

Relationship between Service Quality and Customer Satisfaction

In the case of CCG (Customer Centric Group) CO

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Relationship between service quality and customer satisfaction: In the case of CCG(Customer Centric Group) CO

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ABSTRACT

RELATIONSHIP BETWEEN SERVICE QUALITY & CUSTOMER SATISFACTION: IN THE CASE OF CCG (CUSTOMER CENTRIC GROUP) CO

These days all the organizations are realizing the significance of customer –centered philosophies .One of the key challenges of them is how they manage service quality, which holds a great importance to customer satisfaction. The purpose of this research was to gain a better understanding of the service quality dimensions that affect customer satisfaction from customer perspective. Based on a detailed literature review, a frame of reference was developed. Some service quality dimensions were selected to be tested in CCG CO operations and its relationship with customers in order to explore the relationship between service quality and customer satisfaction. A qualitative research approach was used to get a better understanding of this issue. The empirical data were gathered through in dept interviews with 10 people by using semi-structured questionnaire. Data presentation and analysis were done in accordance with the research questions and the frame of reference. Finally, in the last chapter findings and conclusions were drawn by answering the research questions. Some service quality dimensions in CCG CO activities were identified in this study (i.e. reliability, responsiveness, tangibles, empathy, assurance, logistic/technical support, fulfillment, pricing and courtesy.). The quality performance of all the dimensions was shown to have a strong impact on customer satisfaction. Finally price, speed of installation, speed of delivery was new dimensions found in this study.

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CHAPTER 1

INTRODUCTION

1. Introduction

The first chapter in this thesis introduces the background of the selected area. This will be followed by a problem area discussion that will help reader to understand the insight of the research area. The problem discussions end with a research problem and specific research question. In the end of the first chapter, we will also present the disposition of the thesis.

1.1 Background

This section will provide the background of the research area. This section contains the general idea of service-quality, role of service-quality and customer-satisfaction and their close relationship with each other. This section also describes importance of customer satisfaction in those companies involved in electrical industry, relationship between customer satisfaction and service quality and measurement of service quality.

1.1.1 Service Quality

Service quality is a concept that has aroused considerable interest and debate in the research literature because of the difficulties in both defining it and measuring it with no overall consensus emerging on either (Wisniewski, 2001). There are a number of different "definitions" as to what is meant by service quality. One that is commonly used defines service quality as the extent to which a service meets customers' needs or expectations (Lewis and Mitchell, 1990; Dotchin and Oakland, 1994a; Asubonteng et al., 1996; Wisniewski and Donnelly, 1996). Service quality can thus be defined as the difference between customer expectations of service and perceived service. If expectations are greater than performance, then perceived quality is less than satisfactory and hence customer dissatisfaction occurs (Parasuraman et al., 1985; Lewis and Mitchell, 1990).

Always there exists an important question: why should service quality be measured? Measurement allows for comparison before and after changes, for the location of quality related problems and for the establishment of clear standards for service delivery. Edvardsen et al. (1994) state that, in their experience, the starting point in developing quality in services is analysis and measurement.

The SERVQUAL approach, which is studied in this research, is the most common method for measuring service quality.

1.1.2 Customer Satisfaction

Customer satisfaction is a critical issue in the success of any business system, traditional or online (Ho & Wu 1999). In a turbulent commerce environment, in order to sustain the growth and market share, companies need to understand how to satisfy customers, since customer satisfaction is critical for establishing long-term client relationships (Patterson et al. 1997). It is evidenced by the fact that over the last five years, customer satisfaction surveys have become common in many financial institutions. Thus, a fundamental understanding of factors impacting customer satisfaction is of great importance to commerce. Furthermore, the need for research in customer satisfaction has been accentuated by the increasing demand for the long-term profitability of dotcom companies and traditional companies (Pather, Erwin & Remenyi, 2002).

To understand satisfaction, we need to have a clear understanding of what is meant by customer satisfaction. Customer satisfaction is defined as a result of a cognitive and affective evaluation, where some comparison standard is compared to the actually perceived performance. If the perceived performance is less than expected, customers will be dissatisfied. On the other hand, if the perceived performance exceeds expectations, customer will be satisfied (Lin 2003).

Relationship between Satisfaction and Service Quality Service quality is the key to measure user satisfaction (Pitt et. al., 1995).

Few scholarly studies, to date, have been undertaken to identify quality dimensions and detailed aspects of services and their relationships with customer satisfaction (Zeithaml et. al., 2002; Yang & Fang2004). One of the more widely used instruments for assessing customer satisfaction is SERVQUAL developed by Zeithaml et. al., (1988). Researchers have paid much attention to the close

relationship between service quality and customer satisfaction (Bitner et. al., 1990; Parasuraman et. al., 1985; Parasuraman et. al., 1988).

SERVQUAL is widely recognized and used, and it is regarded as applicable to a number of industries, including the electrical industry.

1.1.3 Measuring Service Quality

Clearly, from a Best Value perspective the measurement of service quality in the service sector should take into account customer expectations of service as well as perceptions of service. However, as Robinson (1999) concludes: "It is apparent that there is little consensus of opinion and much disagreement about how to measure service quality". One service quality measurement model that has been extensively applied is the SERVQUAL model developed by Parasuraman et al. (1985, 1986, A. Shahin 41988, 1991, 1993, 1994; Zeithaml et al. 1990). SERVQUAL as the most often used approach for, measuring service quality has been to compare customers' expectations before a service encounter and their perceptions of the actual service delivered (Gronroos, 1982; Lewis and Booms, 1983; Parasuraman et al., 1985).

The SERVQUAL instrument has been the predominant method used to measure consumers' perceptions of service quality. It has five generic dimensions or factors and are stated as follows (van Iwaarden et al., 2003):

1. Tangibles

Physical facilities, equipment and appearance of personnel.

2. Reliability

Ability to perform the promised service dependably and accurately.

3. Responsiveness

Willingness to help customers and provide prompt service.

4. Assurance (Including competence, courtesy, credibility and security)

Knowledge and courtesy of employees and their ability to inspire trust and confidence.

5. Empathy (Including access, communication, understanding the customer)

Caring and individualized attention that the firm provides to its customers.

1.2 Problem Discussion

In a competitive market place understanding customer's needs become an important factor. As a result companies have moved from a product-centric to a customer centric position. Satisfaction is also of great interest to practitioners because of its important effect on customer retention (Patterson et al., 1997; Sedon, 1997). Retention is a major challenge, as customers can easily switch from one service provider to another at low cost (Khalifa and Liu 2003). Considering the high costs of acquiring new customers, it is very important to study the determinants of customer satisfaction (Van Riel, Liljander & Jurriens 2001).

Our research area is CCG CO activities and it's transactions with its customers. Customer Centric Group Companies has got partners in supplying whole range of HV Substation products and has organized engineering and expert groups in a way to be able to provide full range of Generation, T&D and Utilization skills and all related service.

CCG CO has lots of problems with it's customers that both side, seller (CCG CO) & buyers got dissatisfied .These are great discrepancies between perceived performance and expectation from customers points of view (perceived performance is less than expectation) that make them dissatisfied.

Customers believe CCG's services (Exactly PASS (Plug & Switch System) and it'd related issues) can't satisfy them for many service quality aspects (Responsiveness, courtesy, credibility, price, reliability, competence...).

Consumer satisfaction is the major issue for the businesses that are operating in Electrical products (Technology based services) and related services. Good customer service quality is the main factor that will determine, in the future, whether the businesses will survive or fail (Thompson, Green & Bokma 2000).

Maintaining effective customer service helps to build and maintain customer's relationship which is the key success in industrial businesses (Sing 2002). In order to satisfy customer's needs, many companies need give better services to their customers .Better service quality typically can help to get higher market share and better returns (Slu & Mou 2003). It is desirable for service providers to uncover what attributes consumers utilized in their assessment of overall service quality and satisfaction and which attributes are more important.

Taking in to account these developments, it is evident that service researchers need to pay more attention to consumer evaluations of technology-based services (Parasuraman and Grewal, 2000).

Recently, many industrial companies used new ways and innovations to offer their customers a variety of services. Promoting quick-response, just-in-time deliveries of services, improve information sharing between the buyer and its customers.

A dramatic change in the way retail industrial companies (sellers) build and maintain close relationships with their customers, since customer expectations and perceptions of services will change overtime. Due to rapid technological change and market competition service quality becomes an increasingly important issue.

Therefore understanding service quality Issues becomes very important to satisfy the customer (Broderick & Vachirapornpuk 2002).

It is important that the CCG CO provide customers with high quality services to survive in the highly competitive electrical industry business. For this, CCG first need to understand the attributes that customers use to judge service quality and monitor and enhance the service performance. There are numerous studies that identified the key service quality dimensions in other businesses, but relatively little literature has investigated service quality attributes in the electrical industry in Iran and the relation with customer satisfaction (Jun & Cai 2001). More research is needed to determine the dimension of service quality and these studies also need to be conducted for different types of services (Zeithaml et al. 2000).

1.3 Research Problem and Research Questions

Based on problem area discussions our research problem is formulated as follows:

To gain better understanding of service quality dimensions that affect customer satisfaction, in the case of CCG CO.

Research Questions:

1. What are the service quality dimensions in CCG CO operations and how do they affect customer satisfaction?
2. How can the relative importance of the service quality dimensions be described for CCG CO in relation with the satisfaction?

1.4 Demarcations

Since the aspects of the chosen research problem are many, the researcher has tried to narrow down the focus. The aim of the research is to gain a better understanding of the service quality dimensions that affect CCG's customer satisfaction from their perspective. In the literature part we will introduce several theories related to service quality and satisfaction in order to give a clear idea about the specific area to the reader and to explain the proper context of the study.

1.5 Disposition of the Thesis

This thesis is divided into five chapters. In the first chapter the background of the selected research area is presented followed by a problem area discussion that ends with a research problem and the research questions. In chapter two theories and previous studies related to the topic will be presented. In chapter three, frame of reference will be developed based on the literature review, also contains the methodology used in this thesis. In chapter four the empirical data will be presented that is collected during the data collection process and contains an analysis of the empirical data. Finally chapter five will present the conclusion, limitation of the research and implication for further research.

CHAPTER 2

Theoretical Review

2. Theoretical Review

This chapter will have a review on literature and related models to the research problem. In this chapter we will introduce the concepts of service quality, customer satisfaction, relationship between service quality and satisfaction, service quality dimensions and concepts, formations of customer satisfaction, in order to give a clear idea about the research area.

2.1 BACKGROUND AND REVIEW OF SERVICE QUALITY

Much of the initial work in developing a model to define and assess service quality has been conducted by Parasuraman, Zeithaml, and Berry (1985) (otherwise referred to as PZB). In conceptualizing the basic service quality model PZB (1985) identified ten key determinants of service quality as perceived by the company and: the consumer reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding/knowing the customer and tangibility.

They noted that discrepancies existed between the firm's and the customer's perceptions of the service quality delivered. In investigating these discrepancies, PZB (1985) assert that service quality can be assessed by measuring the discrepancies or "gaps" between what the customer expects and what the consumer perceives he receives.

Arguing that the magnitude, and direction of this gap, directly affects the service quality that the consumer perceives, PZB (1985) note that customers would have perceptions of high service quality to the extent that their expectations are lower than the perceived service performance.

If the converse were true, customers would perceive low service quality.

1. Report the results of a study that examines the usefulness of the SERVPERF scale for assessing customer perceptions of service quality in the uniform rental industry.

2. Assess the reliability of service quality measures as it applies to the uniform rental industry.

3. Identify the dimensions of service quality that are important to customers of uniform rental companies.

4. Assess the overall service quality and satisfaction level as perceived by customers of rental companies.

PZB (1985) assert that their framework can be used for identifying differences in the quality of goods and services by distinguishing between the properties of a good or service. They note that Nelson (1974) defined "search properties" as properties that can be determined before purchasing (such as credibility and tangibles), and "experience properties" as properties that can be determined only after purchase or consumption. Further, Darby and Karni (1973) defined "credence properties," (such as competence and security) as properties or characteristics that consumers often find extremely difficult to evaluate after their purchase. Therefore, PZB (1985) concluded that consumers typically rely on experience properties when evaluating service quality.

Based on their review of the literature, PZB (1985) developed the SERVQUAL scale. The scale was designed to uncover broad areas of good or bad service quality and can be used to show service quality trends over time, especially when used with other service quality techniques. The SERVQUAL scale is based on a difference score between customer expectations of service and their perceptions after receiving the service. Initially PZB (1985) focused on the ten determinants of service quality.

However, after two stages of scale purification, they reduced the ten determinants to five dimensions of service quality: tangibles, reliability, responsiveness, assurance, and empathy (PZB 1988).

In their discussion, PZB (1988) assert that the SERVQUAL scale deals with perceived quality and looks specifically at service quality, not customer satisfaction. They state that "perceived service quality is a global judgment or attitude concerning the superiority of service whereas satisfaction is related to a specific transaction" (p. 16). They reported that the scale had a reliability rating of .92 and that the five dimensions could be ranked in order of importance: reliability, assurance, tangibles, responsiveness, and empathy.

Because of "wording related" high expectation scores and higher than normal standard deviations on several questions, the authors later revised the SERVQUAL scale (PZB 1991).

Subsequent research and testing of the SERVQUAL scale, however, has not been supportive of its author's claims. For instance, Carman (1990) notes that while SERVQUAL generally showed good stability, its five dimensions were not always generic. Indeed, the various dimensions can vary depending on the type of service industry surveyed. Carman also calls into question PZB's collection of expectation data after a customer actually uses the service. He claims that this should be done before using the service even though this is rarely practical. Carman states that even when this is done, expectations and perceptions showed little relationship to one another.

Teas (1993) questions SERVQUAL'S discriminant validity. He notes that the service quality expectations concept may have serious discriminant validity short-comings which can cause the "perceptions-minus-expectations" service quality measurement framework to be "a potentially misleading indicator of customer perceptions of service quality" (p.33). He notes that SERVQUAL's lack of discriminant validity results in a significant part of the variance in its expectations scores being determined by the respondent's "misinterpretations" of the expectation questions.

Churchill, Brown and Peter (1993) argue that because the SERVQUAL scales "scores" are really difference scores (perception scores minus expectation scores); problems of reliability, discriminant validity, and variance restrictions exist. They showed that while SERVQUAL had high reliability, a non-difference score rated higher in reliability. Their findings also showed that the scale "failed to achieve discriminant validity from its components", and the distribution of the SERVQUAL scores were non-normal.

2.1.1 Definition of Service Quality

Some important definitions of service quality are coming as following:

Parasuraman et al., (1985, 1988): Service quality is determined by the differences between customer's expectations of services provider's performance and their evaluation of the services they received.

Asubonteng et al. (1996): Service quality can be defined as "the difference between customers' expectations for service performance prior to the service encounter and their perceptions of the service received".

Gefan (2002): Service quality as the subjective comparison that customers make between the quality of the service that they want to receive and what they actually get.

2.1.2 Service Quality Dimensions

Service quality has been the subject of considerable interest by both practitioners and researchers in recent years. Definitions of service quality hold that this is the result of the comparison that customers make between their expectations about a service and their perception of the way the service has been performed (Caruana & Malta 2002; 1984; Parasuraman et al., 1985, 1988, 1994).

Several studies have been conducted to identify traditional service quality dimensions that contribute most significantly to relevant quality assessments in the traditional service environment (e.g. Parasuraman et al., 1985, 1988; Johnston 1995; Pitt et al., 1999; Berry et al., 1985). Identification of the determinants of service quality is necessary in order to be able to specify measure, control and improve customer perceived service quality (Johnston1995).

Parasuraman et al.'s (1985) identified 10 detailed determinant of service quality through focus group studies:

Tangibles, reliability, responsiveness, communication, access, competence, courtesy, credibility, security, understanding/Knowledge of customer. Later these ten dimensions were further purified and developed five dimensions-tangibles, reliability, responsiveness, assurance and empathy to measure service quality, SERVQUAL (Parasuraman et al.1988).

Tangibles refer to physical facilities, equipment, and appearance of personnel. Reliability means ability to perform the promised service dependency and accurately. Responsiveness means willingness to help customers and provide prompt service. Assurance indicates knowledge and courtesy of employees and their ability to inspire trust confidence. Empathy refers to caring, individualized attention the firm provides its customers. (ibid).

Walker (1990) suggested that the key determinants are product reliability, a quality environment and delivery system that work together with good personal service-staff attitude, knowledge and skills. Gronroos (1990) postulated six criteria of perceived good service quality: professionalism and skills; attitudes and behavior; accessibility and flexibility; reliability and trustworthiness; recovery; reputation and credibility and flexibility; reliability and dimensions–Attentiveness/helpfulness, responsiveness, care, Availability, Reliability, Access, Flexibility, Aesthetics, Cleanliness/tidiness, Comfort and Security.

