industry**

Until the mid 1980s, the Greek banking system was heavily regulated in all areas of activity. The price regulation and various credit controls imposed by the government created a system in which competition was almost unknown. Deregulation of interest rates, abolition of various credit controls, development of the capital market, competition from non-bank institutions, free movement of capital flows, and the entry of banking institutions from other European countries into the Greek market created a more competitive banking environment (Noulas and Glaveli, 2002; Spathis et al., 2002; Petridou and Glaveli, 2003).

In addition, the introduction of the Euro decreased margins and revenues to banks. Banks have lost currency-conversion service fees, experienced compression in the spread of interest rates, and incurred establishment costs associated with the new currency (Kosmidou and Spathis, 2000). Takeovers, mergers and acquisitions have been important responses, designed to resist competition and traditional revenues loss through: consolidation of market position, diversification on the basis of customer

characteristics, increase of capital base and economies of scale and scope resulting in advantages for both the organisations and the customers (Davies, 1995; Moshos and Fraggetis, 1997). Banks thought that through the acquisition of insurance companies and investment banks and the promotion of a wider range of products would outweigh the loss that they have started to suffer. The compression of profits stimulating a positive orientation towards managing risks and returns, tracing new profit centres and offering more customised services and products and a re-orientation of banking strategy towards quality service provision (Noulas and Glaveli, 2002). The new environment has attracted a large number of foreign banks into the dynamic sector.

Summarising, it could be supported that the privatisation of the banks and the closure of insolvent institutions, the entry of foreign banks, the adoption of regulations according to international standards and practices and the implementation of tighter and more effective supervision by the central banks and currency boards have substantially transformed the banking sectors in Greece under transition economies. Particularly the entry of foreign banks had a dual effect on the sectors development. On one hand they introduced modern risk management techniques and financial management know-how and on the other hand ensured that there is plenty of competition in the banking system, despite the quite high concentration of the banking sector (Hackethal et al., 2003). This has in turn affected the emphasis given on and the level of quality of the service provided.

## **2.9 Customer Satisfaction Determinants in Retail Banking – Bank selection criteria**

In the financial services industry, high quality customer relationships are very important, as the financial services sector is characterised by increasing competition (Avkiran, 1999), a relatively mature market for retail banking, little growth in primary demand (Murphy, 1996), narrow lending spreads and focused niche players (Hislop et al., 2002). At the same time, financial services tend not to be one-off purchases, but they are required on a recurring basis, generating the need for financial service suppliers to establish relationships with their prospects and at the same time maintain and develop long-term relationships with existing customers (McKechnie and Harrison, 1995).

Many retail banks are directing their strategies towards increasing customer satisfaction and loyalty through improved service quality. Also improved product offerings has made consumers more sophisticated, analytical and systematic in their buying decisions, knowledgeable and demanding (Lymperopoulos; Chaniotakis and Soureli, 2006). As a result, the task facing these managers is to focus on those activities that result in meeting or exceeding customer expectations. Retail banks are pursuing this strategy, in part, because of the difficulty that bank customers face in distinguishing one bank from another due to rapid changes, banking innovations and fierce competition (Boyd et al., 1994). Typically, customers perceive very little difference in the services offered by retail banks and any new offering is quickly matched by competitors (Coskun and Frohlich, 1992; Devlin *et al.*, 1995).

Several studies have examined the factors that affect customer satisfaction and their retention and loyalty criteria in the banking industry (Rust and Zahorik, 1993; Crosby and Stephens, 1987; Kelley et al., 1993) (Appendix 2). Bitner (1990) advocates the effects of the time, money constraints, access to information, and lack of credible alternatives, switching costs, and habit which may affect customer satisfaction, service retention and loyalty. Similarly, Cronin and Taylor (1992) suggest that convenience, good value for money and availability might enhance customer satisfaction and subsequently behavioural intentions. Moreover, Keaveney (1995), in his grounded theory development model of customer switching behaviour, proposed eight reasons (price, inconvenience, core service failures, service encounter failures, competitive issues, ethical problems, and involuntary factors) for customer satisfaction (Athanasopoulos; Gounaris and Stathakopoulos, 2000).

Moreover, retail bank customers require information, comprehensive advice, honesty, integrity, consistency, responsiveness and commitment (Shelton, 1995; Leach, 1995). They are mainly interested in the way the financial service is delivered (functional quality dimension) (McKechnie, 1992) and particularly in the bank's opening hours, provision of information, and ability to focus on customers' needs (Holmlund and Kock, 1996). Great reliance is placed on experience qualities rather than tangible cues (McKechnie, 1992). Even consumers, who may be customers to several banks in order to get better rates or reduce their risk, ask for improved communication about products and conditions, quality and professionalism in bank staff and offerings (Kennington et al., 1996).

Customer satisfaction is also related to the service offering. With retail banking, the convenience and competitiveness of the provider's offerings can be expected to affect a customer's overall satisfaction and retention (Yavas; Bilgin and Shemwell, 1997).

Another determinant of customer satisfaction is competitive interest rates (Laroche and Taylor, 1988). While differences in rates, either savings or borrowings, are likely to be minimal between competing banks, customers are concerned that they are getting competitive rates on savings or loans because of the impact on their financial situation. Again, customer satisfaction is likely to be influenced by the perceived competitiveness of the bank's interest rates.

A major reason for customer satisfaction is problem resolution (Terrence Levesque; Laurier; McDougall, 1996). If the bank accepts responsibility and resolves the problem, the customer becomes "bonded" to the bank. When customers complain, they give the bank a chance to rectify the problem and, interestingly, if the bank recovers successfully, to increase loyalty and profits (Fornell and Wernerfelt, 1987). Empathy is another factor which has to do with genuine interest in the customer. It entails personal attentiveness, an ability "to enter" into and identify with another person's situation.

Conflict handling refers to the supplier's ability to minimize the negative consequences of manifest and potential conflicts (Dwyer et al., 1987). Conflict handling includes the supplier's ability to avoid potential conflicts, solve manifest conflicts before they create problems and the ability to discuss openly, solutions when problems arise. How conflicts are handled will ensure loyalty, exit or voice (Ndubisi and Wah, 2005).

Many studies have investigated the bank selection criteria or the reasons on the basis of which customers choose to bank with specific banks (Anderson et al., 1976; Denton and Chan, 1991; Erol and El-Bdour, 1989; Erol et al., 1990; Khazeh and Decker, 1992; Kaynak et al., 1991; Laroche and Taylor, 1988; Levesque and McDougall, 1996; Tan and Chua, 1986). These studies have identified a number of such factors: convenience (i.e. the location), friends' recommendations, reputation of bank, image, availability of credit, friendliness of bank staff, service charges, keeping customers informed, giving financial advice, serving timely notices and adequate number of staff serving customers throughout business hours and during peak hours, availability of ATM, special services and the quality of services on checking

accounts. The relative importance of these factors varies from one country to another depending upon the age, gender, income, marital status, occupation and cultural background of customers as well as the type of bank (Lin, 2003).

In 1985, Martenson examined the choice criteria used for bank selection in Sweden and found that bank location, availability of loans and influence from parents, are among the most important factors that form bank choice. Moreover, according to her findings, customers tend to select the bank where their salary is paid through, while a great number of customers choose their bank at random. Similarly, Arora et al. (1985) tried to identify the factors influencing choice of banks and found that customers' choice is based on the dependability of institution, accessibility, variety of services and size of institution. One year later, Laroche et al. (1986) showed that friendliness of bank personnel is a critical factor in determining customers' choice of banks.

Following this, McKechnie (1992) refers to professionalism of bank personnel as some of the common bank choice criteria. Khazeh and Decker (1992) investigated the consumers' decision-making criteria in the USA, considering also the degree of dissimilarity among banks with respect to these criteria and found that service-charge policy, reputation and time required for loan approval are the most important factors in explaining how customers choose banks. On the contrary, availability of financial advice was among the lowest ranking determinant attributes.

Wilson (1995) studied at Ndubisi and Wah (2005), argued that commitment is the most common dependent variable used in buyer-seller relationship studies.

Trust has been mentioned in a number of studies as one of the important underpinnings of relationship marketing. Moorman et al. (1993) defined trust as "a willingness to rely on an exchange partner in whom one has confidence". A betrayal of this trust (by the supplier or service provider) can lead to customer dissatisfaction and defection.

Communication is the ability to provide timely and trustworthy information (Anderson and Narus, 1990). Communication also tells a dissatisfied customer what the organisation is doing to rectify the source of dissatisfaction.

Bendapudi and Berry (1997) suggest four factors (antecedents) that affect consumer receptivity when deciding whether to maintain the connection with habitual providers: environmental, partner, customer, and interaction (Molina; Consuegra and Esteban, 2007).



Following the line of Berry, Gwinner et al. (1998) point out that motivated consumers who maintain long-term relationships with their providers expect not only to receive good service, but also additional benefits from maintaining that relationship (social benefits, confidence and special treatment). Academic literature terms these “relational benefits” (Bendapudi and Berry, 1997; Dwyer et al., 1997; Reynolds and Beatty, 1999). Gwinner et al. (1998) found in Molina; Consuegra and Esteban (2007), define them as those benefits customers are likely to receive as a result of engaging in long-term relationships with a service provider.

Overall consumer satisfaction thus reveals the general evaluation of the actions carried out by a given business in relation to expectations accumulated after various contact between the consumer and business (Bitner and Hubber, 1994). If customers perceived that they are obtaining additional benefits from their relationship with establishment employees, their satisfaction level with the service provider will increase (Beatty et al., 1996). Relational benefits can then be considered as an important factor for satisfaction with financial businesses.

Boyd et al. (1994) also studied selection criteria of banks and how these differ according to customers’ behavioural and demographic characteristics, such as marital status, size and income of household, occupation of household head. (Lymeropoulos; Chaniotakis and Soureli, 2006).

Customers or segments with different needs or usage patterns may have different determinants of customer satisfaction. In the retail banking sector, customers who use particular products (e.g. loans or mortgages) may focus on service features, such as competitive interest rates, more than customers who do not hold these products (Cowling and Newman, 1995).

Moreover, the researchers found that the relative importance of these criteria varied between groups of respondents with different demographic characteristics, with the exception of reputation, which was selected by all household categories except divorced people (Naser; Jamal; Khatib, 1999). Therefore, customer satisfaction with retail banking is composed of a wide variety of dimensions.

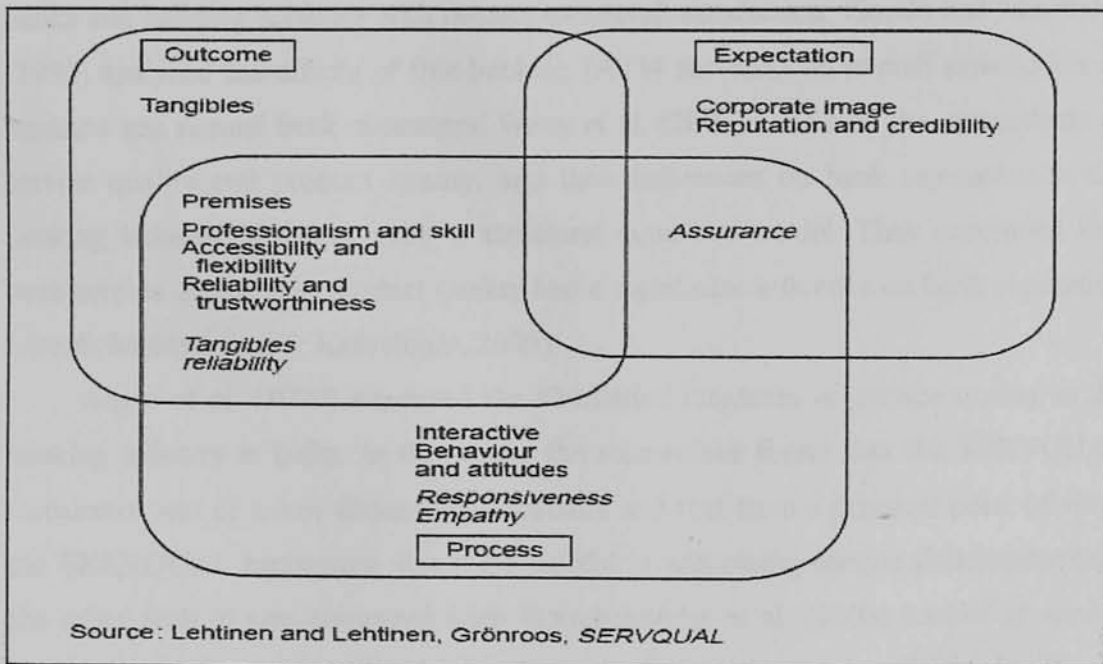
## **2.10 Service Quality Models**

A number of authors have identified the determinants of service quality as a basis for a service quality specification (Muffatto and Panizzolo, 1995). As a result of

their work in identifying service quality factors, different models have been developed (Desmukh and Vrat, 2004). Appendix 3, gives a list of the most applicable models.

### i) SERVQUAL Instrument

The most familiar instrument for measuring service quality is the SERVQUAL introduced by Parasuraman *et al* (Figure 3). SERVQUAL is based on the notion of a gap between what customers expect in terms of service quality from the providers of the service and their assessment of the actual performance of that particular service provider (González Gioconda; Picado Quesada and Eckelman, 2004). The model proposes that service quality consists of technical and functional dimensions, and that a service organization's image functions as a filter in the perception of service quality. The model also proposes that there are direct relationships between service quality perception and the technical and functional quality dimensions, in addition to the indirect effects of technical and functional quality on service quality perception. Finally, the model suggests that service quality leads to customer satisfaction (Kang and James, 2004).



**Figure 3: SERVQUAL Model**

Since Parasuraman *et al.* (1988) introduced the SERVQUAL instrument, many researchers have used, extended and developed this 22-item scale to study service

quality in different sectors of the services industry (Fick and Ritchie, 1991; Babakus and Mangold, 1992; Coyle and Dale, 1993; Cronin and Taylor, 1992; Lewis and Pescetto, 1996; Smith, 1995; Buttle, 1996; Lam et al., 1997; Lim and Tang, 2000; Oldfield and Baron, 2000; Gounaris et al., 2003) found in Glaveli; Petridou and Spathis, 2006.

In the studies within the banking industry, Avkiran (1994) found a 17-item, four-factor scale that measures customer service quality in branches of an Australian commercial bank. Newman and Cowling (1996) studied service quality in the retail-banking sector of the United Kingdom (UK) by comparing two British clearing banks. They concluded that banks have a greater strategic interest in service quality, partly because of the link between quality, productivity and profitability and partly due to a drive to reduce costs within the sector. Caruana (2002) evaluated service loyalty over 1000 retail banking customers in Malta. Results showed that customer satisfaction played a mediating role in the effect of service quality on service loyalty. Zhu et al. (2002) explored the impact of information technology (IT) on service quality in a large consumer bank. Their results showed that IT based services have a direct impact on the SERVQUAL dimensions and an indirect impact on customer perceived service quality and customer satisfaction. Lewis (1991) evaluated student's assessment of banks and building societies with respect to overall satisfaction. Goode and Moutinho (1995) analyzed the effects of free banking (ATM services) on overall satisfaction of students and normal bank customers. Wang et al. (2003) evaluated the antecedents of service quality and product quality, and their influences on bank reputation in the banking industry of China, using a structural equations model. They concluded that both service quality and product quality had a significant influence on bank reputation (Arasli; Mehtap-Smadi; Katircioglu, 2005).

Angur et al. (1999) examined the alternative measures of service quality in the banking industry in India. In this study, the researchers found that the SERVQUAL instrument was of a four dimensional structure and that from a practical point of view, the SERVQUAL instrument was more helpful in addressing service deficiencies than the other scale it was compared with. Sureshchandar et al. (2003) looked at service quality in public, private and foreign banks in India (Gonza' lez Gioconda; Picado Quesada and Eckelman, 2004). Yavas et al. (1997) investigated the relationship between service quality, customer satisfaction, complaint behavior and commitment in the banking industry of Turkey. They found that customer contact personnel played

a vital role in the delivery of high quality service. In addition to the banking sector, SERVQUAL has been applied to other sectors in different countries such as higher education institutions, airport services, tourism sector services, accounting firms, medical services (Johnston, 1997).

### SERVQUAL Criticism

While the SERVQUAL instrument has been widely used, it has been subject to criticism by many authors (Asubonteng et al., 1996; Buttle, 1996; Teas, 1993; Behara; Fisher and Lemmink, 2002). These criticisms have mainly revolved around the interpretation and implementation of the instrument (Babakus and Boller, 1992; Smith, 1995; Buttle, 1996; Lam et al., 1997; Newman 2001). A major problem with the SERVQUAL instrument is related to its dimensional structure. A number of researchers have reported different dimensions for expectations, perceptions and gap scores (Baker and Lamb, 1993; Mangold and Babakus, 1991; Richard and Allaway, 1993, Sureshchandar, Rajendran & Kamalanabhan, 2001).

Criticisms found in Athanassopoulos; Gounaris and Stathakopoulos (2000), also include the use of difference scores, dimensionality, applicability and the lack of validity of the model, especially with respect to the dependence or independence of the five main variables (Babakus and Boller, 1992; Carman, 1990; Cronin and Taylor, 1992). It is interesting to note that the developers of SERVQUAL initially suggested that service quality consists of functional (process) and technical (outcome) dimensions (Parasuraman et al., 1985); however, the SERVQUAL instrument does not include any measure of the technical quality dimension (Carman, 1990; Cronin and Taylor, 1992; Buttle, 1996). Shortcomings concerning convergent and discriminant validity have also been noted (Buttle, 1996).

Service quality is an abstract concept and thus hard to measure. There is no standard scale to measure perceived quality particularly in the banking sector (Wang et al., 2003). Despite the concerns over the validity of the instrument, Buttle (1996) supported that, the SERVQUAL instrument has formed the basis for a considerable amount of research and application in the field of service management and it is still the mostly widely used and probably the best available (Johnston, 1997).

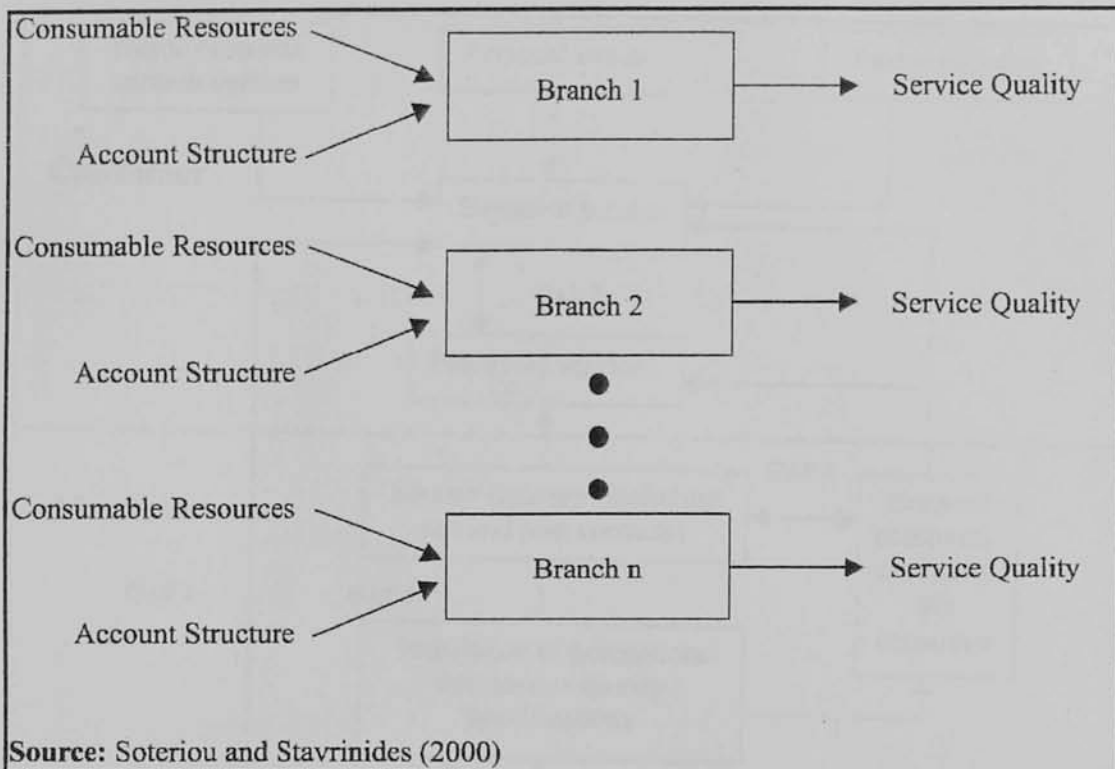
### ii) SERVPERF Model

There have been other attempts too to develop models and mechanisms to measure quality and recently a new performance-based measurement instrument, SERVPERF, has been elaborated. Cronin and Taylor (1992) modified the gap-based SERVQUAL scale into SERVPERF, a performance only index. Their study was later replicated and both studies' findings suggest that in a number of industries such as fast food, pest control, dry cleaning, but also in banking, SERVPERF outperforms SERVQUAL.

