

**INTERNATIONAL CUSTOMER
PERCEPTIONS OF SOUTH AFRICAN
AUTOMOTIVE COMPONENT
MANUFACTURER PERFORMANCE LEVELS**

Research Report No. 32

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FOREWORD

The Industrial Restructuring Project (IRP) was initiated at the beginning of 1996 as the KwaZulu-Natal Industrial Restructuring Project (KZN IRP). The project initially focused exclusively on KwaZulu-Natal, but is now aimed at supporting industrial policy in South Africa at the national, provincial and local levels. It is facilitated by international experts and is based at the School of Development Studies, University of Natal Durban. The project has two important features. Firstly, it focuses on critical issues that are impacting on the competitiveness of manufacturing sectors that are under threat from increased international competition and the liberalisation of the South African trade regime. Secondly, it is action-oriented in design. The findings that have been generated have, for example, been presented to numerous industry stakeholders, including government, business associations and trade unions. The project consequently has the support of various regional and national stakeholders.

This particular report/working paper has arisen out of both new research and the cumulative knowledge that has been generated from previous studies. These cover a number of IRP reports, working papers, journal articles and conference papers. Some of the themes covered include South Africa's manufacturing competitiveness, the automotive industry, the clothing and textiles sectors, footwear, middle-management capacity, human resource development, institutional support for industrial restructuring, and business services for manufacturing competitiveness. Enquiries regarding IRP material should be addressed to: The Librarian, Centre for Social and Development Studies, University of Natal, Durban, 4041. Tel: 031 2601031; Fax: 031 2602359; email: smithm@mtb.und.ac.za.

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At an academic level a special thank you needs to be directed towards Sean Ellis who helped with data analysis and the generation of certain tables and figures for the report. The views expressed in this report are, however, solely those of the author. All responsibility for its content therefore lies with the author alone.

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INTRODUCTION

The liberalisation of the South African automotive industry has caused a quantum change in its structure. Automotive component manufacturers supplying domestic OEMs, as well as the domestic OES and independent aftermarket have had to rapidly improve their performance to meet more demanding market requirements and fight off the intense international competition coming into the domestic market. The stagnation of the domestic automotive market over the latter part of the 1990s has further compounded the difficulties faced by the component manufacturers with the foreign imports fighting for a slice of a small domestic market. Whilst domestic buyers of automotive components have become increasingly demanding of the quality, price, durability, etc. of the products they purchase (see Barnes 2000), South African component manufacturers are still largely faced with the same domestic market problems they have encountered since the inception of the industry in the 1920s. Many of these problems pertain to the segmented nature of the South African market and linked to this the inability of the component manufacturers to generate the economies of scale required for the attainment of international competitiveness. Anthony Black (1993, 1995, 1998) has captured the importance of this issue by exploring the failure of the automotive components industry to generate economies of scale in the domestic market and the effect that this has on the competitiveness of individual automotive component manufacturers.

Whilst the domestic automotive market was protected by high trade barriers issues of competitiveness and economies of scale were not particularly important, with firms making large profits despite operational inefficiencies, poor product quality and low economies of scale. By erecting high trade barriers around the South African automotive market artificial demand was created for the output of South African automotive component manufacturers, in spite of their weaknesses. With the post 1995 changes ushered in by the Motor Industry Development Programme (MIDP), this is of course no longer the case. To survive in the domestic market South African automotive component manufacturers need to meet the increasingly onerous demands of domestic buyers, who can now procure their products internationally if they are dissatisfied with the performance of South African suppliers¹.