From the focus group interviews, Berry et al. (1985) identified ten determinants of service quality. Virtually all comments consumers made in these interviews about service expectations, Priorities and experiences fall into one of these ten categories. These are – reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding and tangibles.

Reliability involves consistency of performance and dependability. It means that the firm performs the service right the first time. It also means the firm honors its promises. Specially it involves: accuracy in billing, keeping record correctly, performing the service at the designated time. Responsiveness concerns the willingness or readiness of employees to provide service. It involves timeliness of services that means –mailing a transaction slip immediately, calling the customer back quickly and giving prompt service. Competence means possession of the required skills and knowledge to perform the services. It involves: knowledge and skill of the contact personnel, knowledge and skill of operational support personnel, research capability of the organization. Access involves approach, ability and ease of contact. It means: the service is easily accessible by telephone, waiting time to receive service is not extensive, hours of operation are convenient and location of service facility is convenient. Courtesy involves politeness, respect, consideration, and friendliness of contact personnel. It includes- consideration for the consumer's property, clean and neat appearance of public contact personnel. (ibid)

Communication means keeping customers informed in language they can understand .It also means listening to customers. It may mean that the company has to adjust its language for different consumers-increasing the level of sophistication with a well-educated customers and speaking simply and plainly with a novice. It involves: explaining the service itself, explaining how much the service will cost, assuring the customer that a problem will be handled. Credibility involves trusts worthiness, believability, honesty; it involves having the customer's best interests at heart. Contributing to credibility is: company reputation, personal characteristics of the contact personnel. The degree of hard sell involved in interaction with the customer. Security is the freedom fro danger, risk or doubt. It involves: physical safety, financial security and confidentiality. Understanding the customer means making the effort to understand the customer's

need. It includes: learning the customer's specific requirements, providing individualized attention, recognizing the regular custom. Tangibles includes the physical evidence of the service, physical representations of the service, such as a plastic credit card or bank statement, other customers in the service facilities. (ibid)

Vriens (2000) developed an application for measuring retail banking service quality, which consists of 28 attributes including four service quality dimensions such as: accessibility; competence; accuracy and friendliness; and tangibles. The accuracy and friendliness dimension turned out to be the most important factor out of four determining banking preference, followed by competence, tangibles, and accessibility. Nantel (2000) proposed an alternative measure of perceived service quality in retail banking that comprises 31 items with six underlying key dimensions. These dimensions are: effectiveness and assurance, access, price, tangibles, service portfolio and reliability.

Table 2.1 Summary of Service quality Dimensions

Dimensions	Service Quality	Authors
Reliability		Prasuraman et al., (1985); Zeithmal et al., (1988); Zeithmal et al., (2002); Yang & Fang (2004); Liu & Arnett (2000); Riel et al.(2001)
Responsiveness		Parasuraman et al.,(1985); Zeithmal et al.,(1988);
Competence		Parasuraman et al.,(1985);
Accessibility		Parasuraman et al., (1985); Kaynama and Black (2000); Joseph et al.(1999)
Courtesy		Parasuraman et al.,(1985);
Communication		Parasuraman et al.,(1985);

Credibility		Parasuraman et al.,(1985);
Security		Parasuraman et al.,(1985);
Understanding the customer		Parasuraman et al.,(1985);
Tangibles		Parasuraman et al.,(1985) Zeithmal et al .,(1985)
Content		Doll et al.(1994);Kaynama And Black(2000)
Accuracy		Doll et al.(1994);Joseph et al.(1999)
Easy of Use		Doll et al.(1994); Yang & Fang(2004)
Timeliness		Doll et al.(1994)
Empathy		Zeithmal et al.,(1988) Delone and Mclean (2003); Liu & Arnet(2000);Riel et
Assurance		Zeithmal et al.,(1988); Delone and Mclean(2003); Liu & Arnett(2000);Riel et

2.2 SERVQUAL

Just over a decade ago, Parasuraman et al. (1985) initiated a research stream that many consider to be the most comprehensive investigation into service quality. Briefly, Parasuraman et al. (1985) proposed service quality to be a function of pre-purchase customer expectations, perceived process quality, and perceived output quality. They defined service quality as the gap between customers' expectations of service and their perceptions of the service experience, ultimately deriving the now-standard SERVQUAL multiple-item survey instrument (Parasuraman et al., 1988).

The SERVQUAL scale is a principal instrument in the services marketing literature for assessing quality (Parasuraman et al., 1991; Parasuraman et al., 1988). This instrument has been widely utilized by both managers (Parasuraman et al., 1991) and academics (Babakus and Boller, 1992; Carman, 1990; Crompton and MacKay, 1989; Cronin and Taylor, 1992; Johnson et al., 1988; Webster, 1989;

Woodside et al., 1989) to assess customer perceptions of service quality for a variety of services (e.g. banks, credit card companies, repair and maintenance companies, and long-distance telephone companies). Based on Parasuraman et al.'s (1988) conceptualization of service quality (noted above), the original SERVQUAL instrument included two 22-item sections that intended to measure (a) customer expectations for various aspects of service quality, and (b) customer perceptions of the service they actually received from the focal service organization (Parasuraman et al., 1988). In short, the SERVQUAL instrument is based on the gap theory (Parasuraman et al., 1985) and suggests that a consumer's perception of service quality is a function of the difference between his/her expectations about the performance of a general class of service providers and his/her assessment of the actual performance of a specific firm within that class (Cronin and Taylor, 1992).

Five dimensions; the results of the initial published application of the SERVQUAL instrument indicated that five dimensions of service quality emerged across a variety of services (Parasuraman et al., 1988). These dimensions include tangibles, reliability, responsiveness, assurance, and empathy (Brensinger and Lambert, 1990; Carman, 1990; Crompton and MacKay, 1989; Parasuraman et al., 1985, 1988; Woodside et al., 1989; Parasuraman et al., 1991). Tangibles are the physical evidence of the service (e.g. physical facilities, appearance of personnel, or tools or equipment used to provide the service), reliability involves consistency of performance and dependability (i.e. a firm performs the service right the first time and honors its promises), responsiveness concerns the willingness or readiness of employees to provide service (e.g. timeliness of service), assurance corresponds to the knowledge and courtesy of employees and their ability to inspire trust and confidence, and, finally, empathy pertains to caring, individualized attention that a firm provides its customers.

Subsequent research conducted in a variety of settings (e.g. a dental school clinic, a business school placement center, a tire store, and an acute care hospital) suggests that the five SERVQUAL dimensions may not be universal across all services, and that it is probably unnecessary to administer the expectation items every time SERVQUAL is administered (Babakus and Boller, 1992; Carman, 1990; Parasuraman et al., 1991). Cronin and Taylor (1992), for instance, concluded that a psychometrically superior assessment of service quality can be obtained through the SERVQUAL performance items alone, rather than the expectations–performance methodology originally used by Parasuraman et al. (1988).

More robust. Most recently, researchers have begun incorporating other constructs and measures along with the SERVQUAL dimensions in order to extend and improve the explanatory power of this model. For instance, Zeithaml et al. (1994) suggest that the financial effects of SERVQUAL are more robust if one considers the immediate behavioral consequences of service quality (i.e. behavioral intentions) as intervening between service quality and financial gains or losses.

2.2.1 Five critical aspects of service quality

In an effort to conceptualize service quality (by taking in to account all the aspects of customer perceived service quality, including those already addressed in the existing instruments and those that are left out in the empirical service quality literature), Sureshchandar et al. (2001) identified five factors of service quality as critical from the customers' point of view. These factors are:

1. Core service or service product;
2. Human element of service delivery;
3. Systematization of service delivery: non-human element;

4. Tangibles of service – servicescapes;
5. Social responsibility.

2.2.2 The importance of customer loyalty

Hallowell (1996) defines customer loyalty as the relationship a customer maintains with the seller after the first transaction. Gremler and Brown (1996) categorise three aspects to customer loyalty: cognitive, affective and behavioral. Cognitive is the customer's expressed future buying intention; affective is the customer's feeling of attachment to or affection for a company's people, products or services; and behavioral refers to the actual purchase pattern of the customer. Cognitive psychology is probably more appropriate for complex services as it assesses the importance of cognitive schemas in the decision-making process and consumer behavior prior to action, e.g. the impact of corporate image (the attitude to a company) and its effect on customer loyalty. Although Andreassen and Lindestad (1998) have proposed that the general feeling of satisfaction felt by a customer is the result of purchase encounters, it need not be based on previous transactional experience. Intermediaries who may not have personally sampled the product or service could also display loyalty in their recommendations to third parties. In the steel industry, loyalty may be any one or a combination of these influences: confirmation-based satisfaction with previous purchases; cognitive decision to buy based on a company's reputation or image; and recommendation by a third party with or without previous transaction experience.

The stages for developing a long-term customer relationship suggested by Grönroos (1990) in his loyalty model are establishing, maintaining and enhancing the link. Keeping or retaining the customer is the most important step in this model. This is based on satisfaction arising from an initial contact or through purchase experience, especially the last encounter between the customer and the service provider. It is worth noting, however, that Storbacka *et al.* (1994) argue that

customer satisfaction is only one dimension in building relationship strength and that environmental factors such as market concentration can also affect the longevity of the relationship. The handling of service encounters, especially the “critical episodes”, can influence the supplier-customer relationship positively or negatively. The economic argument for preventing customer defection is reflected by Reichheld and Sasser’s (1990) observations when researching a credit card company. They found that a decrease in defections by just 5 per cent would boost profits by 25 per cent to 85 per cent. They concluded that customer defections have a significant impact on a company’s profitability – more so than “scale, market share, unit costs and many other factors usually associated with competitive advantage”. Long-term customers are more likely to buy additional services and to pass on favorable recommendations. Existing customers tend to be less price-sensitive and have lower maintenance costs than what might be involved in finding new customers. Reichheld and Sasser (1990) went on to suggest that customer retention should be a key performance indicator for senior management and a fundamental component of any bonus or incentive scheme. Stone’s (1998) proposal that the net economic contribution of customer longevity is dependent on the concept of the “good” and “bad” customer supports findings in retail banking. They reported that customer satisfaction was greater among the most unprofitable (high volume) customers. The aim therefore for a business is to identify and segregate the good from the bad customers so as and to direct the company’s improved or modified service qualities at the good customers to retain their loyalty. Bachelor (1998) in arguing that customer loyalty is not appropriate for commodity products where selling price seems to play a major role in the purchase decision, asks the question “Is there such thing, any more, as customer loyalty?” Nonetheless, the service management literature shows increasing interest in relationship strategies where the focus is evidently on building customer satisfaction and loyalty.

Recent environmental factors such as demographic shifts in Western industrialized countries, the rapid growth of competition through increased customer choice (Kotler *et al.*, 1999), the breakneck pace of innovation and companies realizing that repeat business is akin to compounding interest, have witnessed a strategic move away from “offensive marketing” aimed mostly at getting new customers to “defensive marketing” focused on customer retention. This prominence placed on keeping existing customers rather than acquiring new ones will have an impact along the value chain system and companies will have to review their competencies in order to meet this objective. In the UK steel industry where the customer base is relatively small, customer retention is a pertinent strategy.

2.2.3 Customer Satisfaction

Early concepts of satisfaction research have typically defined satisfaction as a post choice evaluative judgment concerning a specific purchase decision (Churchill and Sauprenant 1992; Oliver 1980). Most researchers agree that satisfaction is an attitude or evaluation that is formed by the customer comparing their pre-purchase expectations of what they would receive from the product to their subjective perceptions of the performance they actually did receive (Oliver, 1980).

2.2.3.1 Definition of Customer Satisfaction

Several authors have defined satisfaction in a different way. Following table will present some definition of customer satisfaction that will give us clear idea about satisfaction concept.

Table 2.2 Some Definition of Customer Satisfaction

Definition	Author
“Satisfaction is a person’s feelings of pleasure or disappointment resulting from comparing a product’s perceived performance (or outcome) in relation to his or her expectation”.	Kotler (2000,p.36)
Customer satisfaction is a collective outcome of perception, evaluation and psychological reactions to the consumption experience with a product/service.	Yi(1990)
Satisfaction is a function of consumer’s belief that he or she was treated fairly.	Hunt(1991,pp.110)

2.2.3.2 Determinants of customer satisfaction

Although there is a general conformity on the distinctiveness of service quality and customer satisfaction from a conceptual point of view, the operationalisation of customer satisfaction is somewhat hazy. For instance, Cronin and Taylor (1992) defined and measured customer satisfaction as a one-item scale that asks for the customers’ overall feeling towards an organization. By using a single item scale to measure customer satisfaction, Cronin and Taylor’s approach fails to do justice to the richness of the construct, as it has failed to acknowledge that, like service quality, customer satisfaction is also likely to be multidimensional in nature. Bitner and Hubert (1994) used four items to measure the customers’ overall satisfaction with the service provider. The authors introduced the concept of encounter satisfaction, and devised a nine-item scale to measure the same (i.e. the customers’ satisfaction with a discrete service encounter).

2.2.3.3 Customer satisfaction is multi-faceted

Other works have emphasized the multi-faceted nature of customer satisfaction and have used multiple item scales to measure customer satisfaction (Westbrook and Oliver, 1981; Crosby and Stephens, 1987; Suprenant and Solomon, 1987; Oliver and Swan, 1989; Oliva et al., 1992). In a recent effort, Shemwell et al. (1998) used a five-item scale to model customer satisfaction. Price et al. (1995) measured service satisfaction by using a six-item scale, while studying the structural model of the relationships among the service provider performance, affective response and service satisfaction. From the growing body of literature on customer satisfaction, one can easily observe that there has been some research works on specific encounters, known as transaction-specific/encounter-specific customer satisfaction. Researchers have also acknowledged the multi dimensional nature of customer satisfaction and have come out with global measures (capturing the satisfaction at multiple levels in the organization), that view overall satisfaction as a function of satisfaction with multiple experiences or encounters with the service providers. The present study takes a slightly different approach and views customer satisfaction as a multi-dimensional construct, but the underlying factors/items of customer satisfaction are the same as the ones by which service quality is measured. In other words, the current work argues that customer satisfaction should be operationalized along the same dimensions that constitute service quality and by the same items that span the different dimensions.

Such an approach was also pronounced by Bitner and Hubert (1994) who argued that although the SERVQUAL items of Parasuraman et al. (1988), when measured at the level of the firm's services, appear to be good predictors of service quality, it is also possible that the 22 items of SERVQUAL, when measured as a function of multiple experiences with the firm, may be good predictors of overall service satisfaction.

2.2.3.4 Five factors of customer satisfaction

By this factor/item specific approach, it is posited that a more meaningful comparison/relationships of the service quality and customer satisfaction constructs can be made. Therefore, it is postulated that customer satisfaction also comprises of the following five factors:

1. Core service or service product;
2. Human element of service delivery;
3. Systematization of service delivery: non-human element;
4. Tangibles of service – service escapes;
5. Social responsibility.

2.2.4 Satisfaction Formation

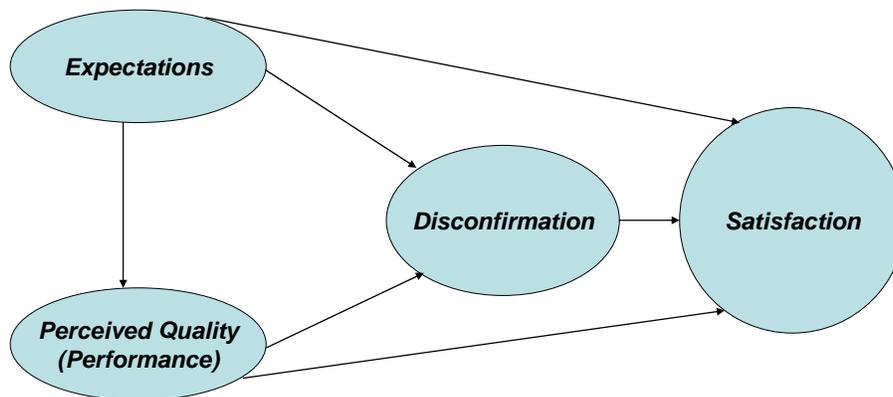
In marketing literature (e.g. Churchill and Surprenant, 1982; Oliver 1980) as well as in recent information system studies (e.g. McKinney et al., 2002), the disconfirmation theory emerges as the primary foundation for satisfaction models. According to this theory, satisfaction is determined by the discrepancy between perceived performance and cognitive standards such as expectation and desires. (Khalifa and Liu 2003).

