

MEASURING INTERNAL SERVICE QUALITY AT A WINDOW-BLINDS MANUFACTURING COMPANY

by

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Signed

8 March 2023 Date

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ABSTRACT

Customer requirements are the driving force behind a competitive environment. In order for organisations to survive and capitalise, more focus must be on quality services and customer satisfaction. Service quality can serve as a competitive advantage if it is understood. Thus, measuring service quality can be useful to identify improvement areas outside and within an organisation. Specifically, the research study focusses on measuring internal service quality (ISQ) and its impact on customer retention. The organisation under study is one of the leading window-blind manufacturing companies in South Africa.

The research study used the positivism approach to understanding the phenomena being investigated. A cross-sectional study positioned in the quantitative research paradigm was employed. The research study adopted a survey design and data was captured using a SERVQUAL questionnaire. With a population of 43 participants, total population sampling was used as the research sampling technique. The sample characteristics included age, gender, department and employment duration. Ethics were considered in order to mitigate any risk posed by the study. A pilot study was conducted to clarify the overall structure and approach to data capturing while validating the measurement instrument used. The split-half was used to assess the internal consistency of a questionnaire and ensure reliability. The Spearman-Brown coefficient values were greater than 0.80, indicating the questionnaire's reliability was acceptable. The questionnaires were retrieved in paper format and captured into the SPSS software and Microsoft Excel.

The research results indicated that the gap between the Frontline and the Planning department was the biggest, with the reliability dimension as the main contributing factor. Overall, reliability and responsiveness were identified as the aspects of ISQ with the largest gaps.

The research contributes to existing literature by extending the application of SERVQUAL for measuring ISQ within a manufacturing company. It also assists the organisation under study with identifying possible improvement areas of ISQ.

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ABBREVIATIONS AND ACRONYMS

ISQ	Internal Service Quality
EDT	Expectancy Disconfirmation Theory
IPA	Importance/Performance Analysis
CIT	Critical Incident Technique
SPSS	Statistical Package for Social Science
TQM	Total Quality Management
QFD	Quality Function Deployment
ESQ	External Service Quality
SQ	Service Quality
JSE	Johannesburg Stock Exchange

GLOSSARY OF TERMS

Term	Description
ISQ	ISQ is defined as the perceived quality of internal services between employees or organisational units within an organisation (Sirvastava & Prakash, 2019).
EDT	Expectancy disconfirmation theory is a substantial theory that originated in the study of customer behaviour (Van Ryzin, 2013).
SERVQUAL	SERVQUAL measures the quality of a service based on the difference between customer expectations and actual perceptions of the service (Ingaldi, 2018).
ESQ	An external customer comparison between their expectations and perceptions of a service.
Fuzzy Kano Model	Fuzzy Kano Model is a linear scoring system used to accurately understand users' demands (Wu & Cheng, 2018).

CHAPTER 1: SCOPE OF THE RESEARCH

1.1 Introduction and motivation

In order to survive in a highly competitive environment, organisations need to ensure that they provide competitive products and services to ever-changing customer expectations. Customer satisfaction and loyalty are extremely challenging to cultivate and sustain. The markets are highly competitive, and consumers have the power to decide where they want to invest their loyalty.

According to Forbes (2019), only 73% of customers are willing to give a company more than one chance to deliver good customer service. The fact is that a negative customer service experience can result in distress and frustration for the customer. It is estimated that 26% of customers consider one bad customer service experience enough to persuade them to switch companies. After three bad experiences, 92% of customers will switch companies. Customers switching to competitors and investing their loyalty elsewhere can have a detrimental effect on the market share and bottom line of any organisation.

Generally, service experience would not be considered part of manufacturing. However, customer service experience is a reality for manufacturing firms. In these trying times, manufacturing firms look at a combination of quality products and excellent quality services to establish and sustain a competitive edge and customer loyalty.

Customer loyalty stems from customer satisfaction, since a satisfied customer is more likely to repeatedly engage with an organisation that delivered products and services aligning with their expectations (Heskett et al., 1994). The foundation of customer expectations is external service quality (ESQ). A customer formulates the concept of satisfaction based on a comparison between their expectations and perceptions of a service. An expectation higher than the perception leads to a dissatisfied customer, with the opposite true as well.

When looking at factors affecting the quality of ESQ, internal service quality (ISQ) emerges. The customer does not directly engage with internal services,

but internal services affect the way in which the organisation engages with the customer.

Studies noted in extensive literature in a wide variety of fields have been conducted to measure ESQ and its benefits. However, few studies have been concerned with ISQ, especially in a manufacturing context.

ISQ has been an emerging theme in literature over the past two decades (Frost & Kumar, 2001; Brandon-Jones & Silvestro, 2010; Wu, X., Wang, J. & Ling, Q., 2021). Internal services are defined as the services between organisational units or employees working within the organisation (Stauss, 1995). Good internal service and its provision to employees is critical to an organisation's success (Kang, James, & Alexandris, 2002). Functional units are linked together through internal services with the aim of delivering a service to external customers. Thus, the delivery of quality service to external customers depends on the internal supply network's service quality (Brandon-Jones & Silvestro, 2010).

ISQ, defined as the perceived quality of internal services between employees or organisational units within an organisation (Sirvastava & Prakash, 2019), plays a key role in providing a foundation for continuous improvement (Reynoso & Moores, 1995; Frost & Kumar, 2001).

Taylor Blinds and Shutters is one of the leading window and door covering manufacturers within South Africa. The organisation manufactures and supplies a wide range of door and window covering products, including aluminium shutters and blinds. With trade agents all over South Africa, the company must be able to supply excellent products and services. This research focusses on internal service quality and considers this to be the origin of the deteriorating customer service experience and ESQ of the organisation under study.

The study contributes to existing ISQ literature by employing the SERVQUAL questionnaire to measure the gaps between ISQ dimensions within a manufacturing company. It builds upon existing literature in proving the validity and reliability of the SERVQUAL instrument.

The research results will contribute to the understanding of possible gaps between ISQ dimensions within the studied manufacturing company, identifying possible areas of improvement.

1.2 Background to the research problem

1.2.1 Company history

Taylor Blinds and Shutters was established in 1959. It started as a family business conducting blind repairs. Today, they are one of the leading manufactures of blinds and shutters within South Africa. The company manufactures their products in Cape Town, South Africa, and has distribution and sales offices in Cape Town and Johannesburg. In 2016, the company was bought by the Johannesburg Stock Exchange (JSE) listed Trellidor Group. The involvement of a JSE listed company made it inevitable for the family business to adapt a more corporate strategy and culture.

1.2.2 Organisational culture

Corporate strategy guides the organisation towards the achievement of goals and objectives. Organisational objectives are expressed by the organisational culture through values and beliefs. These values and beliefs guide the activities of employees through group norms and shared assumptions (Groysberg, Lee, Price, Cheng, 2018). Culture can define human identities and is considered highly important in our daily human lives. The effect of change on the culture of an organisation cannot be neglected. Organisational change can trigger positive and negative employee responses. These emotions and moods depend on a range of factors which include but are not limited to the frequency of change, employee emotional intelligence and the nature of leadership (Smollan & Sayers, 2009). As employees act out these responses within the working environment, these emotions can dictate the way in which employees engage with colleagues.

1.2.3 Management

Since 2016, the business has undergone a transitioning phase and the company's management and structure has changed on numerous occasions. The transitioning started with the empowerment of internal candidates. They joined the management level the previous business owner and his family members occupied. At the time, most of the internal candidates were suitable

for the opportunities based on their years of experience within the industry and the company. As time progressed, however, he management team consisting of internal candidates faced a tremendous challenge to incorporate desirable change into the business and to drive the implementation of a new corporate era. These challenges along with other factors caused the business to stagnate and slowly deteriorate, creating a situation where the business growth surpassed the capability of the internal systems and expertise. The result was unpleasant for some of the management team members, the employees and the business.

1.2.4 Current state of business

As the growth surpassed the capabilities of internal systems and knowledge, the customers began to notice a difference in the quality of external services and products. The loyal customer base dampened the effect of the decrease in quality in the beginning. Customer's had faith that the organisation would consider the feedback provided to improve in the specific areas of the business. However, these complaints where never properly delt with, contributing to a decline in satisfaction and an increasing number of complaints.

A customer complaint can be an informal or formal report regarding a dissatisfied outcome. The outcome can be either a product or a service. Long-term business success is linked to the way in which a company approaches and resolves customer complaints. If customer complaints are ignored or not acted upon, the business continually expose itself as a provider of poor service (Nina, 2021).

According to Nina (2021), complaint management involves interaction between complaints, the compensation policy and between buyer and seller. When there is a non-conformance to the expectations of the customer, the customer believes that there will be someone involved in solving the problem. Failure to provide customers with the expected support and resolution when they submit the issue or express dissatisfaction can damage a company's reputation.

The escalation of customer complaints without proper resolution has deteriorated this company's reputation and bottom line. Since 2016, the company's annual profit margin has been on a downward trend. The company's top management is deeply concerned with the state of the business. On top of

the increase in customer complaints, the company invested in the development of a new product in 2020. The project was planned to be completed by the beginning of 2021. However, when the project was close to the estimated deadline, the project manager made the decision to go ahead and launch the product while it was still in the prototyping phase. This created havoc, since a poorly develop product was released to an anxiously waiting market. The market replied, flooding to the company and the new product, but this came with great disappointment and expense. The product did not function as expected; it had numerous issues with stockouts and breakdowns. All these issues could have been avoided with proper internal communication and prototyping, but at the end, the poor decision drove the company further away from success.

It is clear that intervention with the focus on internal service quality (ISQ) is needed. The current state of the company indicates that there might be internal service quality gaps. It is important to understand that excellent external service quality is not possible when ISQ is neglected or insufficient. especially during the Covid pandemic and the era of globalisation when customer expectations are ever-increasing. It is important to understand that the way in which employees interact with each other can determine the success of the company.

1.2.5 Cross-functional departments

Figure 1 shows a holistic view of departmental relationships within the researched organisation.

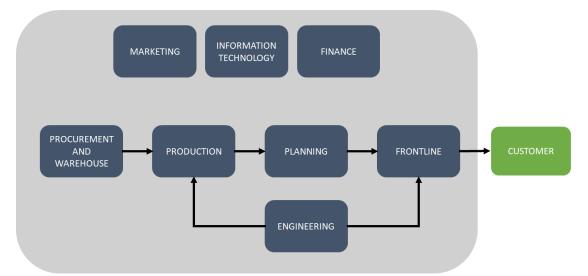


Figure 1: Departmental relationships within a window-blind manufacturing company

Frontline

The Frontline includes staff that works face-to-face with customers. They are the face of the organisation. It is important to understand the difference between direct and trade customers. Direct customer refer to a member of the general public, whereas trade customer refers to a business that distributes the organisation's product under an agreement. The frontline includes the following roles:

• Sales Representatives

Sales representatives converse directly with direct customers, excluding trade customers. They are the link between the organisation and the customer. Any service or product-related question is referred to sales representatives, who then take it upon themselves to source the necessary information to answer the customer. The sales representatives rely on Production, Warehouse and Procurement, Engineering and Planning to assist with answering customer queries.

• Front Desk

The front desk manages all trade customer order and information requests. They are the link between the trade customers and the organisation. Similar to the sales representatives, the front desk receives questions about the service and products. Sourcing the necessary information involves contacting functional department team members. The front desk rely on Production, Warehouse and Procurement, Engineering and Planning to assist with answering customer queries.

• Installation Schedulers and Installers

The Installation Department provides services to both direct and trade customers. They facilitate the installation of the products at the customer's premises. The department consists of installation schedulers and installers. The installation schedulers inform the customer that their order is ready for installation and engage with the customer to set a suitable date for installation. On the day of the scheduled installation, the installer contacts the customer to confirm the installation booking. When the installation has been confirmed, the installer will collect the products from the Production Department and transport

them to the installation site. At the installation site, the installer will carry out the installation and ensure the customer is happy with the products. If any customer queries arise from the installation, the installers will feed the information back to the respective functional department.

Production

The Production Department encompasses the blind and shutter product manufacturing assembly lines and dispatch. The Production departmental structure contains team leaders who report to a supervisor. The supervisors report to a production manager. The team leaders are responsible for their own manufacturing assembly line, whereas the supervisor oversees multiple assembly lines. Team leaders and supervisors ensure that products are produced on time and within a predetermined quality standard. If any issues occur, the Production Department seeks assistance from Planning, Engineering or Warehouse and Procurement.

Engineering

The Engineering Department encompasses Quality, Design and Systems Engineering. The main purpose of the Engineering Department is to support other departments within the organisation.

• Quality Department

The Quality Department assists in multiple areas and collects valuable information regarding organisational processes. The Quality Department consists of goods receiving inspection, waste management, non-conformance administration and final product quality. Goods receiving inspection is an important part of any manufacturing organisation. All raw materials need to be inspected for quality standard deviations before the order is accepted into the warehouse. Waste management hold valuable information for the organisation and allows production to control their raw material consumption. The waste team also plays a big role in the identification of production non-conformances and root-causes. Non-conformance administration is the data centre of the Engineering Department. All the service and product non-conformances and customer feedback are gathered and investigated by the non-conformance administrator.

• Design

The Design Department is responsible for controlling part and product designs. When production related issues occur and the Quality Department identified the root cause as design related, then a qualified design engineer intervenes.

• Systems

Systems include the order capturing and manufacturing job card creation software. The order capturing software is used by frontline staff to communicate customer order specifications with Planning and Production. A systems engineer is responsible for system changes and technical enquiries.

Technical

Technical support and queries are a substantial part of the window covering industry. Frontline staff often request material specifications and guidance with product applications. The technical support function is controlled by one product technical specialist who records frequently asked questions and sources information to assist staff with answers.