### iii) Data Envelopment Analysis Model (DEA)

Service quality is an important factor that must be considered when assessing a bank branch performance. The branch may report high volume of products and services offered as well as profits, but lose its long-term advantage owing to eroding service quality. Charnes et al (1978) presented a service quality model that can be used to provide directions to a bank branch for optimal utilization of its resources. Data Envelopment Analysis (Figure 4) provides a nonparametric methodology for evaluating the efficiency of each of a set of comparable decision making units (DMUs), relative to one another (Cook and Zhu, 2006). Compared to other models, DEA is a better way to organise and analyse data since it allows efficiency to change over time and requires no prior assumption on the specification of the best practice frontier (Wu; Yang and Liang, 2006). Furthermore, the standard DEA output reports the various potential improvements in input usage or output generation for the inefficient DMU. Hence, DEA can be a valuable benchmarking tool (Avkiran, 2005; Hoff, 2006; Wanger and Shimshak, 2006).

Though, the key limitation of DEA is that it assumes data to be free of measurement error and thus, it is more sensitive to the pressure of measurement error than parametric techniques (Avkiran and Rowlands, 2006). Another problem that has lead to various approaches being developed involves dealing with the impact of environmental factors (Prior and Surroca, 2004; Brown, 2005).



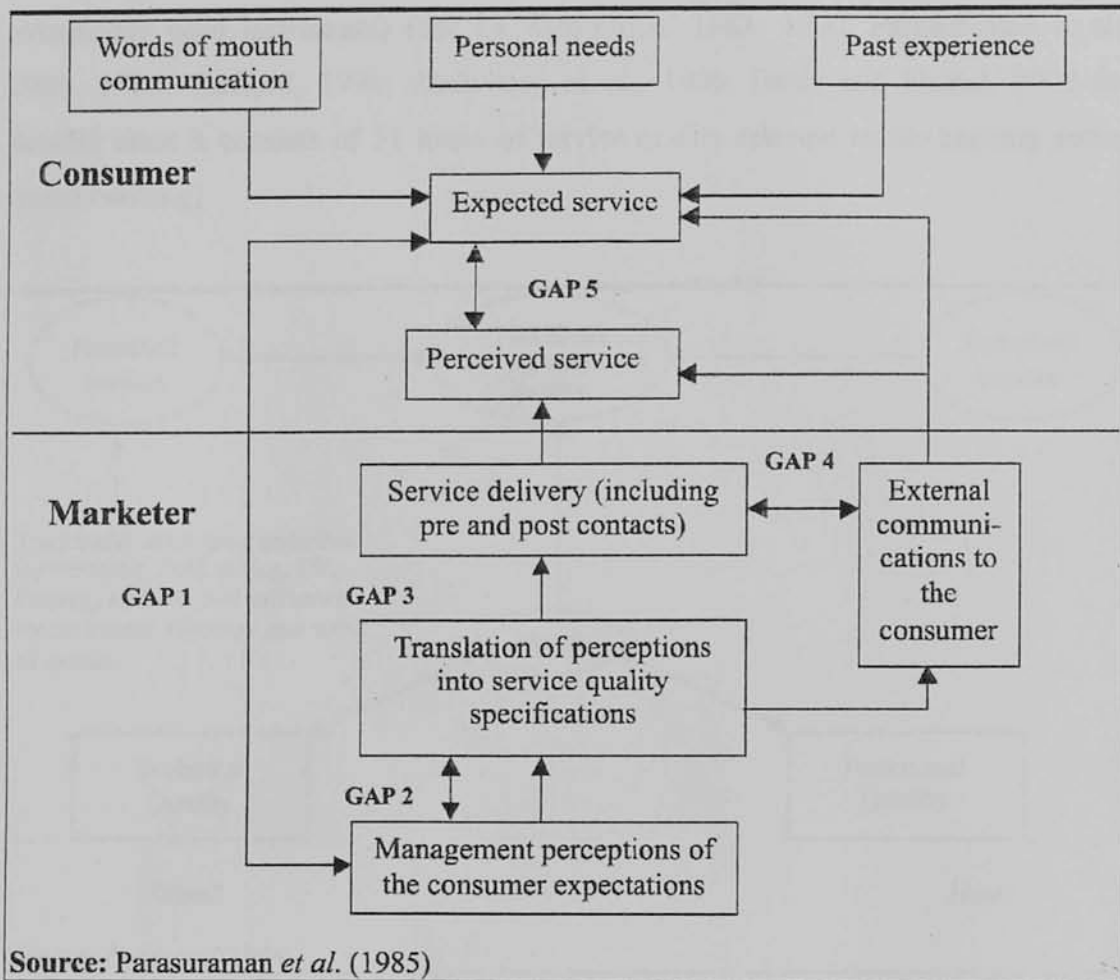
**Figure 4: DEA Model**

#### iv) Gap Model

The gap model (Figure 5), highlights the four organizational failures (gaps) which contribute to the fifth gap, namely the discrepancy between the external customer's perceptions and expectations. Four gaps stand in the way of delivering a service perceived by customers as being of high quality:

- Gap one: Customer expectations – management's perceptions.
- Gap two: Management's perceptions – service quality specifications.
- Gap three: Service quality specifications – service delivery.
- Gap four: Service delivery – external communications.
- Gap five: Perceived service gap.

The perceived service gap is an overall measure of service quality from the customer's point of view. It is the difference between perceived and expected levels of service. The gap between expectations and perceptions is measured by the difference between two 7- point rating scales (Newman and Cowling, 1996).



**Figure 5: GAP Model**

v) Technical and functional quality model (Gronroos, 1984)

An organization in order to compete successfully must have an understanding of consumer perception of the quality and the way service quality is influenced. Managing perceived service quality means that the firm has to match the expected service and perceived service to each other so that consumer satisfaction is achieved. The author identified three components of service quality, namely: technical quality; functional quality; and image (Figure 6).

vi) Bank Service Quality

According to (Glaveli; Petridou and Spathis, 2006), the instrument used for measuring perceived service quality was the Bank Service Quality (BSQ) developed by Bahia and Nantel (2000). BSQ was preferred to SERVQUAL (the most known and

extensively used instrument) (see i.e. Grönroos, 1983, 1990; Parasuraman et al., 1985, 1988; Stafford, 1996; Asubonteg et al., 1996; Bahia and Nantel, 2000 for details) since it consists of 31 items of service quality relevant to the banking sector (retail banking).

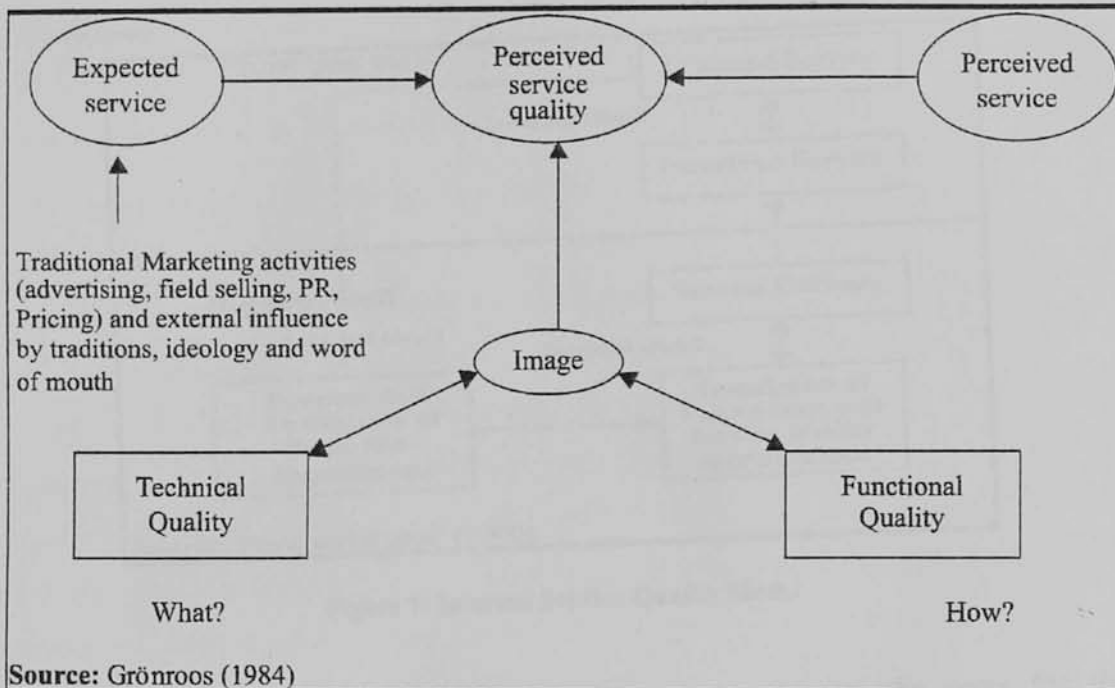


Figure 6: Gronroos Model

#### vii) Total Service Satisfaction

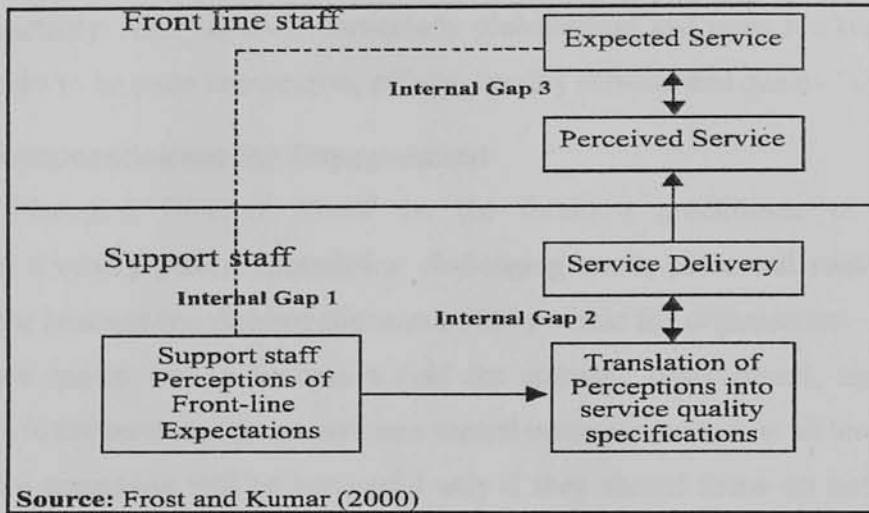
Nagel and Cilliers found in Muffatto and Panizzolo (1995), developed an integrated model for the management of what is called "total service satisfaction". In this model all service attributes can be managed on an integrated basis, irrespective of whether the service is offered to internal or external customers. This approach seeks to optimize the performance of the service delivery system as a whole.

#### viii) Internal service quality model (Frost and Kumar, 2000)

The authors have developed an internal service quality model based on the concept of GAP model (Parasuraman et al., 1985). The model (Figure 7) evaluated the dimensions, and their relationships, that determine service quality among internal customers (front-line staff) and internal suppliers (support staff) within a large service organization. The internal gap 1 shows the difference in support staff's perception (internal supplier) of front-line staff's expectation (internal customers). Internal gap 2 is the significant difference between service quality specifications and the service



actually delivered resulting in an internal service performance gap. Internal gap 3 is the gap which focuses on the front-line staff (internal customers). The gap is based on the difference between front-line staff's expectations and perceptions of support staff's (internal supplier) service quality.



**Figure 7: Internal Service Quality Model**

A number of different models have been evolved over the years for the calculation of Service Quality. Though the most well known are the SERVQUAL Model and the Technical and Functional as well as the DEA Model.

## 2.11 Conclusions

Many service firms, including retail banks, have been measuring customer satisfaction and service quality to determine how well they are meeting the customer needs and requirements. Understanding the casual relationship between service quality and customer satisfaction is of significant value to service, as both satisfaction and service quality are predictors of customer behaviours, such as purchase intentions and word of mouth advertising.

Various service quality models have been developed covering all aspects of conventional services to interacted services. Each of them is representative of a different point of view about services. The primary aim of these models is to enable the management to understand and enhance the quality of the organization and its offering.

The banking sector is one of the most representative service sectors. Banking is a high involvement industry. Customers whether at the retail or corporate level, have always been important for banks. Banks now know that delivering quality service to customers is essential for success and survival in today's global and competitive banking environment.

In Greece, until the mid 1980s, the banking system was heavily regulated in all areas of activity. Many factors, particularly globalisation and open markets, lead the Greek banks to be more competitive, offering quality services and quality "products".

## **2.12 Recommendations for Improvement**

1. The Managing Director should be the foremost practitioner of leadership spreading a quality policy, formulating challenging goals, plans and routines for all parts of the business and dividing the responsibility within the organization.
2. Service quality has to become a field for strategic development, an important ingredient in the business idea as well as a central management task at all levels.
3. Service companies will be successful only if they should focus on understanding their customers' articulated and unarticulated needs as well as the factors that steer the customers' desired or adequate services respectively. They have to be open and sensitive to ideas and expectations of their customers.
4. Quality improvement should be everybody's responsibility. Each person in the organization should have the knowledge, resources and authority to produce and provide the right quality.
5. Focus on new service development and service design. It is becoming more and more apparent that it is essential to build-in prerequisites for the right quality from the beginning when designing new services.
6. Stress on development of a process focus: continuous improvement and reengineering – moving from a focus on structure to a focus on processes – as a matter of prevention. Continuous quality improvements in the process and "process re-engineering" complement each other.
7. Quality improvement drives productivity and profitability.
8. Benchmarking: comparing to one or more similar organizations that have an outstanding performance and learning from them.

9. Service guarantees can make a service more distinct than other to customers and help create realistic expectations. They have also proved to be a good tool in strengthening internal quality work.

10. Focus on complaint management as a tool for discovering customer dissatisfaction, learning how to handle a situation, compensating for the mistake and explaining why it happened.

11. Stress on employee commitment and customer involvement for customer perceived total quality.

12. Great emphasis on the systematic measuring of quality for customers, employees and owners.

13. Rewarding quality improvement based on facts (Edvardsson, 1998)

### **2.13 Literature relationships – findings with the current thesis**

Service quality is a major component that can affect utterly customer's satisfaction. Alpha Bank, through the years, has tried and succeeded in building strong relationships with its customers via the provision of financial products and services of high quality, as well as by providing certain advantages for its customers. More specifically, customer loyalty is a strategic key for Alpha Bank's success, which, in association with the aforementioned, has placed Alpha Bank among the three most profitable banks in Greece. Further more, globalization was the case for Alpha Bank's competitiveness; Alpha Bank attempted and succeeded in evolving its financial services and products, or developing new ones in order to meet the higher customer demands. At this point, Alpha Bank seems to have realised very soon, the importance of keeping satisfied its internal customers, thus its employees, which is regarded as a major step and means for achieving customer satisfaction; the bank has developed a significant and competitive rewards and remuneration system as well as strong human resources management policies that embrace its employees with self recognition, recognition of personal achievements and promoting chances.

To end with, in order to choose the best model that can objectively measure service quality for this thesis, it was decided to apply the Data Envelopment Analysis (DEA); among many models, DEA, has gained certain popularity over the years compared to the most common model used for measuring banking's service quality, thus SERVQUAL. Many studies have suggested that DEA is an excellent tool for investigating and measuring a bank's performance.

## **CHAPTER 3: AIM OF THE PROJECT AND RESEARCH METHODOLOGY**

### **3.1 Aim of the project**

As cited previously in the literature review, the purpose of the dissertation is to:

- Demonstrate the importance of Service Quality and Customer Satisfaction to service institutions for their future well being and competitiveness among other organizations.
- To examine the level of customer satisfaction and the quality of the services that Alpha Bank provides.
- To compare customer satisfaction levels among branches,
- To analyse the issues related to the “how” and “what” ways Alpha Bank uses in order to satisfy its customers and,
- What problems is facing and how possible gaps can be closed.

### **3.2 Research Methodology**

#### **3.2.1 Primary data requirement**

In order to conduct the research in accordance with the above aims, the collection of primary data, is essential. Secondary data will be used only for a narrow reference to Alpha Bank’s presentation. Regarding secondary data availability, the author’s intention was to explore data on the Internet, cited at the Bank’s web page.

Leedy (1989) defines research as “a procedure by which we attempt to find systematically, and with the support of demonstrable fact, the answer to a question or the resolution of a problem.”

Primary data are new data collected to solve a current problem. To a great extent of frequency, researchers gather primary data when adequate relevant secondary information is already available – at a small or no cost at all! (<http://ollie.dcccd.edu/mrkt2370/Chapters/ch3/3mtstart.html#primdata>)

### 3.2.2 Strategy

There are various research methods to collect primary data, depending on the type of the research involved. Yin (1994) suggested the following five research methodologies (as shown in the table 2).

Strategy	Form of research questions	Requirement control over behavior	Focuses on contemporary events
Experimental	How, Why, What, If?	Yes	Yes
Survey	Who, What, Where? How many? How much?	No	Yes
Archival Analysis	Who, What, Where? How many? How much?	No	Yes/ No
Historical		No	No
Case Study		No	Yes

Table 2: Yin model (Source: Yin, 1994. p.6)

The type of strategy that will be implemented in the specific research is that of survey. It is a popular and common strategy in business and management research. Surveys allow the collection of a large amount of data from a sizeable population in a highly economical way and are easily understood. In addition, the survey strategy is perceived as authoritative by people in general. The data will be obtained by using questionnaires and will be standardized, allowing easy comparison. The use of a survey strategy will definitely offer more control over the research process. This is why it has been the author's intention to develop a questionnaire that it would be both "scientific" and easy to understand and answer. Before applying it to the branches, it was considered wise to test it. It would be given to some co- colleagues as well as to persons that are activated in the Bank market with a wide experience. In that way it will be attempted to minimize any dysfunction related to its structure.

### 3.2.3 Data analysis

Regarding the primary data collected by the use of questionnaires, these data so as to be useful, they have to be analyzed and interpreted. The software package that will be used to analyze these data in the total of four branches is Excel. But in order to

have more advanced management and statistical analysis about the measurement of quality satisfaction comparing branches between them, the Data Envelopment Analysis Model (DEA), will be the applied procedure, which was analyzed in the literature review section. It should be stated at this point that the model implementation was made with the help of an online DEA solver (<http://www.dea.uni-hohenheim.de/index.php>), which was found in the web and was previously compared to the ones suggested by the bibliography. This was due to the easiness offered by the specific solver to apply DEA and make conclusions. DEA is a benchmarking technique which has been gaining increasing popularity over the last few years, especially in the bank sector. The aforementioned collected quantitative data, may be classified in categorical (data whose values cannot be measured numerically) and quantifiable (data whose values can be actually measured numerically as quantities).

The data collected through the questionnaires will be in their majority qualitative ones, so the analysis chosen will be a qualitative one as well. The general set of process that will be implemented involves:

- To categorize the data collected by classifying them
- To unitize them according to their categorization
- To recognize different relationships as the analysis is being continued
- To develop and test hypotheses that inductively will emerge from the data (Saunders et al, 2003).

Then, it will be attempted to graphically represent them (pies or diagrams).

## **CHAPTER 4: RESEARCH ANALYSIS**

The survey was conducted at the branches of Alpha Bank at the cities of Larissa and Karditsa, total of four (4) branches, during the summer of 2007 (July and August). The data collection was made through questionnaires in order to measure customer satisfaction and if possible to suggest ways to improve the quality system of branches.