Customer expectation can be defined as customer's pretrial beliefs about a product (McKinney, Yoon and Zahedi 2002). Expectations are viewed as predictions made by consumers about what is likely to happen during impending transaction or exchange (Zeithmal and Berry 1988). Perceived performance is defined as customer's perception of how product performance fulfills their needs, wants and desire (Cadotte et al. 1987). Perceived quality is the consumer's judgment about an entity's overall excellence or superiority (Zeithmal 1988). Disconfirmation is defined as consumer subjective judgments resulting from

comparing their expectations and their perceptions of performance received ((Mckinney et al.2002, Spreng et al.1996).

Oliver (1980) described the process by which satisfaction judgments are reached in the expectancy – disconfirmation framework. Figure-1 shows how satisfaction judgment is related to expectancy-disconfirmation approach. Buyers form expectations of the specific product or service before purchase and perceived quality level which is influenced by expectations.

Figure 2.1 Satisfaction Formation



The figure 1 explains the arrow drawn from expectations to perceived quality that indicated perceived quality may increase or decrease directly with expectations. Perceived quality may either confirm or disconfirm pre-purchase expectation. The determination of the extent to which perceived quality expectations are disconfirmed in figure 1 by arrow drawn from expectations and perceived quality to disconfirmation. Satisfaction is positively affected by

expectations and the perceived level of disconfirmation that is also shown by arrow in the figure 1. Disconfirmation and perceived quality have a stronger impact on satisfaction (Oliver 1980).

2.2.5 Antecedents of service quality and satisfaction

Researchers have yet to come to a conclusion on the antecedents to service quality and satisfaction. A study carried out by Bitner (1990) on 145 tourists in an international airport suggested satisfaction as the antecedent to service quality (satisfaction → service quality). On the other hand, there are many other researchers who concluded that service quality is the antecedent to satisfaction (Ahmad and Kamal, 2002; Cronin and Taylor, 1992; Yavas et al., 1997). Hence in this research, the question of which one is the antecedent will be studied. Using service quality as the antecedent to satisfaction is more logical. This is because satisfaction is an important goal to be achieved by bank marketers and if the banks want to increase satisfaction, they can do it through service quality (Goode et al., 1996).

2.2.6 Service Quality and Satisfaction

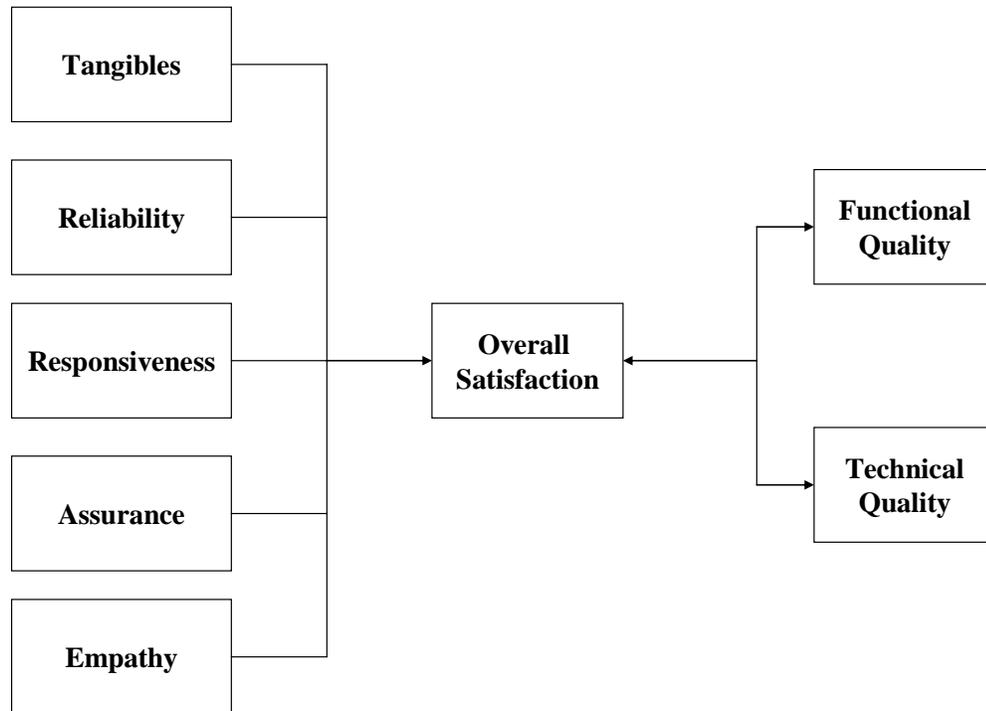
Better understanding. Based on the two perspectives of service quality noted, as well as the relationship between service quality and customer satisfaction, the primary goal of the present research is to compare and contrast empirically the SERVQUAL and Technical/Functional Quality models. Specifically, we wish to compare the various dimensions of the two service quality models and their effects on satisfaction. By testing the two perspectives in a single empirical (and largely exploratory) study, we hope to gain a better understanding of how the models perform when applied to a common setting, and the relative strengths and weaknesses of each model within this context. Thus, the first basic (or null) hypothesis for the study is that the various dimensions of service quality – per the SERVQUAL and Grönroos perspectives – are approximately equivalent in their

ability to predict customer satisfaction. Given that the two conceptualizations are each considered generally to be comprehensive and robust measures of service quality, and have never been compared directly in an empirical study, there exists no compelling rationale to suggest otherwise.

A second research goal is to examine the utility of separately measuring customer satisfaction from the perspectives of both technical and functional aspects of the service delivery process. By individually examining these interpretations of satisfaction, we hope to determine whether satisfaction is more appropriately conceptualized as a general affect (as in traditional definitions) or rather as a multidimensional construct. Since service quality has been previously demonstrated to have a variety of distinct elements, it might therefore be expected that customer satisfaction (as directly impacted by the various components of service quality) also comprises multiple components. Based on this reasoning, our hypothesis is that customer satisfaction is a multidimensional construct, and that these dimensions will be differentially impacted by the various components of service quality.

The third goal of this study is to extend the existing (albeit sparse) research on covariates of the quality/satisfaction relationship in services. We seek to explore new ways in which the quality/satisfaction relationship may (or may not) vary, depending on particular service settings and/or situations. Based on established theory from organization economics (i.e. the S-P-P model), we propose two moderator variables (service failure and communication) and test whether or not these significantly affect (i.e. moderate) the relationship between service quality and satisfaction.

Figure 2.2



This model is an extension of the Walfried.M.Lassar model of Servqual Vs functional quality-based impact on satisfaction

If customer loyalty is an important determinant of future financial health, then the challenge for managers is in knowing how to achieve it. Discrepancy on the extent to which satisfaction with service quality leads to customer longevity has been the subject of many studies but an outright conclusion has still to be drawn (Cronin and Taylor, 1992; Boulding *et al.*, 1993; Spreng *et al.*, 1996; Holmlund and Kock, 1996). Although Rust and Zahorik's (1993) research into retail banking indicated a relationship between customer satisfaction and retention, other studies have shown that despite apparent satisfaction, customer defection can still take place and, in some industries, be as high as 50 per cent (Mittal and Lassar, 1998). Taylor and Baker (1994) argue that service quality and customer

satisfaction are separate constructs. Whilst satisfaction indicates the state of a customer's psyche, quality refers to the state of a business' resources and efforts. Whiteley (1991) differentiates product and service quality by defining the former as "What you get" and the latter as "How you get it". This is in agreement with Grönroos' (1990) two-dimensional aspects of service quality:

1. Technical quality – the quality of what is delivered.
2. Functional quality – the quality of how the service is delivered.

Whilst customer satisfaction could be viewed as the outcome of the difference between customer's perception and expectation of service quality, it should not be forgotten that factors such as price, packaging and situational factors such as the service encounter, would also influence satisfaction. Hence, Zeithaml and Bitner (1996) define service quality as the way in which the whole service experience is performed. Their model of customer perceptions of quality and customer satisfaction hypothesises that satisfaction is more of an attitude and this attitude would influence perceptions of service quality, which in turn would influence purchase intentions:(see equation 1) Failure to provide reliable service may result in customer dissatisfaction and possible defection. This is based on the premise that a satisfied customer will continue to maintain a relationship (Hallowell, 1996) and that relationship will lead to loyalty and longevity. Zeithaml *et al.* (1990) arrived at the same idea by looking at the probable behavior of the dissatisfied customer.

They maintain that a dissatisfied customer is likely to switch to a competitor and may inform others of the bad experience. One study conducted by the US Office of Consumer Affairs indicated that one dissatisfied customer could be expected to tell nine other people about the experiences that resulted in dissatisfaction (Knauer, 1992). This raises the question of whether dissatisfied customers do actually "voice" their complaints or whether they simply do not buy

from the same supplier again. Andreassen and Lindestad (1998) argue that customer defection may not necessarily be the natural outcome if switching barriers are high or if there are no real alternatives. Other factors preventing switching may be social pressure or cost of exit (Holmlund and Kock, 1996). Conversely, some customers although satisfied are still willing to sample other suppliers in anticipation of even better results (Rust and Zahorik, 1993). Customers are value-maximizers and perceiving that value is being received is also thought to influence retention (Chang and Wildt, 1994; Neal, 1999). It is worth noting that service quality is intangible (Cadotte *et al.*, 1987) and satisfaction is based on an individual's perceptions or emotions towards a product or service. Indeed, how customers perceive service quality is sometimes more important than the actual level of quality (Goncalves, 1997). It has thus proven difficult to obtain concrete, measurable results with clear conclusions from consumer satisfaction/dissatisfaction models.

Service quality has been the subject of considerable interest by both practitioners and researchers in recent years (Parasuraman *et al.* 1985). An important reason for the interest in service quality by practitioners results from the belief that this has a beneficial effect on bottom-line performance for the firm.

However, practitioners often tend to use the terms service quality and customer satisfaction interchangeably. Among academics the satisfaction construct is recognized as being distinct and has developed along fairly independent lines from service quality (Oliver, 1980). Most experts agree that customer satisfaction is a short-term, transaction specific measure, whereas service quality is an attitude formed by a long-term, overall evaluation of a performance (Hoffman & Bateson 1997).

The service quality theory originated from the product quality and customer satisfaction literature. Early conceptualization of service quality is based on the

disconfirmation paradigm where quality is a result of the difference between perceived and expected service.

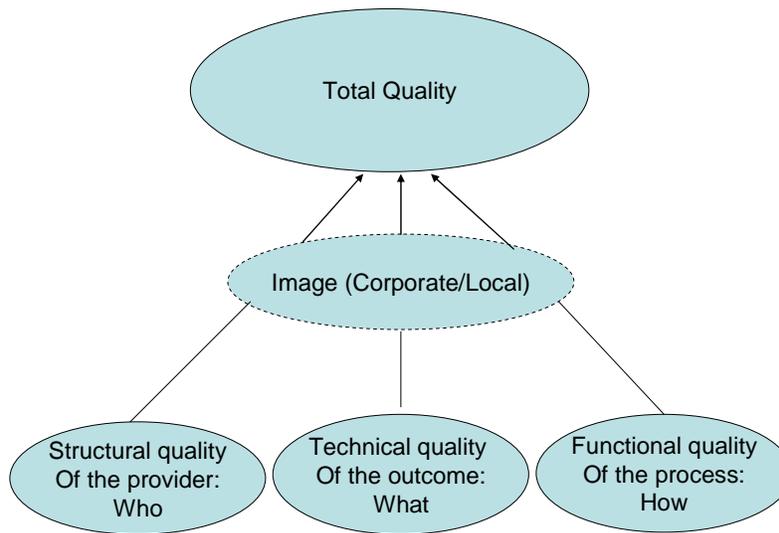
Many academicians give different definitions of quality. Kotler and Levy (1969) noted that customer satisfaction could be related to values and prices whereas service quality generally does not depend on prices (Anderson *et al.*, 1994). Quality should be in accordance with the needs and expectations of the customers. Customers' expectations are the true standard for judging service quality and not the policy of the bank or the management of the bank (Berry and Parasuraman, 1991). Parasuraman *et al.* (1991) pointed out that customers expect service companies to do what they are supposed to do (which includes the fundamentals), not indulging in fanciness, performance, and not empty promises. Hence, it is argued, service quality is an important element in determining the success of a service firm.

Satisfaction is dependent on the ability of the supplier to meet the customer's norms and expectations (Dwyer *et al.*, 1987; Fornell, 1992; Oliva *et al.*, 1992). According to Kotler (1991), satisfaction is the post-purchase evaluation of products or services given the expectations before purchase. Commitment to customer satisfaction is an on-going process. This is because no matter how good the services are, customers will continually expect better services (Murray, 1996).

As a process in time, service quality takes place before, and leads to overall customer satisfaction. Service quality has been found to be an important input to customer satisfaction (Caruana & Malta 2002). Cronin and Taylor (1992) originally hypothesized that satisfaction is an antecedent of service quality, their research with a multi industry sample showed, in a LISREL analysis, an opposite relationship. Service quality appears to be only one of the service factors contributing to customer's satisfaction judgments (Cronin and Taylor, 1992; Ruyter *et al.*, 1997; Spreng and Mackoy, 1996). A number of academics such as

Parasuraman et al. (1985, 1988); Gronroos (1984); Johnston (1995) and others have tried to identify key determinants by which a customer assesses service quality and consequently results in satisfaction or not.

Figure 2.3 Model of the components of quality in business support services.



A model of service quality (Gronroos, 2000; Homburg & Garbe, 1999)

Management of Service Quality has 3 dimensions: Structural Quality, Technical Quality, and Functional Quality.

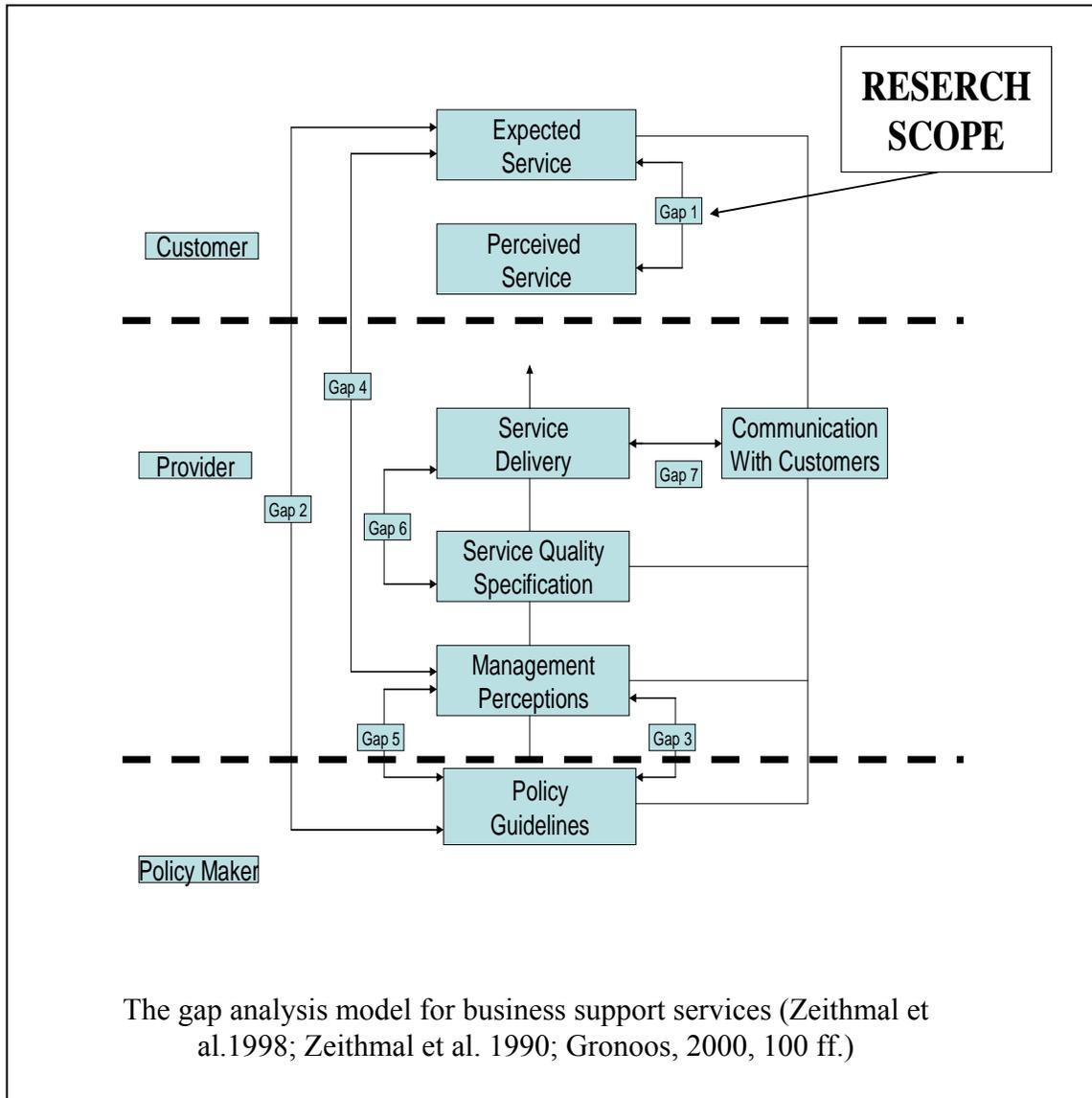
Structural quality is related to the providers of services also setting of that organization.

