The Perception of Service Quality of Pasdec Automotive Technologies

G.S. Fourie

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Supervisor: Mr. H Lotz

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Abstract

The scope of this research study focuses on measuring service quality amongst customers of Pasdec Automotive Technologies.

The research objectives were:

- Identify the relevant service quality dimensions
- Investigate perceptions towards the overall level of service quality as well as across the dimensions
- Identify key service performance areas as well as areas that need to improve.

Although the study followed a qualitative approach, elements of triangulation was employed in order to enhance the reliability of the research. This involved gathering quantitative measures from respondents to substantiate qualitative data. Data was gathered by means of in-depth interviews.

The results showed that of the original 31 service quality items discussed, it can be reduced to 10 primary dimensions. The in-depth interviews also focussed on a discussion of Pasdec's key service performance areas.

Based on the results and findings of the study a number of recommendations are made. This includes that service quality should be monitored and measured on a yearly, or even bi-annual, basis. The close interaction of indepth discussions with customers adds significant value in building and nurturing customer relations.

It is lastly recommended that management develop short and medium term action plans to develop and improve the design capabilities of the firm. The firm should move towards a position where it can become a global player and reap the cost benefits of economies of scale.

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CHAPTER 1: ORIENTATION

1.1 Introduction

According to Argenti (1997:276) successful firms, regardless of their line of business, have several best practices in place. One of these is to monitor and learn from customers by maintaining a close relationship. Part of improving customer relationships involves measuring the perceived level of service quality that the customer receives. By gaining insight into the levels of service delivery, firms can proactively work towards improving customer satisfaction, which ultimately will reflect positively on the profitability of the firm.

Pasdec Automotive Technologies manufactures and supplies electrical wiring harnesses for the automotive industry. The supply of harnesses is mainly to three big original vehicle equipment manufacturers (OEM's), although some smaller customers are also serviced.

The scope of this research study focuses on measuring service quality amongst customers of Pasdec Automotive Technologies. Although manufacturing firms produce tangible products that should meet the quality requirements of clients, customer service management forms a key element in customer relationship management.

1.2 Problem statement

When one assesses the driving forces in today's global competitive environment of the automotive industry, it is clear that one of the critical success factors to become globally competitive is to ensure total customer satisfaction. Total customer satisfaction is ensured through the delivery or ability of a supplier to deliver an excellent quality service and to exceed in the customers expectations of a supplier (Makopanele, 2007).

This critical success factor currently doesn't form part of the performance measurement system of Pasdec Automotive Technologies. Customer satisfaction currently is only derived from the measurement of tangible outcomes such as product quality, product pricing and on time delivery. These measurements, however, are not enough, and will not give a true reflection on the actual level of customer satisfaction that customer's experience. Hence the development of a customer satisfaction and service quality measurement system is of critical importance to ensure sustainable competitive advantage, and to enable Pasdec to really compete on global levels.

Good quality service and total customer satisfaction will be the key to Pasdec to succeed in future long term strategies such as to become a supplier to the global automotive industry.

1.3 Research objectives

The primary research objective is to determine perceptions towards the service quality of Pasdec Automotive Technologies amongst its three main customers.

More specifically, the study aims to:

- Identify the relevant service quality dimensions
- Investigate perceptions towards the overall level of service quality as well as across the dimensions
- Identify key service performance areas as well as areas that need to improve.

1.4 Importance of the study

Although numerous research studies in the past have focused on understanding and measuring service quality, few examples can be found pertaining to the South African automotive parts manufacturing industry. The specific service dimensions that must be measured in this industry is therefore under consideration and it is believed that the findings from this study can contribute towards the development of a specific service quality measurement model for the automotive parts manufacturing industry.

1.5 Definitions

OEM: Original Equipment Manufacturer. OEM's are manufacturers who resell another company's product under their own name and branding. It refers specifically to the act of a company rebranding a product to its own name and offering its own warranty, support and licensing of the product.

1.6 Outline of the research report

The report is divided into five chapters.

Chapter 1 provides an orientation to the management dilemma from which the research was borne. The research objectives are also stated in chapter 1.

Chapter 2 provides the foundation of the study with an overview of the South African automotive industry and Pasdec Automotive Technologies.

The findings from the literature review are provided in chapter 3 and form the basis for identifying the theoretical dimensions of service quality.

Chapter 4 states the research methodology followed.

Chapter 5 reports on the research results and provides a discussion of findings. From the findings a number of recommendations culminate.

CHAPTER 2: PASDEC AUTOMOTIVE TECHNOLOGIES

2.1 Introduction

The South African automotive supply chain currently consist of seven original equipment (OEM) manufacturers, namely BMW, Daimler, General Motors, Ford, Nissan, Toyota and Volkswagen. There are also approximately 275 first tier suppliers, 100 second tier suppliers and less than 200 third and fourth tier suppliers (Cloete, 2007:30). This supply chain makes for a highly competitive market.

In order to stay competitive, suppliers in the supply chain have to continuously implement and improve quality and environment management systems to comply with global quality and environmental standards set by customers. Suppliers also need to be globally competitive in terms of product pricing, manufacturing, design and technological capabilities. This requires that despite the stringent demand for the manufacturing of high quality products, the intangible value delivery by manufacturing firms in the form of customer service must also be adhered to.