### **4.1 Alpha Bank presentation**

Alpha Bank, founded in 1879, is one of the largest banks in Greece. With 675 Branches, Alpha Bank Group is also active in the international banking market, with presence in Cyprus and Southeastern Europe as well as in New York, London and Jersey in the Channel Islands.

Alpha Bank is one of the leading banking and financial services groups in Greece, offering a wide range of services including retail, SME and corporate banking, credit cards, asset management, investment banking, private banking, insurance, brokerage, leasing and factoring. Alpha Bank customers, retail and corporate, maintain approximately 3.5 million accounts.

The Bank is subject to regulation and supervision by the Bank of Greece and to Greek banking and accounting law.

With faith, loyalty and vision, Alpha Bank preserved the principles and values that have governed its operation since its establishment. The primary aim is credibility, reliability and efficiency in banking services. Their everyday concern is the constant qualitative and quantitative improvement of their products and services, modern and responsible treatment of all the banking needs of their clients.

The Bank has built up its' capabilities with respect to organization and systems in order to make feasible a faster expansion in the Greek retail business and the Balkan markets. They will continue to invest in human capital and infrastructure with a view to support income-generating activities while reigning in cost growth through process reengineering. ([www.alphabank.gr](http://www.alphabank.gr))

## 4.2 Client determination

Alpha Bank's client can be any person who becomes receiver of the quality service provided by each company's branch; every single person, physical or juristic one that takes the decision to buy the Bank's services for personal or common use. Customers or clients have demands for the services provided and it is expressed through satisfaction measurement.

According to the above, the survey's methodology is applied to all customers of Alpha Bank.

## 4.3 Questionnaire Analysis

The questionnaire used in the survey can be found in appendix 4. Graphical representation and statistical analysis of the questionnaire's results can also be found in appendix 5.

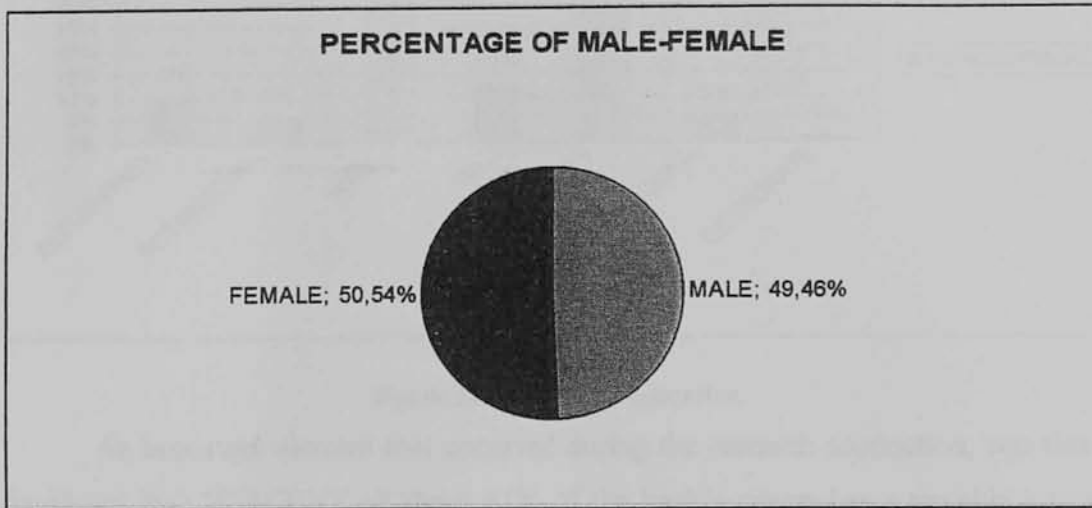
The questionnaire is separated in four parts. The first one includes questions about demographical information and some questions referring to general data around the survey. Next, there are questions about the basic purpose of the questionnaire including questions for satisfaction measurement. A seventh-level satisfaction measurement was used (1=disappointed, 2=very unsatisfied, 3=unsatisfied, 4=neutral, 5=satisfied, 6=very satisfied, 7=delighted). At the third part there are questions about customers' actions concerning their level of satisfaction. Also a seventh-level satisfaction measurement was used at the majority of the questions (i=never, ii=almost never, iii=rarely, iv=sometimes, v=often, vi=very often, vii=always). At the fourth and last part there is a separate question form which was exclusively spread to the branches managing directors', asking for specific information about each branch.

The survey was conducted at the branches of Alpha Bank at the cities of Larissa and Karditsa, total of four (4) branches, during the summer of 2007 (July and August). There were answered 184 questionnaires, of the 184 distributed, a total of 100% percent of the questionnaires.

- In the first part of the questionnaire a statistical analysis of the questions is presented, related to demographical information and consumer/client behavior.

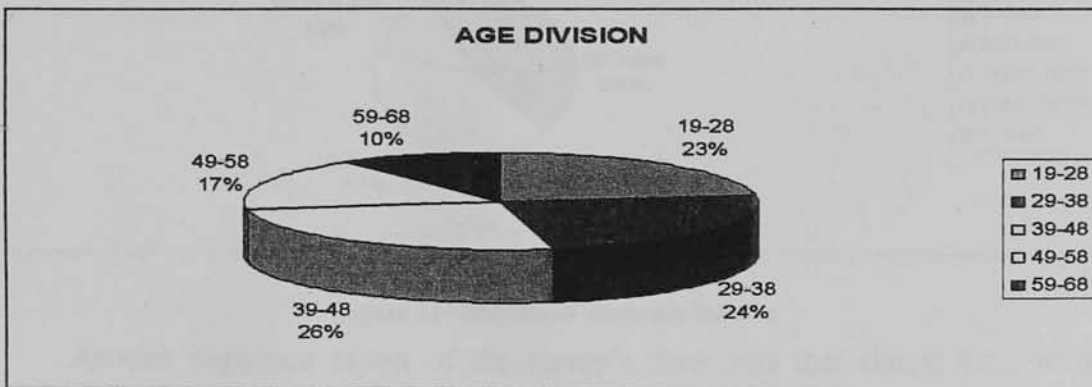


From the diagram below it is observed that 91 male and 93 female people replied to the questionnaire.



**Figure 8: percent of male-female**

The diagram below presents the age division of the people asked during the research. It is obvious that the majority of the people asked, belong to ages between 19 to 48 years old.



**Figure 9: age division**

Regarding clients' education, the diagram suggests that the majority of them have finished high school or university.

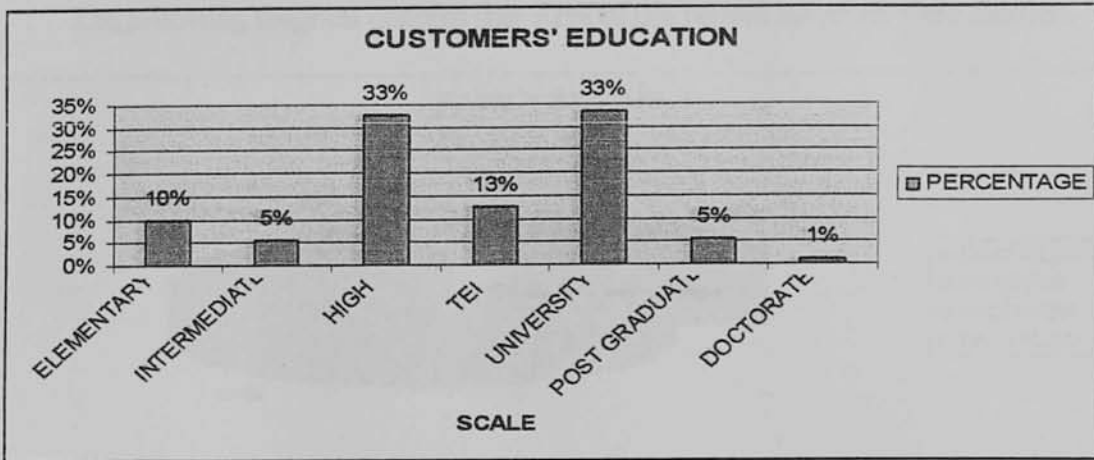


Figure 10: customers' education

An important element that occurred during the research conduction, was that a significant high PERCENT of about 41% of the bank's clients has a monthly income more than 1000€ as it can be seen from the diagram below.

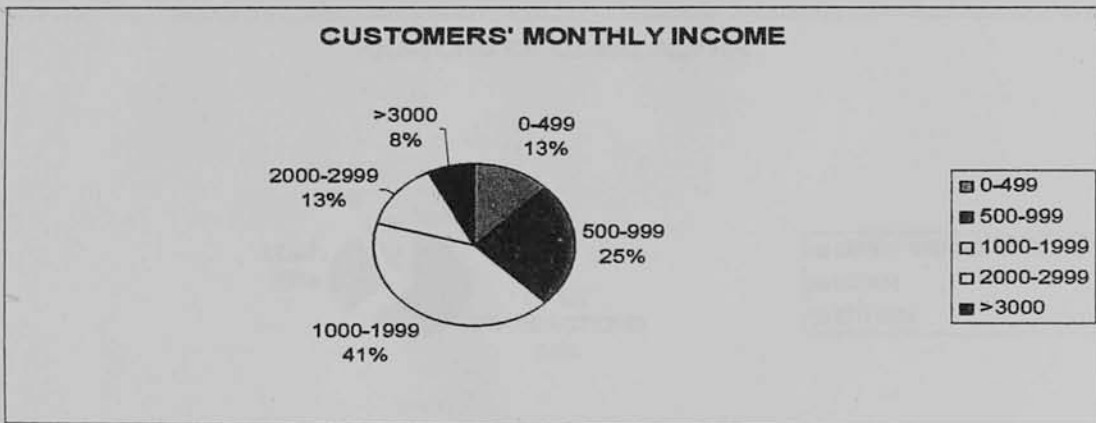


Figure 11: customers' monthly income

Another important aspect of the survey's clues was that almost 82% of the people asked were in "business"

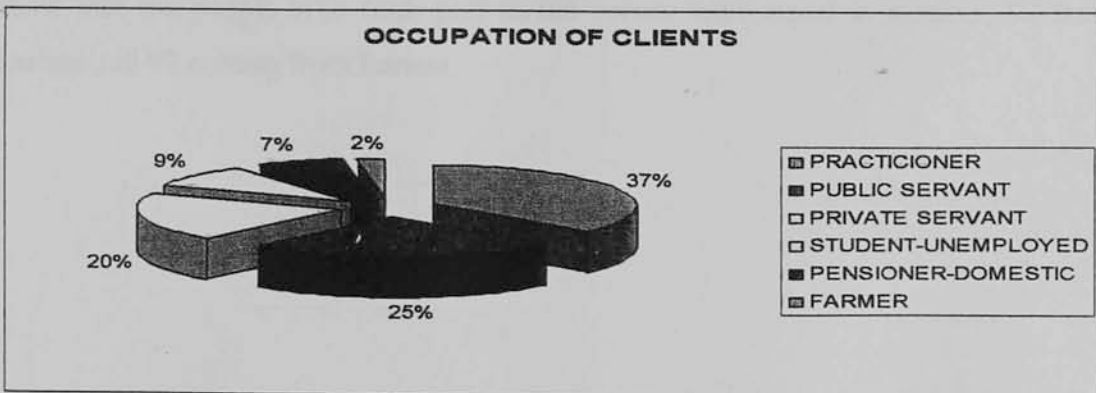


Figure 12: occupation of clients

The following diagram denotes that 62% of the people surveyed were married.

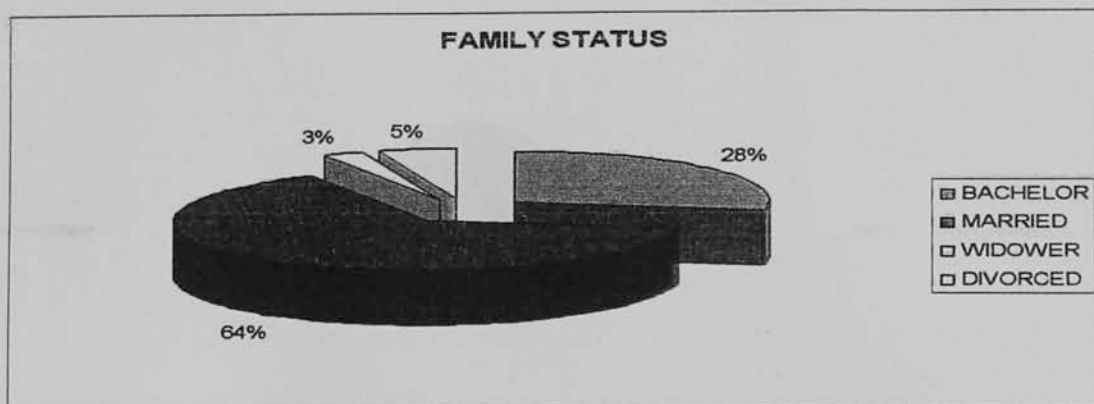


Figure 13: family status

Continuing the results analysis it is obvious from the following diagram that 64% of the people asked use Alpha Bank for their daily transactions. This shows the bank's multiple statuses.

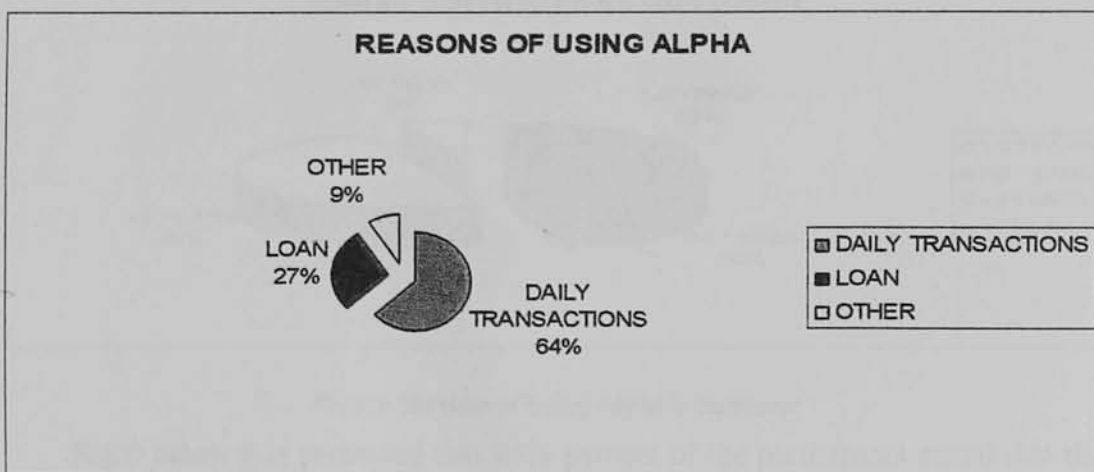
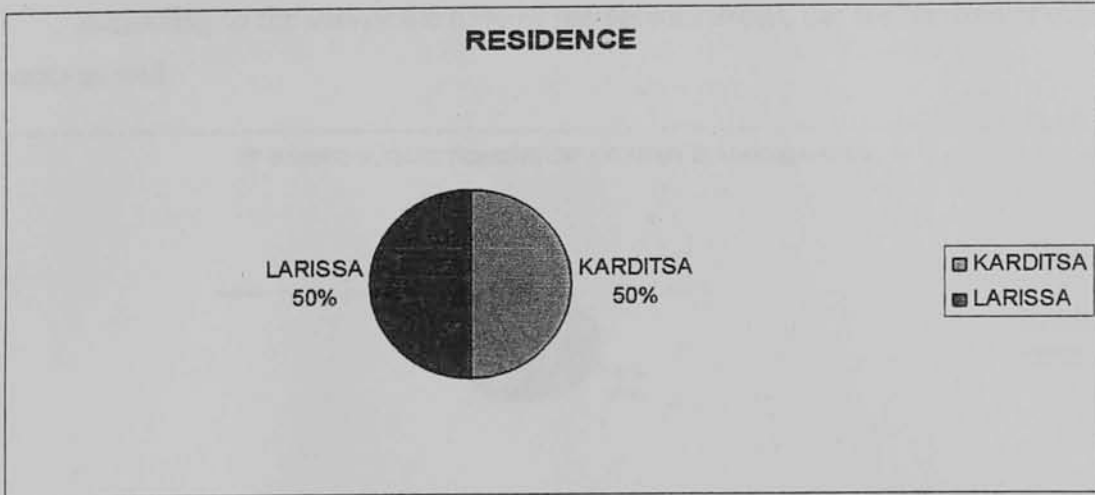


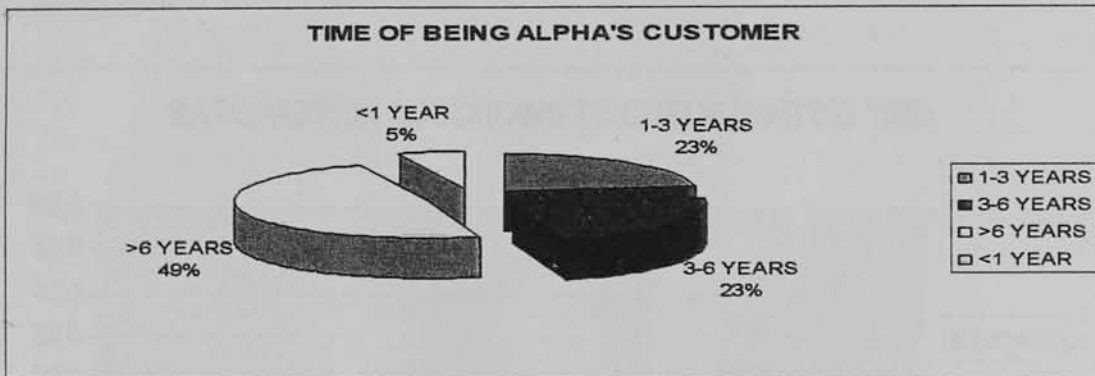
Figure 14: reasons of using Alpha

A demographical element occurs from the next diagram. The survey results show that the people who took part in the survey were equal in number, 92 from Larissa and 92 coming from Larissa.



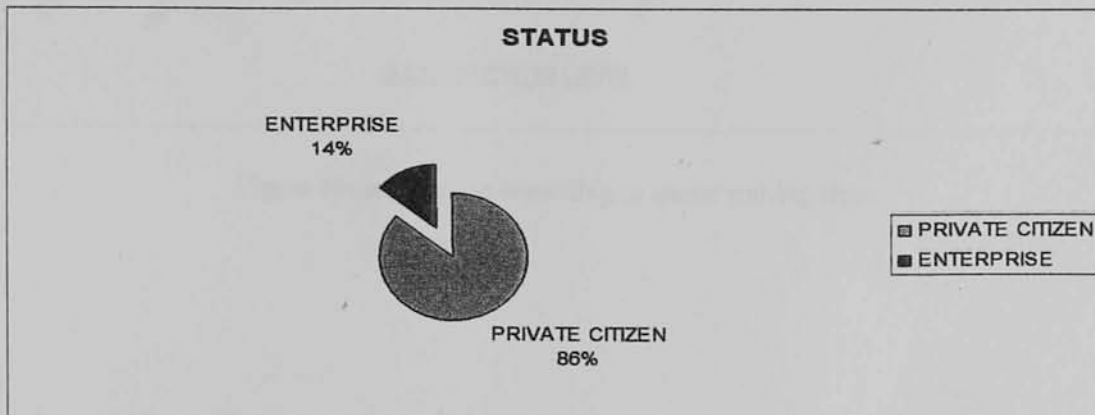
**Figure 15: residence**

In the next diagram it should be noticed that almost half of the people asked are Alpha’s clients for more than six (6) years.



**Figure 16: time of being Alpha’s customer**

Right below it is presented that 85% percent of the participants stated that they use Alpha for their needs as civilians.



**Figure 17: status**

According to the survey the 65% of the persons asked, use the services of other banks as well.