Technical quality is related to service production process and relationship between buyer and seller.

Functional quality of the process is about delivered services. Functional quality is very important specially in the businesses that related to technology. Also a good functional quality depends on following factors:

- Behavior of the staff of service providing company with customers, they may feel that the staff is going to solve their problems and help them.
- Accessibility and availability of the service providers
- Satisfaction of the customers is depended on the quality and intensity of the user's involvement in the production of the service, as the customer wants to affect on service delivery.
- Also service quality dimensions have a different impact on the total perceived quality. Only for few dimensions, it has a linear relationship between functionality and customer satisfaction.
- Some factors make that customers can count on service delivery such as reliability, trust and readiness to recovery.
- Perceived quality may depend on the flexibility and ability to solve emerging problems even unforeseen, outside the scope of the provider's original mission or requiring skills that are not immediately available to the provider (Nicola Belini, 2002).
- It makes a community sense in customers, so customers imagine that all of them are the members of a club with service provider so it influence on reduction the costs and strengthen the relationship. Provider's image is very important for customers:
 - To present customers: image filters, at least temporarily, experiences and impacts on the perception of the provider's performance;
 - To the market: image reflects experience and communicates expectation.

Figure 2.4 The gap analysis model for business support services



This model is good conceptual model to analyze the quality management problem in business support services that named “Gap analysis model” (Zeithmal et al., 1988; Zeithmal et al., 1990; Gronroos, 2000,100 ff.)/ This model is focused on service quality as the relationship between the expectations about service quality and perceived quality by customer.

In this model we have 7 gaps that the most important one is the Gap 1, discrepancy between perceived service and expected service.

Gaps 2, 3, 4 discussed about political issues.

- Gap 2 exists between policy guidelines and the expected service.
- Gap 3 exists between policy guidelines and management perceptions.
- Gap 4 occurs when provider's management has not enough perception of their user's expectations specially about service issues.
- Gap 5 occurs when it has discrepancy between management's perception about service quality specification and user's expectations.
- Gap 6 is about the delivery of the service, that technical and functional quality may be not match with original service design.

Some factors that create this gap as following:

1. Low quality of human or technical resources in preparing the service
 2. Not useful and effective marketing
 3. No co-operation between management and staff
 4. No collaboration between corporate culture and service specifications
 5. Not flexible specification of the services that are not adjusted to the customers needs
- Gap 7 emerges when service providers promised to the customer about service delivery issues that this promises are unrealistic and based on wrong planning or political reasons.

2.2.6.1 The dynamics of expectations

The hypothesis that consumers evaluate a service according to their own expectations, based on past experiences, both direct and indirect, gives a realistic picture of the wide majority of business support situations (cf. Priest 1998).

How often customer expectations are not realistic .For business support services it is too difficult to evaluate specially after consumption, satisfaction

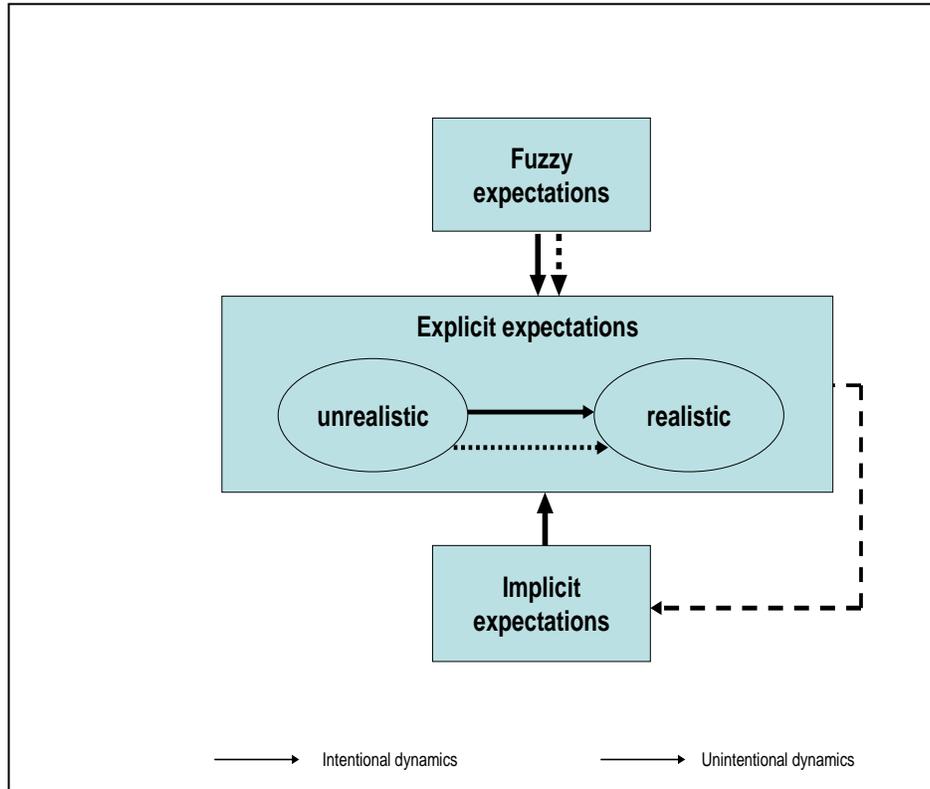
depends on the how customer's expectations can be attuned to the provider's perception of what the customer's reasonable expectations should be, also satisfaction depends on the quality of the dialogue between user and provider, especially in the "moments of truth". (Nicola Bellini 2002).

Expectations are created by many factors. Sometimes unrealistically high expectations occurs when one company perceives the business support services to solve its problems, this may be created by unrealistic marketing activities and strategies that instead of concerning to the important and basic factors of service quality, they emphasis on social relationships, so consequently uncertainties emerging and also occurs a distrust in customers.

At following figure a useful model is presented for dynamics of expectations:

- *Fuzzy* expectations exist when customers expect a service provider to solve a problem but do not have a clear understanding of what should be done;
- *Explicit* expectations are clear in the customers' minds in advance of the service processes. They can be divided into realistic and unrealistic expectations;
- *Implicit* expectations refer to elements of a service which are so obvious to customers that they do not consciously think about them but take them for granted (Grönroos, 2000, 89 f.).

Figure 2.5 Dynamic Model of Expectations



Dynamic model of expectations

Source: (Gronroos, 2000, 90)

In the case of business support services:

1. Fuzzy expectations may easily prevail and run a high risk of being disappointed. Customers with fuzzy expectations must be helped by the provider to make their expectations explicit. This may happen also without the provider's intervention, as a result of the user's learning process, but this may lead the user to quit the relationship or to substitute unrealistic for fuzzy expectations;

2. Explicit expectations are likely to be unrealistic, due to their innovative or experimental character or to the vague promises made by manager and politicians: these expectations must be rapidly brought to realism. Again this may happen autonomously, as the company learns about the service, but what the user understands now as realistic may be felt as insufficient and disappointing;

3. Implicit expectations may become relevant when they are not fulfilled: e.g. the user may incorrectly expect that the support service is free of charge. Implicit expectations should therefore be made explicit and it must be clarified whether they are realistic or not;

4. Overtime expectations, that were once explicit, may become implicit and out of control: e.g. a certain level of quality and empathy is given for granted, but may decline as a consequence of the routinization of the service (cf. Grönroos, 2000, 89 ff.).

Chapter 3

Research Method

3. Research Method

This part will provide the conceptual framework based on literature review. This chapter will explain the key factors, variables and relationships among theories or models and provides a theoretical overview; also this chapter will present detailed idea about how the research will be conducted. This includes the purpose of the research, research approach, research strategy, sample selection methods, data collection methods

and data analysis methods. At the end of this chapter validity and reliability issues will be discussed to follow the quality standards of the research.

The conceptualization helps us to answer the study's research questions. This conceptual framework will also guide the data collection of this study. Main purpose of the study is to gain a better understanding of the relationship between service quality and customer satisfaction in CCG operations. Based on the objectives of the study the first research question focuses on what are the service quality dimensions in CCG activities and how do they affect CCG'S customer satisfaction. The second research question focuses on how the relative importance of the service quality dimensions can be described for CCG activities in relation with the satisfaction.

3.1 Service Quality Dimensions

Clearly, from a Best Value perspective the measurement of service quality in the service sector should take into account customer expectations of service as well as perceptions of service. However, as Robinson (1999) concludes: "It is apparent that there is little consensus of opinion and much disagreement about how to measure service quality". One service quality measurement model that has been extensively applied is the SERVQUAL model developed by Parasuraman *et al.* (1985, 1986, 1988, 1991, 1993, 1994; Zeithaml *et al.* , 1990). SERVQUAL as the most often used approach for measuring service quality has been to compare customers' expectations before a service encounter and their perceptions of the actual service delivered (Gronroos, 1982; Lewis and Booms, 1983; Parasuraman *et al.*, 1985).

The SERVQUAL instrument has been the predominant method used to measure consumers' perceptions of service quality. It has five generic dimensions or factors which are stated as follows (van Iwaarden *et al.*, 2003):

1. Tangibles

Physical facilities, equipment and appearance of personnel.

2. Reliability

Ability to perform the promised service dependably and accurately.

3. Responsiveness

Willingness to help customers and provide prompt service.

4. Assurance

(Including competence, courtesy, credibility and security). Knowledge and courtesy of employees and their ability to inspire trust and confidence.

5. Empathy

(Including access, communication, understanding the customer). Caring and Individualized attention that the firm provides to its customers.

3.2 Online Service Quality and Satisfaction

Better understanding. Based on the two perspectives of service quality noted, as well as the relationship between service quality and customer satisfaction, the primary goal of the present research is to compare and contrast empirically the SERVQUAL and Technical/Functional Quality models. Specifically, we wish to compare the various dimensions of the two service quality models and their effects on satisfaction. By testing the two perspectives in a single empirical (and largely exploratory) study, we hope to gain a better understanding of how the models perform when applied to a common setting, and the relative strengths and weaknesses of each model within this context. Thus, the first basic (or null) hypothesis for the study is that the various dimensions of service quality – per the SERVQUAL and Grönroos perspectives – are approximately equivalent in their ability to predict customer satisfaction. Given that the two conceptualizations are each considered generally to be comprehensive and robust measures of service

quality, and have never been compared directly in an empirical study, there exists no compelling rationale to suggest otherwise.

A second research goal is to examine the utility of separately measuring customer satisfaction from the perspectives of both technical and functional aspects of the service delivery process. By individually examining these interpretations of satisfaction, we hope to determine whether satisfaction is more appropriately conceptualized as a general affect (as in traditional definitions) or rather as a multidimensional construct. Since service quality has been previously demonstrated to have a variety of distinct elements, it might therefore be expected that customer satisfaction (as directly impacted by the various components of service quality) also comprises multiple components. Based on this reasoning, our hypothesis is that customer satisfaction is a multidimensional construct, and that these dimensions will be differentially impacted by the various components of service quality.

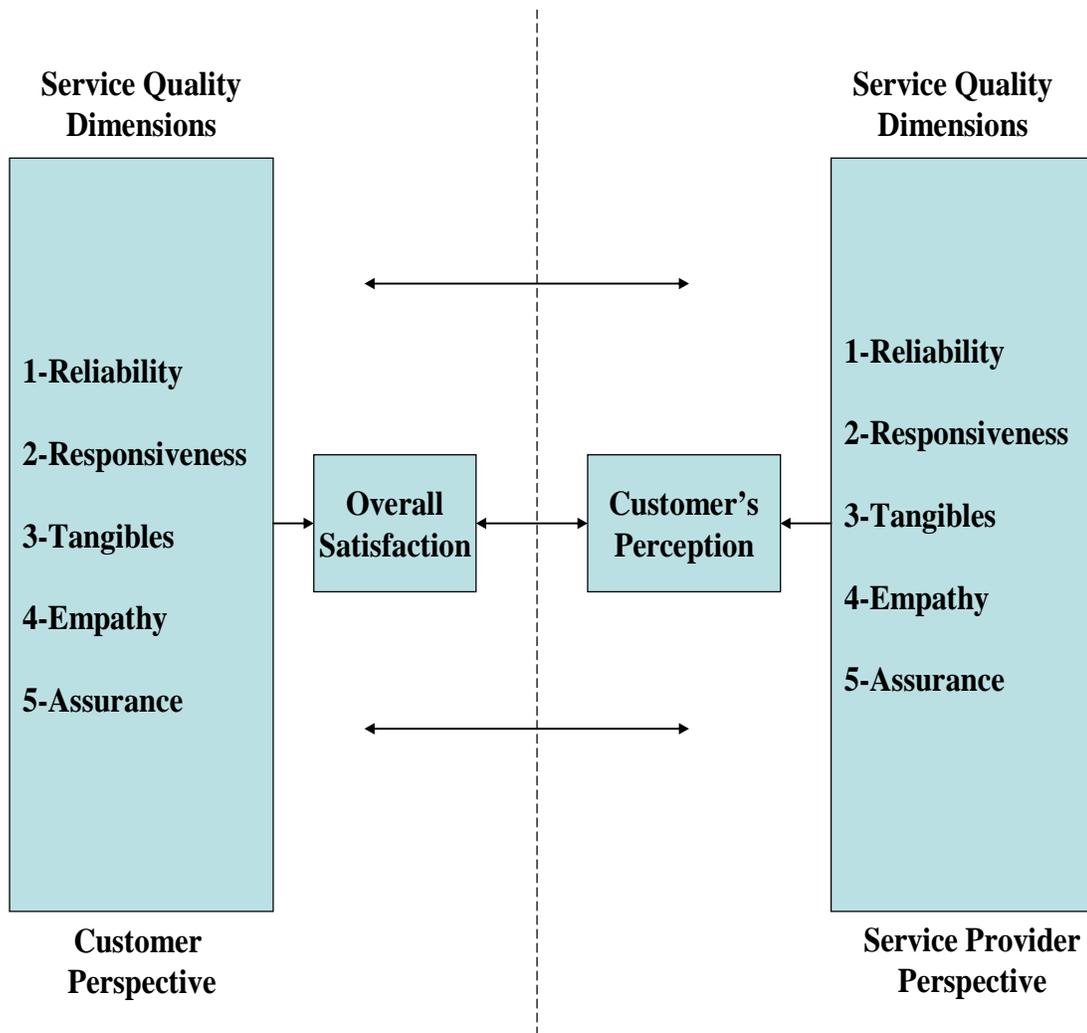
The third goal of this study is to extend the existing (albeit sparse) research on covariates of the quality/satisfaction relationship in services. We seek to explore new ways in which the quality/satisfaction relationship may (or may not) vary, depending on particular service settings and/or situations. Based on established theory from organization economics (i.e. the S-P-P model), we propose two moderator variables (service failure and communication) and test whether or not these significantly affect (i.e. moderate) the relationship between service quality and satisfaction.

3.3 Conceptual Framework

Based on the narrowed down scope of literature review above, the relationship between service quality variables and customer satisfaction can be shown as following. The five Service quality dimensions have been selected from the studied done by Zethaml et al. (2000; 2002).

In this conceptual model the five Service quality dimensions have been selected from the studied done by (van Iwaarden *et al.*, 2003):

Figure 3.1



Relationship between service quality and customer satisfaction derived from the studied done by Zethaml *et al.* (2000; 2002). Five Service quality dimensions have been selected from the studied done by (van Iwaarden *et al.*, 2003):

3.4 Research Purpose

Research can be classified in terms of their purpose. Accordingly, they are most often classified as exploratory, descriptive or explanatory (Saunders, Lewis & Thornhill 2003). Exploratory research is useful when the research questions are vague or when there is little theory available to guide predictions. At times, researcher may find it impossible to formulate a basic statement of the research problem. Exploratory research is used to develop a better understanding (Hair, Babin, Money & Samouel 2003). Exploratory studies are a valuable means of finding out what is happening, to seek new insight, to ask questions and to assess phenomena in a new light. It is particularly useful if researcher wish to clarify the understanding of a problem. There are three principle ways of conducting exploratory research: a search of the literature, talking to experts in the subject, conducting focus group interviews (Saunders, Lewis & Thornhill 2003). Descriptive research describes some situation. Generally things are described by providing measures of an event or activity. For example, which brands are most preferred? What advertisements are most effective? These are the questions that can be answered by descriptive research. Descriptive research designs are usually structured and specifically designed to measure the characteristics described in a research question. Hypotheses, derived from the theory, usually serve to guide the process and provide a list of what needs to be measured (Hair, Babin, and Money & Samouel 2003). The object of descriptive research is to portray an accurate profile of persons, events or situations. It is necessary to have a clear picture of the phenomena on which researcher wish to collect data prior to the collection of the data (Saunders, Lewis & Thornhill 2003).