2.2 The automotive parts industry in South Africa

Suppliers to the original equipment manufacturers are mainly measured and benchmarked in terms of three objectives namely: product quality, product costing and on time delivery. These suppliers not only compete with other local suppliers, but also with international firms located around the globe. To compete, many suppliers of non-differentiated products have been forced to operate on negligible margins, to a point where unforeseen volume reductions and rising raw material costs have essentially evaporated profitability as marginal costs increase (Mckenzie, 2007).

Globalisation is a significant driver in the automotive industry change. Significant differences in labour costs among different countries forces or gives manufacturers the opportunity to locate plants for labour intensive products in low wage countries or directly source (called global sourcing) labour intensive products from these low cost countries. These driving forces actually force the South African automotive industry to move in the same direction, by moving away from focussing only nationally, to directly compete with other low cost countries such as China, India and Mexico in terms of local and international market shares (Mckenzie, 2007).

Challenges for automotive industry thus include (Makopanele, 2007):

- To be cost effective in the manufacturing of components.
- Product innovation in a rapid moving industry with shorter product life cycles.
- Implement best practices to ensure effectiveness and efficiencies.
- Be more customer focussed to ensure overall customer satisfaction.

2.3 Pasdec Automotive Technologies

2.3.1 Background

Pasdec Automotive Technologies was established in 1969, as Auto Cable Industries, to support the local South African vehicle manufacturing sector. Over the years Pasdec went through many mergers, acquisitions and consolidations to have finally grown into where it is today under the name of Pasdec Automotive Technologies (Pty) LTD.

Pasdec Automotive Technologies is the leader in the supply and manufacture of automotive electrical wiring harnesses to the OEM vehicle manufacturers in South Africa. This is evident in the many supplier awards Pasdec has received from different customers over the years of doing business. Rewards include: Supplier of the year; Best

delivery performance of the year; and Overall best performance of the year.

Pasdec's dedicated manufacturing plants are purpose-built; hence capacities are customised to accommodate both high volume production lines and lower volume jobbing shop-type orders. The company has three dedicated manufacturing and assembly plants, designed for current demand and future growth opportunities. Two plants are located in Brits and one in East London, ideally situated to service customers.

Once harnesses are completed they are delivered to the respective customers on either a just-in-time (JIT) supply basis for some customers or following a kanban supply system for other customers.

All products manufactured by Pasdec meet and exceed international ISO requirement standards in terms of quality. Applied technology is further enhanced by "best global practice", continuous improvement programs and customer specific standards.

Pasdec currently employs approximately 650 people in order to support customer demands in a highly labour intensive operation, where automation possibilities are very limited. Because of the labour intensive nature of the electrical wiring harness manufacturing process, Pasdec directly competes against all the low cost countries, especially in terms of low product pricing.

Furthermore, economies of scale play an important role in keeping manufacturing costs down. Most of Pasdec's direct global competitors have already established manufacturing facilities in low cost countries and are catering for the rest of the globe from those countries. This enlarges production volume and creates economies of scale advantages which further drive down costs. This is in total contrast to a company only manufacturing for the local South African market with low

volumes and big varieties which results in many production changes and increased production down times.

2.3.2 The vision and mission of Pasdec

The primary aim of Pasdec is to manufacture and supply automotive wiring harnesses to its customers which are of superior quality and value. The philosophy of the company is to promote continuous improvements in quality and productivity with zero defects being Pasdec's sustainable goal. Part of this drive is to ascertain that customers are satisfied with primary service activities such as the actual delivery of products (outbound logistics), marketing and sales and after-sale service.

Pasdec's mission statement includes:

- To meet or exceed the requirements, expectations and needs of all customers.
- To seek innovative, cost effective solutions to problems both locally and internationally.
- To supply products and services which are beneficial both functionally and financially to all customers, both current and future, and to Pasdec self.
- To ensure that all employees are qualified, trained and informed such that they shall be successful within their given areas of responsibility.
- To strive for continuous quality improvements within the company, the product, the service provided and the capabilities of all employees.

CHAPTER 3: LITERATURE STUDY

3.1 Introduction

Extensive research has been conducted on service quality over the past 20 years. Numerous of these studies have focussed explicitly on identifying the dimensions of service quality that need to be measured in a specific industry. This chapter discusses the main theoretical foundations and grounded theory of service quality. This cannot be done without considering first the concept of service quality. Secondly, the measurement of service quality as an indicator for customer satisfaction is also highlighted. Having laid this foundation, the literature review turns the focus to existing models for measuring service quality. The extensive research done by Parasuraman, Zeithaml and Berry in the mid 1980's, and the subsequent development of the SERVQUAL model is one that cannot be ignored when studying service quality. Although more than 20-years old, the SERVQUAL model and its service dimensions are today still used by many practitioners in the field. Many other service quality models, such as the LIBQUAL model or the one developed by De Jager, Grundling and Fourie (2003) are merely extensions of the SERVQUAL model. Lastly, the chapter concludes by identifying and listing the various dimensions and items identified from different models in measuring service quality.