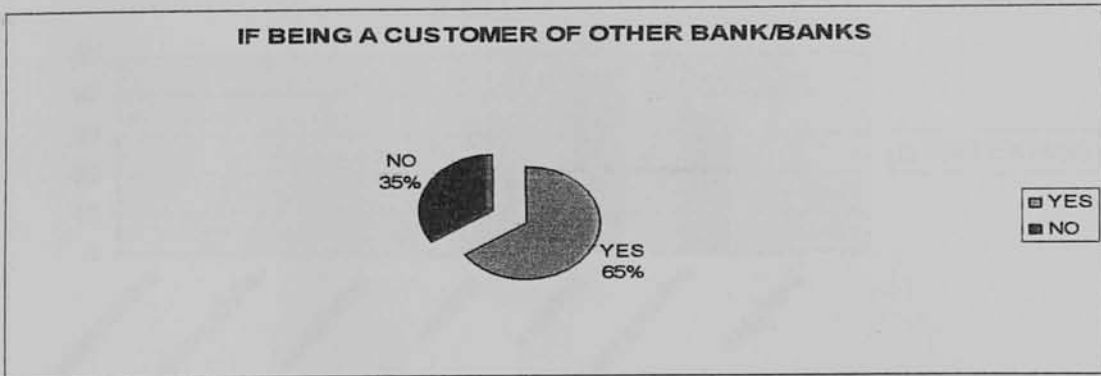


Figure 18: being a customer of other bank except Alpha

At the second part of the questionnaire there is a graphical presentation of the statistic elements of the answers given by the customers referring to the seven levels of satisfaction.

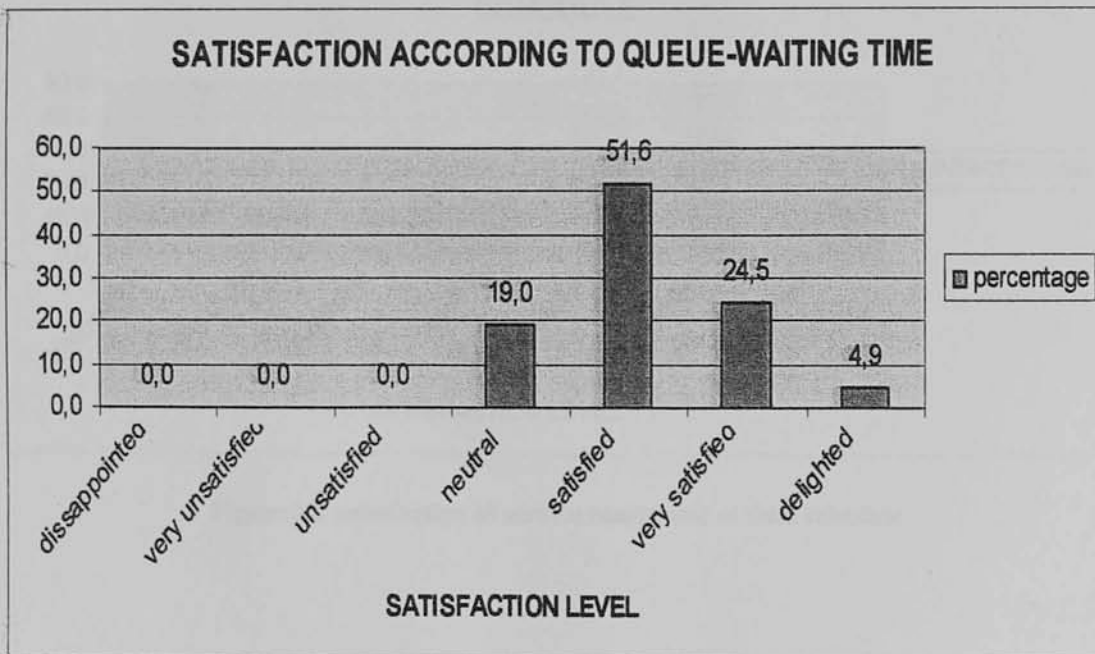
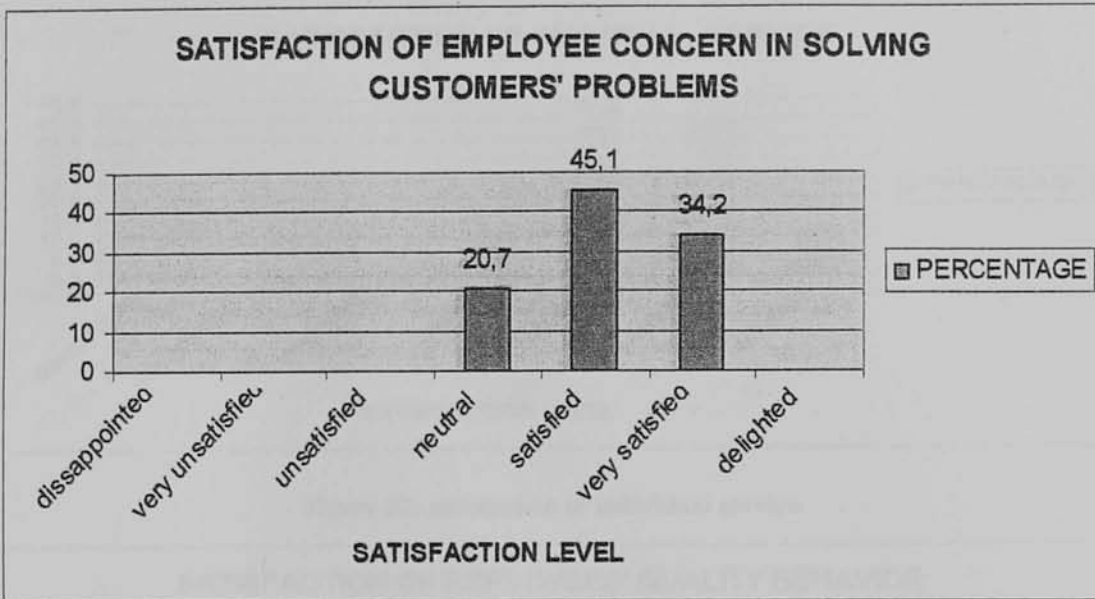
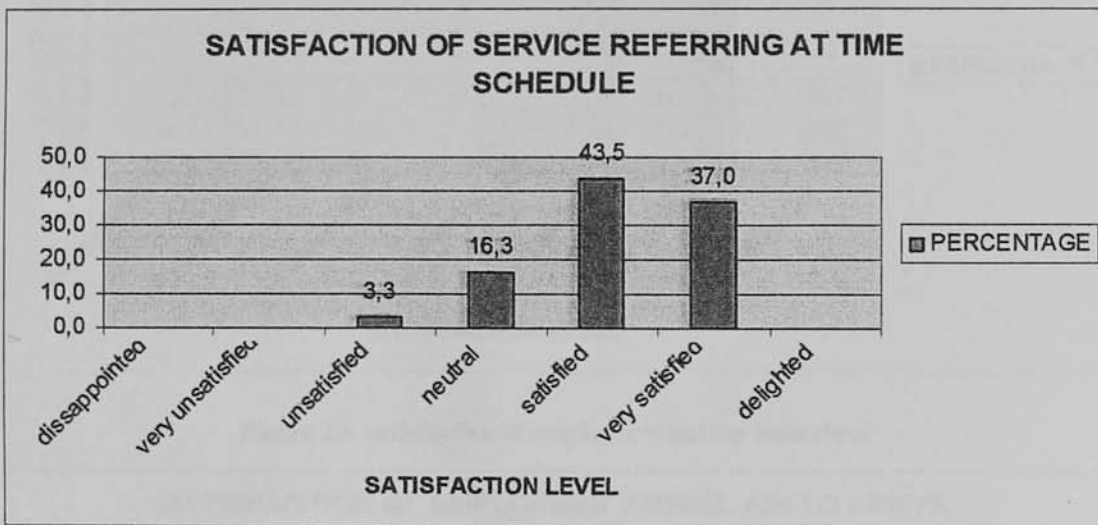


Figure 19: satisfaction according to queue waiting time



**Figure 20: employee satisfaction of customers concern to solve their problems**



**Figure 21: satisfaction of service completed at time schedule**

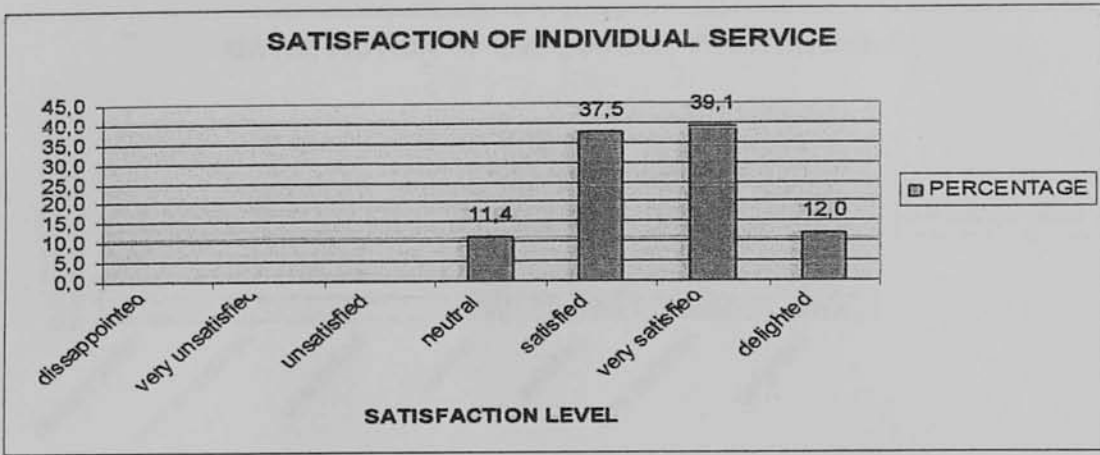


Figure 22: satisfaction of individual service

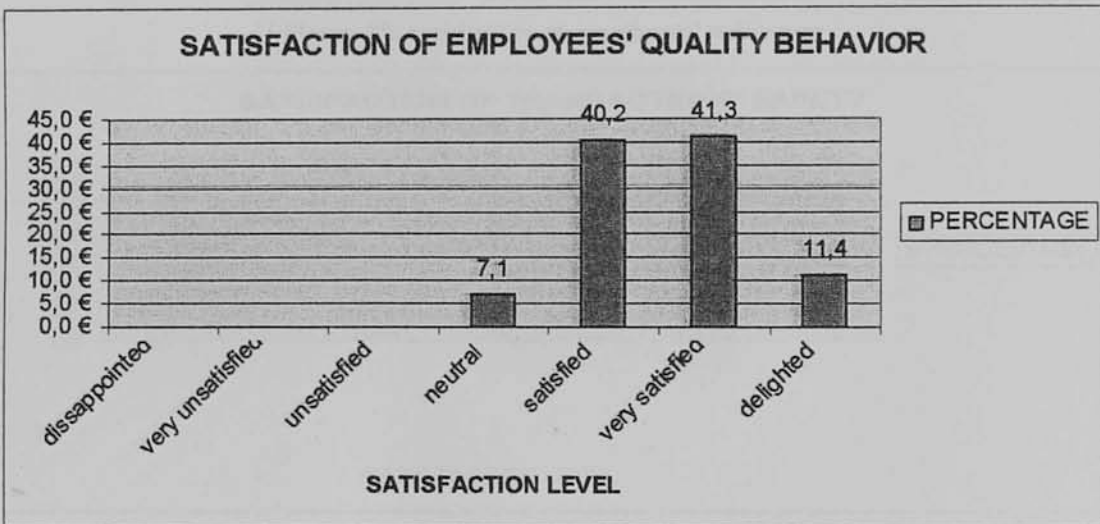


Figure 23: satisfaction of employee's quality behaviour

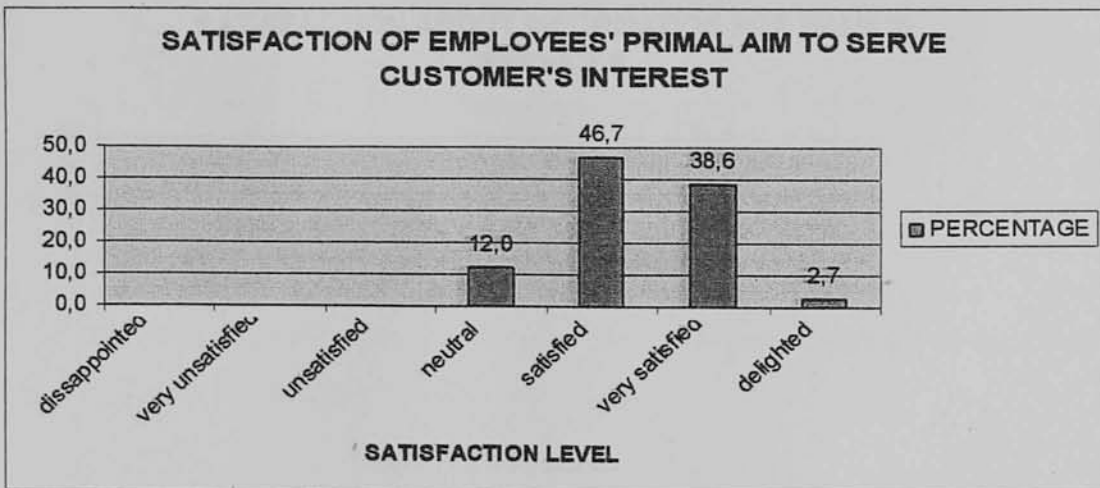


Figure 24: satisfaction of employees' primal aim to serve customers' interest

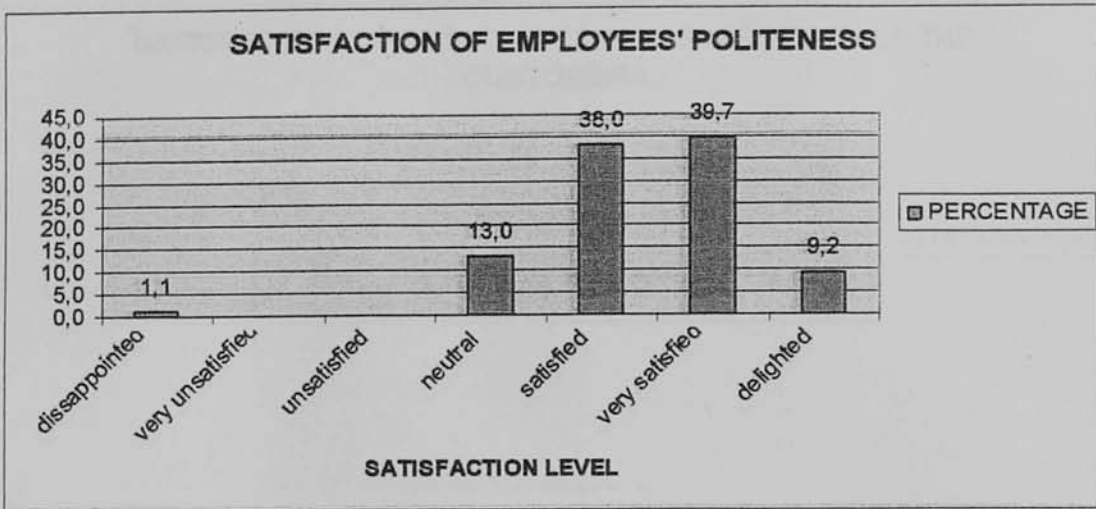


Figure 25: satisfaction of employees' politeness

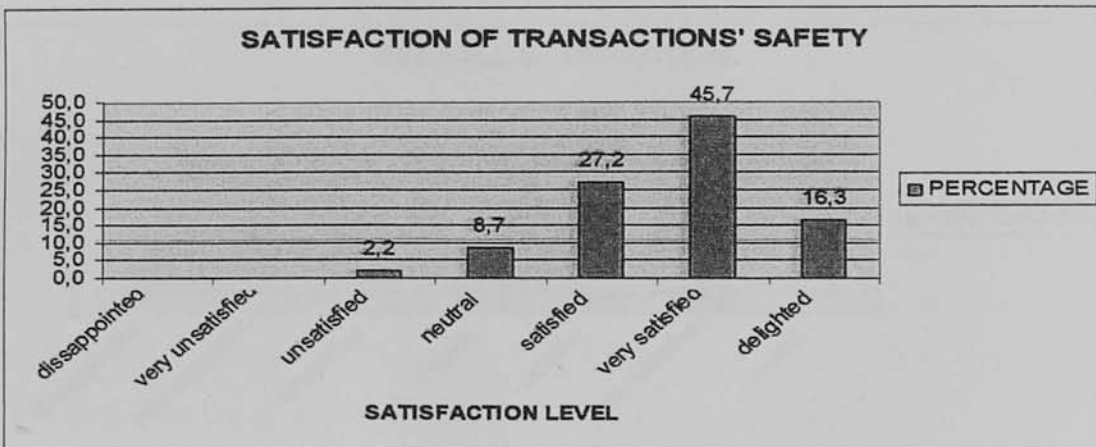


Figure 26: satisfaction of safe transactions

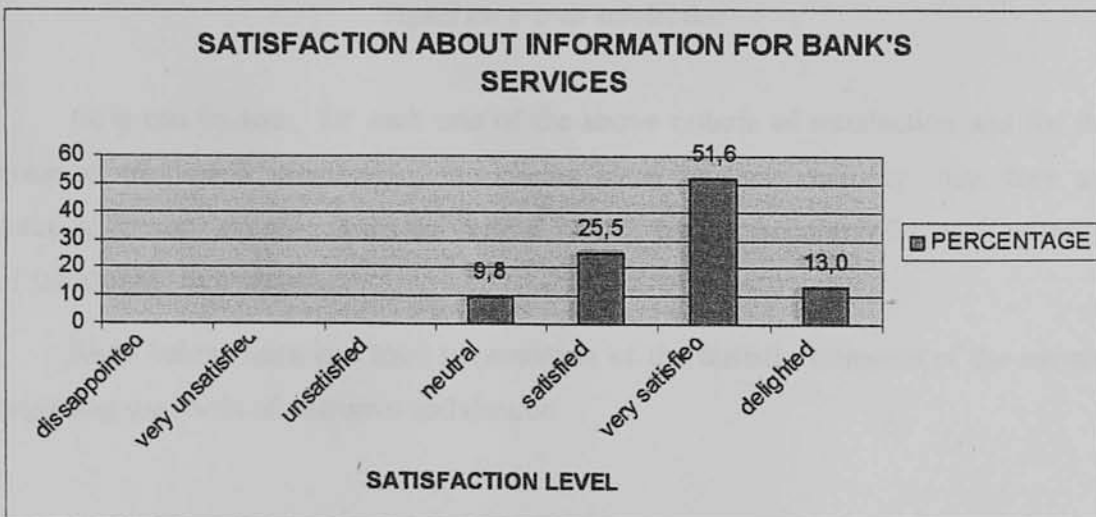


Figure 27: satisfaction about services' information



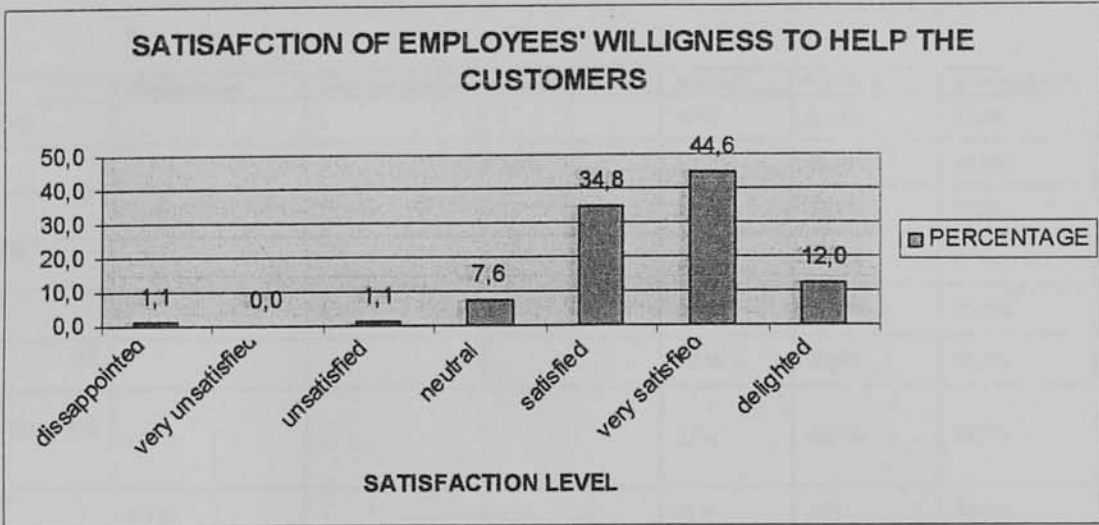


Figure 28: satisfaction of willingness to help customers

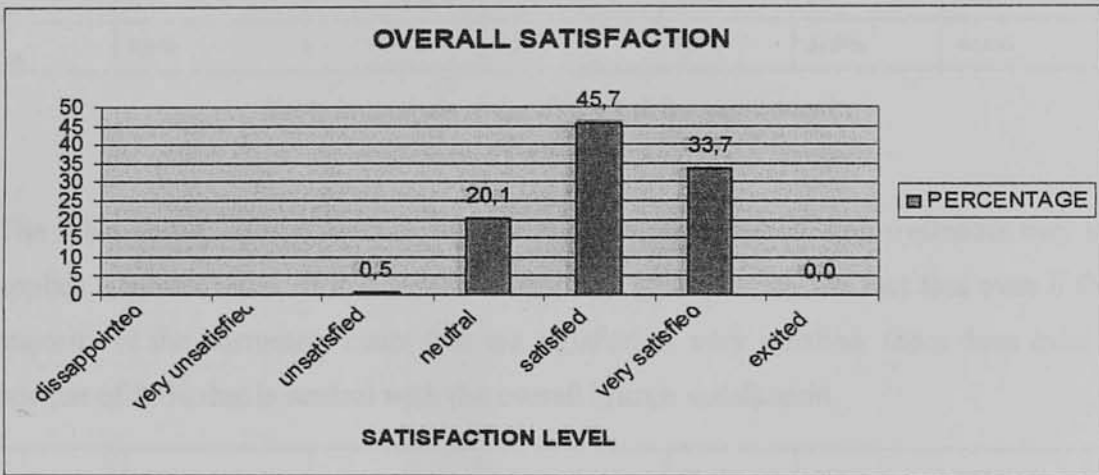


Figure 29: overall satisfaction

As it can be seen, for each one of the above criteria of satisfaction and for the question of overall satisfaction, the clients state, in their majority, that they are satisfied or very satisfied from the overall branch performance and for each criterion of satisfaction individually.