Planning

The purpose of the Planning Department is to received order requirements from frontline staff and communicate these to Production.

• Production Scheduling

All orders generated from the frontline staff need to be considered for the production schedule. Before the order is placed on the production schedule, the Planning Department enquires for information about raw material availability from the Warehouse and Procurement team. The production schedule then gets distributed to the Production Department if the raw material is available.

• Service Desk

The service desk checks and corrects all order processing errors. Order processing errors can easily occur when a frontline staff member captures a customer order. The process of correcting processing errors can be timeconsuming since corrections might affect product pricing and specifications. When corrections affect pricing and specifications, the service desk team has to contact the relevant frontline staff member to explain the errors found and discuss corrections.

Warehouse & Procurement

Warehouse and Procurement encompass the raw material management and purchasing. Warehouse is responsible for the safekeeping of stock and to ensure they communicate their stock levels with Procurement and Planning timelessly. All raw materials are issued to Production by the Warehouse. Procurement is concerned with the sourcing and buying of raw materials and consumables.

1.3 Research design and methodology

1.3.1 Research problem statement

The research problem statement describes the phenomena being studied. Against the background of the research, the research problem statement reads as follows: "Poor internal service quality negatively effects external service quality, resulting in a reduced customer retention and organisational profit."

1.3.2 Research question

The research question forming the foundation of this research reads as follows: "What internal service quality aspects negatively impact customer retention at a window blinds manufacturing company?"

1.3.3 Primary research objectives

- To establish the validity of the SERVQUAL instrument.
- To identify the critical internal customer and supplier relationships within a window-blind manufacturing company.
- To measure and analyse ISQ as perceived by the window-blind manufacturing company's employees.
- To assess the gaps between ISQ dimensions.

1.3.4 Research questions

• Is SERVQUAL a valid tool for measuring ISQ?

- What are the critical internal customer and supplier relationships within a window-blind manufacturing company?
- What are the gaps between ISQ dimensions of a window-blind manufacturing company?

1.3.5 Research process

The research process systematically guides a research study, with the aim of producing knowledge within the chosen field of study. The research process was as follows:

- 1. Preliminary scan of relevant literature in the field of study
- 2. Establish a supervisor/promoter working relationship
- 3. Get topic approval
- 4. Write and submit research proposal
- 5. Investigate the company background
- 6. Conduct an in-depth literature review
- 7. Undertake data collection
- 8. Undertake data analysis

1.3.6 Research methodology

Qualitative methods generally aim to understand experiences and attitudes of research participants or a population. The researcher's personality plays a much greater role in qualitative research than in quantitative research which means that the quality of qualitative research depends on the researcher's ability to interpret data after its acquisition. The quality of quantitative research, in contrast, depends on the quality of raw numerical data (McCusker & Gunaydin, 2014).

According to Watson (2014), quantitative research is the systematic investigation of a social phenomenon using numerical or statistical data. When quantitative research is employed, the researcher assumes that the phenomena being studied can be measured. Quantitative research, by applying deductive reasoning, has the ability to formally test theories by hypotheses formulation and the application of statistical analysis. When research is deductive, it measures a phenomenon and applies analysis. Conclusions can be drawn from the analysis and recommendations can be made. When a single research study integrates both quantitative and qualitative data, it is known as mixed-methods research. Novice researchers often tend to find mixed-methods research challenging due to its demand for skill and resources. When considering use of a mixed-methods research design, the researcher should base the decision on the potential value that can be added by combining both qualitative and quantitative data collection methods to address specific research questions. However, mixed-methods research should not be employed simply because it is possible to collect both narrative and numerical data in relation to the research question (Halcomb & Hickman, 2015).

This research study was quantitative in nature. The researcher made the decision based on the assumption that the phenomena could be measured, and numerical data could be collected and analysed to address the research questions.

When the researcher can manipulate the independent variable and study the effect on a dependent variable, it is known as an experimental study. Survey design studies are normally involved with the distribution of questionnaires or conducted by observation or interview. There is a fundamental difference between surveys and experiments. Experiments can distinguish between cause and effect whereas surveys can describe samples of populations by gathering large amounts of data. Surveys can be classified as either cross-sectional or longitudinal. Longitudinal studies are complex, requiring repeated surveys, and typically span over several years (Watson, 2014).

Positioned in the quantitative research paradigm, a cross-sectional research study was employed. Cross-sectional research involves the obtainment of information with regards to variables in different contexts, but at the same time. These studies are normally employed when there is a time or resource constraint. The data is typically collected over a short period of time before analysis and reporting are undertaken.

This study adopted a survey design to measure the gap between ISQ dimensions at the window-blind company since survey studies aim to provide a broad overview of a representative sample of a large population and are quantitative in nature (Mouton, 2001).

The population of focus was permanent white-collar employees at a windowblind manufacturing company. The sample size was 43 employees from various functional departments within the window-blind manufacturing company. Based on the small size of the population, the research sample was 43 and the unit of analysis will be people. Sample variables included the following:

- age;
- gender;
- department; and
- employment duration.

1.4 Ethics

Written permission to approach employees and conduct research was requested and granted from the organisation under study. The researcher explained the purpose of the research to the participants and requested permission to analyse and store data gathered from participants. All participants were informed that participation is voluntary, and participation will not relate to possible unemployment. Research participants' right to privacy was considered and they could refuse to participate in the study. Information obtained from participants was confidential, with the anonymity of participants ensured. As all information obtained was related to the study, under no circumstances was unnecessary personal information about participants obtained. No participants were harmed physically, emotionally or psychologically. All details of the research have been disclosed where required and informed consent has been requested from all participants.

Since the loss of data can jeopardise the study, it was essential that careful consideration was given to the storage of research data, especially after loading the data into any of the packages used. To ensure the safety of data, the researcher employed good practice and created master copies of the data. The master copies were not altered. Backup copies were created of the master copies and stored safely in the case of data loss. Files do not contain information that could harm or identify individual participants and all data stored have been password-protected (Watson, 2014).

Research integrity was insured through adherence to high technical standards. Under no circumstances was any data fabricated or falsified to suit a desired conclusion, and all consulted sources are acknowledged. All study findings and methodological constraints have been identified and indicated. No research results or findings have been misinterpreted and all the details, theories, methods and research designs have been disclosed.

1.5 Chapter and content analysis

The chapter and content analysis summarises the content addressed in the chapters to follow. The research study contained five chapters, with the following content addressed.

Chapter 1: This chapter includes an introductory overview of the issue investigated, accompanied by a motivation of the importance of the research study. The background of the research problem follows, covering the business history, culture, company structure and current state of the business. The chapter concludes with the research design and methodology statements, including the research problem statement, research questions and ethical considerations.

Chapter 2: This chapter includes an overview and critical analysis of the relevant literature, assisting the researcher with gathering information and putting together the best design to understand and solve the research problem. The literature review covers ISQ-related topics and gradually assists with the indepth understanding of past research methods and research results.

Chapter 3: This chapter includes the research design and methodology. It identifies the key concepts and variables of the study, discussing the instruments used to measure the key variables and explaining the sampling design and techniques employed. The data collection process will also be detailed and include the methods used to gain access to subjects and the settings of the data capturing.

Chapter 4: This chapter includes the demographic characteristics of the participants and descriptive statistics aiming to aid the researcher in answering the secondary and primary research questions. Data trends and patterns are

identified and discussed in an effort to understand the phenomenon being studied.

Chapter 5: This chapter include the reviews of the chapters and correlation between the literature and the research study results. Recommendations are made and the significance of the research is explored. Possible future research is suggested, and the chapter ends with a conclusion.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

A literature review assists with understanding the theoretical underpinning of a research problem. This chapter covers topics ranging from the origin, development and the application of service quality research aimed at grasping the idea of its measurement. The topics include disconfirmation theory, service quality, SERVQUAL, service profit chain and ISQ. The literature review references research papers older than five years because the referenced papers contained fundamental concepts and the most applicable research to date.

2.2 Expectancy disconfirmation theory

Expectancy disconfirmation theory (EDT) is a substantial theory that originated in the study of customer behaviour. The theory holds that customers can develop different expectations of product or service quality from personal experiences, advertising and word of mouth. These different expectations are then applied by the customer in setting a standard for subjective ratings of satisfaction judgement. Van Ryzin (2013) suggests that expectancy disconfirmation is a determinant of customer satisfaction. Disconfirmation refers to the resulting gap or difference between expectations and performance. It can either be positive (which is true when performance exceeds expectations) or negative (when performance fall short of expectations), as seen in Figure 2.

These differences in expectations may assist with the explanation of how customers differentially perceive – and then judge – the quality of the same goods or services (Van Ryzin, 2013).

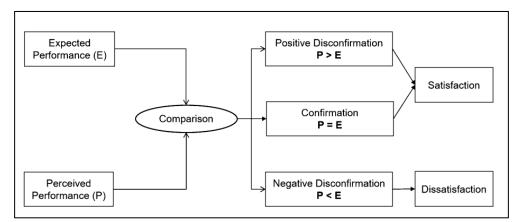


Figure 2: Confirmation-disconfirmation paradigm (Homburg et al., 2021)

2.3 Service quality

Service attributes are intangible, which means they cannot be inventoried or carried in stock. Companies rarely have two or more services that are the same, making the outputs of these services heterogeneous. The term *service* is quite broad and can cover diverse industries, but the definitions share the fact that customers are actively involved in the production of these services and in creating problems for service providers. For example, the time taken to serve customers can be variable, which can contribute to difficult capacity planning. Specific customer demands contribute to process variability and increase the difficulty of producing a quality service. It is important that companies design, manage and promote positive interactions with customers to combat these challenges (Foster, 2013).

The concept of leadership is key to the success of service quality. Key aspects of leadership in service delivery involves the following:

- Service vision When leaders view service quality as one of the most important contributions to the profitability and success of the business. When choosing improvement strategies, these leaders always see quality as the winning strategy. Only when an organisation develop a passion for service quality can they 'win' in services.
- *High standards* Leaders with high standards are usually focussed on small but important details.
- In-the-field style of leadership Owners and leaders often isolate themselves in the business, while service leaders operate in the field where the action is (Foster, 2013).

Parasuraman, Zeithaml and Berry (1985) consider *quality* an elusive and indistinctive construct. The ability to be highly competitive depends on the ability of an organisation to provide high quality services. Only if an organisation has an accurate understanding of the desires, needs and wants of customers can it provide a high-quality service. Even manufacturing firms must consider service quality throughout the supply chain after product requirements have been met. Being able to satisfy customers will increase customer loyalty, revenue and profits (Foster, 2013).

2.4 Measuring service quality

Research in management and quality has recurringly covered the topic of measuring service quality (Gronroos, 1984; Parasuraman et al., 1988; Cronin & Taylor, 1992). Since organisations need to evaluate their performance and understand customer requirements, it is important to continuously develop valid instruments capable of systematically performing the required evaluations (Cronin & Taylor, 1992). The following approaches are discussed in terms of the service quality measurement.

2.4.1 Expectancy-disconfirmation approach

As mentioned, disconfirmation theory considers the gap between expectations and perceptions. On the foundation of disconfirmation theory, Parasuraman, Berry and Zeithaml created a popular service quality measuring tool known as SERVQUAL. SERVQUAL measures the quality of a service based on the difference between customer expectations and actual perceptions of the service (Ingaldi, 2018).

Perceptions are evaluated opinions and can differ depending on customer beliefs and requirements thereby playing a significant role in determining satisfaction. Customer perceptions can be subjective, but enterprises can extract useful data from perceptions when developing marketing strategies. Customer satisfaction is interrelated with customer perception since a decrease in the gap between customer expectations and perceptions correlates with an increase in customer satisfaction (Ingaldi, 2018).

SERVQUAL can be used to assess the quality of various services and often allows organisations to direct quality improvements, increase customer satisfaction and bolster organisational competitiveness.

2.4.2 Performance-only approach

Researchers have verified that customers raise their expectations when asked to rate their expectations. This leads to customer bias when evaluating service quality and satisfaction. The 'performance only' approach was created to combat these weaknesses of SERVQUAL (Ingaldi, 2018).

Cronin and Taylor (1994) argue that customer expectations are volatile and ambiguous, which led to the creation of SERVPERF. SERVPERF only

examines customer perception of a service, eliminating subjectivity with regards to unreasonable expectations about the service. The 'performance only' approach compares service quality to customer perception, increasing the ease of use and practicality.

2.4.3 Importance/performance analysis approach

The importance/performance analysis (IPA) method, designed by Martilla and James in 1977, was intended as a method to measure customer expectations and the importance of features affecting service quality (Martilla & James, 1977). According to Wong, Hideki and George (2011), IPA has been utilised in various industries with success but is often neglected by researchers. The method requires customers to respond to two types of scaled questions.

The first type of question is related to the importance the customer puts on certain dimensions of the service. The second type of question relates to the level of implementation of these service dimensions. The results from the questions are then summarised using an importance/performance map divided into four quadrants. As seen in Figure 3, the quadrants assist with the analysis of the method.

Quadrant I represent attributes that must be the priority for improvement. This quadrant, known as the "area of urgent needs", is vital for the organisation to pay special attention on these attributes.

Quadrant II represents the pillars and strengths of the organisation. No serious attention is required by the organisation; only actions necessary to maintain the attributes.

Quadrant III represents all non-important attributes which do not pose any threat to the organisation.

Quadrant IV represents overly emphasised attributes. Organisations can reflect on these attributes and instead, reallocate resources to improve quadrant I.