Meeting domestic buyer requirements is, of course, only half the challenge facing South African automotive component manufacturers. Given the limited economies of scale possible in the South African automotive market², it is key

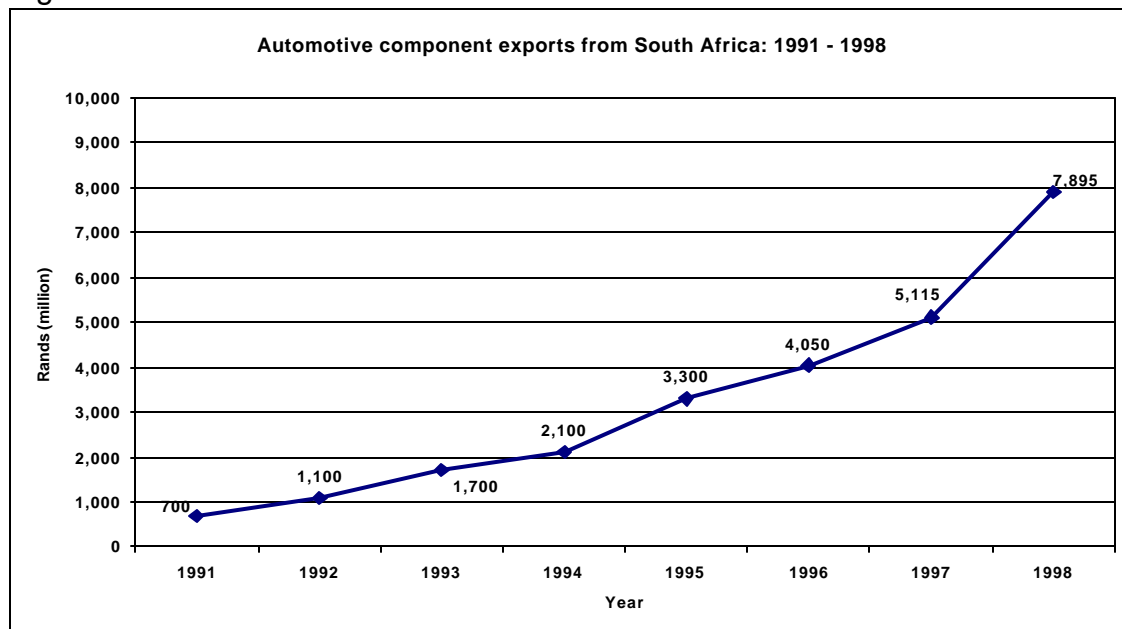
¹ The importance of meeting these domestic buyers' requirements and their increasingly demanding nature is explored in another Industrial Restructuring Project compiled for the Department of Trade and Industry Policy Support Programme (DTI PSP) – see Barnes (2000b).

² The exception here is components for the replacement aftermarket (oil and air filters, gaskets, friction products such as clutches and brake pads, spark plugs, batteries etc.).

that automotive component manufacturers export their products. The South African new vehicle market represents only 0.47% of total global demand and the size of the vehicle park only 0.68% of the total global park. To generate the economies of scale needed for international competitiveness and, as importantly, to learn from the extremely demanding international automotive market, automotive component manufacturers need to find foreign markets for their products. The importance of learning from selling into the international automotive market cannot be underestimated. As highlighted by Valodia (1999) South African firms that wish to continue supplying into the domestic market need to find international markets for their products as well. Firms who supply solely into the domestic market are not as likely to gauge important global technological and/or strategic shifts as quickly as those firms that are linked into the international operating environment.

These points are, of course, recognised in the South African government's development programme for the industry, the MIDP. The programme forces the industry to be strongly outwardly oriented by reducing tariff protection in the domestic market and by facilitating exports through its Import-Export Complementation (IEC) scheme. The direct result of the programme has been a massive increase in automotive component exports. This is clearly revealed in Figure 1 with exports having grown by an astounding 376% between 1994 and 1998.

Figure 1.



Source: DTI (1999)

South African manufacturers can often generate internationally comparative economies of scale for these products.

The automotive component export figure for South Africa are, however, highly skewed by their sub-sectoral make-up. The exports do not reflect a rapid outward reorientation of the major established component manufacturers, but rather the exponential growth of two new export oriented automotive component sub-sectors – namely catalytic converter and leather seat cover manufacture. This is reflected in Table 1, which reveals that in excess of 40% of all automotive component exports from South Africa can be categorised as one of these two products.