Right below there is a total presentation of the statistic elements of the survey, regarding the levels of customer satisfaction.

	disappointed	very unsatisfied	unsatisfied	neutral	satisfied	very satisfied	delighted
WAITING TIME	-	-	-	19%	51,6%	24,5%	4,9%
ACCESS	-	-	2,2%	10,9%	41,8%	34,8%	10,3%
CONCERN	-	-	-	20,7%	45,1%	34,2%	-
SERVICE/TIME SCHEDULE	-	-	3,3%	16,3%	43,5%	37%	-
INDIVIDUAL SERVICE	-	-	-	11,4%	37,5%	39,1%	12%
QUALITY OF BEHAVIOR	-	-	-	7,1%	40,2%	41,3%	11,4%
EMPLOYEES' PRIMAL AIM OF CUSTOMER INTEREST	-	-	-	12%	46,7%	38,6%	2,7%
EMPLOYEES' POLITENESS	1,1%	-	-	13%	38%	39,7%	9,2%
SAFE TRANSACTIONS	-	-	2,2%	8,7%	27,2%	45,7%	16,3%
SERVICES INFORMATION	-	-	-	9,8%	25,5%	51,6%	13%
EMPLOYEES' WILLINGNESS	1,1%	-	1,1%	7,6%	34,8%	44,6%	12%

**Table 3: analysis of the 2<sup>nd</sup> part of the questionnaire**

The table above clearly denotes that there are sections where improvements may be applied (indirect index of low level satisfaction). It is amazing the fact that even if the majority of the customers claim that are satisfied or very satisfied, there does exist a portion of 20% that is neutral with the overall branch satisfaction.

OVERALL SATISFACTION	-	-	0,5%	20,1%	45,7%	33,7%	-
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This portion probably denotes the absence of differentiation in the customers' expectation. Measuring overall quality satisfaction (appendix 6) for the four branches as a total, it was found a relatively high percent of 69%, which shows the level of customers' perception regarding provided service quality. In addition there is a considerably high level of customers of 19% who are neutral regarding the queue waiting time in each branch.

Lastly, it is worth to mention that a relatively high percent of customers seem to be "in the middle" about their satisfaction in the services provided at a specific time. The research denotes the almost total absence of answers given like for example,

“disappointed” or “very unsatisfied”. This is a factor suggesting that Alpha Bank has found the way to keep its customers satisfied.

- Continuing the analysis, at the third part of the questionnaire it will be attempted to figure out some of the reasons that drive customers to specific actions after receiving satisfaction or no satisfaction by the provided services. There follows a total presentation of the statistic elements of the survey, according to the seventh-level scale that has been set. The individual tables and diagrams can be found at Appendix 5.

	never	Almost never	rarely	sometimes	often	Very often	Always
Complains frequency	9,8%	46,7%	26,1%	13%	1,1%	3,3%	-
Thoughts of Bank Change	13,6%	33,7%	23,4%	15,8%	7,1%	6,5%	-
Recommend Alpha to relatives	-	10,3%	9,2%	33,7%	23,4%	21,7%	1,6%
Recommend Alpha to friends	6,5%	7,1%	7,6%	22,8%	28,3%	27,7%	-
Thoughts of Bank change due interest raise	3,3%	7,1%	10,3%	19%	8,7%	32,6%	19%

Table 4: statistic elements of the 3<sup>rd</sup> part of the questionnaire

The data above denote the fact that from the clients asked only a small percent of about 15% has expressed complaints about the provided services. In addition it is also concluded that more than 70% of the participants in the survey don't think to leave Alpha and move to another bank. As a consequence of the above, a relatively high percent of people's intension is underlined, to recommend Alpha Bank's services both to relatives and friends. Lastly it can be suggested that almost 60% of the total asked, find the possibility of interest raise a good reason to leave Alpha and move to another bank.

In addition a graphical representation of the two last questions of the questionnaire follows.

In the diagram below it can be concluded that if Alpha’s clients find a more competitive one, they will not hesitate to move to the new bank. It can be concluded that the bonds between Alpha and her clients are not strong.

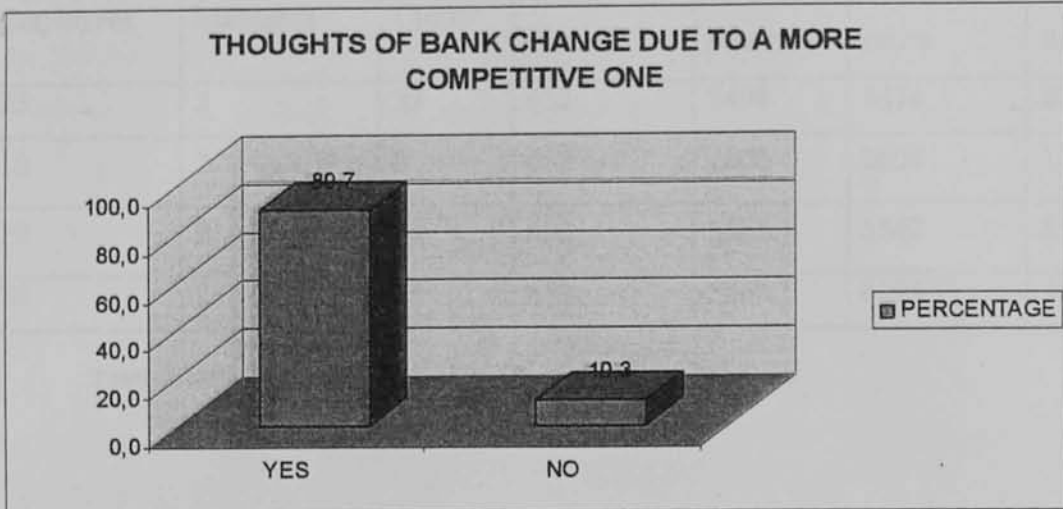


Figure 30: leave Alpha due to bank-competition

The following diagram presents that the most important reason for leaving a Bank for another is the high interest rates.

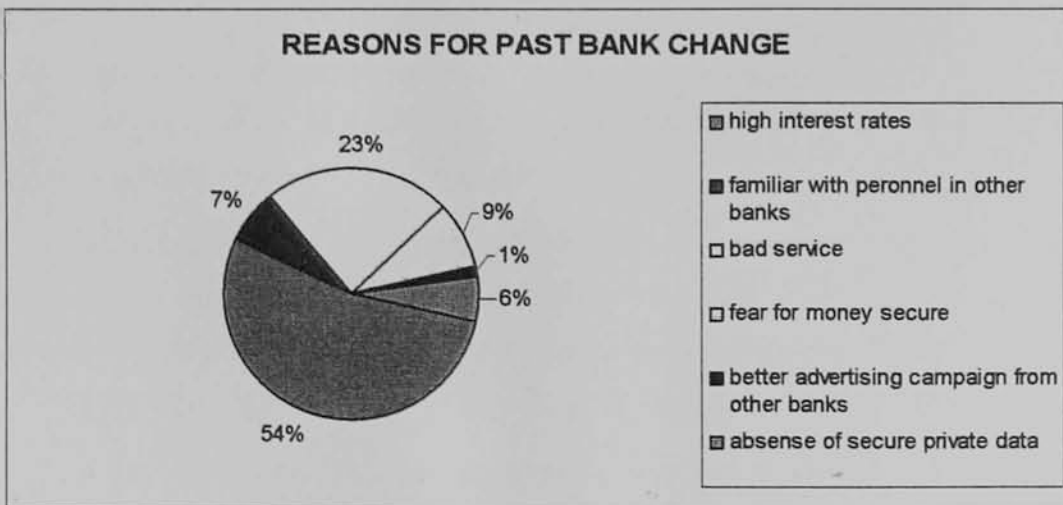


Figure 31: reasons for past bank change

Regarding the fourth part of the questionnaire the analysis that follows is individual for each one of the four branches due to the fact that the elements will be used as input to the implementation of DEA model. The following table includes all the replies from the Managing Directors of the four branches.

(Branch A: Papanastasiou, Branch B: Kiprou, Branch C: Iroon Politexniou, Branch D: Karditsa)

Branch	Employees	Managers	Clerks	Managers (hours)	Clerks (hours)	Terminal hours	Working Space (m2)
A	25	2	23	652	7498	8476	800
B	10	2	8	652	2608	2608	120
C	20	2	18	652	5868	5542	350
D	20	2	18	652	5868	6194	400

**Table 5: Data collected from the branches' Managing Directors**

#### 4.4 Data Envelopment Analysis Model

Data envelopment analysis (DEA) model is a benchmarking technique which has been gaining increasing popularity over the last few years. Developed by Charnes, Cooper and Rhodes (1978), DEA has successfully been used to provide bank branch benchmarks, when multiple outputs are produced with multiple inputs.

The specific research deals with the quality dimension of DEA, as described by Roth and Jackson (1995). More specifically, it is focused on the problem of improving service quality at the branch level; towards this aim, the study develops a DEA model that can be used to provide direction for improvement to branches which do not use their resources in the most efficient way so as to produce service quality. The project does not aim to develop service quality measures but rather to show how such measures can be incorporated into a model which can provide useful suggestions towards service quality improvement.

Schneider and Bowen (1985) report strong correlation between internal and external customer perceptions of service in bank branches. The model focuses on external customer perceptions of service quality which were gathered with the use of questionnaire and has already been analyzed.

##### 4.4.1. Inputs and outputs

DEA determines how efficiently an operating unit or company converts its inputs to outputs, when compared with other units.

Each branch utilizes some consumable resources, such as personnel, space, and computers in order to provide some level of service quality. The DEA model will compare the four branches on how well they transform these resources (inputs) to achieve their level of service quality (output), given their client base.

Generally, the inputs of the model consist of two sets: the consumable resources used by the branches such as personnel (in hours), computer terminals (in hours), and working space (in square meters) as well as from the branch's account structure (the number of accounts in different account categories). For the needs of our survey (derived from the fact that difficulties occurred in the effort to collect information for the branches' account structure and from the nature of the survey, which focuses in the quality dimension of DEA and not in efficiency or profitability) the model was run

without including the current accounts as an input. The inputs that will be used in the specific survey were defined in the previous section.

The clientele infrastructure reflects the steady-state market conditions of a branch which is tightly linked with each branch and may change very slowly over time (it won't be necessary in the specific analysis).

The output of the model is the level of SQ achieved, as perceived by the external customers of the branch. Since the aim of this project is not to develop a definitive measure of SQ as perceived by the external customers, it was decided, for the purpose of this project, to use the overall SQ measure (occurred from the questionnaire, 2<sup>nd</sup> part, question 12<sup>th</sup>) as a proxy for the SQ external customer perceptions for each branch. An average measure was calculated for each branch from the responses of its customers, and used as a single output indicator of the SQ level of the external customer perceptions for the branches included in the study (Soteriou, A. and Stavrinides Y., 1997). The methodology that SQ proxy was measured can be found in Appendix 6.

The data (inputs and output) that were applied in the model can be seen at the following table:

	Inputs	Inputs	Inputs	Inputs	Output
Branch	Managers (hours)	Clerks (hours)	Terminal hours	Working Space (m2)	SQ (%)
A	652	7498	8476	800	75,00
B	652	2608	2608	120	65,94
C	652	5868	5542	350	67,75
D	652	5868	6194	400	65,48

**Table 6: data applied in DEA**

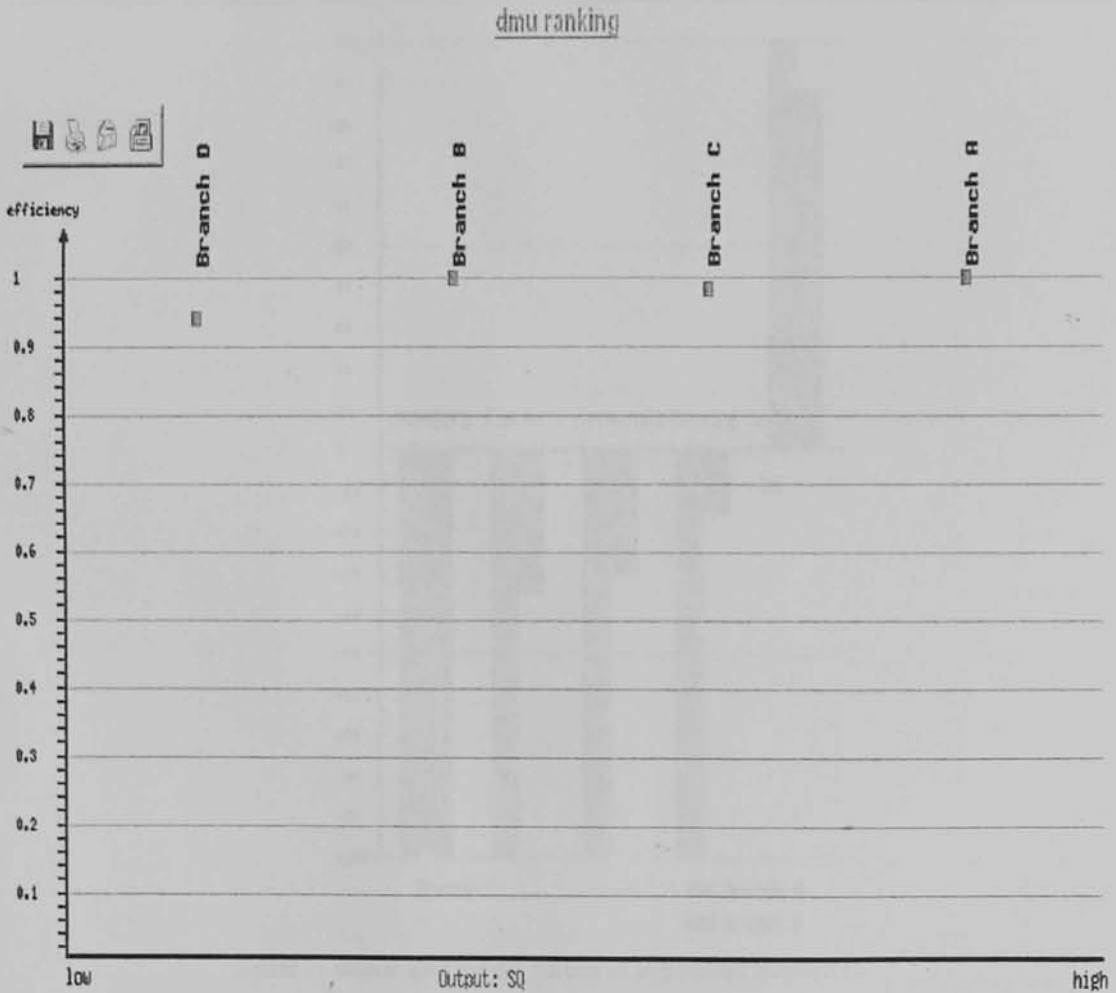
#### 4.4.2 Results and discussion

Both input minimization and output maximization DEA models were run for each branch in the group, in order to identify the **relative best practice** or yardstick branches as well as the inefficient branches in the group. The input minimization

model provides information on how much could the consumable resources be reduced while delivering the same level of SQ, given how the other branches of the groups perform. The output maximization model provides information on how much SQ can be improved using the same consumable resources.

**4.5.2.1 Input minimization DEA**

The next figure presents the rank between the Decision Making Units, regarding their efficiency. As it was calculated previously, branches A & B show the highest percents of service quality levels and as an assumption for the model they are scored with 1. So the rank follows in the next diagram.



**Figure 32: dmu ranking**

According to the next table, a composite branch which is combined of branches A & B exists for branch C. The specific branch uses a considerable lower amount of



clerks (working hours) and terminals (operational hours), and almost the same amount of managers (working hours) and working space. The model can point towards the resources which are not properly utilized for the purpose of delivering high levels of SQ. Pointing out these resources can provide the specific branches with a starting point for improvement.

Branch C	Input/Output	Composite		Branch A		Branch B
652.000000	Managers	640.147944		652.000000		652.000000
5868.000000	Clerks	4184.497206		7498.000000		2608.000000
5542.000000	Terminals	4509.278292	= 0.332087	8476.000000	+ 0.649735	2608.000000
350.000000	Working Space	343.6378		800.000000		120.000000
67.750000	SQ	67.7500509		75.000000		65.940000

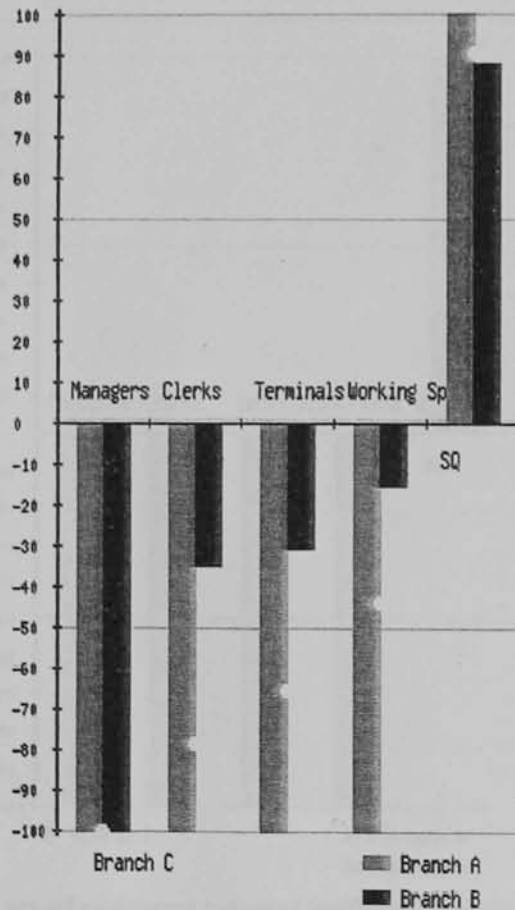


Table 7: actual and target values of inefficient branch C

Figure 33: branch C - drill down analysis

The results occurred for branch D is presented at figure 34. The analysis is similar to that of branch C. Less inputs in all categories (managerial and clerical

hours, terminal hours and working space) needed in order for branch D to reach the quality levels of the best in the branch.