3.2 The concept of service quality

Service quality is a concept that has aroused considerable interest and debate in research literature because of the difficulties in both defining and measuring it with no overall consensus emerging on either (Shahin, 2006:324). A commonly used definition defines service quality as the extent to which a service meets customers' needs or expectations (Venter & Dhurup, 2005:30). Another definition defines service quality as customer satisfaction (Schofield & Breen, 2006:207).

This implies that quality of a product or service is ultimately determined by the customer. Furthermore different factors contribute to service quality such as the internal organisation, physical support of the service producing system, corporate image, staff and customer interaction and the degree of customer satisfaction, and the product itself. Essentially, definitions revolve around the fact that perceived quality is a consumer judgement, a form of attitude and results from comparisons by consumers of expectations of service with their perceptions of actual service performance (Schofield & Breen, 2006:211).

The need to acknowledge the role of the customer and meet their needs in the service environment has become evident in the literature produced in management circles in recent years. In processes where the element of service is present, customers are more than mere consumers of output; they are co-producers of the process (Grönroos & Ojasalo, 2004:15). When examining service quality in a manufacturing environment, consideration needs to be given to what the customer expects from the service provision and how the supplier determines this and reflects this in the service design and provision. It is thus important to deliver a service together with a tangible product which meets customers' expectations and thus incites satisfaction. Customers do not necessarily consider the purchase of a product purely on price and purchase satisfaction but also take into account the level of customer service perceived from the supplier (Lee, Lee & Yoo, 2000: 218). Lee et al. (2000:219) also noted that factors such as convenience, price, or availability may influence satisfaction while not actually affecting customers' perceptions of service.

Taking all the different viewpoints into account, service quality can thus be defined as the difference between customer expectations of service and perceived service. If expectations are greater than performance, then perceived quality is less than satisfactory and hence customer dissatisfaction occurs (Shahin, 2006:325).

3.3 The importance of service quality

In the early 90's, Lewis and Mitchell (1990:2) noted that the importance of service quality as an indicator of customer satisfaction and organisational performance is widely acknowledged and has led to a major research thrust which has focused on a number of industries. The importance of this research movement is also evident in the remark by Schofield and Breen (2006:199) that in order to win and retain customers service quality is now widely regarded as important to achieve customer satisfaction. To achieve this requires understanding of customer's expectations. Satisfaction or dissatisfaction is not inherent in the product but, instead, is the individual's perceptions of that product's attributes and the service received with the product as they relate to that individual (Boshoff & Gray, 2004:71). Satisfaction is thus distinctive to the individual and is formed by the interaction of perceptual interpretations of the service and consumer expectations of the product and service. consequence, different consumers will have varying levels of satisfaction for an experience which is essentially the same. Satisfaction is viewed as a post-choice evaluative judgement of a specific purchase occasion (Boshoff & Gray, 2004:77). The evaluation of each encounter will not necessarily correlate with the customer's overall satisfaction with the organisation or perceptions of the quality of the products delivered by the organisation. Over time, however, it is likely that multiple service encounters will lead to an overall level of satisfaction. This is supported by Parasuraman, stating that services are intangible because, unlike goods – which are objects with precise manufacturing specifications that can be counted, inventoried, measured, tested and verified prior to sale in order to test uniform quality - services are performances for which uniform quality specifications can rarely be set (Tsitskari, D Tsiotras & G Tiotras, 2006:4). Services are considered simultaneous in production and consumption because service delivery often takes place as an interaction between the customer and an erriployee. They are

perishable because once the interaction ends, so does the service, as opposed to goods, which a customer can keep after its purchase. It is therefore necessary to understand the customer experience. This understanding is vital to the long-term profitability and growth of an organisation. The quality of customer experience an organisation delivers will determine how much sustainable competitive advantage they can enjoy. Services are frequently described as intangible and their output is viewed as an activity, rather than a tangible object (Johns, 1998:434). This distinction is not a clear one, because much service output has a substantial tangible component. A manufacturing organisation produces a tangible product but also interacts with the customer to which it delivers a service in supplying in the customers' need.

3.4 An overview of service quality measurement models

In order to determine the experience value of a service and whether it is meeting the needs of its customers, performance measurement practices need to be developed. A number of specific methods are available to measure service quality. The tangible aspects of service can be measured using the very basic quantitative measures of operational performance objectives related to meeting customer expectations; for example speed, quality, dependability, and flexibility (Slack & Rowley, 2003:57). In addition to measuring the tangible aspects of service quality there are techniques that have been developed in total quality management, service quality and servicemarketing that enables the more intangible aspects of service quality to be measured. Examples include tools such as the Balanced Scorecard, mystery shopping, customer feedback and focus groups, and service quality measurement models such as SERVQUAL (Lewis, 1999: 566).

The early work of Grönroos (1984) was later extended by Parasuraman, Zeithaml and Berry (1985) in developing SERVQUAL

(Lewis, 1999: 566). To fully understand service quality, the *intangible*, *heterogeneous* and *inseparable* nature of service as a concept must be acknowledged and that service quality can be defined as the consumer's overall impression of the relative inferiority/superiority of the organisation and its services or as the customer's assessment of the overall excellence or superiority of the service (Boshoff & Gray, 2004:6). In these terms service quality means conforming to customer expectations and implies, from a consumer perspective, the comparison of customer expectations with customer perceptions of actual service performance.