Product	Value (1998)	% of Component exports (1998)
Stitched leather seat covers	R1,854m	23.5
Catalytic converters	R1,520m	19.3
Tyres	R498m	6.3
Silencers/exhaust pipes	R493m	6.2
Road wheels and parts thereof	R446m	5.6
Total exports	R7,895m	100

Source: DTI (1999), DTI (1998)

Whilst the rapid growth in automotive component exports from South Africa appears to suggest a massive increase in the international competitiveness of the domestic industry a closer look at the make up of the exports reveals that they are in peripheral automotive items, with low levels of local value added. The massive growth in exports from the automotive components industry appears therefore to be a factor of the duty rebate benefits embedded in the IEC component of the MIDP³.

Macro indicators do not reveal a rapid turn around in the economic performance of established automotive component manufacturers, although this does not mean that competitiveness improvements have not occurred, as this has clearly taken place at the firm-level (see Barnes, 1997, 1998, 1999, 2000a). What it does mean, however, is that the exporting success of the automotive components industry cannot be gauged solely in terms of macro indicators and the burgeoning success of recently established automotive component exporters. An investigation of long-established⁴ automotive component manufacturers who now export is also required in order to generate an understanding of their increased outward orientation and performance in the international market.

³ See Barnes and Kaplinsky (2000) and Barnes and Morris (2000) for further explorations of this critical issue.

⁴ The term “established” in this report means those companies that were set up to supply the domestic automotive market prior to its rapid liberalisation through the MIDP. They are not companies that were set up to export products as a mechanism for generating duty rebates for OEMs.

In this research report we consequently explore international buyer perceptions of the competitiveness of a group of established South African automotive component manufacturers relative to their performance requirements, as well as their perceptions of the South African automotive component manufacturers' international competitors. This research was undertaken by sending perception questionnaires to international automotive customers purchasing components from automotive component manufacturers that are members of the Eastern Cape and KwaZulu-Natal Benchmarking Clubs⁵. Due to the fact that none of the Club members export directly to international OEMs the focus of the paper is on their international aftermarket customer demands and assessments of South African automotive component manufacturer capabilities relative to their international competitors. The findings generated are critically important as they highlight:

1. The critical demands of the international automotive aftermarket
2. International buyer perceptions of their South African automotive component manufacturer performance levels relative to their performance requirements
3. International buyer perceptions of their South African based automotive component manufacturer's performance levels relative to the performance levels of international competitors they source similar products from
4. International buyer perceptions of the performance changes of the South African automotive component manufacturers over time
5. International buyer perceptions of whether they will continue purchasing products from their South African supplier and why

All of these findings illustrate the extent to which certain established automotive component manufacturers have successfully entered the international marketplace and where performance gaps and inadequacies still lie. The findings are important in that they illustrate the extent to which established component manufacturers have become increasingly outward oriented and where critical performance gaps still exist.

From a policy perspective this is obviously key. In identifying the performance weaknesses and/or strengths of the South African automotive component

⁵ The Eastern Cape and KwaZulu-Natal Benchmarking Clubs are continuous improvement networks for automotive component manufacturers. Both Clubs are closely associated with the Industrial Restructuring Project.

manufacturers the Department of Trade and Industry and other industry stakeholders will have a better understanding of the challenges confronting the industry. This will provide all stakeholders with a clearer understanding of areas of possible intervention that could facilitate the improved export performance of the manufacturers.

In order to present the findings generated from the study, the report is broken into three sections. In Section One the methodology used for the perception studies is highlighted as is the profile of the international buyers surveyed and the exporting Eastern Cape and KwaZulu-Natal Benchmarking Club members. Section Two, which constitutes the bulk of the report, focuses on the findings generated from the international buyer survey. A short conclusion that draws out some of the key analytical issues and policy implications of the findings presented in Section Two then completes the report.