It must be mentioned that the input combination of the “top” branches refers to relative best practises. Almost a 39% of branch’s A inputs and 55% of branch’s B inputs are combined to yield the same levels of quality (65,48%). This can be seen for both branches at figure 35.

Branch D	Input/Output	Composite		Branch A		Branch B
652.000000	Managers	612.783504	= 0.386998	652.000000	+ 0.552854	652.000000
5868.000000	Clerks	4343.554236		7498.000000		2608.000000
6194.000000	Terminals	4722.03828		8476.000000		2608.000000
400.000000	Working Space	375.94088		800.000000		120.000000
65.480000	SQ	65.48004276		75.000000		65.940000

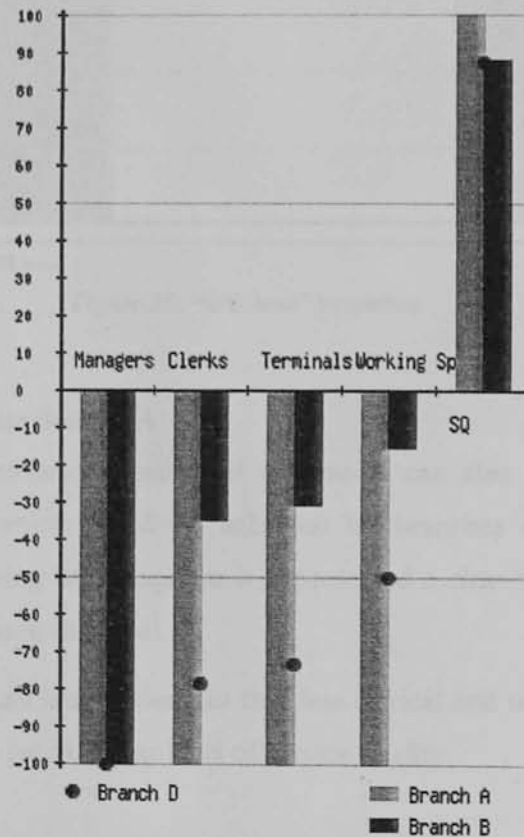


Table 8: actual and target values of inefficient branch D

Figure 34: branch D- drill down analysis

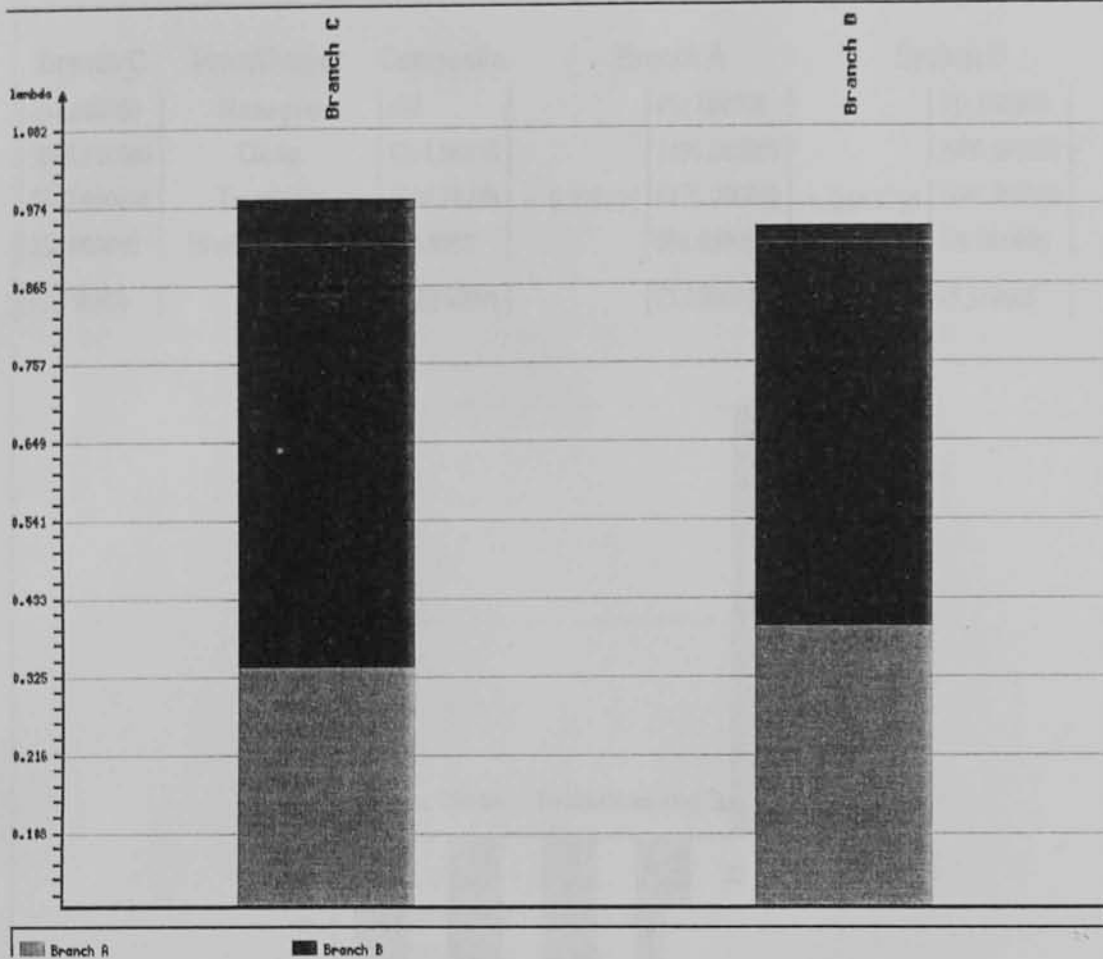


Figure 35: "efficient" branches

4.5.2.2 Output maximization DEA

The output maximization version of the model can also provide the external customers' SQ level which could be achieved by branches C & D given their resources. In the following two diagrams it is presented a clear view of how the two "inefficient" branches reach that goal.

The following figure clearly denotes that less clerical and terminal hours needed in order for branch C to reach higher level of service quality.

Branch C	Input/Output	Composite		Branch A		Branch B
652.000000	Managers	652		652.000000		652.000000
5868.000000	Clerks	4261.96915		7498.000000		2608.000000
5542.000000	Terminals	4592.76298	= 0.338235	8476.000000	+ 0.661765	2608.000000
350.000000	Working Space	349.9998		800.000000		120.000000
67.750000	SQ	69.0044091		75.000000		65.940000

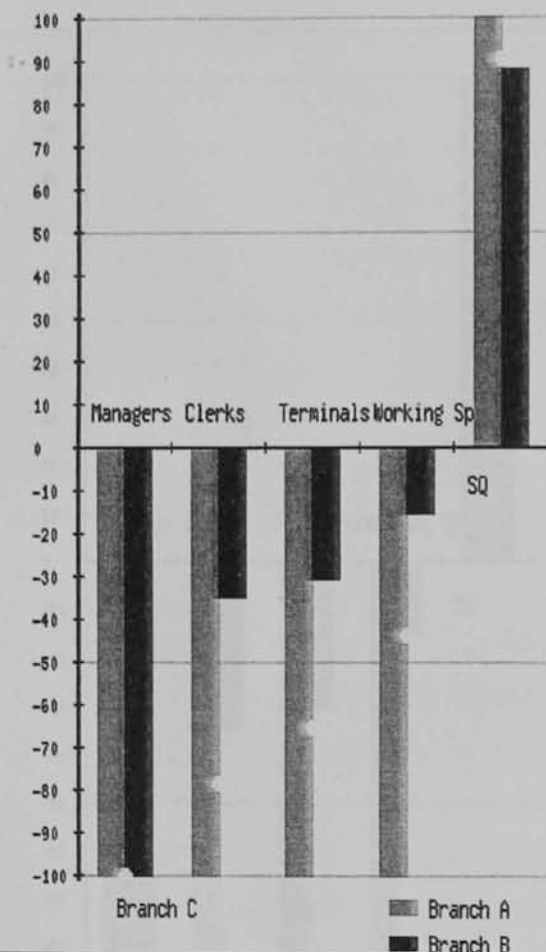
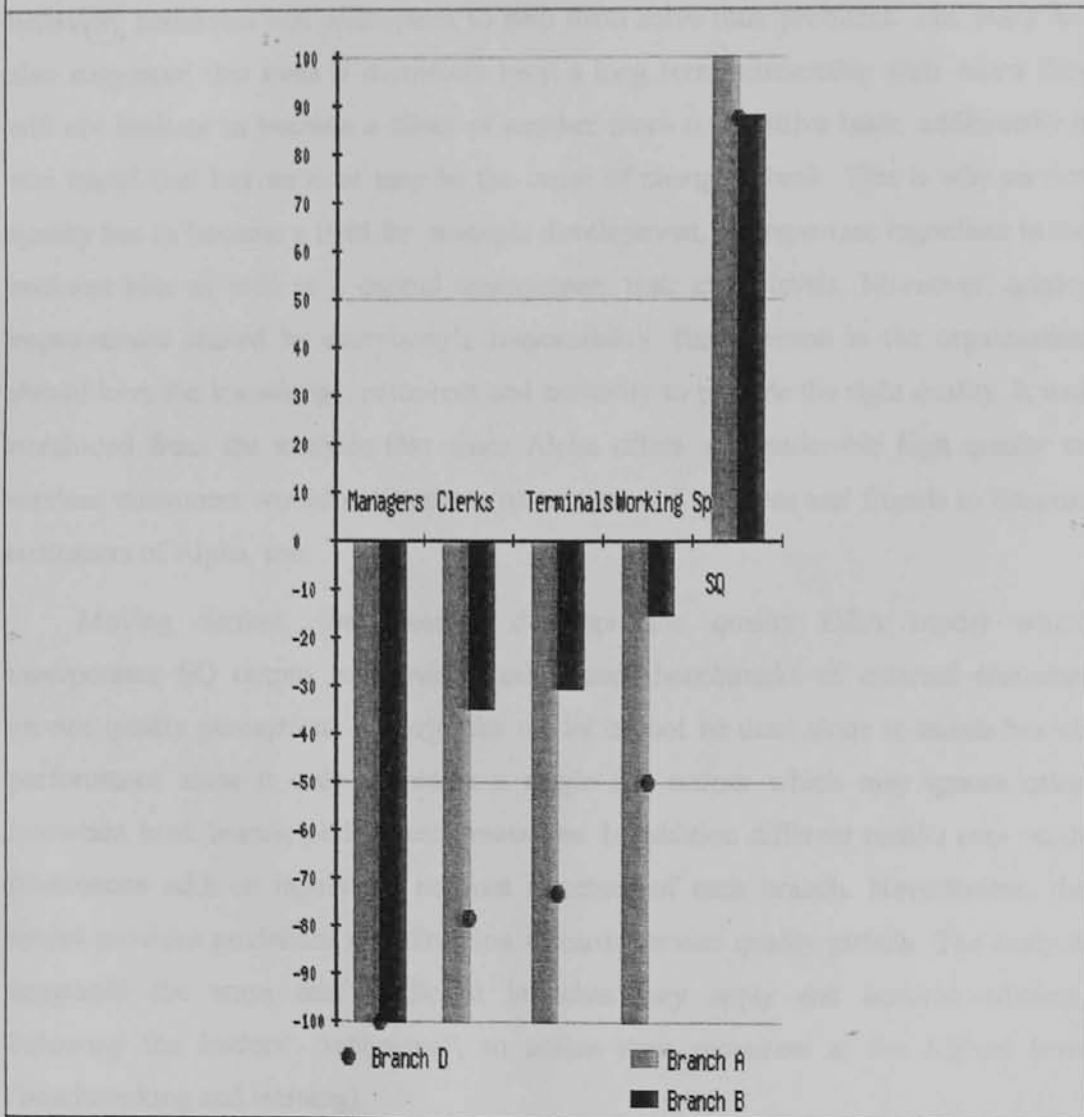


Table 9: actual and target values of inefficient branch C

Figure 36: branch C- drill down analysis

A similar analysis at branch D in the following figure reveals that the branch using less clerical and terminal hours may reach at significant higher levels of service quality.

Branch D	Input/Output	Composite		Branch A		Branch B
652.000000	Managers	652		652.000000		652.000000
5868.000000	Clerks	4621.53085		7498.000000		2608.000000
6194.000000	Terminals	5024.23702	= 0.411765	8476.000000	+ 0.588235	2608.000000
400.000000	Working Space	400.0002		800.000000		120.000000
65.480000	SQ	69.6705909		75.000000		65.940000



**Table 10: actual and target values of inefficient branch D**

**Figure 37: branch D- drill down analysis**

## CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

At the last section of the dissertation it will be attempted to highlight the results of the survey conducted and if possible to recommend ways for improvement.

At the first part of the analysis section it was presented that Alpha's Bank services offer a generally high level of quality of about 69%. Customers are generally satisfied with the quality of services provided and more specifically with personnel's behavior, politeness and willingness to help them solve their problems. The study has also suggested that even if customers keep a long term relationship with Alpha they will not hesitate to become a client of another more competitive bank. Additionally it was found that bad services may be the cause of changing bank. This is why service quality has to become a field for strategic development, an important ingredient in the business idea as well as a central management task at all levels. Moreover, quality improvement should be everybody's responsibility. Each person in the organization should have the knowledge, resources and authority to provide the right quality. It was concluded from the analysis that since Alpha offers a considerable high quality of services customers would not hesitate to recommend relatives and friends to become customers of Alpha, too.

Moving further, the research develops the quality DEA model which incorporates SQ output to provide bank branch benchmarks of external customer service quality perceptions. Clearly, the model cannot be used alone to assess branch performance since it only considers a single SQ output which may ignore other important bank branch performance measures. In addition different results may occur if someone adds as inputs the account structure of each branch. Nevertheless, the model provides guidelines and direction towards service quality pitfalls. The analysis suggested the ways that inefficient branches may apply and become efficient, following the leaders' "technique", to utilize their resources at the highest level (benchmarking and learning).

The model can also provide the basis for the development of richer models which include multiple outputs to capture the multi-objective nature of bank branches. Such models can provide realistic branch performance benchmarks. Furthermore, the nature of the linkages between SQ, profitability, and operating efficiency provides

food for future research. DEA can provide an excellent research tool for such investigation (Soteriou, A. and Stavrinides Y., 1997).

What Alpha should do is to focus on complaint management as a tool for discovering customer dissatisfaction, learning how to handle a situation, compensating for the mistake and explaining why it happened.

After all, productivity and profitability are driven by quality improvement.

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### INTERNET SOURCES

- <http://ollie.dcccd.edu/mrkt2370/Chapters/ch3/3mtstart.html#primdata>
- <http://www.alphabank.gr/page/default.asp?id=4&la=2>
- <http://www.dea.uni-hohenheim.de/index.php>
- <http://ollie.dcccd.edu/mrkt2370/Chapters/ch3/3mtstart.html#primdata>

### APPENDICES

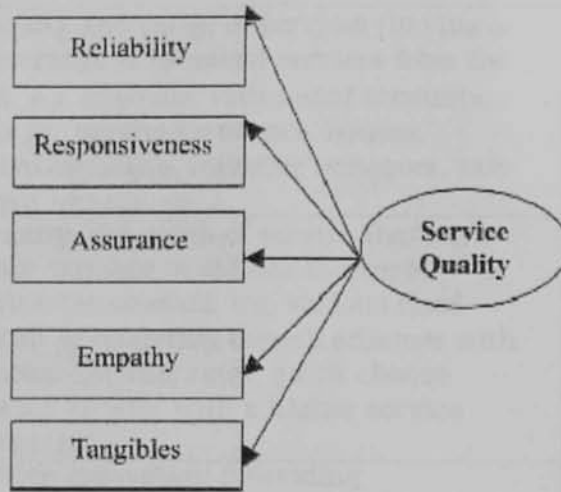
Appendix to Service Quality Factors



Figure 10. Service quality factors. Source: Wood and Zenger, 2002.

## APPENDICES

### Appendix 1: Service Quality Factors



**Figure 38: Service Quality Factors (Source: Wond and Sohal, 2002)**

**Appendix 2: Bank Selection Criteria**

1	Diversity and range of services (having a wider range of financial services from the bank, e.g. deposits, retirement accounts, loans for purchases of cars, houses, foreign exchange, traveller's cheques, safe deposit lockers, etc.).
2	Intensity and depth of service (having a higher number of options in every service/transaction, e.g. various fixed deposit or recurring deposit schemes with different interest rates, quick cheque clearing facility with a higher service charge, etc.).
3	Service innovation (providing information/details on a regular basis through post; telephonic banking; ATM; room service facility; cards to defence personnel, etc.).
4	Availability of most service operations in every branch/department of the bank.
5	Convenient operating hours and days (e.g. working on Saturdays and Sundays, extended service hours during evenings, weekdays, etc.).
6	Providing services as promised.
7	Effectiveness of the employees' skills and ability for actions whenever a critical incident takes place (i.e. when a problem arises).
8	Whenever a critical incident takes place (i.e. when a problem arises), the degree to which the organization succeeds in bringing the condition back to normality by satisfying the customer.
9	Providing services right the first time.
10	Providing services as per the promised schedule.
11	Apprising the customers of the nature and schedule of services available in the bank.
12	Prompt service to customers.
13	Willingness to help customers and the readiness to respond to customers' requests.
14	Extent to which the feedback from customers is used to improve service standards.

15	Regularly apprising the customers about information on service quality and actual service performance versus targets in the organization.
16	Employees who instill confidence in customers by proper behaviour.
17	Making customers feel safe and secure in their transactions.
18	Employees who are consistently pleasing and courteous.
19	Employees who have the knowledge and competence to answer customers' specific queries and requests.
20	Effectiveness of customer grievance procedures and processes.
21	Giving caring and individual attention to customers by having the customers' best interests at heart.
22	Employees who understand the needs of their customers.
23	Having a highly standardized and simplified delivery process so that services are delivered without any hassles or excessive bureaucracy.
24	Having highly simplified and structured delivery processes so that the service delivery times are minimal.
25	Enhancement of technological capability (e.g. computerization, networking of operations, etc.) to serve customers more effectively.
26	Degree to which the procedures and processes are perfectly fool-proof.
27	Adequate and necessary personnel for good customer service.
28	Adequate and necessary facilities for good customer service.
29	The ambient conditions such as temperature, ventilation, noise and odour prevailing in the bank's premises.
30	Extent of the physical layout of equipment and other furnishings being comfortable for customers to interact with employees.
31	Having house keeping as a priority and of the highest order in the organization.
32	Visually appealing signs, symbols, advertisement boards, pamphlets and other artifacts in the bank.
33	Employees who have a neat and professional appearance.
34	Visually appealing materials and facilities associated with the service.

35	Equal treatment stemming from the belief that every one, big or small, should be treated alike.
36	"Service transcendence" – making customers realize their unexpressed needs by giving more than what they expect.
37	Giving good service at a reasonable cost, but not at the expense of quality.
38	Having branch locations in most places convenient to all sections of the society (e.g. villages, down town areas, etc.)