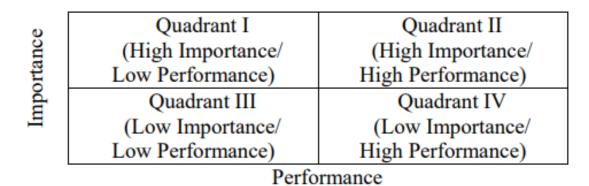


Figure 3: Importance/performance map (Martilla & James, 1977)

The IPA method can be used by organisations to identify and focus their attention on service attributes that customers regard as highly important. It also assists in determining the level of customer satisfaction related to certain service attributes.

2.4.4 Critical incident technique

The critical incident technique (CIT) we know today is a result of work by Flanagan (1954). The technique is defined as a set of procedures facilitating the collection of information about customer behaviour in relation to defined criteria. The information collected facilitates problem solving and the development of broad psychological principles.

The incident refers to an event where human action is observed and conclusions draw (Bitner, Boom & Tetreault, 1990). A critical incident in this context is the interaction between an employee and a customer.

CIT involves direct interviews with customers regarding a collection of events. These events are then analysed and arranged in appropriate schemes, allowing for the detection of issues and causes. During the interview, customers are asked to reflect on past events that contributed to feelings of either satisfaction or dissatisfaction. The disadvantages of CIT include the time-consuming nature of the method and the challenge of analysing results obtained from a wide range of customers.

According to Ingaldi (2018), CIT is an appropriate tool to measure customer satisfaction and dissatisfaction of offered services. The research results mainly contribute to the design of services in order to meet customer requirements and

expectations. Similar to other service quality methods, the level of customer satisfaction is determined by the difference between customer expectations and perceptions of the service.

2.4.5 Mystery shopper

The Mystery Shopper method, established in the 1940s, rose in popularity in the 1970s. This method analyses service quality through observations made by qualified observers. The method has been used in multiple commercial and service enterprises and is commonly used by enterprises operating in networks. According to Kirkpatrick (2001), this method is significantly beneficial in the establishment and implementation of consistent policies related to sales and brand image. The topics studied using the Mystery Shopper approach can vary from organisation to organisation and are primarily directed to meeting the needs of the research requestor. It is recommended that Mystery Shopper projects be carried out over a period of time to monitor changes over time (Snarski, 2021).

This method involves approaching the service provider and requesting the service under study. Using a prepared questionnaire for describing the service, the researcher evaluates the following elements:

- place of service provision;
- presentation of products;
- customer service; and
- mechanisms for building customer loyalty.

The results of the study are normally received within a report addressed to the organisation. The researcher plays a critical role in the effectiveness of the Mystery Shopper method and should be able to memorise elements of the service while interacting with the organisation's employees in a controlled facility. Since the method involves the collection of data by one observer, the argument of evaluator subjectivity must be considered. Although the method has its disadvantages, it is praised for speed and ease of use (Ingaldi, 2018).

2.5 SERVQUAL

2.5.1 SERVQUAL theory

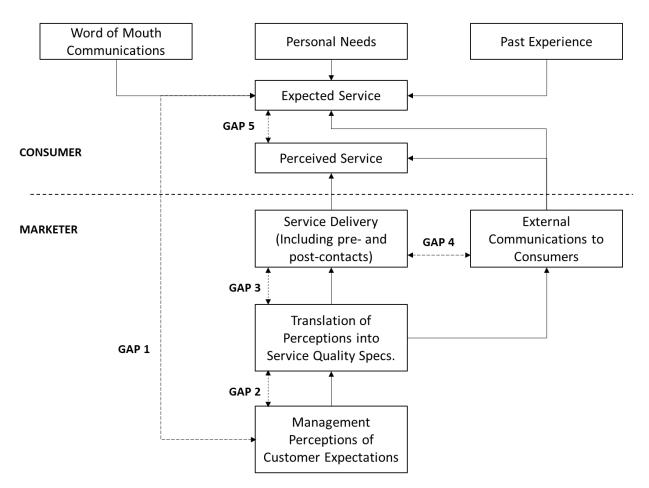


Figure 4: SERVQUAL model also known as "the gap model" (Parasuraman et al., 1985)

Parasuraman et al. (1985) developed the SERVQUAL model for measuring service quality, also known as the expectation-perception gap model, as seen in Figure 4. According to Foster (2013), the differences between the desired levels of performance and the actual level of performance is the 'gap'. Extensive research on the topic identified five dimensions: tangibles, reliability, responsiveness, assurance and empathy (Parasuraman et al., 1988).

Citing Parasuraman et al. (1985), Foster (2013) argues that the following gaps must be considered when measuring service quality.

Gap 1: Customer expectation – management perception gap

Gap 1 refers to the difference between the actual expectations of customers and management's idea of customer expectations. Improving a process does not always improve customer service. It can be difficult for managers to break out of an internal, process-oriented view.

Gap 2: Management perception – service quality specification gap

Gap 2 occurs when there is a difference between management's expectations and service quality specification. When managers truly understand what the customer wants, only then can they develop a system which will potentially meet customer needs. If a firm does not specify customer requirements when developing a well-defined system, there is no way to ensure that the customer's specifications and management's expectations are aligned.

Gap 3: Service quality specifications – service delivery gap

Even with well-defined service specifications, service quality is still not guaranteed. Gap 3 occurs when inadequate training, communication and the preparation of contact personnel lower the quality of service delivered.

Gap 4: Service delivery – external communications gap

Gap 4 refers to the difference between the service delivery and external communications with the customer. External communications include word of mouth and advertising. This gap can lead to a very serious negative customer perception of service quality.

Gap 5: Expected service – perceived service gap

Gap 5 refers to the difference between expected and perceived services. The customer's perception of service quality is related to personal expectations of the service. In closing the fifth gap, it is imperative to first close gaps 1 to 4. These gaps can be closed through system design, workforce training in outstanding and consistent customer service, and careful communication with the customer. If these gaps exist, low perceptions of customer service will continued (Foster, 2013).

2.5.2 SERVQUAL advantages

The SERVQUAL survey has been applied by many organisations as an off-theshelf approach to understanding the quality of their services. The advantages of SERVQUAL include the following:

• It is a standard method of assessing various service quality dimensions.

- It has been proven valid by several service situations.
- It is reliable since readers interpret the questions similarly.
- It consists of 22 items, making it parsimonious. Basically, customers and employees can fill the surveys out quickly.
- It contains a standardised analysis procedure facilitating interpretation and results (Foster, 2013).

According to Asubonteng, McCleary and Swan (1996), SERVQUAL is confirmed to have face validity with minor word changes. The extent to which a test measures what it is intended to measure is known as *face validity*. So, for example, if most people agree that items from a test appear to measure what it was intended to measure, the test will have a high face validity (Johnson, 2013).

Babakus and Boller (1992, as cited by Asubonteng et al., 1996) conducted preliminary discussions with customers and extensive interviews with executives confirming the sustainability of SERVQUAL for a utility company. According to Asubonteng et al. (1996), SERVQUAL dimensions and elements are appropriate for the assessment of service quality in various settings.

2.5.3 SERVQUAL critique

According to Asubonteng et al. (1996), service quality critique focusses on the dimensions and linkage between satisfaction and quality. However, researchers are in disagreement over the linkages between quality and satisfaction. One group supports the proposition that quality leads to satisfaction, whereas the second group supports the idea that satisfaction leads to quality. The third group believes that quality and satisfaction are determined by similar attributes.

The issue regarding the dimensions of SERVQUAL is related to the quantity of basic dimensions. Previous studies replicated the research of Parasuraman et al. (1988) and found more than five dimensions. Studies have also suggested fewer dimensions of service quality. Even with no clear agreement on the linkages, dimensions and attributes of quality and satisfaction, there is, however, consensus that service quality attributes are both measurable and variable (Asubonteng, et al., 1996).

O'Connor et al. (1993, as cited by Asubonteng et al., 1996), reported that the reliability dimension of quality was not a significant predictor of customer satisfaction and reliability issues with the tangibles scale.

Findings from SERVQUAL research studies differed from the original study conducted by Parasuraman et al. (1988) in respect to its discriminant validity. According to Rönkkö and Cho (2020), discriminant validity is a validation technique originating from the idea that tests can be invalidated by high correlations with unrelated tests.

The studies argue that there is a greater overlap between the SERVQUAL dimensions as originally implied. The foundation of the argument originated from the differences in factor analysis results which are not the same across studies. The differences may be due to different data collection and analysis procedures or that respondents may consider SERVQUAL dimensions as conceptually unique. However, across-dimension similarities within each setting results in differences in the number of empirically derived factors across studies (Asubonteng et al., 1996).

Carman (1990, as cited by Tseng & Hung, 2013) suggests that SERVQUAL has a context-specific scale and that dimensions can vary across industries and companies. Although SERVQUAL have been criticised on both operational and theoretical grounds, it remains the dominant framework for conducting a service quality study (Tseng & Hung, 2013).

According to Asubonteng et al. (1996), there is little proof of SERVQUAL's convergent validity, since the factor-loading patterns in replicated studies do not match the original study conduct by Parasuraman et al. (1988). Factor loading is related to the factor analysis technique. The factor analysis technique is used by researchers to reduce the number of variables into fewer numbers of factors. The technique puts variables into a common score by extracting the maximum common variances from all the variables. Factor loading refers to the correlation coefficient of the variable and factor. Generally a loading factor of 0.7 or higher indicates that the factor extracts enough variance from that variable (Statistics Solutions, 2022).

One of the main critiques of SERVQUAL is the usefulness of the expectations questionnaire and the appropriateness of gap score analysis (Asubonteng et

al., 1996). Cronin and Taylor (1992) conducted research measuring the performance of SERVPERF against SERVQUAL. SERVPERF was created by Cronin and Taylor (1992) based on the argument that the expectations aspect of SERVQUAL was fairly useless. Thus, the SERVPERF questionnaire used SERVQUAL as a foundation, but excluded the expectations questionnaire. The findings from the research conducted by Cronin and Taylor indicated that the SERVPERF questionnaire produced better results than SERVQUAL. Durvasula et al. (1999, as cited by Tseng & Hung, 2013) found that in the ocean freight service, SERVPERF score's psychometric properties had more prediction ability than the SERVQUAL gap scores.

2.5.4 SERVQUAL applications

Golrizgashti (2020) used SERVQUAL in conjunction with the Fuzzy Kano model to assess the after-sales service within the home appliance industry. The service quality attributes were defined by focus group meetings. These attributes were then allocated to the appropriate dimensions of service quality. The study reported the SERVQUAL tool identified the strengths and weaknesses of the after-sales service. The fuzzy Kano model categorised the defined strengths and weaknesses.

Kano, Seraku, Takahaski and Tsuji (1984: page 3), as quoted by Golrizgashti, 2020), suggest that "...sometimes service attributes may exhibit a non-linear pattern and because of this non-linearity, perceived service quality attributes may not always create the expected satisfaction or may cause dissatisfaction". According to Golrizgashti (2020), integrating the Kano model with other approaches in quality can improve the quality in manufacturing.

The SERVQUAL dimensions were validated using the factory analysis, which indicated that all the dimensions proposed by the original SERVQUAL study affected the after-sales service quality. The research results indicated the greatest gap between the assurance dimension and the lowest gap between the empathy dimensions. The study proposed practical solutions to improve customer satisfaction based upon the final research results.

Meidutė-Kavaliauskienė, Vasilienė-Vasiliauskienė and Vasilis Vasiliauskas (2020) examined the impact of logistics service quality and the impact it has on the satisfaction of companies working with different categories of goods. Their

research study utilised the SERVQUAL model to analyse the evaluate the quality of logistics services. The five original SERVQUAL dimensions were used, and the SERVQUAL questionnaires were distributed among respondents from three product categories. The results of gap analysis indicated that logistics companies should focus on reliability of their services, as this is the area with the biggest gap score.

Salleh, Abdullah, Che Nawi and Muhammad (2019) investigated the impact of service quality on customer satisfaction within the Islamic banking industry. The research employed convenience sampling to establish the sample studied. SERVQUAL questionnaires were distributed to customers during their visits, and only 20 returned questionnaires were deemed usable. The researchers used Statistical Package for Social Science (SPSS) to analyse the research data. The SERVQUAL questionnaire was tested for reliability using Cronbach's alpha, and the results indicated the SERVQUAL questionnaire was fit for analysis. The study determined a significant relationship between empathy and customer satisfaction, while no link was apparent between customer satisfaction and the rest of the SERVQUAL dimensions.

2.6 Service-profit chain

Service-profit chain is a term use to describe the establishment of a relationship between profitability, customer loyalty and employee loyalty, productivity and satisfaction. As evident in Figure 5, customer loyalty primarily stimulates profit and growth. An increase in customer satisfaction correlates with an increase in loyalty. The value of services provided to customers influences satisfaction, since value is a direct result of satisfied, productive and loyal employees. Highquality support services and policies that enable employees to deliver quality services to customers, in return cultivate employee satisfaction (Heskett et al., 1994).

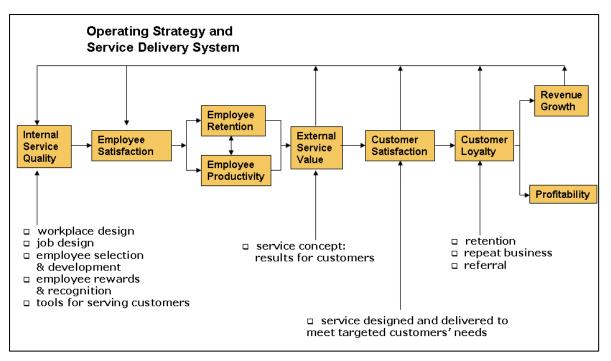


Figure 5: Service-profit chain (Heskett et al., 1994)

When considering the service-profit chain conceptual pattern, the design of the workplace and content, the tools for customer service and the human resource management of employees all are intwined with the quality of internal services. The mismanagement of internal services will undermine the entire service chain to customers (Bouranta, Chitiris, & Paravantis, 2019). Improvements made to ISQ contribute to improved external service value (Kang et al., 2002).