Studies that establish causal relationships between variables may be termed explanatory studies. The emphasis here is on studying a situation or a problem in order to explain the relationship between variables (Saunders, Lewis & Thornhill 2003).

Explanatory studies are designed to test whether one event causes another (Hair, Babin, Money & Samouel 2003).

The purpose of the research is mainly descriptive and explanatory. It is descriptive because descriptive data has been collected through detailed interviews and it is also explanatory since we will explain the relationship between the service quality variables and customer satisfaction and how these dimensions affect customer satisfaction. It is somewhat exploratory nature since we are exploring the relationship between service quality variable and satisfaction based on the previous theory to develop a better understanding about the research area.

3.5 Research Approach

The knowledge claims, the strategies and the method all contribute to a research approach that tends to be more quantitative, qualitative or mixed (Creswell 2003).

3.5.1 Quantitative Approach

Quantitative approach is one in which the investigator primarily uses post positivist claims for developing knowledge (i.e., cause and effect thinking, reduction to specific variables and hypotheses and questions, use of instrument and observation, and the test of theories), employs strategies of inquiry such as experiments and surveys and collects data on predetermined instruments that yield statistical data (Creswell 2003).

Quantitative research is frequently referred to as hypothesis-testing research. Characteristically, studies begin with statements of theory from which research hypotheses are derived. Then an experimental design is established in which the variables in question (the dependent variables) are measured while controlling for the effects of selected independent variables. Subject included in the study are

selected at random is desirable to reduce error and to cancel bias. The sample of subjects is drawn to reflect the population (Newman & Benz 1998).

These procedures are deductive in nature, contributing to the scientific knowledge base by theory testing. This is the nature of quantitative methodology. Because true experimental designs require tightly controlled conditions, the richness and depth of meaning for participant may be sacrificed. As a validity concern, this may be a limitation of quantitative designs (Newman & Benz 1998).

3.5.2 Qualitative Approach

Qualitative research is multi method in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them (Newman & Benz 1998).

Qualitative approach is one in which the inquirer often makes knowledge claims based primarily on constructivist perspectives (i.e., the multiple meaning of individual experiences, meaning socially and historically constructed, with an intent of developing a theory or pattern) or advocacy/participatory perspectives (i.e., political, issue-oriented, collaborative or change oriented) or both. It also uses strategies of inquiry such as narratives, phenomenology, ethnography, grounded theory studies or case studies. The researcher collects open-ended, emerging data with the primary intent of developing themes from the data (Creswell 2003).

Since the purpose is to gain a better understanding of the relationships between service quality and customer satisfaction, qualitative research is found to be more appropriate for this study. Generalization is not the purpose of the study but rather a qualitative research is conducted to gain a deeper and detail understanding of regarding issue.

3.6 Research Strategy

Research strategy will be a general plan of how researcher will go about answering the research questions that has been set by researcher. It will contain clear objectives, derived from research questions specify the sources from which researcher intend to collect data and consider the constraints that researcher will inevitably have such as access to data, time, location and money, ethical issues. (Thornhill et. al., 2003).

Based on three conditions 1) form of research question 2) requires control over behavioral events and 3) focus on contemporary events Yin (1994) identified five research strategies in social science. These are – experiments, surveys, archival analysis, histories and case studies.

Table 3.1: Relevant Situations for Different Research Strategies

Strategy	Form of Research question	Requires control over behavioral events?	Focuses on contemporary events?
Experiment	How ,Why	Yes	Yes
Survey	Who, What, Where, How many , How much	No	Yes
Archival analysis	Who , What, Where, How many , How much	No	Yes/No
History	How , Why	No	No
Case study	How , Why	No	Yes

Source: (Yin (1994) P. 6)

Most important condition for selecting research strategy is to identify the type of research question being asked. “Who”, “What”, “Where”, “how” and

“Why” are the categorization scheme for the types of research questions. Two possibilities need to investigate by asking the “what” question. First, some types of what questions are justifiable for conducting an exploratory study and the goal is to develop pertinent hypotheses and propositions for further inquiry. Any of the five research strategies can be used in that situation- exploratory survey, exploratory experiment, or an exploratory case study. The second type of what question is actually form a “how many” or “how much” line of inquiry and the outcomes from a particular situation. The survey or archival analysis is more favorable than other strategies. If the researcher needs to know the “how” question, the better strategy will be doing history or a case study. (Yin 1994).

Since questions in this study are based on “how” question and “what” questions this what question is actually form a “how many” and the investigators have no control over the actual behavioral events, Case study is found to be a more appropriate approach in order to gain a better understanding of the research area. Case study is more appropriate for qualitative study.

3.6.1 Case Study

Case study involves when researcher wish to gain a rich understanding of the context of the research. The data collection method in case study may include questionnaires, interviews, observation and documentary analysis (Saunders et. al., 2003). More specifically, Yin (2003) defined a case study as an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. This definition helps us to understand cases studies and distinguish them from the other research strategies (Yin, 2003).

When selecting single- or multiple-case studies, Yin (2003) explained that the single-case study makes an in-depth investigation regarding a single entity, such as an organization or individual.

However, by conducting multiple-case studies with two or more entities, analytic conclusions arising from two or more cases will be more powerful than those coming from a single case (Yin, 2003). Therefore, multiple-case studies have been preferred in this study. Using multiple-case studies, the findings could be more robust and powerful by analyzing and comparing the results among different cases. Furthermore, this also gives us the opportunity to better understand the finding and detect similarities and differences among the cases.

3.7 Data Collection

There are two major approaches to gathering information about a situation, person, problem or phenomenon. Sometimes, information required is already available and need only be extracted.

However there are times when the information must be collected. Based upon these broad approaches to information gathering data are categorized as: Secondary data and Primary data.

Secondary data are collected from secondary sources such as govt. publications, personal records, census (Ramjet Kumar 1996) and primary data are collected through: observation, interviews and/or questionnaires (Hair et. al., 2003). According to Creswell (2003) data collection procedure in qualitative research involve four basic types: Observations, Interviews, Documents and audiovisual materials.

In interviews, the researcher conducts face-to face interviews with participant, interviews participants by telephone, or engages in focus group interviews with six to eight interviewees in each group Creswell (2003). According to Saunders et. al., 2003 interview can be conducted based on structured interview, semi-structured interview and unstructured interview.

In this study in-depth face-to-face interviews were used as data collection methods. Semi-structured interview was used to get a detail idea about the customer's experiences in using PASS. According to Saunders et. al., 2003 in semi-structure interview researcher have list of questions to cover the research area and it may vary from interview to interview. In addition the order of the questions also varied depends on flow of conversation and additional questions can be asked in the interview process.

For getting a better understanding of the situation, in-depth and face-to-face interviews have been taken with 9 experienced users(Customer) and 1(Service provider) in designing and contracting electrical substations that each of whom has more than five years experience in any related issues to electrical substations. I developed interview guide that covered all questions relating to our research area and research questions in order to ensure that interviews are conducted in the same manner.

The estimated time for each interview lasted approximately one hour to one and half hour.

The in-depth face-to-face interviews were conducted in the CEO's offices at May 16th,18th,21st,23rd,28th,29th,30th,31st and at June 4th,8th,17th almost at 6:00 PM.

Before starting the interview, the participants were informed about the purpose of the study and how the interview would be conducted.

During the interviews I basically asked the open questions, and I used notes taking and tape recording by myself, as the interviews lasting at least one hour mainly involved open questions which the participants need to explain a lot... In order to avoid any misunderstanding, I discussed with the interviewees in Farsi

during the interviews. After interviews I still kept in touch with our participants by visiting or e-mail in order to make clear questions that arose afterwards.

Yin (2003) states, “no single source has a complete advantage over all others” (p. 85). The different sources are highly complementary, and a good case study should use as many sources as possible (Yin, 2003). The validity of scientific study increases by using various sources of evidence.

3.8 Data Analysis

After collecting all the data the process of analysis begins. To summarize and rearrange the data several interrelated procedure are performed during the data analysis stage (Zikmund 2000).

The data's will b analyzed based on frequencies and also, gathered data's from customers will be compared by service provider data's.

According to Miles & Huberman (1994) qualitative data analysis is consisting of some flows of activity:

3.9 Data reduction

To appear data in transcriptions form data reduction process involves the selecting, focusing, simplifying, abstracting and transforming the collected data. There are several ways can be used to reduced and transformed qualitative data – through selection, through summary or paraphrase, through being subsumed in a larger pattern and so on. Data reduction is a form of analysis that sharpens shorts, focuses, discards and organizes data that helps to draw and verify final conclusion. (Miles & Huberman, 1994)

3.10 Conclusion drawing/verification

Conclusion drawing and verification is the other stream of analysis activity where researcher need to decide meaning of things by noting regularities, patterns, explanations, possible configurations, causal flows and propositions.

These stages have been followed in this thesis. After finishing the data collection we organized and summarized the data for every case based on the variable set that has been selected from literature review and according to the research questions.

Subsequently we conducted an analysis to compare the customer responses and service provider responses in order to measure the gap between the customer's expectations and service provider's perception.

3.11 Validity and Reliability

In order to reducing the possibility of getting the answer wrong, attention need to be paid two particular on research design: reliability and validity (Saunders et. al., 2003).

3.11.1 Validity

Validity is concerned with whether the findings are really about what they appear to be about (Saunders et. al., 2003). Validity defined as the extent to which data collection method or methods accurately measure what they were intended to measure (Saunders et. al., 2003). Yin (2003) states, "no single source has a complete advantage over all others" (p. 85). The different sources are highly complementary, and a good case study should use as many sources as possible. The validity of scientific study increases by using various sources of evidence (Yin, 2003).

Numbers of different steps were taken to ensure the validity of the study:

- Data was collected by in-depth interviews with the open-ended questions.
- Data was collected from the reliable sources, from respondents who are more experienced to using PASS (Plug & Switch System)
- Interview questions were made based on literature review and frame of reference to ensure the validity of the result.
- Questionnaire has been pre-tested by the responded before starting the interview. Questionnaire and interview guide were tested by at least 3 persons.
- Data has been collected through between 4 weeks, within this short period of time no major event has been changed with the related topic.

3.11.2 Reliability

According to Saunders et. al., 2003, reliability refers to the degree to which data collection method or methods will yield consistent findings, similar observations would be made or conclusions reached by other researchers or there is transparency in how sense was made from the raw data.

Reliability can be assed by the following three questions (Easterby-Smith et al., 2002: p.53):

- Will the measures yield the same results on other occasions?
- Will similar observation be reached by other observers?
- Is there transparency in how sense was made from the raw data?

Numbers of different steps were taken to ensure the reliability of the study:

- Two interviewers were present during the whole interview process.
- For recording the whole conversation in the interview a recorder was used and notes were taken. After finishing the interview recorded conversation has been listened and cross checked has been done with the written scripts to get the correct data.
 - The same type of questions was used during all these sessions in order to increase the reliability.
 - The theories that have been selected for the study was clearly described and research question has been formulated based on the previous theory. Data has been collected based on the frame of reference that was drawn from the discussed theories. The objective is to make sure that if another investigator will

follow the same procedures and used the same case study objects, the same conclusions would be made.

Chapter 4

Research Data Description, Analysis and Results

4. Research Data Description, Analysis and Results

This chapter will present data that has been collected through in-depth interviews with 9 Customers and 1 service provider (totally 10), who are experienced designing and contracting electrical substations and also PASS (Plug & Switch System (The system and related service that presented by CCG CO)).

Qualitative data will be presented according to the research questions and the variables identified in the frame of reference along with detailed descriptions to help the reader get a detailed idea about every issues raised in the interview.

4.1 Respondent A (Customer)

The interview with first respondent was conducted through a face-to-face in-depth interview with the respondent who is working as a CEO of an electrical substations contracting company that about 2 years ago they participated in a tender with PASS and got qualified. Here respondent is identified as respondent A. He is 32 years old. Before starting the interview, the participant was informed about the purpose of the study and how the interview would be conducted, also before the interview he got informed of the general goals of the interview by introduction letter.

He has been working in any related issues to electrical substations designing and contracting for more than 6 years, but about 2 months ago, he became a CEO of this company, meanwhile he was absolutely aware of PASS product, its specifications and the quality of the CCG services to his company.

4.1.1 Service Quality Dimensions and their relationship with satisfaction

1. Tangibles

When we discussed the issue regarding the tangibly of the CCG services ,he mentioned PASS product is perfect and has unique useful and fantastic facilities and equipments in beside ,but he claimed that he is not sure ,CCG couldn't provide himself with all those equipments and facilities.

2. Reliability

For this factor, he told me CCG services are not Reliable at all and awfully bad, the speed of delivery is too low and also installation procedure of PASS is too slowly, i.e. it is more than 9 months that CCG hasn't delivered the products yet ,also CCG'S engineers are very slowly in install the PASS, also as we haven't

any previous reference in Iran because PASS is new, I don't know how much is it durable and how long it will be in order, so I don't rely on CCG services at all.

3. Responsiveness

Regarding the issue of responsiveness, respondent faced with lot's of problems while using service (PASS & its related issues). He told me CCG is not willing to help him and provide him and his company with prompt service, i.e. when they bought a PASS, they need a visa to go to abroad to visit the PASS type test, but CCG didn't help them at all and also after many attempts, CCG accepted to be responsible for their accommodation costs during the type test, but only for 1 week, so they wanted more, in order to get enough information about PASS, but they didn't get successful, it means they are not eager to help their customers, just think about their quick margin.

4. Assurance

Regarding the issue of Assurance, he believed CCG doesn't have adequate credit to handle these kinds of business, also they (CCG members) don't have courtesy to respect to their customers, thus we are suspicious about their (CCG) competence, i.e. when we participated in a tender with PASS and we asked CCG'S staff to fill the guaranty tables, they filled it totally wrong that it destroyed our credit, so we don't trust on them at all and their information are not confidential, also we don't trust in CCG guaranty, also I'm suspicious about the security of our investment in buying PASS from CCG, Is CCG bound to it's commitments or not? And the respondent is not very satisfied with the security of CCG services and specially PASS, also CCG is not credible at all.

5. Empathy

Based on this dimension, I'm awfully dissatisfied with CCG, i.e. whenever we send any letter to them, they answer us very impolitely, or whenever we need their congeniality, CCG doesn't concern.

4.1.2 Relative Importance of the Service Quality Dimensions

Regarding the issue of service quality criteria of CCG CO, according to him assurance (including the ability to inspire trust & confidence, and courtesy of employees) and also reliability are the most important service quality criteria. He mentioned, "we (his company) don't have any trust on them, i.e. we participated in a tender with PASS and we won that tender and we began working on the

project, so one of the reasons that we've chosen PASS was we thought after buying PASS , we can supply our customer by spare part and gain a good profit from this side, but CCG didn't let us and started the negotiation directly with our customers, it means after obtaining enough profit from selling to us, then they wanted to get double profit by bypassing us, so it shows we mustn't trust on them at all".

He is very dissatisfied about the services that he is getting from the CCG CO. According to him, he is suspicious about the performance of the PASS and its related services, also he claimed that it is very difficult to communicate with CCG staffs and CCG CEO and whenever we send them a letter, their answer is too offensive and insulting that shows they don't have empathy.

Regarding the issue which service quality is important to increase his satisfaction, he mentioned courtesy of CCG employees and their ability to inspire trust and confidence is the first most important for him, it means Assurance. Reliability, the ability to perform the promised service dependably & accurately is the second important factor for him. He told me "we ordered the special equipment and they promised us to deliver it within 1 week, then they haven't sent it for more than 2 months. But according to him, he is very dissatisfied of all the service quality dimensions.

4.2 Respondent B (Customer)

The second interview was conducted through a face-to-face in-depth interview with a Director Manager of a company involved in contracting and designing electrical substations. Demographically, the participant is a 51 years old male and from southern cities of Iran. Before the interview, the participant was informed about the purpose of the interview and how the interview would be conducted.

The interviewee has been working in contracting and designing electrical substation as an expert or manager more than 20 years. As PASS is almost a new product, so about 2 years ago, he got familiar with PASS and its unique features, advantages and also benefits, so at that time he decided to participate in tenders by proposing PASS.