3.4.1 SERVQUAL

SERVQUAL is a service quality measurement instrument that was developed by Parasuraman, Zeithaml and Berry in the 80's. Although more than 20 years old, the model is still regarded as valid today and widely used in practice. The underlying service quality dimensions measured by the SERVQUAL model have also been the key to the development of other similar measurement frameworks.

The measurement instrument, or questionnaire, consists of 22 service items that is firstly rated on respondent expectations regarding their importance, and secondly on a 5 point Likert-scale. The questionnaire is based on the idea that service quality is derived from the difference between clients' expectations about performance of a general class of service providers and their assessment of the actual performance of a specific firm within that class. Service quality has been described as a form of attitude, related but not equivalent to satisfaction that results from the comparison of expectations with performance (Parasuraman, et al, 1988). The SERVQUAL model has proved to be the most popular service quality measuring instrument in all industries. Coulthard (2004:18) noted that SERVQUAL seemed to capture the crux of what service quality might mean. SERVQUAL has become the conceptual basis for the development of customised service quality

measurement instruments, for example LIBQUAL was developed for measuring service quality in libraries.

Although any service industry is unique in some aspects, there are five broad dimensions of service quality that are applicable to any organisation that delivers a service in its normal way of doing business, including the public sector and manufacturing sector. These dimensions are:

- Tangibles, which includes physical facilities, equipment, and appearance of personnel.
- Reliability, which relates to the ability to perform the promised service dependably and accurately.
- Responsiveness, which relates to the willingness to help customers and provide prompt service.
- Assurance, which relates to knowledge and courtesy of employees and their ability to inspire trust and confidence.
- Empathy, which relates to caring, individualised attention the firm provides its customers.

3.4.2 The expectancy-disconfirmation model

Oliver (1993) developed the expectancy-disconfirmation model which is the most dominant theory of client satisfaction. According to this theory, satisfaction outcomes are a function of perceived performance and perceived disconfirmation (Löffler, 2001:107). Perceived disconfirmation depends on perceived performance and standard for comparison. Standards of comparison may include expectations, ideals, competitors, other service categories, marketer promises and industry norms. If perceived performance is significantly worse than the comparison standard, a client will experience negative disconfirmation meaning the service did not meet the comparison standard even though the product may meet expectations. It does not

matter how the organisation believed the service was performed. It is especially important for managers of business services to recognise negative disconfirmation, as it presents the largest threat to client loyalty, word-of-mouth recommendation, repeat purchases, and other desirable client responses.

3.4.3 The European Foundation for Quality Management Excellence Model

Another service quality measurement model was introduced in 1988 namely The European Foundation for Quality Management Excellence Model. This model has its roots in the philosophy of Total Quality Management (TQM) because of the potential that Total Quality Management showed as a means of gaining competitive advantage. The process of self-assessment of the European Foundation for Quality Management Excellence Model is comprehensive, systematic and performed periodically, whereby an organisation can identify its own strengths and areas for improvement, and benchmark its overall performance to accepted levels of good practice (Kaydos, 2003:336).

All these models have one embedded goal namely to determine if a service delivered satisfied the customer. Lovelock (2001:223) noted that satisfaction is inextricably linked to client loyalty and relationship commitment. Highly satisfied clients also spread positive word of mouth and in effect become walking and talking advertisements for a firm whose services and products have pleased them.

3.5 Service quality dimensions

Much of the earlier empirical work in service management has suggested that the dimensions of service quality may be stable in terms of their relative importance. However, customers have become more and more aware of their requirements and demand higher standards of services. Their perceptions and expectations are continually evolving,

making it difficult for the organisation providing a service to satisfy the customer. The key lies in improving the service selectively, paying attention to more critical service attributes or dimensions as a part of customer service management. It is imperative to understand how sensitive the customers are to various service attributes or dimensions. Allocating resources in the fashion that is consistent with customer priorities can enhance the effectiveness in the delivering of the service. It is also important to explore the relative importance of service quality dimensions (Verma & Sanchdev, 2004:1).

In this regard, Seth, Deshmukh and Vrat (2006:85) provide a comprehensive list of 35 dimensions, as indicated in Table 3.1:

Table 3.1: 35 Dimensions of service quality dimensions

1. Access	13. Environment	25. Reliability
2. Anticipation	14. Empathy	26. Responsiveness
3. Assurance	15. Enthusiasm	27. Safety
4. Attitude	16. Flexibility	28. Security/confidentiality
5. Communication	17. Follow-up after initial service	29. Skill
6. Competence	18. Friendliness	30. Speed
7. Completeness	19. Image/reputation	31. Thoughtless/accuracy
8. Consistency	20. Information-providing	32. Timely/prompt service
9. Convenient location	21. Performance	33. Trustworthiness
10. Courtesy	22. Politeness	34. Understanding/knowing the customer
11. Credibility	23. Professionalism	35. Willingness to correct errors
12. Ease of use	24. Reasonable cost	

Source: Seth et al., 2006:85

3.6 Summary

The concept of service quality is debated by different authors and has aroused considerable interest because of the difficulties in both defining and measuring it with no overall consensus.