2.6.1 Customer loyalty

Customer loyalty is commonly defined as the series of purchasing behaviours that systematically favour a single entity over competing entities, due to a collection of attitudes. Conceptualising customer loyalty is complicated. Although marketing research and practice have highlighted the importance of customer loyalty, researchers continue to struggle to reach consensus on how to define it. Most studies agree that customer loyalty is a complex and multidimensional construct (Homburg et al., 2021).

Customer loyalty is often conceptualised by differentiating between two theoretical elements – loyalty intentions and loyalty behaviours (Figure 6). Four factors define both these elements, including repurchase, positive word of mouth, cross-buying and price increase acceptance. Achieving sustainable high sales success with an existing customer base is related to systematic assessment and management of customer loyalty and customer satisfaction levels. It is also important to understand that the relationship between loyalty and customer satisfaction might be significantly weaker under high competition (Homburg et al., 2021).

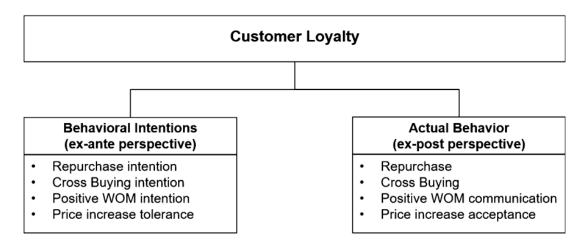


Figure 6: Conceptualisation of customer loyalty (Homburg et al., 2021)

2.6.2 Customer satisfaction

Customer satisfaction is known as a measurement to determine how happy customers are with a company's products or services (American Society for Quality, 2020). According to Oliver (2010), companies struggle to define customer satisfaction with regards to their industry. The reason for studying customer satisfaction is that it is fundamental to the wellbeing of the customer, to the profits of the organisation and to the stability of economic and political structures.

Every organisation knows the importance of satisfying a customer and continually striving to enhance the attainment of satisfaction. Total quality management (TQM) and quality function deployment (QFD) are related to organisational strategies and changes and encouraged to make a firm more 'customer-friendly'. Consequently, it is believed that these practices will enhance the attainment of satisfaction, if they are followed.

According to Oliver (2010: page 3), "these managerial practices cannot guarantee satisfaction any more than the best efforts of a good coach can guarantee consistent victories in sport". Managers can only devise strategies from the best data available at the time and hope they function as intended. It is argued that adopting a more behavioural focus may enable management to understand the inside of a consumer's mind and thus be able to better satisfy each customer.

2.6.3 External service value

External service value is a synonym of ESQ. Value in this context is a relative concept as it is based on both customer expectations and perceptions of the delivered service. Value is a function of cost and results achieved for the customer, which is why organisations measure value using feedback from customers related to high and low satisfaction levels. Since emphasis is on the link between customer satisfaction and external service value, more organisations empower and support their frontline staff to customise their approach in service delivery and customer complaint resolution (Heskett et al., 1994).

2.6.4 Employee retention

Employee retention is a voluntary organisational strategy to create a working environment that engages employees for the long term. The purpose of retention is to prevent capable and competent employees from leaving the organisation, as this could potentially negatively impact productivity and service delivery. The opposite of employee retention is employee turnover. When employees leave their jobs and must be replaced, this is employee turnover. The exercise of replacing existing employees can be costly and destructive to an organisation and its services. Often these employees leaving the organisation migrate to competing organisations and share trade secrets and knowledge (Samuel & Chipunza, 2009).

Employee turnover can be classified as either functional or dysfunctional. Functional turnover is when low performing employees leave the organisation and high performing employees stay, assisting with the reduction of suboptimal organisational performance. Dysfunctional turnover is the opposite of functional turnover: when high performing employees leave the organisation, it decreases

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the organisational productivity and can jeopardise the realisation of key organisational goals and objectives (Samuel & Chipunza, 2009).

2.6.5 Employee productivity

According to Hanaysha (2016), organisational success depends on employee productivity. To explain productivity simply, if an organisation gains the maximum output with minimum costs, it is productive. Scholars often describe *productivity* as the ability to carry out an activity or task within predetermined accuracy standard, cost, completeness and speed. Citing Ferreira and du Plessis (2009), Hanaysha (2016) describes employee productivity as the time spent by an employee executing duties within the scope of expected outcomes determined by a job description.

When employee productivity increases, it favours the organisation in terms of competitive advantage, achievement of organisational goals and profitable financial results. Conversely, a decrease in employee productivity can have a negative effect of the organisation. Citing Michac (1997), Hanaysha (2016) mentions several reasons for decreased employee productivity, including absence of written performance standards, poor planning and motivation, ineffective training by the organisation, frequent change, insufficient communication at various levels and an overall undesirable work environment.

2.6.6 Employee satisfaction

Citing Spiro and Weitz (1990), Jeon and Choi (2012) argue that customers' perceptions of business interactions are shaped by the behaviour of satisfied employees as satisfied employees often show signs of friendliness, empathy and enthusiasm. Increased levels of employee satisfaction have a positive effect on customer perception of external value. Citing Schlesinger and Zornitsky (1991), Jeon and Choi (2012) suggest that employees believe they can deliver excellent service when higher levels of job satisfaction are present.

2.7 Internal service quality

Internal service quality (ISQ) is defined as the perceived quality of internal services between employees or organisational units within an organisation (Sirvastava & Prakash, 2019). Considered a key driver of job satisfaction, employee loyalty and organisational performance, poor levels of ISQ can damage employee commitment to the organisation (Sharma, Kong, & Kingshott, 2016).

According to Hallowell, Schlesinger and Zornitsky (1996), for an organisation to deliver quality external services, it must first be able to satisfy employees with the quality of internal services. Thus, ISQ is regarded as the satisfaction shown by employees for service obtained by internal suppliers (Hallowell et al., 1996).

Recent studies have confirmed the relationship between employee satisfaction and internal service quality. An increase in employee satisfaction is directly proportional to an increase in internal service quality (Syahidul, Achmad, G. N. & Hudayah, S., 2020; Abdullah *et al.*, 2020; Samadara, 2020; Al-Ababneh, M. M., Masadeh, M. A., Al-Shakhsheer, F. J. & Habiballah, M. A., 2018).

2.7.1 Measuring internal service quality

Reynoso and Moores (1995) conducted the first research using the SERVQUAL instrument to measure ISQ. Since then, research on ISQ has employed the SERVQUAL questionnaire and tested its validity and reliability (Kang *et al.*, 2002; Brandon-Jones & Silvestro, 2010).

SERVQUAL have been foundational for measuring service quality. In 2000, Frost and Kumar published a paper aiming to design a conceptual model known as INTSERVQUAL (Frost & Kumar, 2001). The model, based on the original SERVQUAL model proposed by Parasuraman *et al.* (1985; 1988; 1991), explored the role of service quality in an internal marketing setting. A large international airline was used as the service context, and the results indicated that the scale can be successfully used to assess ISQ.

Kang *et al.* (2002) modified the SERVQUAL instrument for a service setting. The research empirically tested the appropriateness of a modified SERVQUAL instrument for measuring ISQ.

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Brandon-Jones and Silvestro (2010) conducted research to test and evaluate the respective benefits and limitations of the gap-based and 'perceptions only' approaches. The two approaches were evaluated in terms of validity and reliability, and the researchers found that both measures are reliable and valid to measure ISQ.

Customer requirements are the driving force behind a competitive environment. In order for organisations to survive and capitalise, more focus must be on quality services and customer satisfaction. Thus, service quality can serve as a competitive advantage. Internal service quality affects customer satisfaction and the ability of an organisation to produce quality external services to customers.

2.8 Conclusion

It is evident that EDT is the foundation on which service quality and related measures are built. Service quality, an expanding research area, is applicable in almost every industry. The measuring aspect of service quality has kept researchers engaged with the phenomenon due to its potential to contribute to organisational success through customer satisfaction. ISQ is a branch of service quality that requires extensive research but benefits from the foundation that service quality has provided. The foundation would include the establishment of SERVQUAL, a valid tool to be used for the measurement of ISQ.

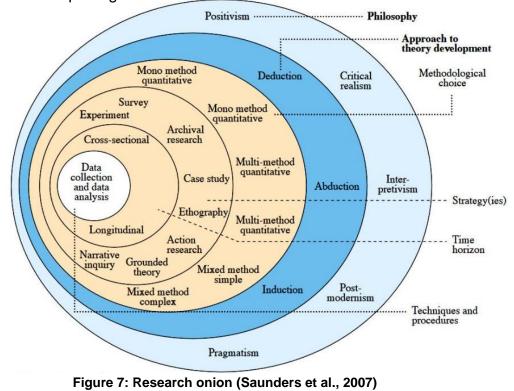
The chapter briefly explained EDT and covered service quality and its measurement in depth. SERVQUAL was also discussed, and the service-profit chain explained in detail. ISQ research has been found to be limited, but the researcher covered the definitions and the measurements of ISQ.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

According to Singh Brar, Jain and Signh (2014) research is a structured enquiry to solve problems by utilising an acceptable scientific methodology. Scientific methodology includes the systematic observation, classification and interpretation of a phenomenon. Undertaking research implies that the study is within a framework containing a set of philosophies, that techniques and procedures are valid and reliable, and that the study is designed to be objective and unbiased. The research onion is a well-known concept among researchers (Figure 7). Saunders, Lewis and Thornhill (2007) introduced the concept of the research onion and referred to the core of the onion as data collection and analysis techniques. The purpose of the research onion is to assist the researcher with explaining the choices made during all stages of the research process, thereby increasing the credibility and seriousness of the research conducted (Saunders et al., 2007).

This chapter identifies the key concepts and variables of the study, discusses the instruments used to measure the key variables, and explains the sampling design and techniques employed. The data collection process will also be detailed, including the methods used to gain access to subjects and the settings of the data capturing.



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3.2 Research philosophy

According to Saunders et al. (2007), *research philosophy* refers to the development of knowledge based on a system of beliefs and assumptions. It is inevitable that a researcher will make a variety of assumptions when preparing or conducting a research study. These assumptions can be based on realities encountered, known as ontological assumptions.

Human knowledge is known as epistemological assumptions, and axiological assumptions refers to how the researcher's own values influence the research process. All these assumptions shape the researcher's understanding of the research questions and the interpretation of findings. Well selected assumptions can contribute to a research study constituting a credible research philosophy.

The five major philosophies are discussed below.

3.2.1 Positivism

The philosophical stance of the natural scientist that promises unambiguous and accurate knowledge is known as positivism. Positivism produces law-like generalisations by working with an observable social reality. Positivism is strictly focused on the scientific empiricist method design which yields pure facts and data uninfluenced by human bias or interpretation.

3.2.2 Critical realism

The philosophy focusses on the explanation of what is seen and experienced in terms of underlying structures of reality, structures that shape observable events. Reality is the most important consideration for critical realists. Although reality is perceived as external and independent, it is not directly accessible through observation and knowledge. This philosophy understands the world in two steps: firstly, events and sensations we experience; secondly, the mental processing after the experience. The second step is usually referred to as 'retroduction'. According to Saunders et al. (2007), if the researcher believes that the bigger picture should be considered when only a small part is seen, this might be leaning towards the critical realist philosophy. Critical realist researchers strive for the awareness of how socio-cultural backgrounds and experiences influence their research. They normally seek to minimise bias and to be objective as possible.

3.2.3 Interpretivism

The interpretivism philosophy emphasises the fact that humans create meaning and thus need to be considered differently than physical phenomena. Interpretivists, concerned about meaning, argue that humans and their social world require a different way of studying, differentiating this from natural science research. Interpretivism challenges the positivist purpose to discover law-like generalisations. These researchers believe that humanity is complex but that reducing the complexity would eliminate any opportunity to create new and rich understanding of a phenomena. When conducting research, the interpretivist needs to enter the social world of participants to understand the world from their frame of mind.

3.2.4 Postmodernism

The role of language and power relations is emphasised by the postmodernist philosophy. It seeks to give voice to marginalised views and question accepted ways of thinking. Postmodernists emphasise the primacy of movement, flux and change, while rejecting the modern objectivists. They see order as foundationless and provisional and recognise the partiality and inadequacy of language. Language privileges and emphasises aspects while marginalising and suppressing what it claims to describe. Thus, through language there is no true 'right' way to describe the world. Since power relations dominated by ideologies shape collective choices, postmodernist researchers hunt power relations that sustain dominant realities to expose and question their existence.

3.2.5 Pragmatism

When researchers question the relevance of the difference between philosophies, they might be leaning towards the philosophy of pragmatism. Pragmatists only believes in the relevance of concepts when they support action. This philosophy values reality as practical effects of ideas and valuable knowledge that enable successful actions. Pragmatists start with a problem and conduct research that aims to contribute practical solutions which inform future practice.

The researcher employed the positivist approach to understanding the phenomena being investigated, in a attempt to draw lawlike generalisations from the observable social reality under study.

3.3 Sample design and sampling methods

There are two main types of sampling techniques in research: probability sampling and non-probability sampling. Probability sampling is also known as random sampling since the units studied have an equal chance of being chosen from a large population. Non-probability sampling, on the other hand, is entirely based on the researcher's judgement (Sharma, 2017).

Purposive sampling is a non-probabilistic sampling technique which relies on the researcher's judgement when selecting units to be studied. It allows researchers to make justified generalisations from the sample under study. Purposive sampling is highly prone to researcher bias, but only when judgements are ill-conceived or poorly considered. Total population sampling is a purposive sampling technique. Since the research population is considered small, the researcher employed total population sampling as the research sampling technique (Sharma, 2017).