4.2.1 Service Quality Dimensions and their relationship with satisfaction

Data will be presented here according to the research questions and the variables identified in the frame of reference.

1. Tangibles

Regarding the issue of Tangibles of the CCG services, the participant began by mentioning that PASS facilities and equipments are very useful, he said: I know PASS has some features that you can't compare it with other alternatives, space and time of construction is going to be saved by using PASS and its related services.

2. Reliability

As for how to judge the reliability of the CCG services, the participant as we haven't use PASS in our projects yet and we haven't start co-working with CCG, so it is difficult to judge about the speed of delivery and also speed of installation, but as I heard they should be very slow, so I think regarding this issue, I can rely on CCG, but about durability, I think it is seems early to judge about PASS durability, so we should wait.

3. Responsiveness

Regarding how responsiveness is CCG in delivering its services to customers, the responsiveness was less significant for him. As he is going to use PASS in the project so this factor is not important for him or he hasn't faced with it yet. But he said that I don't believe in contact by phone with service provider. In his point of view, personal contacts with a live person were important when meeting problems. The participant also brought up telephone or using e-mail was convenient and both time and cost saving. However, he did not trust in these two ways after one time unsuccessful experience of phone call, but I think CCG is enough responsiveness in live contact.

4. Assurance

Regarding Assurance issues, the participant began by saying he doesn't trust on CCG at all, because whenever he wants to buy from CCG, they (CCG) refused to send him a original Performa in \$, and send him an invoice in Rials after adding his margin, so we don't know how much is their margin and as we persuade them to send us the original Performa, they refused, so we don't have any trust on them on pricing. He said "fro credit side ,I don't have any doubts to CCG , I think as it's manager is working in this field for a long time, he and his company has enough reputation, so it means CCG is enough Competence but for the security of CCG services, he can't say anything, because it is soon.

5. Empathy

When discussing Empathy of CCG services, the participant said as we haven't started yet our co-operation seriously, so it is somehow difficult to say anything about empathy of CCG, but I think CCG is going to respect its customers and try to solve their problems.

4.2.2 Relative Importance of the Service Quality Dimensions

When discussing the quality criteria of CCG services, the participant mentioned Assurance, Reliability, and Responsiveness. Assurance is the most concern for him because one of the critical success factors in winning the tenders is price, so as the participant doesn't trust on the proposed price of CCG, so Assurance is the most important factor for him. The interviewee said, If CCG services will become too expensive, so how can I do the projects beneficial for myself, I will reject PASS and try to substitute another alternative. So respondent B will be satisfied, if CCG reduces the expenses of the using PASS in the projects.

Additionally, the participant thought the performance and technology of PASS is very important, the participant emphasized CCG should try to train its customers. Also Responsiveness is less significant for him.

4.3 Respondent C (Customer)

The third interview was conducted through a face-to-face in-depth interview with an Assistant Manager of a company involved in contracting and designing electrical substations that I've done an interview with a director manager of it. Demographically, the participant is a 48 years old male and from central cities of Iran. Before the interview, the participant was informed about the purpose of the interview and how the interview would be conducted.

The interviewee has been working in contracting and designing electrical substation as an expert more than 15 years. As PASS is almost a new product, so about 2 years ago, the same as his director manager he got familiar with PASS and its unique features, advantages and also benefits, so at that time he decided to participate in tenders by proposing PASS.

4.3.1 Service Quality Dimensions and their relationship with satisfaction

Data will be presented here according to the research questions and the variables identified in the frame of reference.

1. Tangibles

Regarding the issue of Tangibles of the CCG services, the participant began by mentioning that PASS facilities and equipments are very useful, time and apace saving and also easy to use, so its tangibility is quit O.K.

2. Reliability

As for how to judge the reliability of the CCG services , the participant mentioned I'm reliable to speed of installation ,but speed of delivery is not quiet good, because CCG doesn't trust on it's customers and refuse to deliver the services until receive the whole money, but from my points of view, I think one of the basic rules in business is mutual trust, so we should trust in each other, but for durability of PASS ,it is no reliable reference to judge, so we should wait ,then after period of time PASS will be tested about it's durability.

3. Responsiveness

Regarding how responsiveness is CCG in delivering its services to customers, the responsiveness was less significant for him. As he is going to use PASS in the project so this factor is not important for him or he hasn't faced with it yet. But he said that I don't believe in contact by phone with service provider. In his point of view, personal contacts with a live person were important when meeting problems. The participant also brought up telephone or using e-mail was convenient and both time and cost saving. Also CCG is taking care about its customers needs.

4. Assurance

Regarding Assurance issues, the participant began by saying he doesn't trust on CCG at all, because whenever he wants to buy from CCG, they (CCG) refused to send him a original Performa in \$, and send him an invoice in Rials after adding his margin, so we don't know how much is their margin and as we persuade them to send us the original Performa, they refused, so we don't have any trust on them on pricing. He said "for credit side, contrary of my manager, I think CCG does not have enough credit, and only think how to reach to its profit as soon as possible, so based on this fault CCG is not competence to handle this business therefore the respondent is suspicious about the security of CCG services.

5. Empathy

When discussing Empathy of CCG services, the participant said as we haven't started our project with PASS yet, but until now, I think CCG'S intention is in order to solve the customers' problems.

4.3.2 Relative Importance of the Service Quality Dimensions

When discussing the quality criteria of CCG services, the participant mentioned Assurance, Reliability, and Responsiveness. Assurance is the most concern for him because one of the critical success factors in winning the tenders is price, so as the participant doesn't trust on the proposed price of CCG, so Assurance is the most important factor for him. The interviewee said, If CCG services will become too expensive, so how can I do the projects beneficial for myself, I will reject PASS and try to substitute another alternative. So respondent B will be satisfied, if CCG reduces the expenses of the using PASS in the projects.

Additionally, the participant thought the performance and technology of PASS is very important, the participant emphasized CCG should try to train its customers. Also Responsiveness is less significant for him.

4.4 Respondent D (Customer)

The fourth interview was conducted through a face-to-face in-depth interview with a CEO of one of the biggest consulting companies involved in any field of engineering specially electrical substations (It should be mentioned that for doing any projects, some companies are act as a contractor and some of them as consultant to supervise the process of doing the project). The participant is about 49 years old male .Before the interview, the participant was informed about the purpose of the interview and how the interview would be conducted.

The interviewee has been working in contracting and designing, consulting electrical projects as top manager for about 20 years. He explained that he is too enthusiastic in academic researches and innovation, so as he is too busy because of his great business, he dedicated his worth time to me without any limitation to discuss about my research aspects and be interviewed. He illustrated that he is very interested in PASS and its matchless figures and got familiar with it more than 4 years ago through an academic conference.

4.4.1 Service Quality Dimensions and their relationship with satisfaction

Data will be presented here according to the research questions and the variables identified in the frame of reference.

1. Tangibles

Regarding the issue of Tangibles of the CCG services ,the interviewee mentioned “as our company is not a contractor and is a consulting company, so we can only recommend PASS to the contractor and reject other alternatives, but from

my points of view PASS has features and benefits that make it unique, specially in time and space saving ”

2. Reliability

Regarding the matter of Reliability, he thinks the service provider (CCG) is reliable. CCG has expert engineers in order to install PASS on time, also as it's manager is too professional in foreign trade, he can facilitate the delivery procedure and also accelerate the speed of delivery, about the duration I think as the manufacturer of PASS is a famous one in this business, it should be durable, because manufacturer never wants to destroy it's reputation, so PASS must be durable, so CCG is reliable.

3. Responsiveness

Regarding how responsiveness is CCG in delivering its services to customers, the responsiveness is very important to him. As he is going to recommend PASS in the project to contractor and also commander, so this factor is significant for him. He said during the doing the projects , service provider should help it's customers completely and should facilitate the ways that customer can contact with them wherever and whenever need them, by phone, e-mail ,live contact,....

4. Assurance

Regarding Assurance issues ,the respondent began by saying as he is a consultant , so the costs of the services should be reasonable that can convinced commander and contractor both, but for this issue he doesn't trust on CCG, because he believes the offered price is not reasonable, so he obliged to shift on other alternatives with lower prices, he mentioned as these kinds of products including it's services are new, the service provider should lower the costs and price to launch it in the market, as it's launched yet, so with this manner ,the service provider will lose it's opportunity to enter in this business, also service provider should concentrate on train it's employees in order to inspire trust & confidence to the customers more and more, also they have to observe the courtesy much more than before, also CCG employees should have enough technical knowledge about specially PASS and it's related issues in order to help the customers more, so he is suspicious about this factor and is not very satisfied, but for security of the CCG'S services, specially PASS ,it is soon to judge, but for competency, the respondent think positive.

5. Empathy

When discussing Empathy of CCG services, the interviewee mentioned ,if CCG wants to be survived in this competitive market, it should also creates an innovations that customers can communicate with them easier and faster, it means CCG pay attention to its customers as it can.

4.4.2 Relative Importance of the Service Quality Dimensions

Regarding the service quality criteria of CCG services, the respondent mentioned Assurance, Reliability, and Responsiveness. Assurance is the most concern for him because one of the key points in convincing the contractors and commanders at both ends is price, so as the participant doesn't trust on the proposed price of CCG, so Assurance is the most important factor for him. The interviewee said, If CCG services will become too expensive, so how can he recommend the contractor to use PASS in its projects I will reject PASS and try to substitute another alternative. So respondent B will be satisfied, if CCG reduces the expenses of the using PASS in the projects.

Additionally, the participant thought the performance and technology of PASS is very important, the participant emphasized CCG should try to train its customers. Also Responsiveness is less significant for him.

4.5 Respondent E (Customer)

The fifth interview was conducted through a face-to-face in-depth interview with a CEO of a company involved in contracting and designing electrical substations. Demographically, the interviewee is a 65 years old male and from western cities of Iran. Before the interview, the participant was informed about the purpose of the interview and how the interview would be conducted.

The interviewee has been working in producing, contracting and designing electrical substation as a manager more than 35 years. As PASS is almost a new product, so he is not aware about PASS features.

4.5.1 Service Quality Dimensions and their relationship with satisfaction

Data will be presented here according to the research questions and the variables identified in the frame of reference.

1. Tangibles

Regarding the issue of Tangibles of the CCG services, the participant began by mentioning that may be PASS is good, but I prefer others such as GIS (Gas Insulation System) and AIS (Air Insulation System) instead of PASS because Iranian (His customers) are much more familiar with those, so as tangibility of CCG services (related issued to PASS) is quiet adequate, but I can't convince my customers.

2. Reliability

Regarding the reliability issue he mentioned as he is a top manager of this company, so he is not fully aware of details and also as PASS is a new product, so I don't know exactly, but I think we can rely on CCG services as I know it's manager for long time, I think CCG is capable enough to hold this business, it means CCG is able to deliver the services on time and also based on it's technicians ,CCG can install the PASS on time, for the durability as I don't have any experience before and PASS is a new product, it is too soon to judge about PASS durability.

3. Responsiveness

Regarding how responsiveness is CCG in delivering its services to customers, the responsiveness was less significant for him. As he is going to use PASS in the project so this factor is not important for him or he hasn't faced with it yet. But he said that I don't believe in contact by phone with service provider. In his point of view, personal contacts with a live person were important when meeting problems. The participant also brought up telephone or using e-mail was convenient and both time and cost saving. Also as CCG manager is concentrating on customer centric concept, I believe CCG is responsible for its customers needs.

4. Assurance

Regarding the issue of Assurance, he believed CCG doesn't have adequate credit to handle these kinds of business, also they (CCG members) don't have courtesy to respect to their customers, thus we are suspicious about their (CCG)

competence, and we can't trust on them, therefore security of the CCG'S services is under the big question.

5. Empathy

When discussing Empathy of CCG services, the participant said CCG'S behavior with customers is quiet good and consider customers needs.

4.5.2 Relative Importance of the Service Quality Dimensions

Regarding the issue of service quality criteria of CCG CO, according to him assurance (including the ability to inspire trust & confidence, and courtesy of employees) and also reliability are the most important service quality criteria. He mentioned, "We (his company) don't have any trust on them.

He is very dissatisfied about the services that he is getting from the CCG CO. According to him, he is suspicious about the performance of the PASS and its related services, also he claimed that it is very difficult to communicate with CCG staffs and CCG CEO and whenever we send them a letter, their answer is too offensive and insulting that shows they don't have empathy.

Regarding the issue which service quality is important to increase his satisfaction, he mentioned courtesy of CCG employees and their ability to inspire trust and confidence is the first most important for him, it means Assurance. Reliability, the ability to perform the promised service dependably & accurately is the second important factor for him.

4.6 Respondent F (Customer)

The sixth interview was conducted through a face-to-face in-depth interview with a CEO of one of the biggest consulting companies involved in any field of engineering especially electrical substations (It should be mentioned that for doing any projects, some companies are act as a contractor and some of them as consultant to supervise the process of doing the project). The participant is

about 49 years old male .Before the interview, the participant was informed about the purpose of the interview and how the interview would be conducted.

The interviewee has been working in contracting and designing, consulting electrical projects as top manager for about 20 years. He explained that he is too enthusiastic in academic researches and innovation, so as he is too busy because of his great business, he dedicated his worth time to me without any limitation to discuss about my research aspects and be interviewed. He illustrated that he is very interested in PASS and its matchless figures and got familiar with it more than 4 years ago through an academic conference.

4.6.1 Service Quality Dimensions and their relationship with satisfaction

Data will be presented here according to the research questions and the variables identified in the frame of reference.

1. Tangibles

Regarding the issue of Tangibles of the CCG services, the interviewee mentioned “as our company is not a contractor and is a consulting company, so we can only recommend PASS to the contractor and reject other alternatives, but from my points of view, I myself believe PASS has something that makes it different with others, specially by using PASS time of construction can be saved too much.

2. Reliability

Regarding the matter of Reliability, he thinks the service provider (CCG) is reliable. He mentioned “I don’t have too much problems with CCG based on this dimension, because CCG deliver the PASS and it’s related services rapidly, of course when they receive the money, then install it very quickly, for durability, I guess PASS should be a durable product, because of it’s specifications and based on it’s type tests, so CCG is totally reliable.

3. Responsiveness

Regarding how responsiveness is CCG in delivering its services to customers, the responsiveness is very important to him. As he is going to

recommend PASS in the project to contractor and also commander, so this factor is significant for him. He said during the doing the projects , service provider should help it's customers completely and should facilitate the ways that customer can contact with them wherever and whenever need them, by phone, e-mail ,live contact,....so in this case CCG is not too bad.

4. Assurance

Regarding Assurance issues ,the respondent began by saying as he is a consultant , so the costs of the services should be reasonable that can convinced commander and contractor both, but for this issue he doesn't trust on CCG, because he believes the offered price is not reasonable, so he obliged to shift on other alternatives with lower prices, he mentioned as these kinds of products including it's services are new, the service provider should lower the costs and price to launch it in the market, as it's launched yet, so with this manner ,the service provider will lose it's opportunity to enter in this business, also service provider should concentrate on train it's employees in order to inspire trust & confidence to the customers more and more, also they have to observe the courtesy much more than before, also CCG employees should have enough technical knowledge about specially PASS and it's related issues in order to help the customers more, also he believes CCG services are not too much credible, also not too much Competence.

5. Empathy

When discussing Empathy of CCG services, the interviewee mentioned ,if CCG wants to be survived in this competitive market, it should also creates an innovations that customers can communicate with them easier and faster, and also increase accessibility , generally CCG has to pay more attention to customers needs.

4.6.2 Relative Importance of the Service Quality Dimensions

Regarding the service quality criteria of CCG services, the respondent mentioned Assurance, Reliability, and Responsiveness. Assurance is the most concern for him because one of the key points in convincing the contractors and commanders at both ends is price, so as the participant doesn't trust on the proposed price of CCG, so Assurance is the most important factor for him. The interviewee said, If CCG services will become too expensive, so how can he recommend the contractor to use PASS in its projects I will reject PASS and try to

substitute another alternative. So respondent B will be satisfied, if CCG reduces the expenses of the using PASS in the projects.

Additionally, the participant thought the performance and technology of PASS is very important, the participant emphasized CCG should try to train its customers. Also Responsiveness is less significant for him. But I think CCG should more focus on PASS promotion , also CCG should try to expose PASS in big cities, that lack of space and air pollution is exist.

4.7 Respondent G (Customer)

The seventh interview was conducted through a face-to-face in-depth interview with an expert in designing electrical substations; he is working in the biggest company involved in designing and contracting electrical substations. The participant is about 29 years old and male .Before the interview, the participant was informed about the purpose of the interview and how the interview would be conducted.