1. METHODOLOGY AND PROFILE OF FIRMS

The principal research tool that was used in the study was a perception questionnaire that was sent to the major international customers of the exporting members of the KwaZulu-Natal and Eastern Cape Benchmarking Clubs. These two 'Continuous Improvement' Clubs are formally linked to the IRP, thus providing the research project with access to domestic automotive component firms and their customers.

The perception questionnaires that were sent to the major international customers were identical to the perception questionnaires used for the undertaking of the domestic customer perception surveys (see Barnes 2000b). The methodology used was therefore the same as the methodology used by the IRP in previous academic perception surveys into the automotive and clothing industries (Barnes 1997, 1999, Harrison 1996). Importantly, moreover, the one to 10 rating scale used in the perception surveys has been developed over a number of years by the IRP, in collaboration with the automotive component manufacturers' that belong to the two Benchmarking Clubs. The accuracy and relevance of the perception scales as a research tool has therefore been widely workshopped and analysed; although this was the first time that the perception surveys were sent beyond the borders of South Africa.

Six Club members had major international customers (i.e. international customers amongst their top 10 customers), with a total of 15 perception surveys sent out on behalf of these six firms. The surveys were sent out either electronically or by fax over the period late 1999/early 2000. Numerous email follow-ups were then undertaken to ensure that the customers returned the questionnaires. As a result of the intensive follow-up, 11 perception surveys were returned in time for the writing of the report. For the purposes of statistical analysis, all information from the questionnaires was captured in SPSS. All the statistical findings presented in this report were therefore generated using SPSS.

An action-based research methodology was used in the study, with all the automotive component firms who participated promised an outline of the key findings generated as per the usual domestic customer perception surveys carried out on their behalf. In addition the total membership of the KwaZulu-Natal and Eastern Cape Benchmarking Clubs were promised formal presentations of the findings, thus facilitating their participation and commitment to the study.

The six Club members that had international customers were evenly split between KwaZulu-Natal and the Eastern Cape. The average level of exporting for the six firms was 37% of turnover, with the highest level of exporting 55% and the lowest 22%. The average turnover of the six firms was R130 million, with the average levels of employment 385. In total then the six firms turned over R780 million and employed 2,311 people. The total value of the firms' exports was

therefore R288 million, thus highlighting the importance of the firms as foreign exchange earners. The profile of the six firms is summarised in Table 2.

Table 2: Profile of exporting Club members (n=6)	
Average turnover	R 130 million
Average employment	385
Average levels of exporting	37%
Total value of exports	R 288 million

The 11 customers that participated in the study were principally based in Europe (6), although perception questionnaires were also received from Australia (1), North America (3) and Japan (1). In just over half of all the cases (6) the international customers had an equity relationship with the South African automotive component manufacturer for whom the questionnaire was sent. In 5 of the cases the South African manufacturer was the sole supplier to the international customer, with 6 of the international customers sourcing from multiple suppliers. In these cases the performance ratings for the other international suppliers was sought, thus allowing for a direct comparison between international customer perceptions of South African and international performance levels.

Given the small size of the database generated the findings presented in this report need to be treated with a level of caution. The findings are, however, suggestive and do indicate striking issues that need to be taken cognisance of by all industry stakeholders.

2. INTERNATIONAL CUSTOMER BUYER FINDINGS

The perception questionnaires that were sent to the buyers at each of the international customers that participated in the study focused on four key areas. First they explored the relative weighting of customer requirements, using the 1 to 10 perception scale. Second, they explored customer perceptions of South African automotive component manufacturer performance levels relative to requirements. Third they considered international competitor performance levels relative to the performance levels of the South African suppliers, and then finally a number of more open-ended questions explored the performance trajectory of the South African component manufacturers over time. The structure of this section reflects the sequencing of the questions posed in the perception questionnaires that were sent to the international customers.