3.4 Design of questionnaire

According to Brown et al. (1993, as cited by Asubonteng et al., 1996) the SERVQUAL instrument was produced in relation to recommended procedures for the development of valid and reliable measures of marketing constructs. Findings from research by Parasuraman et al. (1985) concluded that the evaluation of service quality is a product of customer comparison between the expectations and performance of the service provided, based on 10 dimensions of service quality. The process of developing the SERVQUAL questionnaire included a set of 100 questions asking customers to rate the expectations and the perceptions of a service. These 100 questions were written to reflect specific attributes of each of the 10 service quality dimensions. Data analysis involved grouping the sets of questions together that appeared to measure the same dimension of service quality.

The next step was to employ factor analysis to determine which questions actually measured each dimension. Any questions that did not clearly relate to one of the dimensions in the data were discarded. The factor analysis resulted in a 22-question scale that measures five dimensions: responsiveness, assurance, reliability, empathy, and tangibles. A total of 44 questions are used: 22 questions measuring expectations and 22 parallel questions measuring

perceptions of the service. The Likert scale was the preferred choice of the researchers due to its general acceptability and use in academia (Asubonteng et al., 1996).

After establishing the questionnaire, it was tested by Parasuraman et al. (1988) to ensure reliability and validity. The tests for reliability employed the coefficient alpha method. Coefficient alpha measured the extent of internal consistency between, or correlation among, the questions related to each service quality dimension. According to Asubonteng et al. (1996), a value below 0.6 is low reliability, where a value above or equal to 0.90 is highly reliable. The researchers concluded the SERVQUAL questionnaire to be reliable.

Validity testing was challenging since a proven criterion was not available. Thus, the research approach measured the agreement between a measure of interest. The agreement researched was between SERVQUAL and a second measure of quality. Evidence of convergent validity was provided by Parasuraman et al. (1988) that measured the agreement between the SERVQUAL score and a question asking customers to rate the overall quality of the firm being judged. Evidence covered concurrent validity by asking respondents if they would recommend the firm to a friend (Asubonteng et al., 1996).

The SERVQUAL questionnaire developed by Parasuraman et al. (1988) is popular because of the vigorous testing that it has undergone. To ensure the research participants understand the questions and in the desired context, a pilot study was conducted.

3.5 Pilot study

According to van Teijlingen and Hundley (2002), social science research utilises pilot studies in two different ways: first, a trial or test runs that prepare for the major study; and second, the pilot study tests a particular research instrument. The main aim of a pilot study is to advise the researcher where and how the research project could fail and where the research protocol might not be followed. Another advantage of pilot studies is the fact that they can determine if research instruments or methods are too complicated or inappropriate. Pilot studies are an excellent way to convince funding bodies that research is worth funding. These studies can be qualitative or quantitative in design, and it is not unusual for researchers to conduct multiple pilot studies before a major research project is undertaken.

The pilot study was conducted to ensure questionnaire reliability. Eight employees from the studied company participated in the pilot study. None of the employees who participated in the pilot study was part of the research population and sample. Only four participants completed the expectations and perceptions questionnaires. Feedback from the respondents was positive with regards to the comprehensiveness of the SERVQUAL questions.

Hard copies of the questionnaires were distributed to eight participants. Participants had the comfort of completing the questionnaire in their own time. For this reason, only four questionnaires were returned. When the researcher followed up on the outstanding questionnaires, participants claimed they forgot about the questionnaire. The pilot study was valuable to the research since it afforded researcher clarity on the method of questionnaire distribution.

3.6 Data collection and analysis

The research study adopted a survey design and data were captured using a SERQUAL questionnaire. Research questionnaires can be distributed by means of email, online questionnaire, face-to-face or by post. According to Rowley (2014), delivering questionnaires personally to acquaintances achieves the best responses. Questionnaires are normally designed to be completed by the respondent, without any direct interaction with the researcher. The main advantage of a questionnaire is that it has the ability to gather responses from a relatively large population and allows the researcher to profile the population under study (Rowley, 2014).

Table 1: Internal suppliers and customers

Code	Supplier	Customer	Service Description
FRONT-VS-PLAN	Frontline	Planning	Gather and supply customer orders
PLAN-VS-PRO	Planning	Production	Supply product manufacturing requirements and lead times
WARE-VS-PRO	Procurement & Warehouse	Production	Supply raw material
ENG-VS-FRONT	Engineering	Frontline	Supply technical product information and assistance
ENG-VS-PRO	Engineering	Production	Support production to deliver quality products and manage change

The questionnaires were distributed face-to-face by hand since the population under study resides at a single organisation. The responses were captured using a 5-point Likert scale, where 1 indicated that the respondent strongly disagrees and 5 indicated the respondent strongly agrees. The internal customers with multiple internal suppliers were asked to complete more than one questionnaire. Each questionnaire had to be completed with a specific supplier in mind. Table 1 presents each supplier with its associated customer. The code was used to organise the research data.

Permission was granted by the organisation to collect the research data during working hours. The researcher distributed the questionnaires over a three-week period to minimise any potential disruption on business operations.

Statistical Package for the Social Sciences (SPSS) software was utilised to analyse and present the geographic statistics. According to Rowley (2014), researchers undertaking predictive and analytical research or who want some flexibility usually employ SPSS or Excel. SPSS can assist the researcher in checking and verifying data; it also generates descriptive statistics and graphs and charts to explore and describe data. Overall, it offers a range of statistics to assist the researcher in exploring relationships between variables (Rowley, 2014). The descriptive statistics included totals, averages, percentages and measures of spread. Each dimension's measurement was reported individually and combined. The SERVQUAL questionnaire data were analysed using the following steps:

- 1. Calculate the gap score of each question (Gap score=Perception-Expectation)
- 2. Calculate the average gap score for each dimension.
- 3. Sum gap score averages and divide by five to obtain an unweighted measure of ISQ.

The questionnaires were retrieved in a paper format and captured into the SPSS software and Microsoft Excel. The researcher created a digital master copy of the questionnaires. Backup copies were created of the master copies and stored safely in the case of data loss. The original paper format questionnaires were safely stored by the researcher to be destroyed one year after study completion.

3.7 Data validity and reliability

Watson (2014) argues that errors in measurements are inevitable and must be allowed in the design and use of any instrument. When the researcher embarks on a journey to identify the most applicable instrument to study a phenomenon, it is important to understand the difference between reliability and validity. According to Watson (2014: page 45),

Reliability is the extent to which an instrument makes the same measurement each time it is used. Validity is the extent to which the measurement made by an instrument measures what the researcher is interested in.

This research study employed a validated and reliable instrument (Kan et al., 2002) which consisted of clear, understandable and phenomena-focused questions. A pilot study was conducted to clarify the overall structure and approach to data capturing while validating the measurement instrument used. The pilot study included four participants randomly selected from departments within the organisation. These participants were excluded from the main study.

Research reliability is known as the consistency of a research study or a measurement test. The researcher employed the split-half method to ensure the

reliability of the SERVQUAL questionnaire. The split-half was used to assess the internal consistency of a questionnaire as it measures to which extent the parts of a questionnaire contribute equally to what is being measured (Mcleod, 2013). As seen in Figure 8, the Spearman-Brown Coefficient values are greater than 0.80 which indicates that the questionnaire's reliability is acceptable.

Reliability Statistics				
Cronbach's Alpha	Part 1	Value	.920	
		N of Items	11 ^a	
	Part 2	Value	.674	
		N of Items	11 ^b	
	Total N	ofiltems	22	
Correlation Between Forms	.901			
Spearman-Brown	Equal Length		.948	
Coefficient	Unequal Length		.948	
Guttman Split-Half Coefficient			.874	
a. The items are: Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11. b. The items are: Q12, Q13, Q14, Q15, Q16, Q17, Q18, Q19, Q20, Q21, Q22.				

Figure 8: Split-half analysis result

3.8 Limitations

The research study identified the following constraints and limitations:

- Limitations of geographic scope a Cape Town branch only.
- Sample only includes selected departments within one organisation.
- Concepts of IQS quality and SERVQUAL questionnaires are new to employees.
- Limited literature available on the internal service quality topic.
- Study conducted during the Covid-19 pandemic.
- Researcher employed at the organisation under study.

3.9 Conclusion

The chapter covered topics relating to the research design and methodology which supports the objectives of the research conducted. Various research philosophies were explained, and the researcher confirmed the philosophy used. The sample design and methods section explained different sampling techniques and identified which one the researcher employed. A complete breakdown of how the SERVQUAL questionnaire was designed was covered in the 'design of questionnaire' section. The researcher conducted a pilot study and shared details and learnings from it. The details of the data collection process were covered in the data collection and analysis section, followed by a section covering data validity and reliability. The final section in the chapter explained the limitations of the research study.

4.1 Introduction

Chapter 4 covers the demographic characteristics of the research participants and showcases the descriptive statistics obtained from the research results. Using descriptive statistics, the researcher intends to answer the main research questions and shed light on the patterns and trends discovered through analysis of the research data.

4.2 Demographic characteristics of sample

4.2.1 Gender

As seen in Figure 9, of the 26 participants in the research study, nine participants were male and 17 female.

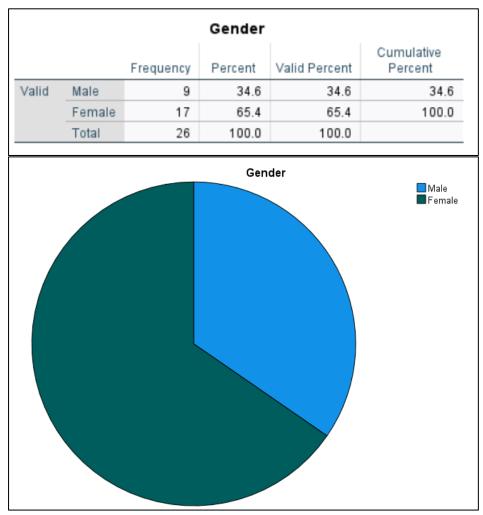


Figure 9: Participant gender

4.2.2 Age

As seen in Figure 10, of the 26 study participants, seven participants were between the ages of 26 and 35, 14 participants were between the ages of 36 and 45 and five participants were between the ages of 46 and 55.

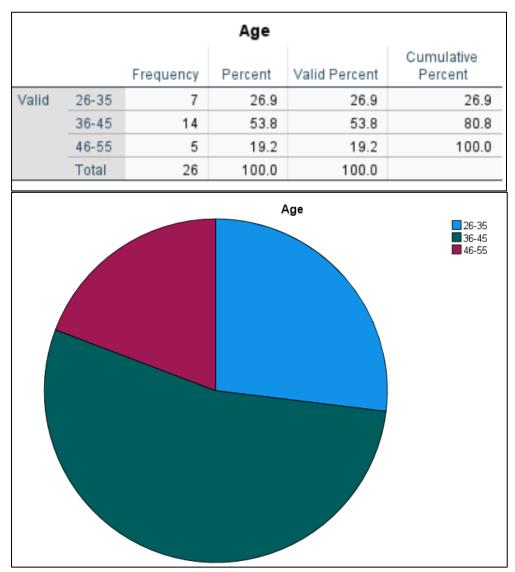


Figure 10: Participant age

4.2.3 Years of employment

As seen in Figure 11, of the 26 study participants, five participants have been employed at the company for 0 to five years, 18 participants have been employed at the company for six to 20 years and three participants have been employed at the company for 21 to 35 years.

Employment_Duration					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-5	5	19.2	19.2	19.2
	6-10	6	23.1	23.1	42.3
	11-15	6	23.1	23.1	65.4
	16-20	6	23.1	23.1	88.5
	21-25	1	3.8	3.8	92.3
	26-30	1	3.8	3.8	96.2
	31-35	1	3.8	3.8	100.0
	Total	26	100.0	100.0	

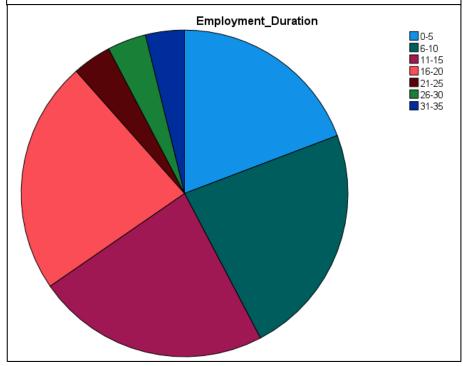


Figure 11: Employment duration

4.2.3 Departments

As seen in Figure 12, of the 26 study participants, nine participants were part of the Frontline, nine were part of Production and eight were part of Planning.

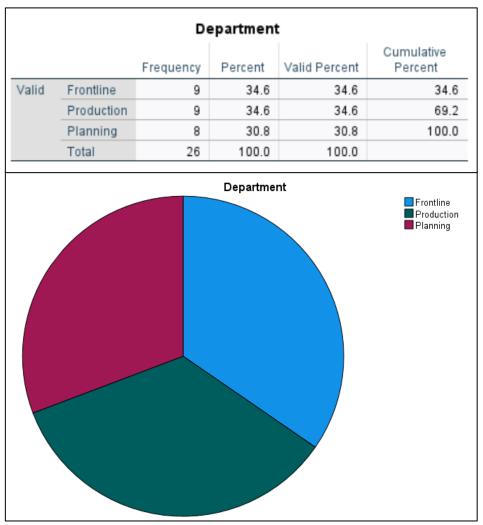


Figure 12: Department

4.3 Descriptive stats

The code referred to in Chapter 3 was used as to construct the descriptive statistics section.