In order to determine the experience value of a service and whether it is meeting the needs of its customers, performance measurement practices needs to be in place. Different measurement models and theories have been developed all aiming at measuring customer satisfaction (Kaydos, 2003: 333). Various authors have provided different service quality dimensions over time. It is imperative to understand how sensitive the customers are to various service attributes or dimensions in order to create advantages in the organisation.

Lastly, the literature review noted the widespread use of quantitative data in past research studies, however, also provided merit for using qualitative data gathering methods and analysis.

CHAPTER 4: RESEARCH METHODOLOGY

4.1 Introduction

Chapter 4 provides a discussion of the research design and methods used for data gathering. Although the study followed a qualitative approach, elements of triangulation was employed in order to enhance the reliability of the research. This involved gathering quantitative measures from respondents to substantiate qualitative data.

Data was gathered by means of in-depth interviews.

4.2 Sample

Pasdec is a supplier of harnesses to three main original vehicle equipment manufacturers (OEM's). Although some smaller customers are also serviced, the contribution to total turnover from these smaller customers is less than 3%. These smaller customers were hence not considered for inclusion in the data gathering phase.

Each customer was contacted and a meeting scheduled with the Manager: Purchasing. The Manager: Purchasing is responsible for all contracts, specifications and liaison with sub-contractors. Each interview lasted between one and a half and two hours.

4.3 Measuring instrument

A pre-developed discussion guide was used to steer discussions during the gathering of data. It provided the researcher with a structured framework for discussion and also ensured that interviews addressed similar themes as related to the research objectives. The discussion guide consisted of a number of pre-developed questions that aimed to address the research objectives, namely to:

- Identify the relevant service quality dimensions
- Investigate perceptions towards the overall level of service quality as well as across the dimensions
- Identify key service performance areas as well as areas that need to improve.

The discussion guide consisted of 10 questions. In order to substantiate qualitative data, respondents were also requested to provide quantitative ratings on the performance of Pasdec on various service dimensions. This provided richness in the data.

Refer to *Annexure A* for a copy of the discussion guide.

4.4 Data analysis

The data analysis was done by means of organising the qualitative data according to the predefined service dimensions discussed. Similar concepts and themes emerging from the data were identified. The insight gained from the findings from the literature review allowed the researcher to recognise the important themes and concepts.

A summary of the main themes and concepts were made.

Quantitative measures in the form of ratings obtained from the interviews were captured in Excel. Graphical representation of individual points allowed the researcher to examine variation across the three companies. The ratings linked to the qualitative data are discussed in Chapter 5.

4.5 Limitations of the study

Most studies as highlighted in the literature review utilises large sets of quantitative data in measuring service quality. This study aims to address the challenge of measuring service quality amongst a small sample by employing a qualitative data gathering technique in the form of in-depth interviews with the three main customers of Pasdec Automotive Technologies. Both qualitative data is gathered and substantiated with quantitative ratings by respondents.

4.6 Summary

Chapter 4 provided a discussion of the research design and methods employed during the study. Being qualitative of nature, the study employed quantitative elements to enhance reliability of the results.

CHAPTER 5: RESULTS, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The primary research objective of this study was to determine perceptions towards the service quality of Pasdec Automotive Technologies amongst its three main customers. As mentioned in Chapter 4, although some smaller customers are also serviced by Pasdec, the contribution to total turnover from these smaller customers is less than 3%. These smaller customers were hence not considered for inclusion in the data gathering phase.

In support of the primary research objective, the study had the following three secondary objectives, namely:

- Identify the relevant service quality dimensions
- Investigate perceptions towards the overall level of service quality as well as across the dimensions
- Identify key service performance areas as well as areas that need to improve.

Chapter 5 reports on the results and findings drawn from the three indepth interviews conducted. It is discussed in relation to the three research objectives.

5.2 Results and discussion regarding the research objectives

The research outcomes of the research objectives are reflected under the relevant sub-headings below.

5.2.1 Dimensions of service quality

Respondents were asked to consider a list of 31 items or service attributes of service delivery. These items or attributes were identified during the literature study. The aim of the discussion was to determine respondents' understanding of each item/attribute and how it specifically relates to the industry under consideration, namely automotive parts manufacturing. The discussions also focused on identifying similar items/attributes that are viewed as measuring the same thing. This will help in developing and refining future service quality programmes in focussing on the most important and relevant dimensions.

The table below provides a summary of the most important and relevant comments by respondents.