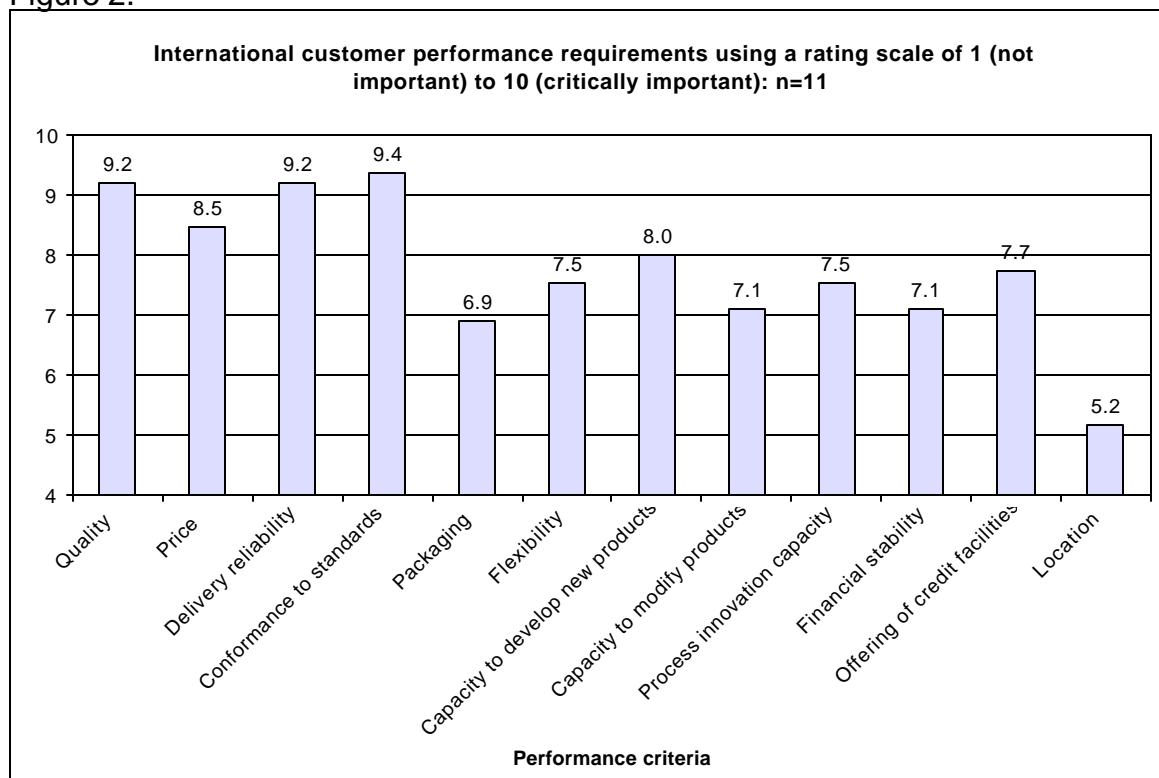
The 12 performance requirements that were extensively explored in each of the perception questionnaires and that constitute the primary focus of this section were:

1. Quality
2. Price
3. Delivery reliability
4. Conformance to standards
5. Packaging
6. Flexibility
7. New product development
8. Capacity to modify products
9. Process innovation capacity
10. Financial stability
11. Offering of credit facilities
12. Geographical location

2.1. International customer requirements

The 11 international customers that were surveyed held very similar perceptions of their performance requirements for the South African automotive component suppliers. These are outlined in Figure 2 below. The four most important performance requirements are conformance to standards, quality, delivery reliability and price. All of these performance criteria received average ratings of over 8, with conformance to standards (9.4), quality (9.2) and delivery reliability (9.2) receiving average ratings of over 9. Less important were the various innovation requirements (both product and process) as well as flexibility, financial stability and the offering of credit facilities, which received average ratings ranging from 7 to 8. The two least important criteria were packaging (average rating of 6.9) and geographical location (5.2).

Figure 2.