4.3.1 ENG-VS-FRONT

The overall gap score was calculated to be -0.66, and the dimensions with the biggest gaps were reliability, responsiveness and empathy, in respective order. Table 2 displays the means of the perception and expectation data for each internal service quality dimension collected by the questionnaire.

Dimensions	Perception Means	Expectation Means	P-E Means (Gap Scores)
Tangibles (Q1-Q4)	3,6	3,9	-0,3
Reliability (Q5-Q9)	3,6	4,5	-0,9
Responsiveness (Q10-Q13)	3,7	4,4	-0,8
Assurance (Q14 - Q17)	4,0	4,6	-0,6
Empathy (Q18-Q22)	3,8	4,4	-0,7

Table 2: ENG-VS-FRONT gap analysis

As seen in Table 2, the expectation means are higher than perception means for each dimension. This indicates that the Engineering Department does not meet or exceed the expectations of the Frontline. The gaps between expectations and perceptions for each dimension were similar, except for tangibles scoring the lowest gap score of -0.3. Reliability had the highest gap score of -0.9 (Figure 13). The questions with the biggest gaps were as follows:

Q5 – When excellent internal service providers promise to do something by a certain time, they will do so.

Q7 – Excellent internal service providers will perform the service right the first time.

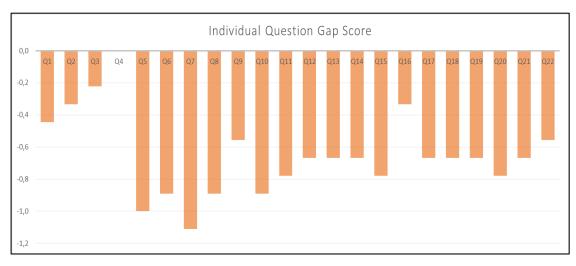


Figure 13: ENG-VS-FRONT individual question gap score

The standard deviation and the variance of each question were calculated. Figure 14 displays the standard deviation and the variance of the expectation data collected from the SERVQUAL questionnaire, whereas Figure 15 displays the standard deviation and variance for the perception data.

A high variability rating indicates a lack of consistency. The standard deviation expresses how much the responses differ from the mean value of the sample responses. A high standard deviation indicates that the responses might differ too much and fail to represent the entire sample.

The expectation variability and standard deviation related to each question were relatively low compared to the perception data in Figure 15. Although the questions with the biggest gap scores were Q5 and Q7, their variability and the standard deviation related to the perceptions were high compared to the expectations.

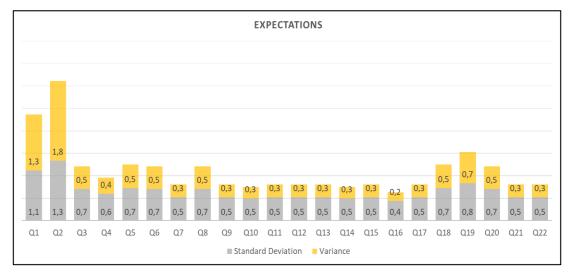


Figure 14: ENG-VS-FRONT expectation variability and standard deviation

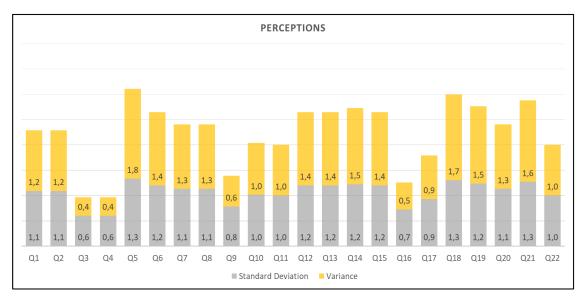


Figure 15: ENG-VS-FRONT perception variability and standard deviation

4.3.2 FRONT-VS-PLAN

The gap score was calculated at -1.47, and the dimensions with the biggest gaps were reliability, responsiveness, empathy and assurance, respectively. Table 3 displays the means of the perception and expectation data for each internal service quality dimension, as collected by the questionnaire.

Table 3: FRONT-VS-PL	_AN gap analysis
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Dimensions	Perception Means	Expectation Means	P-E Means (Gap Scores)
Tangibles (Q1-Q4)	3,0	4,1	-1,1
Reliability (Q5-Q9)	2,4	4,4	-1,9
Responsiveness (Q10-Q13)	2,8	4,3	-1,5
Assurance (Q14 - Q17)	2,8	4,3	-1,4
Empathy (Q18-Q22)	2,9	4,3	-1,4

As seen in Figure 16, the questions with the biggest gaps were as follows:

Q5 – When excellent internal service providers promise to do something by a certain time, they will do so.

Q7 – Excellent internal service providers will perform the service right the first time.

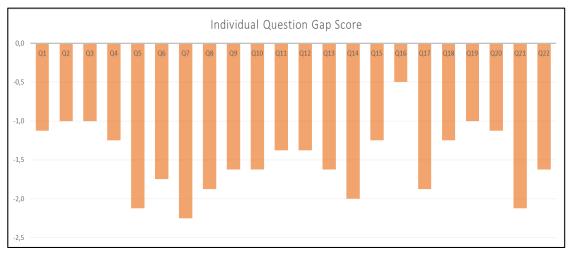


Figure 16: FRONT-VS-PLAN individual question gap score

The standard deviation and the variance of each question was calculated. Figure 17 displays the standard deviation and the variance of the expectation data collected from the SERVQUAL questionnaire, where Figure 18 displays the standard deviation and variance for the perception data.

The expectation variability and standard deviation related to each question were relatively similar to the perception data in Figure 17. Although the questions with the biggest gap scores were Q5 and Q7, their variability and the standard deviation related to the perceptions were similar to the expectations.



Figure 17: FRONT-VS-PLAN expectation variability and standard deviation

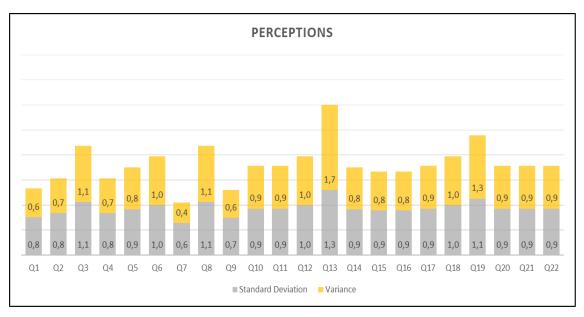


Figure 18: FRONT-VS-PLAN perception variability and standard deviation

4.3.3 PLAN-VS-PRO

The gap score was calculated as -0.9, and the dimensions with the biggest gaps were reliability, responsiveness and assurance, respectively. Table 4 displays the means of the perception and expectation data for each internal service quality dimension, as collected by the questionnaire.

Table 4: PLAN-VS-PRO gap analysis

Dimensions	Perception Means	Expectation Means	P-E Means (Gap Scores)
Tangibles (Q1-Q4)	3,8	3,3	0,4
Reliability (Q5-Q9)	2,6	4,3	-1,7
Responsiveness (Q10-Q13)	2,9	4,4	-1,5
Assurance (Q14 - Q17)	3,2	4,3	-1,1
Empathy (Q18-Q22)	3,1	3,8	-0,7

As seen in Figure 19, the questions with the biggest gaps were as follows:

Q5 – When excellent internal service providers promise to do something by a certain time, they will do so.

Q8 – Excellent internal service providers will provide their services at the time the promise to do so.

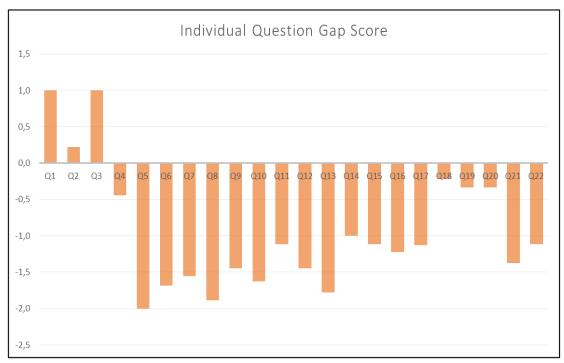


Figure 19: PLAN-VS-PRO individual question gap score

The standard deviation and the variance of each question was calculated. Figure 20 displays the standard deviation and the variance of the expectation data collected from the SERVQUAL questionnaire, where Figure 21 displays the standard deviation and variance for the perception data.

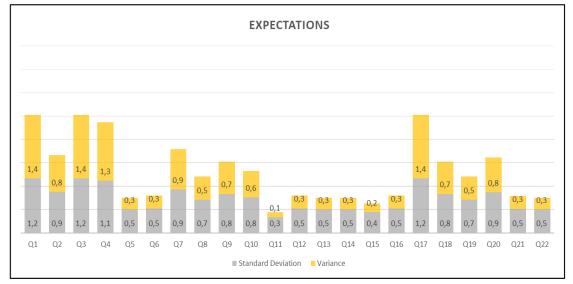


Figure 20: PLAN-VS-PRO expectation variability and standard deviation

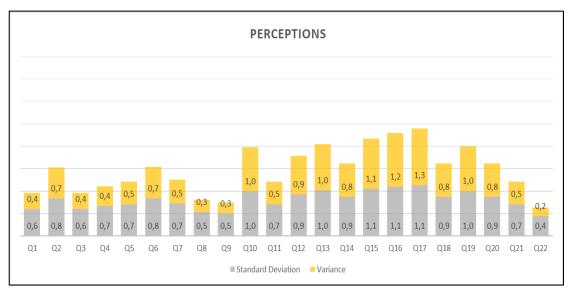


Figure 21: PLAN-VS-PRO perception variability and standard deviation

4.3.4 WARE-VS-PRO

The gap score was calculated as -0.8, and the dimensions with the biggest gaps were responsiveness, reliability and assurance, respectively. Table 5 displays the means of the perception and expectation data for each internal service quality dimension, as collected by the questionnaire.

Table 5: WARE-VS-PRO gap analysis

Dimensions	Perception Means	Expectation Means	P-E Means (Gap Scores)
Tangibles (Q1-Q4)	3,0	3,3	-0,3
Reliability (Q5-Q9)	3,0	3,9	-0,9
Responsiveness (Q10-Q13)	2,8	4,1	-1,3
Assurance (Q14 - Q17)	3,2	4,0	-0,9
Empathy (Q18-Q22)	3,4	4,0	-0,6

As seen in Figure 22, the questions with the biggest gaps were as follows:

Q8 – Excellent internal service providers will provide their services at the time the promise to do so.

Q10 – Employees of excellent internal service providers will tell customers exactly when services will be performed.

Q13 – Employees of excellent internal service providers will never be too busy to respond to customer requests.

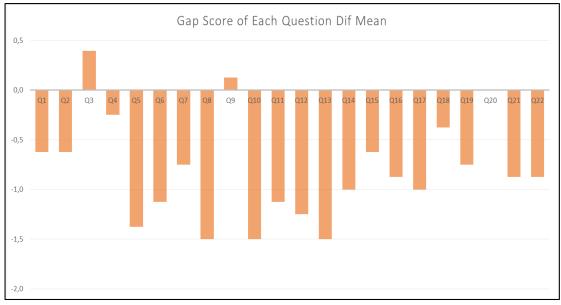


Figure 22: WARE-VS-PRO individual question gap score

The standard deviation and the variance of each question were calculated. Figure 23 displays the standard deviation and the variance of the expectation data collected from the SERVQUAL questionnaire, where Figure 24 displays the standard deviation and variance for the perception data.



Figure 23: WARE-VS-PRO expectation variability and standard deviation

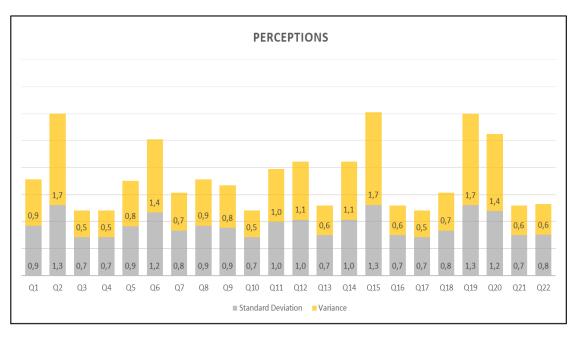


Figure 24: WARE-VS-PRO perception variability and standard deviation

4.3.5 ENG-VS-PRO

The gap score was calculated as -0.4, and the dimensions with the biggest gaps were responsiveness, empathy, assurance and reliability, respectively. Table 6 displays the means of the perception and expectation data for each internal service quality dimension, as collected by the questionnaire.

Table 6: ENG-VS-PRO gap analysis

Dimensions	Perception Means	Expectation Means	P-E Means (Gap Scores)
Tangibles (Q1-Q4)	3,7	3,6	-0,1
Reliability (Q5-Q9)	3,2	3,6	-0,4
Responsiveness (Q10- Q13)	3.3	4,0	-0,7
Assurance (Q14 - Q17)	3,6	4,0	-0,4
Empathy (Q18-Q22)	3,3	3,9	-0,7

As seen in Figure 25, the questions with the biggest gaps were as follows:

Q13 – Employees of excellent internal service providers will never be too busy to respond to customer requests.

Q21 – Excellent internal service providers will have the customers' best interests at heart.

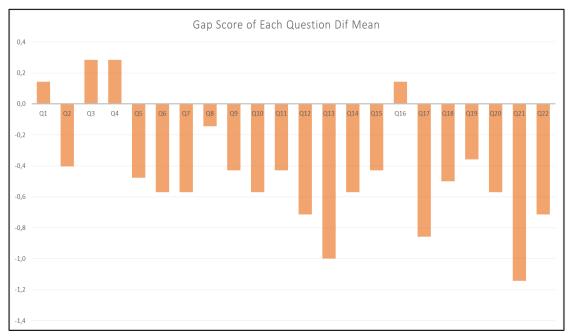


Figure 25: ENG-VS-PRO individual question gap score

The standard deviation and the variance of each question were calculated. Figure 26 displays the standard deviation and the variance of the expectation data collected from the SERVQUAL questionnaire, where Figure 27 displays the standard deviation and variance for the perception data.