Table 5.1: Summary of respondents' comments relating to service quality dimension

	Dimension	Respondent 1	Respondent 2	Respondent 3
1	Accessibility	Easy access to contact person on all levels within PAT	Having direct access to key personnel (direct lines)	Access to information Access to people
2	Assurance	Confidence/Assurance in getting things done	Providing reliable info Confidence in products	"Won't drop the ball when it matters"
3	Attitude of contact personnel	Personal attitude	Their approach to dealing with customers (friendliness, willingness to help)	The way they treat customers
4	Communication and feedback	Communication – verbal meetings Feedback – response from meetings [Link with 2]	Giving regular feedback (without always necessary to ask for it) [Link with 1]	Being in contact when needed Frequency of feedback
5	Competency	Personal and skills requirements to meet contracts	To resolve problems To deliver products on time Innovation	Capability and experience in design and manufacturing
6	Consistency	Same performance over and over again	In quality In service delivery In processes	Expect the same every time
7	Convenient location	Close to customer	Proximity to customers	Location of plant
8	Courtesy	Friendliness/ helpfulness/patience	[Link with 3]	Consideration from staff

	Dimension	Respondent 1	Respondent 2	Respondent 3
9	Credibility	Can depend on person Keep his word [Link with 2]	"Above average supplier" [Link with 2, 5 and 6]	Reputable company
10	Empathy	Concerned with personal feelings Person who contains his conscious in all circumstances and everyone who is in contact with them	Going out of their way [Can also link with 3 and 8]	Understanding and value trust
11	Enthusiasm	To be positive and have hope in good and uncertain periods	About work [Link with 3, 8 and 10]	Eagerness and passion for work To assist
12	Flexibility	To be able to make quick changes	Deliveries Design – minor Design – major	Working around the clock if necessary to deliver
13	Follow-up after initial service	Full ongoing support after contract is rewarded to PAT	Support over long term	Ongoing support throughout the project/product life cycle
14	Friendliness	Same as courtesy [Link with 8]	Personnel [Link with 3, 8, 10 and 11]	Friendly attitude of personnel
15	Image/reputation	How customer see PAT Past QCD performance	Of the company and staff Trust in the company's ability to deliver [Link with 2, 5, 6, and 9]	Being credible & trustworthy
16	Information- providing	Openness and transparency of all sorts of information including confidential information	Transparency [Link with 1 and 4]	Feedback
17	Performance	QCD performance	Quality of processes and end-product [Link with 2, 5, 6, 9 and 15]	QCD Performance
18	Politeness	[Link with 10 and 14]	[Link with 3, 8, 10, 11 and 14]	Way staff handles customers same as friendliness
19	Professionalism	Feedback from meetings, detail from meetings and the way information and service is provided to customer	The way they conduct business [Link with 3, 8, 10, 11, 14 and 18]	The way business is done
20	Reasonable cost	Actual overall component costs	Below average cost supplier	Cost competitive
21	Reliability	Reliable to produce the correct part at the correct time with the correct quality and at the correct cost	[Link with 2, 5, 6, 9, 15 and 17]	Trustworthy
22	Responsiveness	Quick response to requests	Speed of response	Assistance
23	Safety	Customers risk in doing business with PAT	Safety in dealing with company [Link with 2, 5, 6, 9, 15, 17 and 21]	Assurance of manufacturing safety critical components
24	Security/ confidentiality	Security of confidential information that can leak out during exchange between customer and supplier	[Link with 2, 5, 6, 9, 15, 17, 21 and 23]	Confidentiality agreement
25	Skill	Ability to produce what is promised	The ability to perform technicalities	Speciality / specialisation
26	Speed (decision, payment, action, response)	Overall service as a package Quick response Link with 22	[Link with 22]	Quick responses
27	Thoughtless/ accuracy of the service	Non delivery - non commitment	[Link with 2, 5, 6, 9, 15, 17, 21, 23 and 24]	Preciseness / Attention to detail
28	Timely/ prompt service	Time to react to requests/concerns [Link with 22 and 26]	Deliveries Responsiveness [Link with 22 and 26]	Meeting targets
29	Trustworthiness	Same as confidentiality [Link with 19 and 21]	[Can link with 2, 5, 6, 9, 15, 17, 21, 23, 24 and 27]	[Link with 21]
30	Understanding/ knowing the customer	Know customers product, operations and internal systems	Ability to understand technicalities [Link with 25]	CRM
31	Willingness to correct errors	Correction of errors after and before delivery	Attitude to correct errors [Link with 1, 4 and 16]	Readiness to correct own mistakes

Based on the results, it is evident that a number of items can be grouped together as it describes similar dimensions. The new groupings of items are as follow. The original item number is shown in brackets.

- (1) Accessibility
- (4) Communication and feedback
- (16) Information-providing
- (31) Willingness to correct errors

The items describe the effectiveness of Pasdec's communication in firstly providing channels for customers to gain immediate access to key staff members and secondly to pro-actively provide feedback. This also suggests that Pasdec must be willing to correct errors and report on it when relevant. Openness in communication is critical to building strong customer relationships.

The second grouping of items is shown below. Items listed relate to Pasdec's ability to instil trust and meet contract demands. When this happens, a corporate identity is build that encapsulates trust, credibility, and a positive image and reputation. The name 'Pasdec' becomes synonymous with all these items.

- (2) Assurance
- (5) Competency
- (6) Consistency
- (9) Credibility
- (15) Image/reputation
- (17) Performance
- (21) Reliability
- (23) Safety
- (24) Security/ confidentiality
- (27) Accuracy of the service

(29) Trustworthiness

The third grouping of items relate to Pasdec's ability to engage business and customers in an enthusiastic, polite and friendly manner while maintaining professionalism.