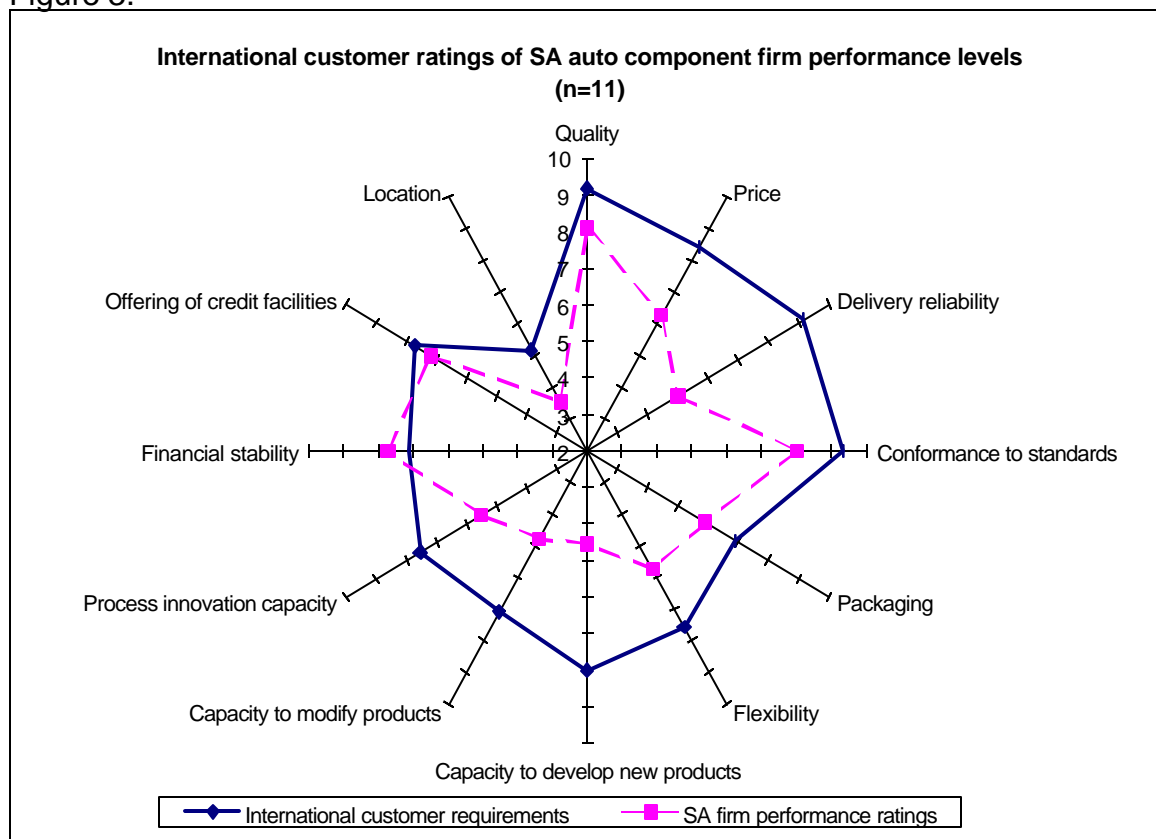


2.2. International customer perceptions of SA component manufacturer performance levels

The 11 international firms that were surveyed strongly believe that their South African suppliers are not meeting their key performance requirements. This is clearly revealed in Figure 3, which highlights the gap between the international customer requirements and their perceptions of the average performance levels of their South African suppliers. The most striking gaps are moreover evident for two of the most important performance requirements of price and especially delivery reliability, where the South African suppliers received very poor ratings. The gaps for the two other key performance criteria of quality and conformance to standards are, however, significantly smaller, thus highlighting the relatively sound technical/quality competence of the South African firms.

The poor average performance of the South African firms in terms of their delivery reliability, as well as their generally sound quality and conformance to specification performance was frequently alluded to in the general comments section of the perception questionnaire used for the study. Most international customers acknowledged the technical/quality capabilities of their South African supplier but were often extremely disappointed with the poor levels of service they were receiving in terms of on-time deliveries and adherence to specified lead times.

Figure 3.