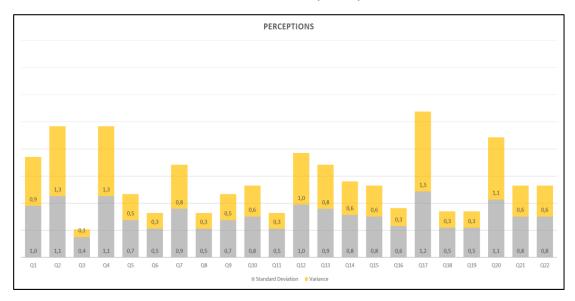


Figure 26: ENG-VS-PRO expectation variability and standard deviation

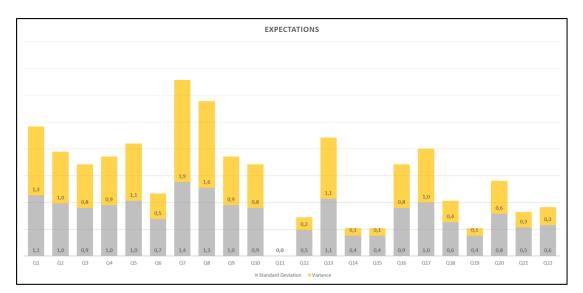


Figure 27: ENG-VS-PRO perception variability and standard deviation

4.4 Discussion of research results

"Is SERVQUAL a valid tool for measuring ISQ?"

Existing literature supports the notion that SERVQUAL is a valid tool for measuring ISQ. During the design of the study, the researcher vigorously tested the validity and reliability of the SERVQUAL questionnaire. While the design and application have been both motivated and criticised over the years, more recently the tool has been recognised as acceptable and valued. The tool's foundation encompasses disconfirmation theory, which is the foundation of most SQ research. Although alternative methods of measuring SQ have been developed, most have used SERVQUAL as its foundation. The method that started out as a tool to measure ESQ has evolved over the years and extended its reach to ISQ. Although ISQ literature is limited, most of the research employs the SERVQUAL questionnaire.

"What are the critical internal customer and supplier relationships within a window-blind manufacturing company?"

The customers determine the critical internal customer and supplier relationships since the effectiveness of these working relationships have an impact on customer experience with the company's service. Internal customers rely on the ISQ of internal suppliers to contribute to the service-profit chain processes effectively and efficiently. The researcher identified the critical

internal customer and supplier relationships within a window-blind manufacturing company to be the following:

- Frontline as supplier and Planning as customer
 - The relationship is critical to the initial stages of customer order processing. Communication and accuracy are exceedingly important.
- Planning as supplier and Production as customer
 - The Production Department relies on planning to provide the information obtained from the Frontline in an understandable, error-free and timely manner. Emphasis on correctness, standardisation and meeting deadlines are very important.
- Procurement & Warehouse as supplier and Production as customer
 - The Warehouse supplies the Production Department with the required stock to produce customer orders. Delivery dates are set, and Production requires availability of stock and responsiveness of Warehouse team members to perform their duties effectively.
- Engineering as supplier and Frontline as customer
 - The Frontline personnel are faced with the complexities of customer requests and require the knowledge and support to understand validated and applicable product applications and limitations.
- Engineering and Production
 - The Production Department's aim is to effectively and consistently perform repetitive activities to produce customer orders. When the consistency of these activities is endangered, Production requires support to stabilise the environment.

The key is to notice that Marketing, Information Technology and Finance are not considered part of the critical relationships. Although these departments support the operations of the organisation, they do not form part of the critical processes within a window-blind manufacturing company.

"What are the gaps between ISQ dimensions of a window-blind manufacturing company?"

After the identification of the critical internal customer and supplier relationships within a window-blind manufacturing company, the researcher could measure the ISQ dimension gap scores of each relationship. The overall gap score refers

to the difference between customer expectations and perceptions of the internal service. The overall gap score provides a good indication of which relationships are of biggest concern. Along with the overall gap scores, the researcher indicated the ISQ dimensions with the biggest gaps scores. These gaps between the ISQ dimensions allow the researcher to understand what aspect of the service the internal customer is most dissatisfied with. The researcher measured the following gaps.

• Engineering as supplier and Frontline as customer

The overall gap score of the internal service provided by the Engineering Department, as rated by the Frontline, is -0.66. This overall gap score is considered low in relation to other internal customer and supplier relationships within the window-blind manufacturing company. However, there is still room for improvement, especially related to reliability and responsiveness. These two dimensions have similar gap scores of -0.9 and -0.8 respectively, indicating that Frontline requires the Engineering Department to be available to respond to their requests. It also suggests that when information is requested from the Engineering Department, the information must be correct and accurate.

• Frontline as supplier and Planning as customer

The overall gap score resulted in -1.47. This is the internal service with the biggest gap between customer expectations and perceptions and therefore should be the area of greatest concern. Compared to the other internal supplier and customer relationships, the overall gap score of -1.47 has the biggest deviation from the norm. The biggest contributing ISQ dimensions are reliability, resulting in a gap score of -1.9, and responsiveness, resulting in a gap score of -1.5. This indicates that above all the Planning Department could be unsatisfied with the correctness of information obtained from the Frontline. The other area of dissatisfaction relates to the speed of response to queries and feedback.

• Planning as supplier and Production as customer

An overall gap score of -0.9 is the second largest gap found. The dimensions with the greatest effect on the overall gap score are reliability and responsiveness. Reliability has a gap score of -1.7 and responsiveness a gap score of -1.5, indicating that the Production Department requires the Planning

Department to stick to promises made and deadlines committed to. These big gaps effect the performance and capabilities of the Production Department to meet their commitments and deadlines, creating a compounding negative effect on the service-profit chain.

• Warehouse as supplier and Production as customer

The Production Department depends on the Warehouse & Procurement Department to support their daily activities by ensuring stock is available and issued on time. An overall gap score of -0.8 indicates room for improvement, specifically in areas related to responsiveness, reliability and assurance. Responsiveness has a gap score of -1.3, while reliability and assurance both have gaps of -0.9.

• Engineering as supplier and Production as customer

The overall gap score for the Engineering Department's service supplied to the Production Department is -0.4. This overall gap score is the lowest among the research results obtained, indicating that the gap should not be at the top of the priority list. The dimensions with the biggest gaps are responsiveness and empathy with equal gap scores of -0.7.

"What are the internal service quality aspects that negatively impact customer retention at a window-blinds manufacturing company?"

The internal service quality aspects can be explained as the ISQ dimensions. These ISQ dimensions reflect the areas of the selected internal services, which positively or negatively contribute to the quality of the service rendered. Since these internal services are key to the execution and performance of services to external customers, it is important that the ISQ dimensions with the highest level of negative contribution must be the organisation's priority area of focus. Improving these areas would increase customer satisfaction and customer retention.

The research results indicate a pattern of major concern related to the responsiveness and reliability dimensions. These two dimensions are at the top of all the measured gaps between the selected internal services rendered. These poor levels of responsiveness and reliability boils over from the internal services and are the main cause of poor customer satisfaction and retention.

Failing to be responsive and reliable are potentially the reasons that customers are dissatisfied.

4.5 Conclusion

The chapter sheds light on data analysis and interpretation by considering the demographic characteristics and descriptive statistics. Twenty-six people from the window-blind manufacturing company participated in the research study, from which the majority were females between the ages of 36 and 45 with between six and 20 years of employment at the company. The participating company departments were equally represented by participants.

The descriptive statistics indicated that the biggest overall gap score was found between the Frontline and the Planning Department. Thus, the researcher suggested that this gap should be at the top of the company's improvement priority list. The smallest overall gap score was identified between the Engineering Department and the Production Department. Although the smallest gap suggests that the priority be assigned, it would be wise to continuously monitor the situation. The discussion of the research results confirmed the validity of the SERVQUAL tool and achieved an answer to the research questions.

5.1 Introduction

This chapter looks back and provides a review of all the chapters. In reviewing the research chapters, this chapter aims to summarise the main topics and arguments. The summary of these arguments and topics are used to draw correlations between the literature and the results of the study, with the aim of answering the research questions. Based on the correlation between the literature and the research study results, recommendations are made to serve as a guide to the studied organisation. The chapter also explores the significance of the study and suggest how future research could be directed.

5.2 Review of chapters

5.2.1 Chapter 1

The introduction of the chapter highlighted the importance of customer loyalty on business success since customer loyalty is a product of customer satisfaction. It also explains the relationship between ESQ and customer satisfaction and accepts the description of ESQ as the foundation of customer satisfaction. At the end of the introduction, the idea of a relationship between ESQ and ISQ is considered, in essence linking the concept of customer loyalty to ISQ.

The research background consulted literature on topics such as company strategy, organisational change and complaint management. Company strategy was described as a guide to the achievement of goals and objectives. These goals and objectives are then expressed through organisational culture, thereby employing group norms and shared assumptions to guide the activities of employees. Organisational change was considered a trigger of employee responses. These responses can be negative or positive, but they dictate the way employees engage. The importance of complaint management was emphasised since a lack of customer complaint resolution damages an organisation's reputation.

The researcher believes that the topics addressed in Chapter 1 relate to and contribute to the level of ISQ. Organisational culture is embedded in employees and way they conduct themselves. Culture gives the employees confidence and

stability when interacting with team members, colleagues and customers. When a known culture is drastically 'pulled out from underneath an employee's feet' so to speak, as a result of change, the effect is detrimental if not carefully managed. Management and planning are extremely important to success of effective change. When Management or Planning confront a barrier due to the lack of skill or competence, swift action must be taken to investigate, respond and overcome the barrier. If management fails in their quest to facilitate and protect the process of change, the whole effort will be in vain, and the damages will be close to irreparable.

5.2.2 Chapter 2

In order to understand the phenomena, the literature review covered topics related to ISQ, and ISQ itself. EDT was identified as the foundation on which service quality and all the associated research were built. The disconfirmation theory, referring to the gap between expectations and performance, is regarded as the determinant of customer satisfaction.

To satisfy and understand customer requirements, an organisation must be able to evaluate the performance of its services. There is an increased emphasis on measuring service quality since customer demands can increase the difficulty of producing a quality service. Organisations providing high service quality are normally highly competitive and cultivate satisfied and loyal customers that produce increased benefits for the organisation. There are multiple methods of measuring service quality, including SERVPERF, IPA, critical incident technique, Mystery Shopper and SERVQUAL. When selecting which method to use, a researcher is responsible to consider the phenomena being studied.

SERVPERF is a SERVQUAL-based method that stemmed from the argument that customer expectations are volatile and ambiguous. Thus, the method excludes the expectations questionnaire. IPA measures features affecting service quality, an aspect often neglected by researchers. The critical incident technique, observing human action and drawing conclusions, is known for its time-consuming and qualitative nature. The Mystery Shopper is a quick and effective way to understand service quality. Observations are made by qualified observers, and these observations can be carried out over time to monitor service quality changes.

SERVQUAL, however, was the chosen method of use for the research study due to its credibility and reliability. The method utilises the expectancy disconfirmation theory approach to measure the gap between service quality attributes in order to prioritise quality improvements. Critics have dissected SERVQUAL and found weaknesses over the years, but in response, some of these weaknesses were addressed by the creators of the SERVQUAL tool. Today, SERVQUAL remains the most popular and most used method of measuring service quality.

The appropriate measurement of ISQ is important because of the role ISQ plays in the service-profit chain. It is believed that the mismanagement of internal services will have a negative effect on customer satisfaction and loyalty, and that external service value increases when ISQ improvements are assessed and implemented, thereby strengthening the notion that customer loyalty is linked to ISQ.

To understand the term service-profit chain, all the individual links in the chain and their relationships need to be considered. Seeing customer loyalty as the result of a functioning service-profit chain, the individual chain links such as customer satisfaction, external service value, employee retention, employee productivity, employee satisfaction and ISQ play their supporting roles.

Customer loyalty has a direct relationship with customer satisfaction since it is explained as the purchasing behaviour of customers. Customer satisfaction is considered the result of understanding customer behaviour and satisfying customer requirements.

The acts of understanding customer requirements and satisfying customer needs are carried out by the organisation's Frontline staff. The value generated between the customer and the organisation's Frontline staff is known as external service value, also known as ESQ. Since external service value has a direct influence on customer satisfaction, it is vital that an organisation empower and support their Frontline staff in an effort to enhance customer complaint resolution and upgrade service delivery.

Empowered and supported employees are capable and competent employees, and they enjoy the results of adding value to service a customer. If these

employees begin to leave an organisation, this is disruptive and destructive. Hence, an organisational strategy is emphasised to ensure employee retention.

Such a strategy should consider employee productivity and employee satisfaction. An employee productivity decrease is the result of absent performance standards, poor planning and motivation, ineffective training, frequent change, insufficient communication and an undesirable work environment. A productive employee is a satisfied employee contributing to a healthy organisational culture.

As stated, organisational culture is embedded in the way employees conduct themselves. ISQ is at its peak when productive and satisfied employees engage. When these engagements are constructive and valued, that is when the ISQ contributes to a functioning service-profit chain and the generation of customer loyalty. The opposite is also true. When ISQ is neglected and undesirable, the organisational culture starts to corrupt and disrupt, and each link in the service-profit chain begins to deteriorate and lose sustainability. A decline in customer loyalty is the result.

5.2.3 Chapter 3

As stated in the chapter, the researcher selected positivism as the appropriate research philosophy for this study. This selection is based on the fact that positivism produces law-like generalisations by working with an observable social reality. It aims to yield pure facts and data.