**Table 11: Bank Selection Criteria (Source: Sureshchandar, Rajendran and Anantharaman, 2003)**

### Appendix 3: Service Quality Models

Model no./type	Key findings/applications	Select weaknesses/limitations
SQ1. Technical and functional quality model	Service quality depends on technical quality, functional quality and corporate image of the organization in consideration Functional quality is more important than the technical quality	The model does not offer an explanation on how to measure functional and technical quality
SQ2. Gap model	The model is an analytical tool. It enables the management to identify systematically service quality gaps between a numbers of variables affecting the quality of the offering This model is externally focused. It is capable of assisting the management to identify the relevant service quality factors from the viewpoint of the consumer	Exploratory study The model does not explain the clear measurement procedure for the measurement of gaps at different levels
SQ3. Attribute service quality model	This model provides a base of segregating service organization on three dimensions for better management of quality The model has the potential to enhance understanding of the concepts of service quality and help to guide about targeting towards the right customer segment This model is useful both in the design stage and periodically as the service and possibly customer taste evolve	It does not offer the measurement of service quality It does not offer a practical procedure capable of helping management to identify service quality problems or practical means of improving service quality
SQ4. Synthesized model of service quality	The use of this model and related managerial tasks can help managers to improve the success of their service offerings in any industry This model identifies key variables that require systematic management attention in planning, implementation and controlling service-marketing strategies that prevent or minimize service quality gap	Needs empirical validation Need to be reviewed for different type of service settings
SQ5. Performance only model	Service quality should be conceptualized and measured as an attitude The performance-based SERVPERF is efficient in comparison with SERVQUAL, as it directly reduces the number of items by 50 per cent and the results are better Service quality is an antecedent of consumer satisfaction and may have a better effect on purchase intentions than service quality	Need to be generalized for all types of service settings Quantitative relationship between consumer satisfaction and service quality need to be established

Model no./type	Key findings/applications	Select weaknesses/limitations
SQ6. Ideal value model of service quality	<p>This model incorporates and defines the importance of diverse components of the service encounter to be studied</p> <p>This model provides a new learning perspective on how an ideal standard can be formed and how it can be sustained mentally</p> <p>The model highlights attention to the importance of negative disconfirmation experience as a determinant for satisfaction outcome.</p>	<p>Fewer number of items used for value and customer satisfaction</p> <p>Needs to be defined for all types of service settings</p>
SQ7. EP and NQ model	<p>The model raised a number of issues pertaining to conceptual and operational definitions of expectation and revised expectation</p> <p>The criterion and construct validity of the EP model was higher than both the SERVQUAL and NQ model.</p>	<p>This model was tested for limited sample size and for narrow service setting (discount store)</p>
SQ8. IT alignment model	<p>This model describes how IT can be used to improve customer service along key service quality dimensions including reliability, responsiveness, competence, access, communication, security and understanding the customer</p> <p>This model can help the organizations to realize the complete benefit of using information systems for delivering improved quality of service</p> <p>Allows managers to understand the commonly used technologies in their industry and determine appropriate technology suiting their requirements</p>	<p>It only highlights the impact of IT on service quality. The model does not offer a way to measure and monitor service quality</p> <p>The model is silent about the level of IT use for particular service settings.</p>
SQ9. Attribute and overall affect model	<p>The attribute-based model is favored in forming the evaluations of service quality for technology-based self-service options</p> <p>The overall affect model is also supported but it does not add further explanatory power to the attribute-based model</p>	<p>Needs to be generalized for different self-service options</p> <p>Effect of demographic variables, price, physical environment etc. is not considered</p>
SQ10. Model of perceived quality and satisfaction	<p>This model shows that service quality and satisfaction are distinct and desires congruency does influence satisfaction</p> <p>A key determinant of service quality and customer satisfaction is meeting customer desires. Rising expectations have a positive effect on customer satisfaction perceptions of performance, but they also have a negative effect on satisfaction through disconfirmation</p>	<p>The model does not highlight how the service quality is achieved and operationalized</p> <p>The model is weak in providing directions for improvements in service quality</p>



Model no./type	Key findings/applications	Select weaknesses/limitations
SQL1. FCP attribute model	<p>Provides a simple, effective and general framework of assessing service quality for any service sector</p> <p>Highlights the area of improvements for service quality depending on the frequency of encounter</p> <p>The dimensions to these three levels of attributes are individual sector-dependent and with reference to consumer</p>	<p>The model is lacking in providing general dimensions to three levels of attributes</p> <p>Lacks empirical validation</p>
SQL2. Retail service quality and perceived value	<p>The technical service quality is an important contributor to product quality and value perceptions and hence influences willingness to buy</p> <p>Functional service quality has indirect influence on willingness to buy through product quality and value perception; however, it has influence on willingness to buy that is independent of product assessment (poor staff manners)</p>	<p>The model considers only one value construct, i.e. value for money</p> <p>Fewer number of items per construct are taken in this study</p>
SQL3. Service quality, customer value and customer satisfaction model	<p>The model can be used as a framework for understanding consumer decision process as well as evaluating company performance</p> <p>This model provides directions and targets for customer-oriented company efforts</p>	<p>Model needs to be generalized for different types of service settings</p> <p>Model variables are measured through relatively fewer items</p>
SQL4. Antecedents and mediator model	<p>Consumers evaluate different factors related to the service but also form a separate overall evaluation of the service quality (which is not a straight forward sum of the components)</p> <p>The antecedent's model can provide complete understanding of service quality and how these evaluations are formed</p> <p>Customer satisfaction is a better predictor of behavioral intentions</p> <p>A strong mediating role was found, confirming that it is important to measure customer satisfaction separately from service quality when trying to determine customer evaluations of service</p>	<p>Antecedents of customer satisfaction have not been explored</p> <p>The model measures behavioural intention rather than actual behaviour</p> <p>Needs to be generalized for different service settings</p>
SQL5. Internal service quality model	<p>The perceptions and expectations of internal customers and internal suppliers play a major role in recognizing the level of internal service quality perceived</p>	<p>Need to be generalized for all types of internal environments</p> <p>Effect of changes in external environment on model is not considered</p>
SQL6. Internal service quality DEA model	<p>Indicates the resources, which can be better utilized to produce higher service quality levels</p>	<p>Does not provide the measurement of service quality</p> <p>Model ignores other bank performance measures</p>

Model no./type	Key findings/applications	Select weaknesses/limitations
SQL7. Internet banking model	<p>Implication for the management of quality in internet banking service arises in two areas a) within the service interface and b) with the management of increased customer role</p> <p>The level and nature of customer participation had the greatest impact on the quality of service experience and issues such as customers' "zone of tolerance" and the degree of role understanding by customers and perceived service quality</p>	<p>Not much empirical work carried out</p> <p>The model is based on the experience of one web site only, needs to be validated with other experiences</p>
SQL8. IT-based model	<p>IT-based services have a direct impact on the reliability, responsiveness and assurance dimensions and an indirect impact on customer satisfaction and perceived service quality</p> <p>IT can help service providers achieve higher level of customer satisfaction</p> <p>The customer evaluation of IT-based services is affected by preference towards traditional services, past experience in IT-based services and perceived IT policies</p>	<p>Fewer number of items chosen to measure the feeling of self-control and comfort in using IT-based services</p> <p>Does not provide a measure of service quality of IT-based transactions</p>
SQL9. Model of e-service quality	<p>It provides a better understanding of e-service quality and, therefore, to achieve high customer retention, customer satisfaction, and profitability</p> <p>This e-service quality model can be of assistance to all companies that engage e-commerce or plan to do so</p>	<p>Exploratory study</p> <p>Model did not provide specific measurement scales</p> <p>No statistical analysis carried out</p>

**Table 12: Service Quality Models (Source: Deshmukh and Vrat, 2004)**

**Appendix 4: QUESTIONNAIRE****First Part**

1. What is your sex?  
Male    Female
2. What is your age?
3. What is the level of your education?  
Elementary School    Intermediate School    High School    TEI    University  
Degree    Master Degree    Doctorate Degree
4. Monthly Income  
0-499    500-999    1000-1999    2000-2999    3000 and more
5. What is your occupation?
6. What is your marital status?  
Bachelor    married    widowed    divorced
7. The reason that I use or I have used Alpha Bank's services is:  
a) Daily transactions (deposit/withdrawals)  
b) Loan  
c) Other
8. You are a permanent citizen of:  
Larissa    Karditsa
9. How long have you been Alpha Bank's client?  
1-3 years    3-6 years    More time    Less time
10. I am using Alpha Bank's services as:  
Private citizen    Enterprise
11. Would you like to state your identity?  
Yes    No
12. Are you a client of other bank/banks?  
Yes    No  
If you have answered yes in the above question, please state the bank's name.....

**Second Part**

*For the questions below, circle your preferred answer in each item, so that it shows your satisfaction level referring to Alpha Bank's services where:*

- 1 = disappointed
- 2 = very unsatisfied
- 3 = unsatisfied
- 4 = neutral
- 5 = satisfied
- 6 = very satisfied
- 7 = delighted

1. What is the level of your satisfaction referring to the queue-waiting time?  
1    2    3    4    5    6    7
2. What is the level of your satisfaction referring to the access of the bank in your city?  
1    2    3    4    5    6    7
3. What is the level of your satisfaction referring to the employees' interest in solving the client's problems?  
1    2    3    4    5    6    7
4. What is the level of your satisfaction referring to the provision of the Alpha Bank's services at the time promised?  
1    2    3    4    5    6    7
5. What is the level of your satisfaction referring to Alpha Bank's provision of individual service?  
1    2    3    4    5    6    7
6. What is the level of your satisfaction referring to the quality of the employees' behavior?  
1    2    3    4    5    6    7
7. What is the level of your satisfaction referring to the fact that the employees' primary aim is the customer's best interests as well as the provision of the best possible service?  
1    2    3    4    5    6    7
8. What is the level of your satisfaction referring to the employees' politeness?  
1    2    3    4    5    6    7
9. What is the level of your satisfaction referring to the safety of your transactions?  
1    2    3    4    5    6    7
10. What is the level of your satisfaction referring to the employee's provision of information regarding to the Alpha Bank's services?  
1    2    3    4    5    6    7

11. What is the level of your satisfaction referring to the employees' willingness to help the customers?

1      2      3      4      5      6      7

12. What is the level of your satisfaction referring to the overall satisfaction regarding Alpha Bank?

1      2      3      4      5      6      7



**Fourth part**

*Extra question sheet (data refer to July and August 2007)*

Question 1: How many employees work in your branch?

Question 2: How many of them are managers?

Question 3: How many of them are clerks?

Question 4: How many times do managers work per month?

Question 5: How many times do clerks work per month?

Question 6: What are the total terminal hours per month?

Question 7: What is the size (in sq meters m<sup>2</sup>) of your branch?

## Appendix 5: Graphical representation and statistical analysis of the questionnaire's results

### 1<sup>ST</sup> Part

#### Question 1

SEX	FREQUENCY	PERCENT
male	91	49,46%
female	93	50,54%
<b>TOTAL</b>	184	100,00%

#### Question 2

AGE	FREQUENCY	PERCENT
19-28	42	22,83%
29-38	44	23,91%
39-48	47	25,54%
49-58	32	17,39%
59-68	19	10,33%
<b>TOTAL</b>	184	100,00%

#### Question 3

EDUCATION	FREQUENCY	PERCENT
elementary	18	10%
intermediate	10	5%
high	60	33%
TEI	23	13%
University degree	61	33%
post graduate (master degree)	10	5%
Doctorate degree	2	1%
<b>TOTAL</b>	184	100%

#### Question 4

INCOME	FREQUENCY	PERCENT
0-499	23	13%
500-999	46	25%
1000-1999	77	42%
2000-2999	24	13%
>3000	14	8%
<b>TOTAL</b>	184	100%



**Question 5**

OCCUPATION	FREQUENCY	PERCENT
practitioner	67	36%
public servant	46	25%
private servant	37	20%
student-unemployed	17	9%
pensioner-domestic	13	7%
farmer	4	2%
<b>TOTAL</b>	<b>184</b>	<b>100%</b>

**Question 6**

FAMILY STATUS	FREQUENCY	PERCENT
bachelor	52	28%
married	118	64%
widower	5	3%
divorced	9	5%
<b>TOTAL</b>	<b>184</b>	<b>100%</b>

**Question 7**

REASONS OF USING ALPHA	FREQUENCY	PERCENT
daily transactions	136	63%
loan	59	27%
other	20	9%
<b>TOTAL</b>	<b>215</b>	<b>100%</b>

**Question 8**

RESIDENCE	FREQUENCY	PERCENT
Karditsa	92	50%
Larissa	92	50%
<b>TOTAL</b>	<b>184</b>	<b>100%</b>

**Question 9**

TIME OF BEING ALPHA'S CUSTOMER	FREQUENCY	PERCENT
1-3 years	42	23%
3-6 years	42	23%
>6 years	90	49%
<1 year	10	5%
<b>TOTAL</b>	<b>184</b>	<b>100%</b>

**Question 10**

STATUS	FREQUENCY	PERCENT
Private citizen	166	86%
Enterprise	27	14%
<b>TOTAL</b>	<b>193</b>	<b>100%</b>

**Question 12**

<b>IF BEING A CUSTOMER OF OTHER BANK/BANKS</b>	<b>FREQUENCY</b>	<b>PERCENT</b>
<b>YES</b>	120	65%
<b>NO</b>	64	35%
<b>TOTAL</b>	184	100%

**2ND Part****Question 1**

<b>SATISFACTION LEVEL ACCORDING TO QUEUING</b>	<b>FREQUENCY</b>	<b>PERCENT</b>
<b>disappointed</b>	0	0,0
<b>very unsatisfied</b>	0	0,0
<b>unsatisfied</b>	0	0,0
<b>neutral</b>	35	19,0
<b>satisfied</b>	95	51,6
<b>very satisfied</b>	45	24,5
<b>delighted</b>	9	4,9
<b>TOTAL</b>	184	100

**Question 2**

<b>SATISFACTION ACCORDING TO BRANCH ACCESS</b>	<b>FREQUENCY</b>	<b>PERCENT</b>
<b>disappointed</b>	0	0,0
<b>very unsatisfied</b>	0	0,0
<b>unsatisfied</b>	4	2,2
<b>neutral</b>	20	10,9
<b>satisfied</b>	77	41,8
<b>very satisfied</b>	64	34,8
<b>delighted</b>	19	10,3
<b>TOTAL</b>	184	100

**Question 3**

<b>SATISFACTION OF EMPLOYEE CONCERN TO CUSTOMERS PROBLEMS</b>	<b>FREQUENCY</b>	<b>PERCENT</b>
<b>disappointed</b>	0	0,0
<b>very unsatisfied</b>	0	0,0
<b>unsatisfied</b>	0	0,0
<b>neutral</b>	38	20,7
<b>satisfied</b>	83	45,1
<b>very satisfied</b>	63	34,2
<b>delighted</b>	0	0,0
<b>TOTAL</b>	184	100

**Question 4**

<b>SERVICE AT TIME SCHEDULE</b>	<b>FREQUENCY</b>	<b>PERCENT</b>
<b>disappointed</b>	0	0,0
<b>very unsatisfied</b>	0	0,0
<b>unsatisfied</b>	6	3,3
<b>neutral</b>	30	16,3
<b>satisfied</b>	80	43,5
<b>very satisfied</b>	68	37,0
<b>delighted</b>	0	0,0
<b>TOTAL</b>	184	100

**Question 5**

<b>SATISFACTION OF INDIVIDUAL SERVICE</b>	<b>FREQUENCY</b>	<b>PERCENT</b>
<b>disappointed</b>	0	0,0
<b>very unsatisfied</b>	0	0,0
<b>unsatisfied</b>	0	0,0
<b>neutral</b>	21	11,4
<b>satisfied</b>	69	37,5
<b>very satisfied</b>	72	39,1
<b>delighted</b>	22	12,0
<b>TOTAL</b>	184	100

**Question 6**

<b>SATISFACTION OF EMPLOYEES' QUALITY BEHAVIOUR</b>	<b>FREQUENCY</b>	<b>PERCENT</b>
<b>disappointed</b>	0	0,0
<b>very unsatisfied</b>	0	0,0
<b>unsatisfied</b>	0	0,0
<b>neutral</b>	13	7,1
<b>satisfied</b>	74	40,2
<b>very satisfied</b>	76	41,3
<b>delighted</b>	21	11,4
<b>TOTAL</b>	184	100

**Question 7**

<b>SATISFACTION OF EMPLOYEES' PRIMAL AIM TO SERVE CUSTOMER'S INTEREST</b>	<b>FREQUENCY</b>	<b>PERCENT</b>
<b>disappointed</b>	0	0,0
<b>very unsatisfied</b>	0	0,0
<b>unsatisfied</b>	0	0,0
<b>neutral</b>	22	12,0
<b>satisfied</b>	86	46,7
<b>very satisfied</b>	71	38,6
<b>delighted</b>	5	2,7
<b>TOTAL</b>	184	100

**Question 8**

<b>SATISFACTION OF EMPLOYEES' POLITENESS</b>	<b>FREQUENCY</b>	<b>PERCENT</b>
<b>disappointed</b>	2	1,1
<b>very unsatisfied</b>	0	0,0
<b>unsatisfied</b>	0	0,0
<b>neutral</b>	24	13,0
<b>satisfied</b>	70	38,0
<b>very satisfied</b>	73	39,7
<b>delighted</b>	17	9,2
<b>TOTAL</b>	184	100

**Question 9**

<b>SATISFACTION OF SAFE TRANSACTIONS</b>	<b>FREQUENCY</b>	<b>PERCENT</b>
disappointed	0	0,0
very unsatisfied	0	0,0
unsatisfied	4	2,2
neutral	16	8,7
satisfied	50	27,2
very satisfied	84	45,7
delighted	30	16,3
<b>TOTAL</b>	<b>184</b>	<b>100</b>

**Question 10**

<b>SATISFACTION FOR ABOUT INFORMATION SERVICES</b>	<b>FREQUENCY</b>	<b>PERCENT</b>
disappointed	0	0,0
very unsatisfied	0	0,0
unsatisfied	0	0,0
neutral	18	9,8
satisfied	47	25,5
very satisfied	95	51,6
delighted	24	13,0
<b>TOTAL</b>	<b>184</b>	<b>100</b>

**Question 11**

<b>SATISFACTION OF EMPLOYEES' WILLINGNESS TO HELP CUSTOMERS</b>	<b>FREQUENCY</b>	<b>PERCENT</b>
disappointed	2	1,1
very unsatisfied	0	0,0
unsatisfied	2	1,1
neutral	14	7,6
satisfied	64	34,8
very satisfied	82	44,6
delighted	22	12,0
<b>TOTAL</b>	<b>184</b>	<b>100,0</b>

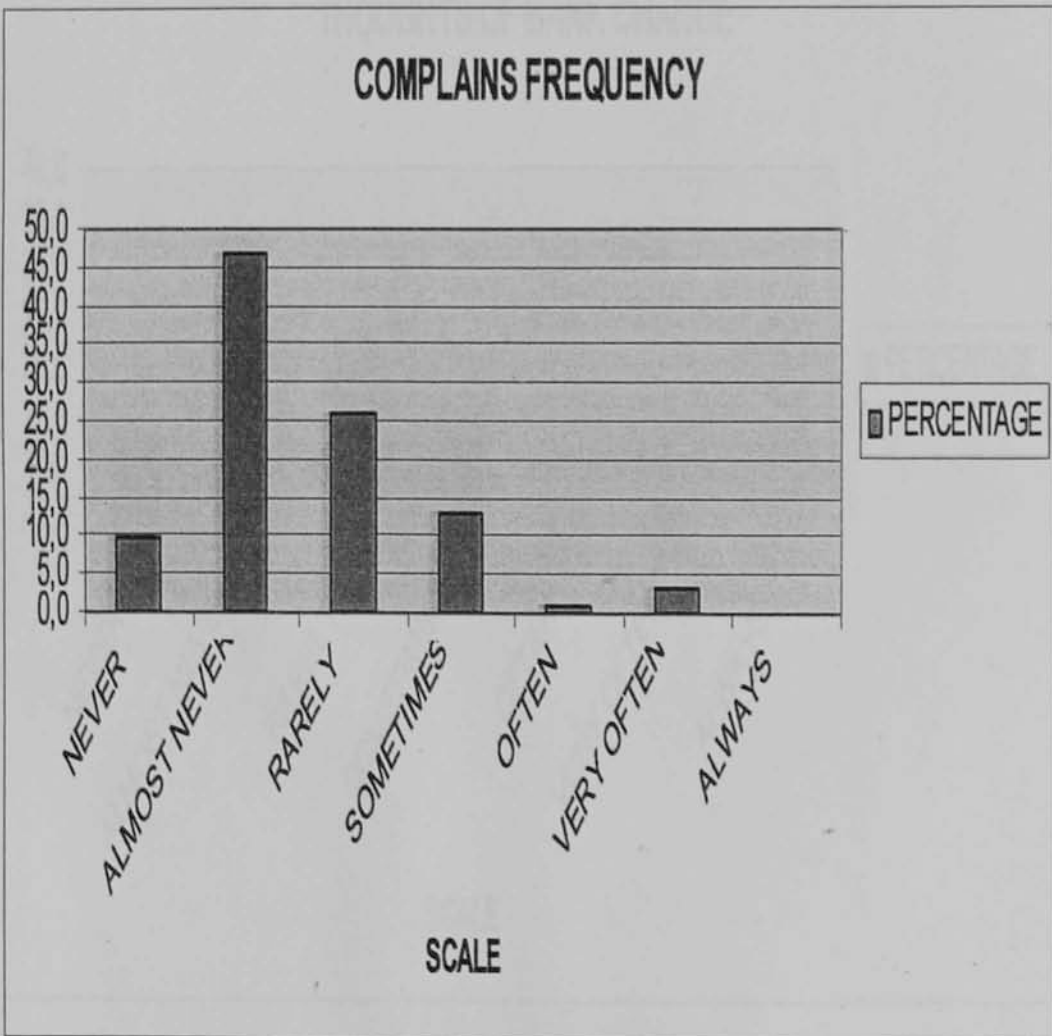
**Question 12**

<b>OVERALL SATISFACTION</b>	<b>FREQUENCY</b>	<b>PERCENT</b>
disappointed	0	0,0
very unsatisfied	0	0,0
unsatisfied	1	0,5
neutral	37	20,1
satisfied	84	45,7
very satisfied	62	33,7
delighted	0	0,0
<b>TOTAL</b>	<b>184</b>	<b>100,0</b>