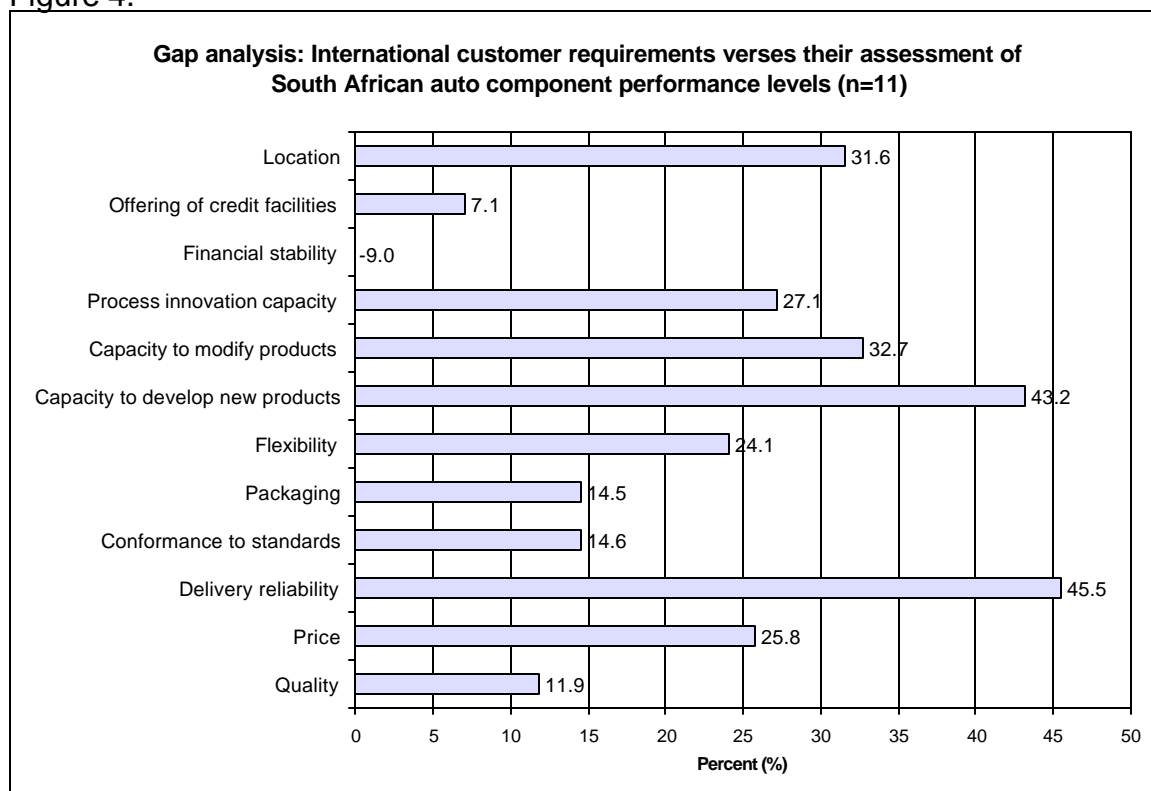
Apart from the most important performance criteria, large performance gaps are also evident for some of the lesser important requirements, with new product development capacity and capacity to modify existing products apparently major weaknesses at the South African firms. This is an interesting finding as it highlights a potentially major cleavage between the domestic and international markets being serviced by established automotive component manufacturers. Their principal domestic market is dominated by OEMs who do not perceive the benefits of South African design expertise (see Barnes 2000b) and hence require suppliers to follow global source designs, whereas aftermarket export customers expect a greater level of innovation capacity.

For all of the other less important requirements, bar geographical location, performance gaps are not sufficiently large to cause industry stakeholders substantial levels of concern. For example, there is no gap between international customer financial stability requirements and the South African suppliers' performance. This is revealed in Figure 4, which quantifies the extent of the gap between the international customer demands and the South African automotive component manufacturers' performance levels.

The poor performance of the South African firms against their international customers' "geographical location" requirements is not a cause for undue concern given the very low importance rating given to this criterion by

international customers. It does, however, suggest that international customers purchasing components from South Africa do so when geographical location is not an overriding factor in their purchasing decisions and that South Africa's geographical position may be an inhibiting factor for the supply of more location-sensitive components.