Supporting the research philosophy, the research employed purposive and nonprobabilistic sampling since it relies on the researcher's judgement when selecting units to be studied. Although the sampling method chosen has a high level of bias, the researcher considered it the most applicable method to use in conjunction with total population sampling. Thus, research bias is limited to the selection of the sampling population.

As identified in Chapter 2, the researcher selected the SERVQUAL questionnaire for data collection. The SERVQUAL questionnaire, developed in 1988 by a team of researchers, is a popular measure of service quality.

To ensure an effective and efficient execution of the research project, the researcher conducted a pilot study. The pilot study indicated a lack of response

due to the method of questionnaire distribution. The pilot study also complemented the research project by indicating that some of the questionnaire questions needed improvement in term of comprehensiveness.

Based on the knowledge gained from the pilot study, the researcher rephrased and distributed hard copies of the SERVQUAL questionnaires. Ethical practices were adhered to throughout the entire process of data collection.

Participant responses were captured using a 5-point Likert scale. SPSS and Excel were used to capture, analyse and display the research data. As part of the analysis process, the researcher calculated the gap scores of each dimension and the overall gap score of each internal service.

The researcher tested the validity and the reliability of the instrument used by conducting a pilot study and using the split-half method to assess the internal consistency of the questionnaire. The Spearman-Brown coefficient values were greater than 0.8, indicating an acceptable level of reliability. Limitations of the research were noted as covering scope, sample size and available literature.

5.2.4 Chapter 4

Chapter 4 entailed the analysis and interpretation of the research data collected. Demographical analysis of 26 participants determined that 65% were females; 53.8% were between the ages of 36 and 45; and 69.3% worked at the company for 20 year or less. The population is equally representative of the various departments since the total number of participants from each department did not exceed nine and was not below eight.

The gap score of each critical internal service was calculated and the highest contributing dimensions were determined. The gap scores of these dimensions were used to identify opportunities for ISQ improvements. The results were summarised as follows:

- The Engineering and Frontline gap was -0.66, with reliability as the dimension with the biggest gap of -0.9.
- The Frontline and Planning gap was -1.47, with reliability as the dimension with the biggest gap of -1.9.
- The Planning and Production gap was -0.9, with reliability as the dimension with the biggest gap of -1.7.

- The Warehouse and Production gap was -0.8, with responsiveness as the dimension with the biggest gap of -1.3.
- The Engineering and Production gap was -0.4, with responsiveness as the dimension with the biggest gap of -0.7.

Perception responses had a higher level of variability and standard deviation than the expectation responses, indicating that the data might lack consistency and fail to represent the entire sample. This is normally the case where the population or sample size is small.

5.3 Correlation between literature and results

The literature made evident that a variety of factors contribute to the existence of the phenomena under study. The depth and complexity of the main research question should not be underestimated since it involves human behaviour. The ability to understand the ISQ aspects that negatively impact customer retention relies heavily on understanding aspects of customer retention and how ISQ impacts customer retention.

In summary, customer retention is synonymous with customer loyalty. This is when customers are so extremely satisfied with an organisation's services or products that they become invested in the organisation. Invested in this context relates to elements like spending patterns and word-of-mouth exchanges, bordering on what some might even consider similar to a religious practice.

Like trust, loyalty is earned. Customer loyalty is the result of satisfied customers. Loyal customers establish and support an organisation's reputation and brand image. When an organisation has an established reputation and a loyal customer base, it 'takes a lot of water to sink the boat' so to speak. However, if efforts to stop the water are constantly neglected, water will slowly consume the boat until disaster strikes, and no effort will be big enough to save the boat from its sinking fate. The boat is used as a symbol to depict an organisation, and in this case, it depicts the organisation under study. The research background covered the current state of affairs, which highlighted a similar trajectory as the symbolic boat.

Life cycles are part of how we as humans understand the world around us. Everything has a beginning and an end. In the context of an organisation, a life cycle embodies the golden years. It also embodies the years of hardship and decline. This makes it extremely important to ensure that in the golden years, referring to the years of profit and success, an organisation works hard to prevent the seemingly inevitable decline. This is known as strategical planning. Strategic planning is the flower of leadership. Among others, it should include a variety of elements such as value created for customers and a positive and efficient organisational culture. Radiating from the research background and the literature review, when strategic planning is not at play, deteriorating culture and poor complaint resolution soon follow.

The research results indicate low levels of reliability and responsiveness related to the organisation's internal services. It is unrealistic to think that when these ISQ aspects are considered low, that it does not affect the service-profit chain. When the organisation's employees are not experiencing a reliable and responsive internal service, the knock-on to their service delivery will be similar.

The Frontline of the organisation interacts with customers directly, and all the other internal services are part of the supporting chain of activities that assists the Frontline in delivering the external service to customers. The customer does not see these internal services and rates the entire organisation's effort as a measure of ESQ.

Since the organisation relies on the quality of internal services to ensure high levels of ESQ, multiple or even single undesirable internal services can drastically lower levels of ESQ. For example, for Frontline employees to perform an excellent external service, they rely on the Production Department to produce customer products in-time and meet required levels of quality. If Production fails to deliver on their part of the internal service chain, the Frontline employees are forced to deliver bad news to the customer. Since the customer does not care what internal service is to blame, they rate the organisation's ESQ.

Sharing the result of a failed external service delivery can be tough and create a burdensome sense of responsibility. Thus, if employees are given the opportunity to share the difference between their expected and perceived ISQ, the result will illuminate the problematic internal services. This is the case for the organisation under study. The employees were given the opportunity to rate

the quality of the internal service delivery, and the results clearly indicate the state of internal services.

Based on the results of the research, all the internal services had a negative gaps score. This indicates low levels of ISQ. The gap between the Frontline and the Planning Department was by far the biggest, with reliability as the main dimension contributing to the gap.

When considering the service-profit chain and the research results, it is evident that the poor levels of ISQ cultivates customer service quality related complaints and correlate with poor customer retention. The aspects of ISQ with the biggest contribution to poor levels of customer retention are reliability and responsiveness.

5.4 Recommendations

Business leadership should look inward and acknowledge that for customer satisfaction and retention to grow, ISQ must be a priority. The importance of ISQ and how it effects the interactions with external customers should be communicated and acknowledged transparently by employees and management alike.

Internal service providers should be allowed to set clear expectations and guidelines related to their service. An example of a guideline would be a cut-off time for certain requests. When last minute requests are entertained, poor planning and an undesired result could follow.

Communication with your internal customer is important. Sharing frequent status updates about a request could allow internal customers plan accordingly. An example would be to inform internal customer know when you have completed a portion of their request, and the timeline for full completion of the request. Communicating challenges that could potentially delay a request is also a way to ensure the internal customer is always in the loop.

The internal service complaints should be discussed in focus groups and the root cause of these gaps between dimensions of the internal services should be determined. These discussions could drive continuous improvement initiatives of the internal services and ensure the system operates in harmoniously to produce desired results.

Based on the study results, the researcher recommends that priority be given to improve the ISQ between Frontline and the Planning Department. Efforts to improve ISQ should be evaluated, and measures of internal service delivery created. These measures could motivate the creation of an employee reward and recognition programme.

5.5 Significance of study

Firstly, the study assists the participating company in identifying the gaps between internal services, allowing improvement initiatives to be considered. Secondly, the study contributes to existing literature by testing the validity and appropriateness of the SERVQUAL tool for measuring ISQ in a manufacturing company.

5.6 Future research

One future research suggestion is to utilise a mixed-method research design to extract the combined efforts of the qualitative and quantitative research approaches. This will allow a researcher to identify the ISQ gaps, but with the added benefit of understanding why these gaps exist.

5.7 Conclusion

Chapter 5 included a review of all the chapters which then led to correlations between the literature and the research results. The review of the chapters highlighted and summarised the main topic of the research study. Correlations between literature and the research results were identified regarding organisational culture, customer loyalty and satisfaction, external service delivery and the effect of ISQ on customer retention. Responsiveness and reliability were identified as the aspects of ISQ effecting customer retention, thereby providing a valid answer to the research question.

The researcher made recommendations based on the correlations drawn from the literature and the research results, stated the significance of the research study and identified possible future research opportunities.

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APPENDICES

APPENDIX A



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DEAR RESPONDENT

The objective of this survey is to determine the gap between internal customers' expectations and perceptions.

The survey is anonymous. Please do not write your name on the survey. Responses cannot be traced to any individual. The free and frank expression of your own opinion will be most helpful.

There are no right or wrong answers to any items in the questionnaire. It is your opinion on each statement made that matters.

The survey contains a number of statements about internal service quality. You are requested to respond to each of the statements by placing a CIRCLE in the space which most accurately fits the extent to which you agree with the statements described.

If you strongly disagree with the statement, you will CIRCLE number **1**. If, on the other hand, if you agree with the statement, you will CIRCLE number **4**, and so on.

After you have read each statement, please decide the degree to which the statement accurately describes your own situation and your own feelings, using the 5-point scale. Please do not spend too much time on a particular statement.

When you have completed all the items, please put the questionnaire on the designated pile.

Thank you for your participation

А

Please complete the following questions:

Gender: Male / Female

Age: _____

Years of employment by the company: _____

Your internal customer: _____

	EXPECTATIONS	3				
	Please check the questionnaire to ensure that you	have comp	pleted all th	e pages/iten	ns	
		1 Strongly	2	3	4	5 Strongly
		Disagree	Disagree	Undecided	Agree	Agree
Tar	gibles					
1	Excellent internal service providers will have modern-looking equipment	1	2	3	4	5
2	The physical facilities of excellent internal service providers will be visually appealing	1	2	3	4	5
3	Employees of excellent internal service providers will be neat- appearing	1	2	3	4	5
4	Materials associated with excellent internal service providers (documents and statements) will be visually appealing.	1	2	3	4	5
Rel	ability		·	··		·
5	When excellent internal service providers promise to do something by a certain time, they will do so.	1	2	3	4	5
6	When internal customers have a problem, excellent internal service providers will show a sincere interest in solving it.	1	2	3	4	5
7	Excellent internal service providers will perform the service right the first time.	1	2	3	4	5
8	Excellent internal service providers will provide their services at the time the promise to do so.	1	2	3	4	5
9	Excellent internal service providers will insist on error-free records.	1	2	3	4	5
Res	ponsiveness					
10	Employees of excellent internal service providers will tell customers exactly when services will be performed.	1	2	3	4	5
11	Employees of excellent internal service providers will give prompt service to internal customers.	1	2	3	4	5
12	Employees of excellent internal service providers will always be willing to help internal customers.	1	2	3	4	5
13	Employees of excellent internal service providers will never be too busy to respond to customer requests.	1	2	3	4	5
Ass	urance					
14	The behavior of employees of excelent internal service providers will instill confidence in customers	1	2	3	4	5
15	Internal customers of excellent internal service providers will feel safe in their transactions.	1	2	3	4	5
16	Employees of excellent internal service providers will be consistently courteous (Polite, respectful, considerate) with internal customers.	1	2	3	4	5
17	Excellent internal service providers will have the knowledge to answer all internal customers' questions.	1	2	3	4	5
Em	pathy					
18	Excellent internal service providers will give internal customers individual attention.	1	2	3	4	5
19	Excellent internal service providers will have operating hours conveniet to all their internal customers.	1	2	3	4	5
20	Excellent internal service providers will have employees who give internal customers personal attention.	1	2	3	4	5
21	Excellent internal service providers will have the customers' best intersts at heart.	1	2	3	4	5
22	The employees of excellent internal service providers will understand the specific needs of their internal customers.	1	2	3	4	5

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	PERCEPTIONS	i				
	Please check the questionnaire to ensure that you	have com	pleted all th	e pages/iten	ns	
		1	2	3	4	5
		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Tar	ngibles					
1	Your internal service provider has modern-looking equipment	1	2	3	4	5
2	Your internal service provider's physical facilities are visually appealing	1	2	3	4	5
3	Your internal service provider's employees are neat-appearing	1	2	3	4	5
4	Materials associated your internal service provider (documents and statements) are visually appealing.	1	2	3	4	5
Rel	iability					
5	When your internal service provider promises to do something by a certain time, they do so.	1	2	3	4	5
6	When you have a problem, your internal service provider will show a sincere interest in solving it.	1	2	3	4	5
7	Your internal service provider performs the service right the first time	1	2	3	4	5
8	Your internal service provider provides their services at the time they promis to do so.	1	2	3	4	5
9	Your internal service provider insists on error-free records.	1	2	3	4	5
Re	sponsiveness					
10	Employees of your internal service provider tell you exactly when service will be performed	1	2	3	4	5
11	Employees of your internal service provider give you prompt service	1	2	3	4	5
12	Employees of your internal service provider are always willing to help you.	1	2	3	4	5
13	Employees of your internal service provider are never too busy to respond to your requests	1	2	3	4	5
Ass	surance					
14	The behavior of employees of your internal service provider instills confidence in their internal customers.	1	2	3	4	5
15	You feel safe in your transactions with your internal service provider.	1	2	3	4	5
16	Employees from your internal service provider are consistently courteous (Polite, respectful, considerate) with you.	1	2	3	4	5
17	Employees from your internal service provider have the knowledge to answer your questions.	1	2	3	4	5
Em	pathy			J		
18	Your internal service provider gives you individual attention.	1	2	3	4	5
19	Your internal service provider has operating hours convenient to all its internal customers	1	2	3	4	5
20	Your internal service provider has employees who gives you personal attention	1	2	3	4	5
21	Your internal service provider has you best interest at heart	1	2	3	4	5
22	Employees from your internal service provider understand your specific needs.	1	2	3	4	5

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