The interviewee has been working in contracting and designing, electrical projects as an expert for about 6 years. As he is junior, so his knowledge about electrical substations is completely updated and also he is working in R&D division of his company, so as PASS is a new product, but he is aware about that. Also he added, in many tenders, he suggested PASS, because he believes in technical features, advantages and benefits of PASS.

4.7.1 Service Quality Dimensions and their relationship with satisfaction

Data will be presented here according to the research questions and the variables identified in the frame of reference.

1. Tangibles

Regarding the issue of Tangibles of the CCG services, the interviewee mentioned “I think

In this case CCG can provide us with proper service, Regarding the issue of Tangibles of the CCG services ,the participant began by mentioning that PASS facilities and equipments are very useful, time and apace saving ,cost saving and also easy to use.

2. Reliability

Regarding the matter of Reliability, he thinks the service provider (CCG) is reliable. He can rely on CCG services to some extent, because CCG is delivering PASS and install it usually as soon as possible, but it depends on some factors, when CCG receive the money and second if CCG doesn't faced with some problems in custom duty, for the durability, I can't say anything until PASS works for sometimes, then It will be possible to judge about PASS durability.

3. Responsiveness

Regarding how responsiveness is CCG in delivering its services to customers, the responsiveness is very important to him. Because of the unique features of PASS he is going to launch PASS by himself, he told me as this product is new and somehow expensive ,so CCG should help customers more and more in order to launch it easier and CCG should do it's promises ,but from my points of view CCG is fair in this case.

4. Assurance

Regarding Assurance issues ,he told me CCG should offered it's services to customer with lower price in order to launch it ,but from my points of view , I can't trust on the offered price, I think CCG mentioned too much margin for itself, so PASS price is not reasonable, by this concern that PASS has not launched yet, also PASS has great competitors, also I think CCG should train it's employees ,because they must convince the customers and make the customers confident, but generally CCG'S staffs conduct right attitude with customers and based on Courtesy factor, they have it, regarding this explanations, CCG is not very competent and it's services are not secure.

5. Empathy

When discussing Empathy of CCG services, the interviewee mentioned, if CCG wants to be survived in this competitive market, it should also creates an innovations that customers can communicate with them easier and faster, and also

increase accessibility, but in this kinds of business and industry, live contacts are much more important, and I think CCG has to push it's staffs to take care about the customers and respect to them more than now.

4.7.2 Relative Importance of the Service Quality Dimensions

Regarding the service quality criteria of CCG services, the respondent mentioned Assurance, Reliability, Assurance is the most concern for him because one of the key points in convincing the contractors and commanders at both ends is price, so as the participant doesn't trust on the proposed price of CCG, so Assurance is the most important factor for him. The interviewee said, if CCG want to be survived in this competitive market, should decrease the price, otherwise CCG loses its business

Additionally, the participant thought the performance and technology of PASS is very important, the participant emphasized CCG should try to do much more marketing activities and prepare FAB'S (Features, Advantages, Benefits) because customers are not familiar too much with PASS, also CCG should invest in big cities that we are facing with lack of space, otherwise in other cities, space is available and customers prefer conventional substations.

4.8 Respondent H (Customer)

The eighth interview was conducted through a face-to-face in-depth interview with a Director Manager of a company involved in contracting and designing electrical substations. Demographically, the participant is a 55 years old male and from Tehran. Before the interview, the participant was informed about the purpose of the interview and how the interview would be conducted.

The interviewee has been working in contracting and designing electrical substation as an expert or manager more than 20 years. As PASS is almost a new product , so he mentioned about few months ago he got familiar with PASS in

technical magazines, so at that time he tends to propose PASS in their tenders as a alternative beside other choices.

4.8.1 Service Quality Dimensions and their relationship with satisfaction

Data will be presented here according to the research questions and the variables identified in the frame of reference.

1. Tangibles

Regarding the issue of Tangibles of the CCG services, the interviewee said that PASS has unique feature and special applications, but in the customer minds, it has not launched yet, first because the general policies of energy ministry of Iran is not to use these kinds of products (PASS) in the projects, so it is somehow difficult to win the tenders by using PASS.

2. Reliability

As for how to judge the reliability of the CCG services, the participant as we haven't use PASS in our projects yet and we haven't start co-working with CCG, so we are suspicious about speed of delivery and speed of installation, also about PASS durability.

3. Responsiveness

Regarding how responsiveness is CCG in delivering its services to customers, the responsiveness significant for him. As he is going to use PASS in the project so this factor is important for him. But he said that I don't believe in contact by phone with service provider. In his point of view, personal contacts with a live person were important when meeting problems. The participant also brought up telephone or using e-mail was convenient and both time and cost saving. However, he did not trust these two ways after one time unsuccessful experience of phone call, so he is satisfied in some extent.

4. Assurance

Regarding Assurance issues ,the interviewee claimed about the offered price, he said "I can't trust on the offered price, I think it is much more than real price" he believed for this factor, CCG is not confident also he is suspicious about CCG credit, so he think CCG doesn't have enough competence to handle this great

business, and also their services don't have enough quality, also is not very satisfied with the courtesy of CCG'S staff ,also it is somehow soon to judge about the security of CCG services.

5. Empathy

Regarding Empathy, he said "I think in these businesses communication and contacts are too important, because it is one kinds of high technology product, so customer should be in touch with service provider always.

4.8.2 Relative Importance of the Service Quality Dimensions

When discussing the quality criteria of CCG services, the participant mentioned Assurance, Responsiveness. Assurance is the most concern for him because one of the critical success factors in winning the tenders is price, so as the participant doesn't trust on the proposed price of CCG, so Assurance is the most important factor for him. The interviewee said, If CCG services will become too expensive, so how can I do the projects beneficial for myself, I will reject PASS and try to substitute another alternative. So respondent H will be satisfied, if CCG reduces the expenses of the using PASS in the projects.

Additionally, the participant thought the performance and technology of PASS is very important, the participant emphasized CCG should try to train its customers. Also Responsiveness is important for him.

4.9 Respondent I (Customer)

The nineteenth interview was conducted through a face-to-face in-depth interview with an expert in designing electrical substations; he is working in the biggest company involved in designing and contracting electrical substations. The participant is about 34 years old and male .Before the interview, the participant was informed about the purpose of the interview and how the interview would be conducted.

The interviewee has been working in contracting and designing, electrical projects as an expert for about 6 years. He is senior and his knowledge about electrical substations is completely updated and also he is working in R&D division of his company, so as PASS is a new product, but he is aware about that. Also he added, in many tenders, he suggested PASS, because he believes in technical features, advantages and benefits of PASS.

4.9.1 Service Quality Dimensions and their relationship with satisfaction

Data will be presented here according to the research questions and the variables identified in the frame of reference.

1. Tangibles

Regarding the issue of Tangibles of the CCG services, the interviewee mentioned “I think

In this case CCG can provide us with proper service, Regarding the issue of Tangibles of the CCG services ,the participant began by mentioning that PASS facilities and equipments are very useful, time and apace saving ,cost saving and also easy to use.

2. Reliability

Regarding the matter of Reliability, he thinks the service provider (CCG) is reliable. He can rely on CCG services to some extent, because CCG is delivering PASS and install it usually as soon as possible, for the durability, I can't say anything until PASS works for sometimes, then it will be possible to judge about PASS durability.

3. Responsiveness

Regarding how responsiveness is CCG in delivering its services to customers, the responsiveness is very important to him. Because of the unique features of PASS he is going to launch PASS by himself, he told me as this product is new and somehow expensive, so CCG should help customers more and more in order to launch it easier and CCG should do it's promises, also he can't

tell his idea about satisfaction, because he believes, it is somehow soon, He told me: After a period of time I will be able to judge about my satisfaction.

4. Assurance

Regarding Assurance issues ,he told me CCG should offered it's services to customer with lower price in order to launch it ,but from my points of view , I can't trust on the offered price, I think CCG mentioned too much margin for itself, so PASS price is not reasonable, by this concern that PASS has not launched yet, also PASS has great competitors, also I think CCG should train it's employees ,because they must convince the customers and make the customers confident, so based on the Courtesy of the CCG staffs, the respondent is not very satisfied, based on these illustrations, respondent thinks CCG is not competent enough and for the security of the CCG services, it is somehow soon to judge.

5. Empathy

When discussing Empathy of CCG services, the interviewee mentioned, if CCG wants to be survived in this competitive market, it should also creates an innovations that customers can communicate with them easier and faster, and also increase accessibility, but in this kinds of business and industry, live contacts are much more important, and I think CCG has to push it's staffs to take care about the customers and respect to them more than now.

4.9.2 Relative Importance of the Service Quality Dimensions

Regarding the service quality criteria of CCG services, the respondent mentioned Assurance, Reliability. Assurance is the most concern for him because one of the key points in convincing the contractors and commanders at both ends is price, so as the participant doesn't trust on the proposed price of CCG, so Assurance is the most important factor for him. The interviewee said, if CCG want to be survived in this competitive market, should decrease the price, otherwise CCG loses its business.

Additionally, the participant thought the performance and technology of PASS is very important, the participant emphasized CCG should try to do much more marketing activities and prepare FAB'S (Features, Advantages, Benefits) because customers are not familiar too much with PASS, also CCG should invest

in big cities that we are facing with lack of space, otherwise in other cities, space is available and customers prefer conventional substations.

4.10 Respondent J (Service Provider)

The tenth interview was conducted through a face-to-face in-depth interview with a Director Manager of CCG involved in contracting and designing electrical substations. Also he is authorized distributor of one of the famous companies in the world involved in manufacturing electrical equipments. Demographically, the participant is a 45 years old male. Before the interview, the participant was informed about the purpose of the interview and how the interview would be conducted.

The interviewee has been working in contracting and designing electrical substation as an expert or manager about 15 years. He is authorized distributor of a well known company that they manufacture PASS (Plug & Switch System).He told me “We have 3 kinds of electrical substations: Conventional, GIS, PASS .In contracting the electrical substation some factors should be mentioned: total cost, performance, feature, time of doing the project, space,...

If we want to compare them with each other, you see if we don't have space problem conventional is the best, because it is the cheapest, If we faced with lack of space, we have 2 choices: GIS & PASS, So If we want to compare these two with each other, PASS is much cheaper, also we can install it in short time and by using PASS we can contract a complete electrical substation in at last 4 months that shows how PASS can save our time & energy.

4.10.1 Service Quality Dimensions and their relationship with satisfaction

Data will be presented here according to the research questions and the variables identified in the frame of reference.

1. Tangibles

Regarding the issue of Tangibles of the CCG services ,the interviewee said : As I explained PASS has unique features, in PASS we are using HYBRID technology, it means , PASS has the benefits of both Conventional and GIS, also doesn't have their disadvantageous, in PASS we don't need a big space i.e. for a 63kv electrical substations, if we choose conventional ,about 1000sqm is needed, but if we use PASS, 30sqm is enough, also, the total cost of a PASS is ¼ of GIS, so it is defiantly recommended.

So you see the facilities and equipments of PASS are surprising.

2. Reliability

As for how to judge the reliability of the CCG services , the participant said “It is somehow difficult for me to describe how my services are reliable, but when I registered my company and began my activities, I've chosen CCG(Customer Centric Group) for my company, it means I concentrate and focus on customers, try to provide them at right time, with right people and right attitude, so as far as I know ,I was doing my promises , but it's not easy to judge, i.e. I promised to my customers for free installation, So I did until now and many evidences show that am I reliable or not? But you see how I concern about two main aspects of reliability: speed of delivery and speed of installation (right time, right attitude). For durability of PASS, I should explain, PASS is one of the unique products of one of the most famous company in the whole world, so never this company destroyed it's credit by manufacturing low quality product, also based on the PASS type tests, customer can realize how PASS is durable, also whenever customer bought PASS, CCG sent them to factory in headquarter to visit the reliable type test.

3. Responsiveness

Regarding how responsiveness is CCG in delivering its services to customers, the interviewee said “I think it is better to describe this issue with an example, one of our customers attended in a tender and won the tender by proposing PASS, As service provider promised to customer to bring him to see the reference, as we wanted to show our well intention , we promised them to send them to main factory to see the best type test, when we sent them our customers claimed :why CCG didn't book 5 stars hotel for our engineers, and why CCG doesn't offer any entertainment programs for our engineers, so it shows ,customer expectations are not logic and how much we support them, but in no conditions ,our customers will be satisfied, totally I take care about increment the service quality and make our customers more confident.

4. Assurance

Regarding Assurance issues, the interviewee explained “for Assurance element, I will explain one by one:

- Competence: I think our company is quite competent to handle this business and provide the customers with proper services, as we I have a good experience in this field.
- Courtesy: Our name (Customer Centric Group) describes our manner, I emphasized to myself and our employees to take care about the customers, respect to them by right attitude and at right time
- Credibility: I think it is somehow difficult to judge have I credit or not, But from points of view I have enough credit.

Based on these sub-factors, I think CCG can inspire trust and confidence to its customers.

5. Empathy

Regarding the issue of Empathy of CCG services, he explained “Our customers have proper access to communicate with CCG, through several telephone lines and our web site, asking FAQ by e-mails and..., so it shows customer can access to us easily and CCG has great attention to provide its customers with their logical favorites.

4.10.2 Relative Importance of the Service Quality Dimensions

When discussing the quality criteria of CCG services, the participant mentioned he'd like that the gap between his perception and customer expectation will be decreased and he told me that he is trying to satisfy the customers, but he believed Assurance is the most significant dimension for him, also responsiveness is very important, it means he obliged himself and his company to be responsive in front of it's customers, also the other dimensions are important.

4.11 Analysis

1. Tangibles

In the previous chapter collected qualitative data has been presented according to the service quality variables identified in the frame of reference regarding how service quality affects customer satisfaction. In this chapter data will be analyzed according to the same direction and as part of the analysis the data will be interpreted based on frequencies and also gathered data's from customers will be compared by service provider data's .

2. Tangibles

Regarding the Tangibility of CCG services, the service provider described that PASS is almost a miracle, because of its unique features, advantageous and benefits. He explained by using PASS time, space, energy and cost will be saved extremely , also he mentioned as he is involved with providing the related services to PASS, so he thinks he can satisfy his customers. Based on customers ideas about Tangibility of CCG services and specially PASS, 8 of them are completely satisfied with it, but 1 of the respondents are not very satisfied, because of the market trend is based on using other alternatives such as GIS and AIS(Conventional).

3. Reliability

Regarding the Reliability of CCG services, the service provider explained: Whenever I sold PASS to our customers ,almost after receiving the money, CCG delivered the product and it's equipments to customer, so for speed of delivery, I think no company do the same as us, for installation, again CCG was installing most of the time, before receiving the money, also without any extra cost plus sending the customer to visit the type test in western country, so I think logic customer has to rely on CGG. Based on customers responses 4 of them are satisfied and reliable with speed of delivery, speed of installation and durability of PASS and related issues, 4 respondents are suspicious about durability of PASS and are not very satisfied and reliable with speed of delivery and speed of installation and one of the respondents is very dissatisfied with every thing and he can't rely on CCG services ate all.

4. Responsiveness

About CCG responsibility and how much it is Responsiveness, the service provider mentioned: In our customer's culture it is not defined that how much service provider should be responsible and how much a customer has right and what is the responsibility of customer in return of a service provider? Customers think every thing they want should be done by service provider and if customer requests illogical issues, it is under the responsibility of service provider, so it means in no way customer satisfaction will be caused. Regarding customers

responses, 1 of them are satisfied and said: Until now CCG was responsible, 5 of them are fair, it means, some of them are not dissatisfied or some of them don't co-working with CCG for long time, so it is somehow soon for them to judge about satisfaction, but 3 respondents are awfully dissatisfied with CCG services, they believe that CCG is only taking care about it's immediate margin and it's general goal is not to help customers and solve their problems.

5. Assurance

Regarding this factor, Assurance is divided to some sub-factors: Competence of service provider, Courtesy of service provider, Credibility of service provider, Security of the services and ...the service provider mentioned:

- Competence: I think our company is quite competent to handle this business and provide the customers with proper services, as we I have a good experience in this field.
- Courtesy: Our name (Customer Centric Group) describes our manner, I emphasized to myself and our employees to take care about the customers, respect to them by right attitude and at right time
- Security of CCG services: As I explained, PASS is a secure product, because it is manufactured under the exact inspection and many type tests, also our engineers are under regular training by the manufacturer.

Based on these sub-factors, I think CCG can inspire trust and confidence to its customers.

But for respondents' answers: Most of the respondents are dissatisfied with whole sub-factors.