- (3) Attitude of contact personnel
- (8) Courtesy
- (10) Empathy
- (11) Enthusiasm
- (14) Friendliness
- (18) Politeness
- (19) Professionalism

The fourth grouping of items relate to Pasdec's ability to respond to customers in a proactive timely way.

- (22) Responsiveness
- (26) Speed (decision, payment, action, response)
- (28) Timely/ prompt service

The 21 items listed above can thus be collapsed into four primary dimensions. Together with the items that were not grouped, the original 31 items can thus be reduced to 10 primary dimensions, namely:

- Accessibility, communication and feedback
- Trust, image and reputation
- Staff and professionalism
- Responsiveness
- Convenient location
- Flexibility
- Follow-up after initial service

- Reasonable cost
- Skill
- Understanding/knowing the customer

The 31 items can thus be represented by ten primary service quality dimensions. In future, service quality programs can focus on these items as a representation of the dimensions of service.

5.2.2 Perceptions towards the level of service quality

Respondents were asked to rate Pasdec's overall level of service quality using a 5-point rating scale where 1 = below expectation and 5 = above expectation.

Table 5.2: Overall ratings of Pasdec

	Overall rating
Respondent 1	5
Respondent 2	4
Respondent 3	4

Two of the three respondents gave Pasdec a rating of four, suggesting overall service levels slightly above expectation. One respondent gave an overall rating of five, which suggests service quality is considerably above expectation. The ratings show that Pasdec maintains a very high level of service delivery to its three main customers. Reasons given by respondents for their overall evaluation were:

- The overall quality, cost and delivery (QCD) targets are continuously met
- Pasdec's contact persons always show enthusiasm and hope
- Walking the extra mile (put in effort in all areas namely delivery, development, cost and quality)
- Always shows friendliness

- Shows overall integrity and politeness
- Really stand out above other suppliers
- Always provide a quick service
- Assistance
- Go beyond what is sometimes asked of them
- Cooperative
- Delivery of parts
- After-sale service

The rating of items is shown in the tables below.

Table 5.3 shows the rating of items grouped under accessibility, communication and feedback. An average rating based on the three individual ratings is also shown as well as an overall average for the dimension.

Accessibility showed the most variation across the three respondents. The average rating is also lowest of the four items (3.8).

Table 5.3: Rating of items relating to accessibility, communication and feedback

Nr Dimensions	R	atings	•	Ave
1 Accessibility	4	3	2	3.0
4 Communication and feedback	4	4	4	4.0
16 Information-providing	5	4	4	4.3
31 Willingness to correct errors	4	4	4	4.0
Average	 _			3.8

Table 5.4 shows rating of items relating to trust, image and reputation.

Table 5.4: Rating of items relating to trust, image and reputation

Nr	Dimensions	R	ating	s	Ave
2	Assurance	4	4	_3	3.7
5	Competency	4	4	5	4.3
6	Consistency	4	4	3	3.7
9	Credibility	5	5	4	4.7
15	Image/reputation	5	5	5	5.0
17	Performance	5	5	5	5.0
21	Reliability	4	5	4	4.3
23	Safety	3	5	4	4.0
	Security/ confidentiality	4	5	4	4.3
	Thoughtless/ accuracy of the service	4	5	3	4.0
	Trustworthiness	4	5	4	4.3
	Average				4.3

Across the items, assurance and consistency scored the lowest ratings (3.7) and performance and reliability (5.0) the highest.

Table 5.5 shows rating of items relating to staff and professionalism.

Table 5.5: Rating of items relating to staff and professionalism

Nr Dimensions	6	tating	S	Ave
3 Attitude of contact personnel	5	4	4	4.3
8 Courtesy	5	4	3	4.0
10 Empathy	4	5	3	4.0
11 Enthusiasm	5	4	4	4.3
14 Friendliness	5	5	4	4.7
18 Politeness	4	5	4	4.3
19 Professionalism	_ 4	5	4	4.3
Average				4.3

Across the items, courtesy and empathy scored the lowest (4.0) and friendliness (4.7) the highest.

Table 5.6 shows rating of items relating to responsiveness.

Table 5.6: Rating of items relating to responsiveness

Nr Dimensions	<u>F</u>	≀ating	js	Ave
22 Responsiveness	4	4	4	4.0
26 Speed (decision, payment, action, response)	4	4	4	4.0
28 Timely/ prompt service	4	4	4	4.0
Average				4.0

Table 5.7 shows the average scoring of the ten primary dimensions. Costing obtained the lowest rating (2.7) and follow-up service (5.0) the highest.

Table 5.7: Rating of all dimensions

Dimensions	Ratings			Ave
Accessibility, communication and feedback	4	4	4	3.8
Trust, image and reputation	4	5	4	4.3
Staff and professionalism	5	5	4	4.3
Responsiveness	4	4	4	4.0
Convenient location	5	5	2	4.0
Flexibility	4	4	4	4.0
Follow-up after initial service	5	5	5	5.0
Reasonable cost	4	3	1	2.7
Skill	4	4	4	4.0
Understanding/ knowing the customer	4	4	3	3.7

The average ratings across the ten dimensions can also be presented graphically.