**3RD Part**

**Question 1**

COMPLAINS FREQUENCY	REPLIES	PERCENT
NEVER	18	9,8
ALMOST NEVER	86	46,7
RARELY	48	26,1
SOMETIMES	24	13,0
OFTEN	2	1,1
VERY OFTEN	6	3,3
ALWAYS	0	0,0
TOTAL	184	100



**Figure 39: 3rd Part Question 1**



## Question 2

THOUGHTS OF BANK CHANGE	FREQUENCY	PERCENT
NEVER	25	13,6
ALMOST NEVER	62	33,7
RARELY	43	23,4
SOMETIMES	29	15,8
OFTEN	13	7,1
VERY OFTEN	12	6,5
ALWAYS	0	0,0
TOTAL	184	100

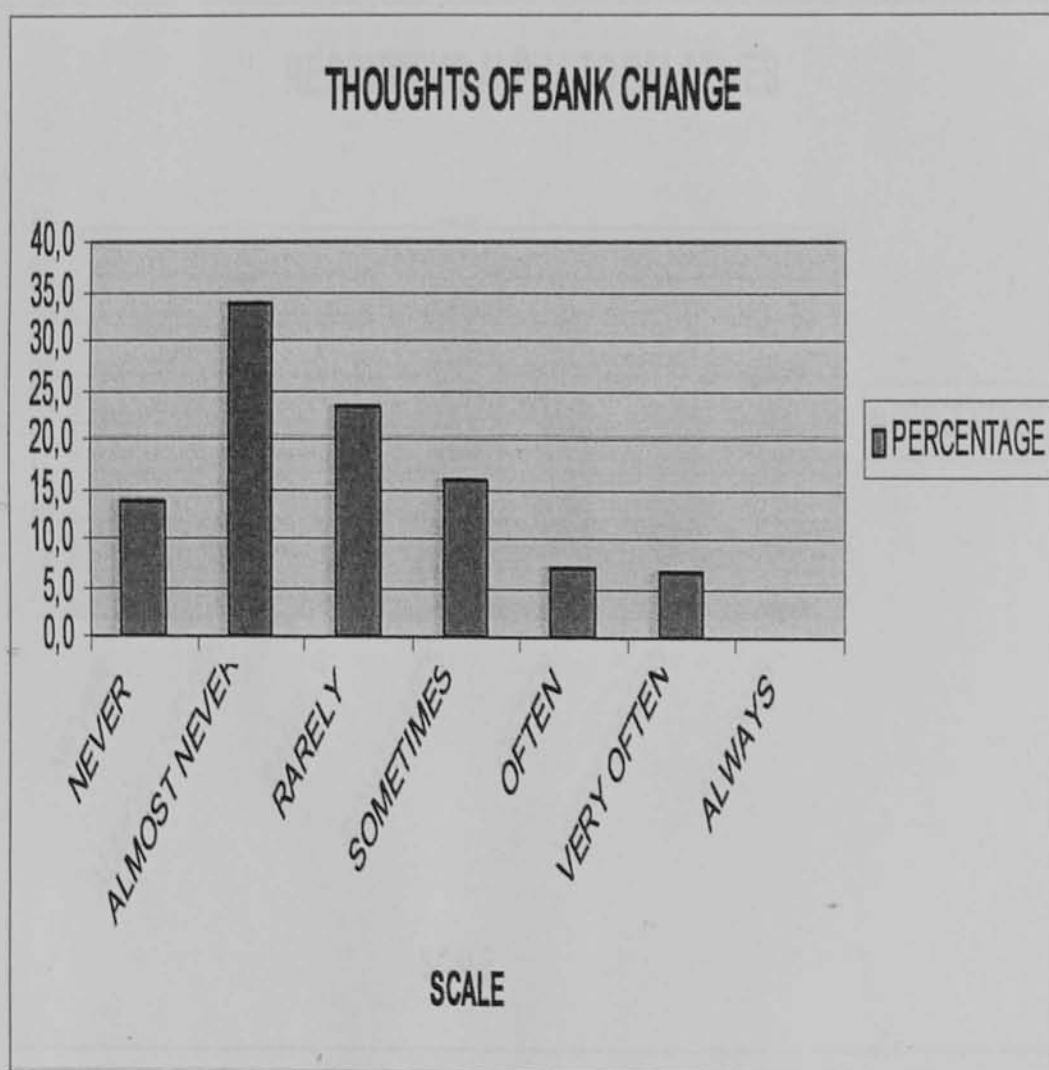
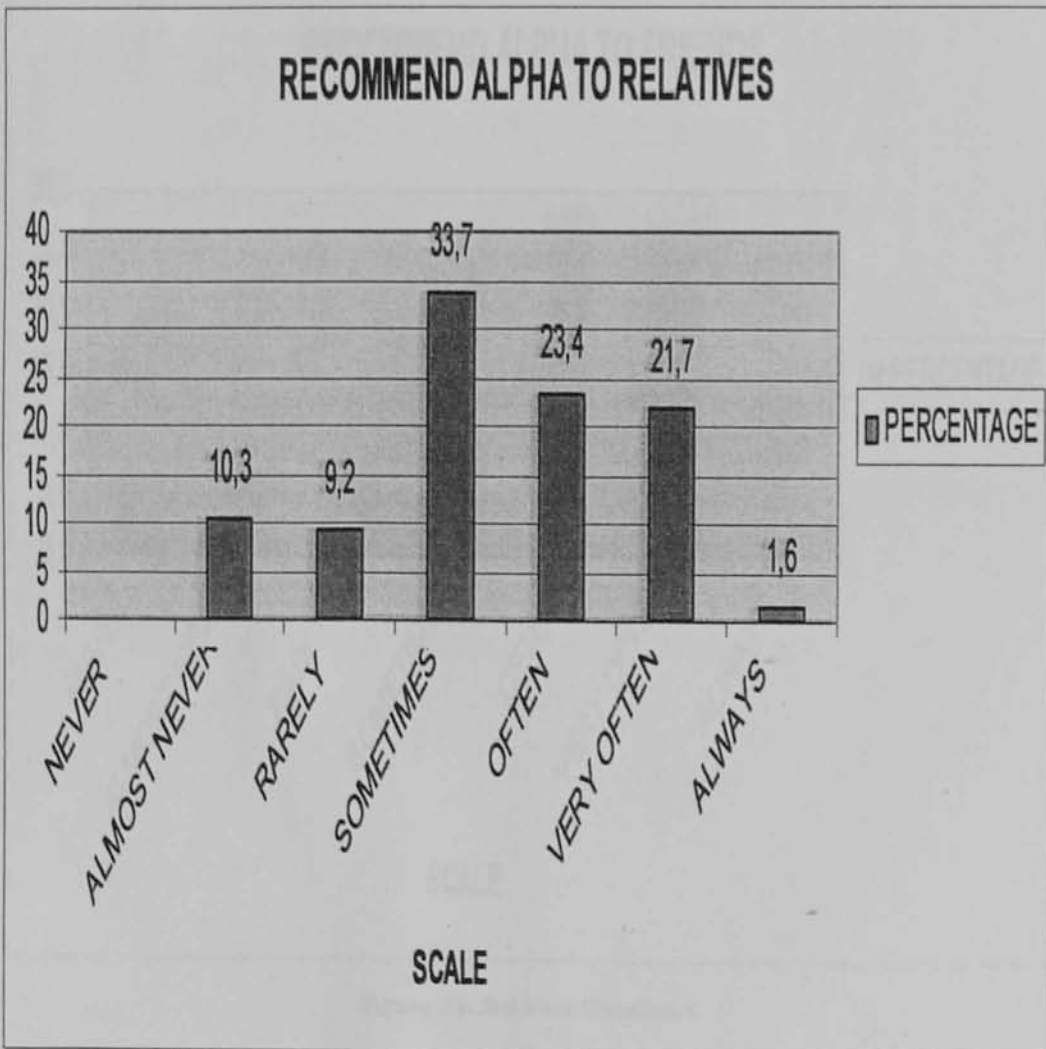


Figure 40: 3rd Part Question 2

**Question 3**

RECOMMEND ALPHA TO RELATIVES	FREQUENCY	PERCENT
NEVER	0	0,0
ALMOST NEVER	19	10,3
RARELY	17	9,2
SOMETIMES	62	33,7
OFTEN	43	23,4
VERY OFTEN	40	21,7
ALWAYS	3	1,6
<b>TOTAL</b>	<b>184</b>	<b>100,0</b>



**Figure 41: 3rd Part Question 3**

**Question 4**

RECOMMEND ALPHA TO FRIENDS	FREQUENCY	PERCENT
NEVER	12	6,5
ALMOST NEVER	13	7,1
RARELY	14	7,6
SOMETIMES	42	22,8
OFTEN	52	28,3
VERY OFTEN	51	27,7
ALWAYS	0	0,0
<b>TOTAL</b>	<b>184</b>	<b>100,0</b>

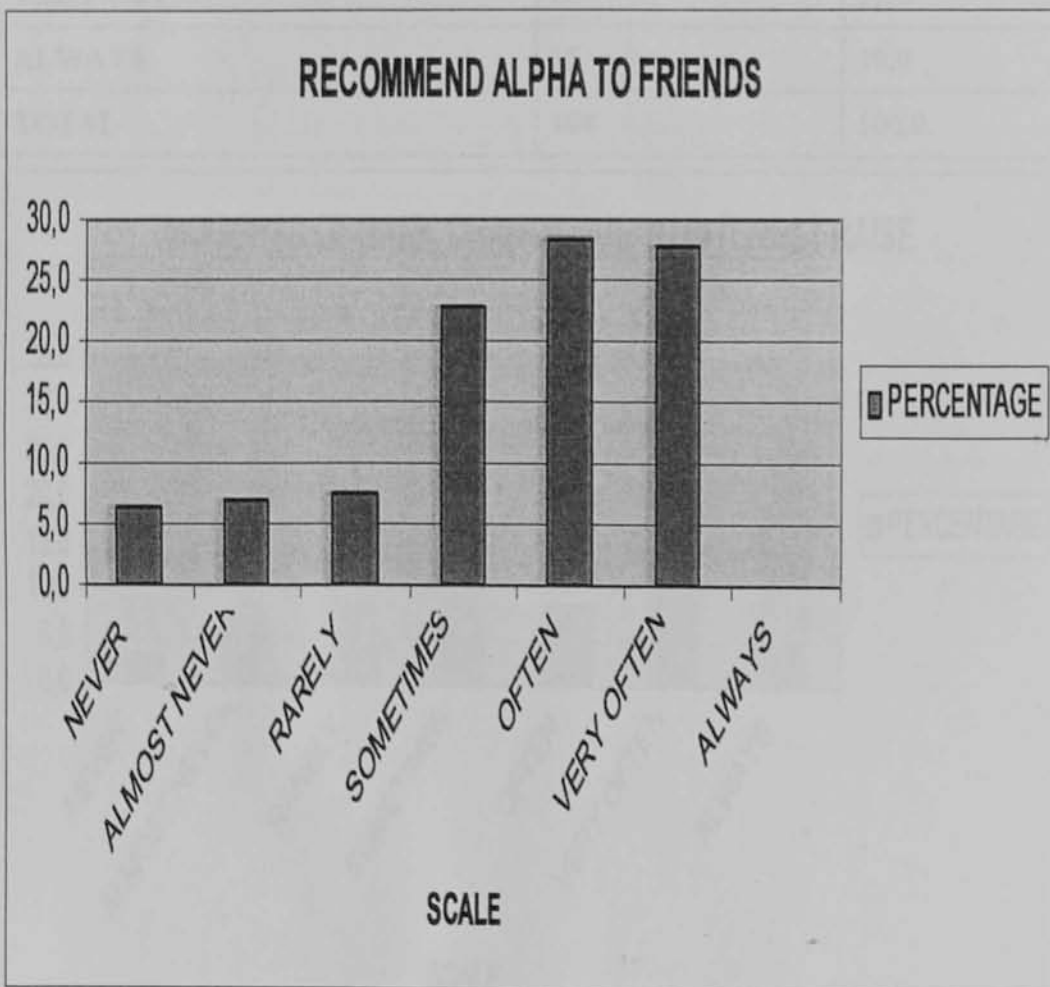


Figure 42: 3rd Part Question 4

## Question 5

THOUGHTS OF BANK CHANGE DUE TO INTEREST RAISE	FREQUENCY	PERCENT
NEVER	6	3,3
ALMOST NEVER	13	7,1
RARELY	19	10,3
SOMETIMES	35	19,0
OFTEN	16	8,7
VERY OFTEN	60	32,6
ALWAYS	35	19,0
TOTAL	184	100,0

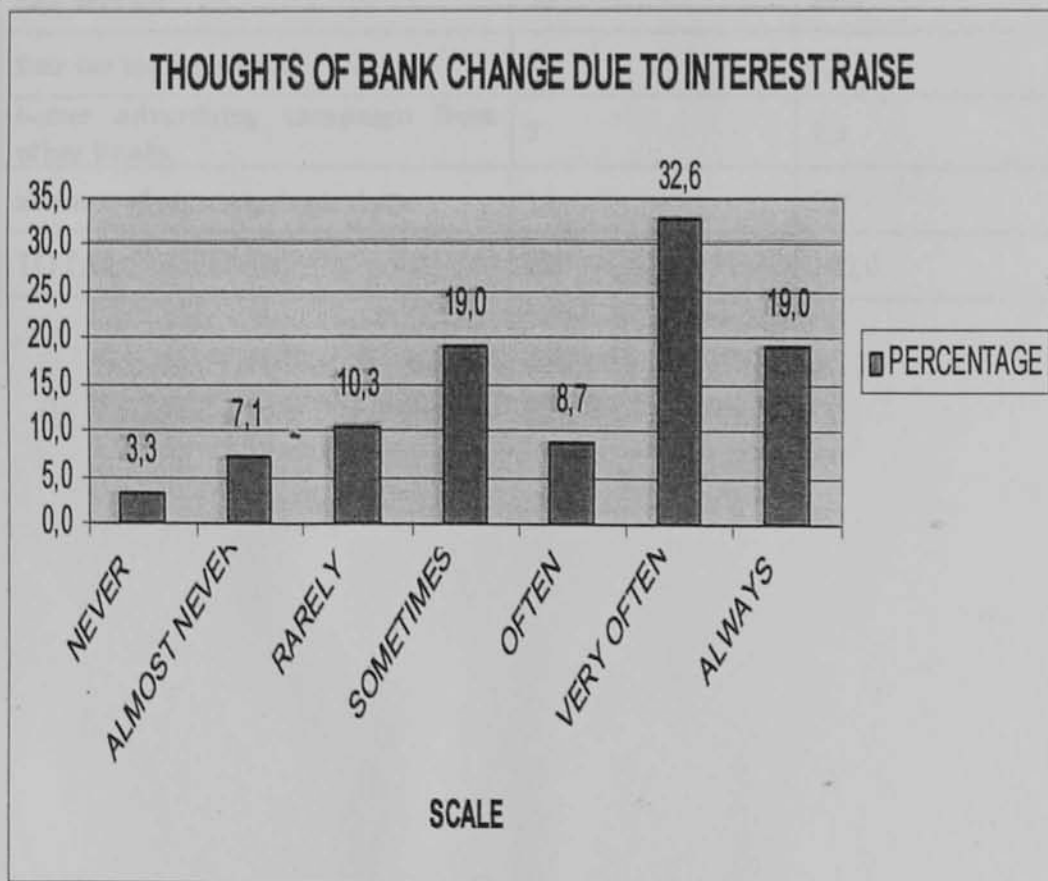


Figure 43: 3rd Part Question 5

**Question 6**

<b>BANK CHANGE DUE TO A MORE COMPETITIVE ONE</b>	<b>FREQUENCY</b>	<b>PERCENT</b>
<b>YES</b>	165	89,7
<b>NO</b>	19	10,3
<b>TOTAL</b>	184	100,0

**Question 7**

<b>REASONS FOR PAST BANK CHANGE</b>	<b>FREQUENCY</b>	<b>PERCENT</b>
<b>high interest rates</b>	128	53,6
<b>familiar with personnel in other banks</b>	17	7,1
<b>bad service</b>	56	23,4
<b>fear for money secure</b>	21	8,8
<b>better advertising campaign from other banks</b>	3	1,3
<b>absence of secure private data</b>	14	5,9
<b>TOTAL</b>	239	100,0

## Appendix 6: Measurement of SQ

In order to quantify SQ, we will follow a simple procedure which is based on common sense. We give a score to the 7th level scale from 0-6 starting from level 1 (disappointed). Then we multiply each frequency with the appropriate score. At next we divide the sum of multiplied frequencies with the total replies (184). The result is then divided with the number six (6) and we have the quantified SQ.

### Question 12

Total of four branches (as a whole)

SCORE	OVERALL SATISFACTION	FREQUENCY	F X S	PERCENT
0	disappointed	0	0	0,0
1	very unsatisfied	0	0	0,0
2	unsatisfied	1	2	0,5
3	neutral	37	111	20,1
4	satisfied	84	336	45,7
5	very satisfied	62	310	33,7
6	delighted	0	0	0,0
	<b>TOTAL</b>	184	759	100,0

$$SQ=(759/184)/6=68,75\%$$

**Branch A (Papanastasiou)**

SCORE	OVERALL SATISFACTION	FREQUENCY	F X S
0	disappointed	0	0
1	very unsatisfied	0	0
2	unsatisfied	0	0
3	neutral	5	15
4	satisfied	15	60
5	very satisfied	30	150
6	delighted	0	0
	<b>TOTAL</b>	50	225

$$SQ=(225/50)/6=75,00\%$$

**Branch B (Kiprou)**

SCORE	OVERALL SATISFACTION	FREQUENCY	F X S
0	disappointed	0	0
1	very unsatisfied	0	0
2	unsatisfied	1	2
3	neutral	12	36
4	satisfied	21	84
5	very satisfied	12	60
6	delighted	0	0
	<b>TOTAL</b>	46	182

$$SQ=(182/46)/6=65,94\%$$

**Branch C (Iroon Politexniou)**

SCORE	OVERALL SATISFACTION	FREQUENCY	F X S
0	disappointed	0	0
1	very unsatisfied	0	0
2	unsatisfied	0	0
3	neutral	12	36
4	satisfied	19	76
5	very satisfied	15	75
6	delighted	0	0
	<b>TOTAL</b>	46	187

$$SQ=(187/46)/6=67,75\%$$

**Branch D (Karditsa)**

SCORE	OVERALL SATISFACTION	FREQUENCY	F X S
0	disappointed	0	0
1	very unsatisfied	0	0
2	unsatisfied	0	0
3	neutral	8	24
4	satisfied	29	116
5	very satisfied	5	25
6	delighted	0	0
	<b>TOTAL</b>	42	165

$$SQ=(165/42)/6=65,48\%$$