- Competence: 5 of the respondents believes CCG doesn't have enough competency to handle this business and are not satisfied, 3 of them are not dissatisfied, but they are suspicious about CCG competency, only one of the customers is satisfied.
- Courtesy: For this dimension, most of the respondents are not very satisfied, it means 4 of them believe CCG employees have not right attitude with customers and very dissatisfied ,but one of them is satisfied and 4 of them are not too much dissatisfied and have fair ideas about the Courtesy of CCG'S employees.
- Security of CCG services: 3 respondents believe CCG'S services and specially is not a secure product and dissatisfied, 5 of the respondents are not very dissatisfied and only one of the respondents is completely satisfied.

Credibility: 5 of the respondents believes CCG doesn't have enough competency to handle this business and are not satisfied, 3 of them are not

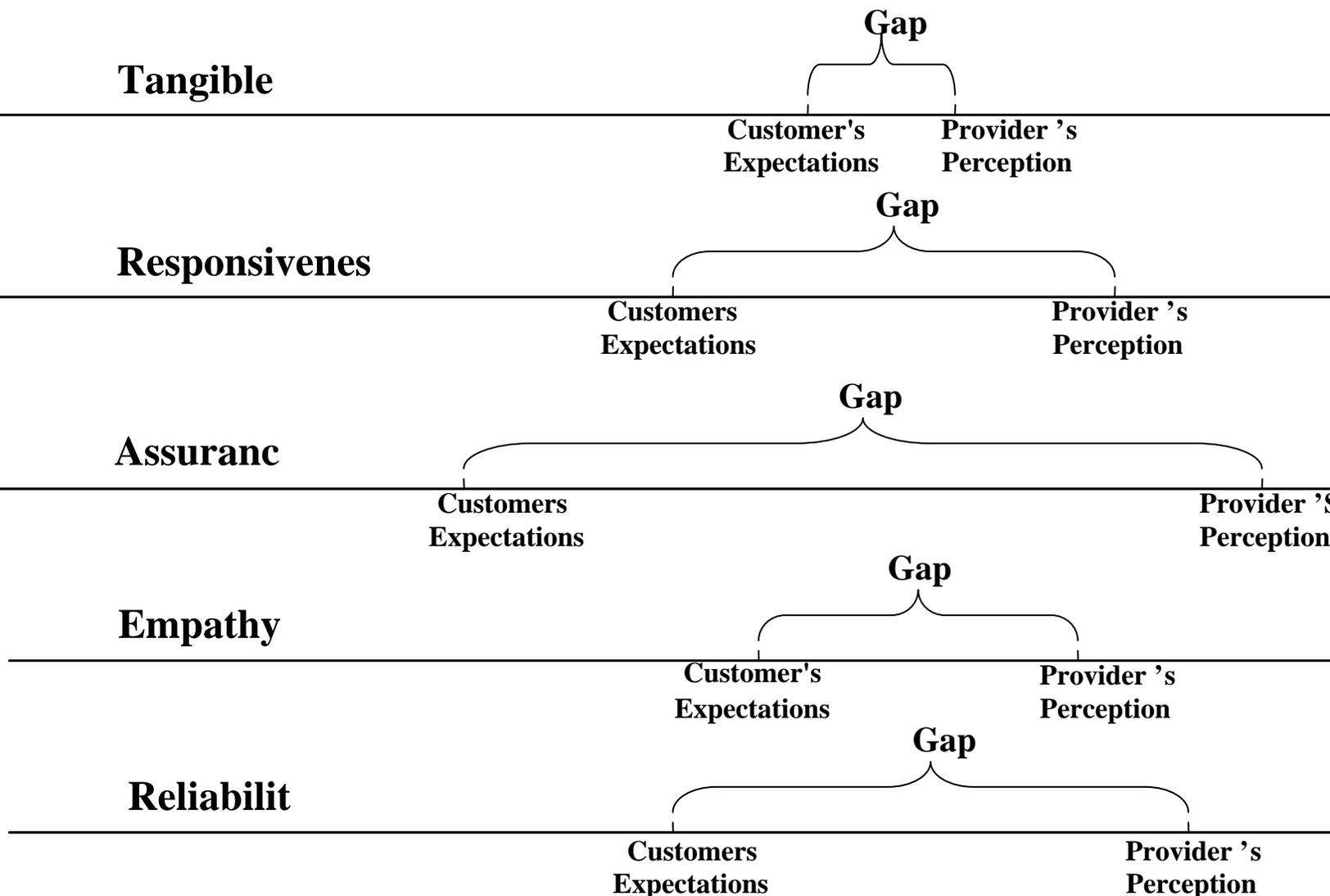
dissatisfied, but they are suspicious about CCG competency, only one of the customers is satisfied.

6. Empathy

Regarding the Empathy of CCG services, the service provider believes, customers have several ways to access CCG and can contact them easily, also he said “our staffs are ready to solve our customers problems and issues”, but customers believe, CCG must think about news of communication and try to facilitate customers in order to have live contact with CCS people’s, but totally 1of the customers are not satisfied, but the rest are satisfied.

4.12 Discrepancy Diagram

Figure 4.1 DISCREPANCY DIAGRAM



Chapter 5

Discussion, Conclusions and Further Research

5. Discussion, Conclusions and Further Research

In the previous chapter the empirical qualitative data were analyzed. In this final chapter two research questions will be answered and general conclusions will be drawn. At the end implications for management, theory and future research will be addressed.

5.1 What Are the Service Quality Dimensions in CCG Operations and How Do They Affect Customer Satisfaction?

A total five service quality dimensions for CCG activities are identified and other dimensions found in this study.

They are reliability; responsiveness; assurance; tangibility; empathy Based on qualitative analysis of empirical data obtained, first five dimensions selected in this study were tested as the core dimensions in CCG activities Price and Customization and Personalization were identified as another two important service quality dimensions in CCG activities. Two new dimensions, technology update; and logistic/technical equipment, were discovered in present work.

1. Tangibles

The findings indicate almost all the customers are satisfied with the tangibility of provided services of service provider and specially all the customers are satisfied with the performance of PASS, so the service provider should try to increase the tangibility more and more.

2. Responsiveness

The findings reveal that it is a big gap between the service provider perception and customer expectation about the responsibilities of the service provider. Based on the collected information, CCG should focus more on helping the customers, because as it comes from it's name (Customer Centric Group) customers are located at the center of CCG activities, but also customers should adjust and modify their needs and expectations, because some customers think that CCG has to provide all of their logical and illogical requests .So finally customers must adjust their expectations and service provider should modify it's perception. The findings also indicate that quick response is one of the key drivers of customer satisfaction or dissatisfaction, which consists with the prior study. More importantly, the findings also show that some customers expect and need personalized services from the CCG. Personalized services could build good relationship with customers, simultaneously gain trust and loyal customers.

3. Reliability

The findings reveal that the CCG should try to speed up installation time by using much more expert engineers and technicians, also based on causing more trust and satisfaction in customers and create confidential atmosphere, the products have to be delivered faster. Also customers must pay the costs on time and without delay, because CCG is buying all the equipments in cash and sell those by related services in payment, otherwise CCG can't be capable to do its duties and make both sides dissatisfied

4. Assurance

The findings imply that the Assurance issue is the utmost concern by CCG customers.

Based on the literature review, Assurance dimension is categorized by 4 categories:

- Competence

Based on the responses, CCG is somehow competent but not enough at all, so CCG should attempt to obtain more competencies by doing more projects and getting better experiences in this field, also CCG has to concentrate on hiring much more competent staffs in order to satisfy customers.

- Courtesy

One remarkable finding is that more and more customers expect right attitude with themselves and based on this factor customers are almost satisfied and believe CCG'S staffs have courtesy, but CCG should recommend its staffs to conduct better and better attitude with customers in order to satisfy them more.

- Security of CCG services

Most of the customers haven't tried CCG services and specially PASS for long time, so they can't judge truly, and their responses are not reliable, so customers must be more patient, and after a period of time, they will be able to judge, also customers should mentioned PASS is manufacturing in a too famous company and the company never destroy it's reputation by producing defensive products, so in this case, customers should wait more and more.

- Credibility

The findings indicate, it is important for customers that their service provider has credit, more than half of the customers believe CCG has enough

credit, but some of them are not satisfied, so CCG has to create a credit for itself more and more, in order to be survived in this competitive market by doing monetary transactions confidentially, pay its payments on time, do it's obligation.

5. Empathy

The findings indicate that except 1 customer, the rest are satisfied, because CCG is using many telephone lines, broad band internet,...so customers can communicate with CCG easily and CCG'S member has empathy to help customers and solve their problems.

6. Pricing

Pricing has not been found in theory, the findings of this study shows that reasonable price and costs of the services is the most important factors in terms of customer satisfaction, all the customers believe the service costs are too much expensive, so CCG must decrease the costs and prices in order to be survived in this competitive and complex market otherwise it will lose this market thoroughly.

7. Technology update

Technology update has not been found in theory. The findings of this study show that continues technology update is important in electrical substations industry.

8. Logistical or technical equipment

Logistical or technical equipment factor has never been identified by previous research. It can be more convenient for customers if CCG offer logistical or technical support.

9. Personalization and customization

One remarkable finding is that more and more customers expect personalized services. More importantly, to meet different customer's different needs; to listen to customers' voice; and to create customer trust, electrical equipment manufacturer should provide personalized and customized services.

- A total of nine service quality dimensions were identified and found by this study:

1. Tangibles;

2. Responsiveness;

3. Reliability;
4. Assurance
5. Empathy;
6. Pricing
7. Technology Update
8. Logistical or Technical Equipment
9. Personalization and customization

- Among them, first five dimensions are consistent with the variables that mentioned in the frame of reference. We tested them as the core service quality dimensions of CCG. From qualitative empirical data, we identified pricing as other important quality criteria in CCG services Moreover.

The last dimensions are the new finding in this study. In addition, the first 5 dimensions share the same meaning with the service quality determinants derived within the context of traditional services industries by prior research.

- All these nine dimensions are significant criteria and factors to judge services that are provided by CCG, simultaneously to identify and measure customers' experiences and preference. However, considering limited resources of CCG, first five key dimensions should be more significant and focused by the CCG.

- All of the nine dimensions tend to have strong impacts on either customers' satisfaction or dissatisfaction, depending on the quality performance of those dimensions.

- Moreover, pricing is the key driver to enhance customer satisfaction, attract and retain customers, even lead to trust and customer loyalty;

- In addition, in responsiveness dimension, when problems occur, quick response and personal contact are also significant for establishing good relationship and gaining trust and loyal customers;

- Finally, Assurance and its aspects are the utmost concern by customers and have strong impact on trust and satisfaction.

5.2 Relative Importance of Service Quality Dimensions in Relation with Satisfaction

The second research question in this study focuses on relative importance of service quality dimensions and understanding different impacts of five key service quality dimensions on satisfaction. Addressing this issue will help CCG develop and implement effective service quality improvement initiatives within its organization. The correlations among the five dimensions set forth earlier are high. Thus, it is impossible to improve individual critical service quality dimensions without maintaining the quality level of all six attributes at least within the relevant zone of tolerance.

Practically, however, it is difficult to offer all service quality attributes at a superior level. Therefore, it is important for CCG to balance the level of each primary service quality dimension.

From data analysis, pricing strategy dimension is the utmost concern for CCG customers because the expensive services or transactions will bring serious problems to customers. Meanwhile this dimension has significant impacts on customer trust and satisfaction.

After Assurance, Reliability and responsiveness are the next important factors and have significant impacts on trust, and responsiveness is the foremost critical factor in determining satisfaction. Also personalization and customization is very effective; the less important dimension is Empathy. As in B2B and industrial businesses, live contacts are much more important, so the Empathy is not too important.

5.3 Implications for Practitioners

In electrical industry development, customers can have unlimited access to the various type of electrical substation contractor and designer (service provider)

they require and may enjoy a wider range of technical and financial transaction from them. Therefore, it is not easy for electrical equipment manufacturers to gain and sustain competitive advantages based only on a cost strategy. Rather, defining customers' needs and preference, and their related quality dimensions have increasingly become a key driving force in enhancing customers' satisfaction and attract more customers.

Identification and measurement of customers' expectations of the electrical equipment manufacturers' services provide a frame of reference for these kinds of companies for accurate assessment of their service quality.

This study identified a total of nine service quality dimensions. Obviously, in order to maintain a high level of overall service quality, the electrical equipment manufacturer and service providers should pay attention to all these dimensions tested in this study. However, to strengthen competitiveness in the extremely competitive market, given limited organizational resources, it is recommended that these companies should focus on the main six key dimensions, assurance; reliability; responsiveness; tangibles; , empathy, and Pricing(as a extra dimension) in order to achieve high level of service quality and customer satisfaction simultaneously.

More specifically, the following implications are recommended by us to electrical service provider or equipment manufacturer:

First, pricing strategy dimension suggests that price and total costs of the project may be the critical determinant of the success of the electrical equipment manufacturers. Since this business is an open network, electrical equipments customers tend to be much more concerned with the price and costs of their project. Therefore, in order to create satisfaction with customer, these kinds of companies should try their best to ensure and keep loyalty of their customers.

Second, the assurance dimension indicates that electrical equipment manufacturers should provide customers with understandable content on their activities.

Third, the responsiveness service dimension implies that they (electrical service providers) should pay more attention to customers' emails, phone calls and personal contact face to face when problems occur. They should reply customers' e-mails as soon as possible and provide proper information when customers need some advice. Since quick response can increase customers' satisfaction, personal contact can establish good relationship and trust with the customers. It is recommended that the electrical equipment manufacturer (service providers) can provide live support over the Internet instead of e-mails. The e-mail responses are not fast enough. So chatting with the personnel over the Internet may be easier to solve the problem and it will also be a more convenient service for customer.

Finally, personalization and customization dimension suggests that the electrical equipment manufacturers should offer personalized services to their customers in order to build customer loyalty... It is well advised that companies involved in this business need to have enough staff members to answer customers' diverse questions via telephone and emails or utilize the electronic CRM applications.

5.4 Implications for Theory

The main purpose of the study is to gain a better understanding of the relationship between service quality and customer satisfaction in CCG activities and its relationship with its customers and aim to describe and explore a phenomenon within this specific research area by answer two research questions.

Theoretically this study extends the knowledge body of service quality and customer satisfaction by enriching the content of service quality dimensions

applicable for electrical service provider sector, and based on existing theories, this study tested five key service quality dimensions in electrical equipment provider context. The primary contribution has been made to enrich the existing theories.

More specifically, concerning research question one the majority of the findings for this study supported the existing literature. The new findings were discovered from qualitative empirical data. These new service quality dimensions are technology update and logistical and technical equipment pricing strategy. Regarding research question two previous theories were supported and further developed in this study. It also increased and enhanced understanding about relative importance service quality dimensions.

5.5 Implication for Further Research

With the development of contracting electrical substations and generally any related issues to power electrical projects , some areas which are not covered in this study are interesting and need to explore. In addition, the limitation and shortcoming of this study also provide implications for future research. Future research could make several extensions of the current study.

First, future research needs to verify the service quality dimensions in companies involved in supplying whole range of HV products, especially to test the two new dimensions discovered in this study. Also, this study was conducted to find the linkage between service quality dimensions and satisfactions from the consumers' viewpoint. The study could, in the future, be conducted to explore and include the providers' viewpoint. In other words, it could assess these kinds of companies, viewpoints and their stance regarding what they might identify as service quality variables to satisfy their customers. This could further confirm or disconfirm the presence of the two variables identified in this study.

Second, the research findings need to be enhanced and validated by using more diversified random samples and employing online survey or content analysis method. Since the main limitation for quantitative data collection that restricts the development of the findings is the number of samples. Therefore, a greater number of samples might give a more reliable and different finding a larger sample size should not effect the conclusions drawn from this research.

Finally, since the time and cost limitation, the study conducted in companies involved with contracting, designing and consulting electrical substations and in a special case (using PASS). Future research can be conducted in other things and in more countries. A different picture might be offered.

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Appendix 1

INTERVIEW REPORT

Gender:

Age:

Profession:

Date:

- **How long have you been using PASS?**
- **Are you satisfied with the services that you are getting from CCG CO? If no why?**
 - **What are the quality criteria that you consider in case of using electrical substations? And which one is most important?**
 - **What do you think about the efficiency of CCG CO and its offered services?**
 - **Is CCG reliable? And what criteria do you consider to judge the reliability of the CCG services?**
 - **How responsive is the CCG in delivering its services to you?**
 - **Is there anything you want to say regarding the privacy issue when you are dealing with CCG?**
 - **Does the CCG perform according to your expectations or surpass it?**
 - **Could you please tell your general idea about PASS and CCG CO services and rank all criteria that we discussed?**
 - **Is there anything you want to add?**