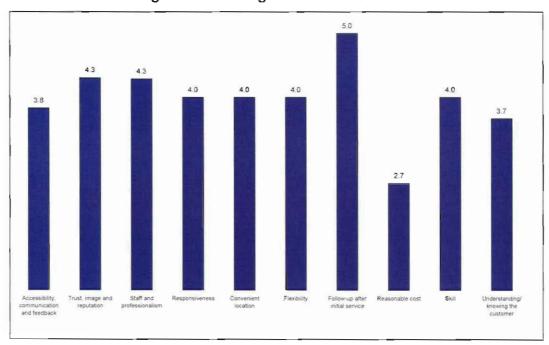


Figure 5.1: Rating of all dimensions

5.2.3 Key performance service areas and improvement areas

The in-depth interviews also focussed on a discussion of the Pasdec's key performance service areas. These were:

- Responsiveness
- Accessibility (Only a phone call away/ Door always open to customers)
- Openness (transparency)
- Quality of parts
- Quality of systems
- Turnaround time
- Logistics

Part of Pasdec's success is their consistent supply and quality over many years. Pasdec has received many quality and performance awards that confirm this.

Areas that Pasdec need to improve include:

- Component costing
- Development and design capabilities/ Self-design capabilities
- Localisation/manufacturing of components

5.3 Conclusions

In conclusion, respondents were also of the opinion that Pasdec is currently well geared in terms of competency and performance and is delivering a service above expectation. However, efforts should be put in place to ensure future service levels in these two departments are sustained. Part of the challenge is the cost and development competitiveness that global players bring to the automotive parts market. Pasdec, in comparison to global players, is relatively small and lacks the advantage of competing on economies of scale. This threatens Pasdec's long term sustainability.

The results also show that Pasdec will need to improve the productlead time to enable quick design changes and enhance flexibility. More benefits will follow if cost savings can be quicker implemented.

5.4 Recommendations

Based on the results and findings of the study, it is recommended that future service quality programmes focus on the following dimensions:

- Accessibility, communication and feedback
- Trust, image and reputation
- Staff and professionalism
- Responsiveness
- Convenient location
- Flexibility
- Follow-up after initial service
- Reasonable cost
- Skill
- Understanding/knowing the customer

It is furthermore recommended that design capabilities also added to the list given its critical contribution to future competitiveness. Service quality should be monitored and measured on a yearly, or even bi-annual, basis. The close interaction of in-depth discussions with customers adds significant value in building and nurturing customer relations.

It is lastly recommended that management develop short and medium term action plans to develop and improve the design capabilities of the firm. The firm should move towards a position where it can become a global player and reap the cost benefits of economies of scale.

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ANNEXURE A: DATA GATHERING INSTRUMENT

INTERVIEWS WITH PRIMARY CLIENTS

Discussion Guide

Introduction & background

Interviewer introduces himself and state the aim of the discussion - that is to discuss the service quality that Pasdec Automotive Technologies deliver to their clients. The feedback will be used to improve key service delivery areas.

Responses are confidential and analysed using qualitative and textual content analysis techniques. Where ratings are provided, ranking statistics will be used.

Interviewer should also inform the respondent that the interview will be recorded for transcribing and analysis purposes.

Section A: Overall rating of service quality

 Please rate Pasdec Automotive Technologies overall level of service quality using a scale where [1] = Below expectation; [3] = As expected; [5] = Above expectation.
 [Interviewer should prompt extensively to understand drivers of service quality]

Please motivate your rating?

3.	Which specific areas of service delivery would you say Pasdec excels in? Why do you							
	say so?							
4.	Which specific areas of service delivery would you say Pasdec needs to improve on?							
	Why do you say so?							

Section B: Understanding and rating of service dimensions

- 5. Please consider the following dimensions of service delivery. Please discuss each dimension. Note the specific services you expect with each dimension.
- 6. Please rate Pasdec Automotive Technologies on each of dimensions using a scale where [1] = Below expectation; [3] = As expected; [5] = Above expectation.
- 7. Please motivate your ratings.
- 8. Which 5 areas do you consider as key to your operations?
- 9. Which 5 areas would you say Pasdec excels in? Why do you say so?
- 10. Which 5 areas would you say Pasdec needs to improve on? Why do you say so?

Dimensions	Rating	Key Service Areas	Excels in	Need to improve
Accessibility				
Assurance			1	
Attitude of contact personnel				
Communication and feedback				
Competency				
Consistency				
Convenient location				
Courtesy				
Credibility				
Empathy				
Enthusiasm				
Flexibility				
Follow-up after initial service				
Friendliness				
Image/reputation				
Information-providing				
Performance				
Politeness				
Professionalism				
Reasonable cost		-		
Reliability				
Responsiveness				
Safety				
Security/confidentiality				
Skill				
Speed (decision, payment, action, response)				
Thoughtless/accuracy of the service				
Timely/prompt service				
Trustworthiness				
Understanding/knowing the customer				
Willingness to correct errors				