Figure 4.



In summary then, the 11 international customers that were surveyed identified a number of significant gaps between their performance requirements and the performance levels of the South African firms that supply them. The existence of these performance gaps is potentially highly problematic, as it opens up the opportunity for other international suppliers to enter the South African suppliers' markets and capture their international market share. This is, however, contingent upon the international suppliers surpassing the performance levels of the South African suppliers. Whilst one might speculate that this is likely given the large performance gaps that exist we attempted to gain a more concrete impression of how the international customers' viewed the performance of their other suppliers that manufacture the same or a similar range of products as the South African suppliers. This was done by requesting that the international customers rate the performance of competing international suppliers, using the same perception measurement system as used for the South African suppliers.

Given the fact that only six of the 11 international customers sourced similar products from other suppliers we only had a small subset of firms from which to

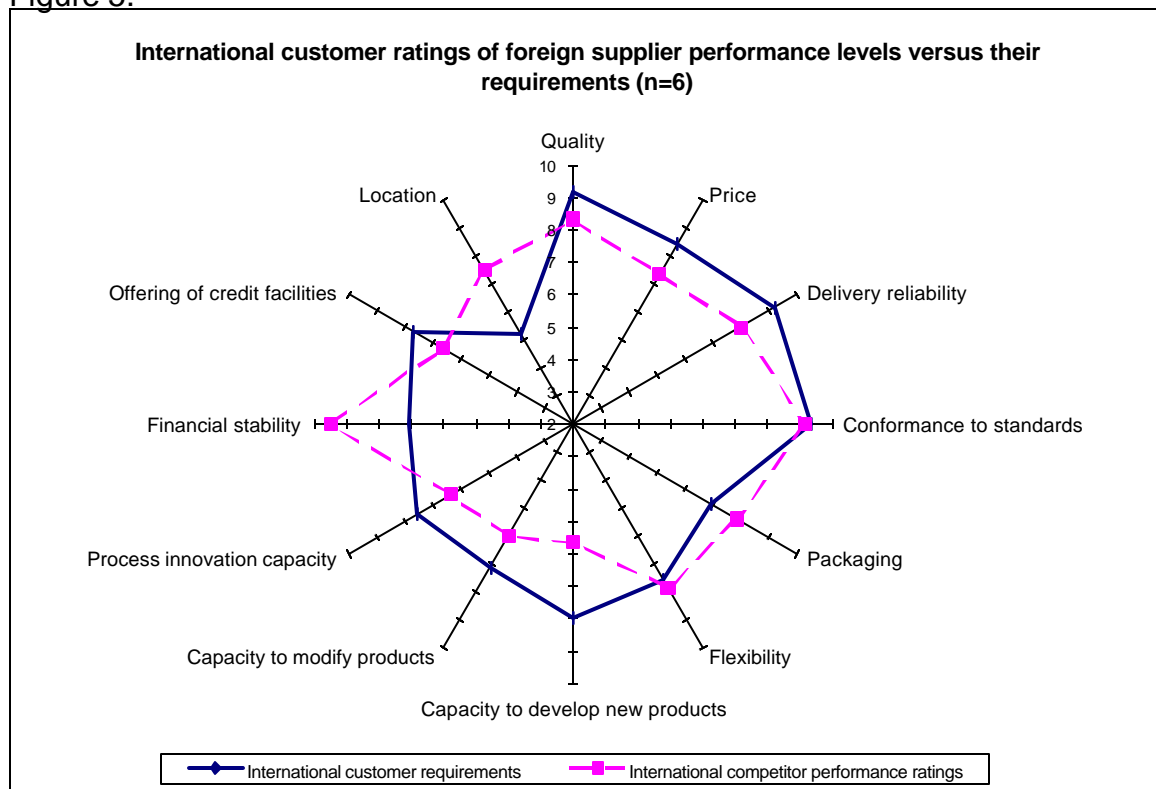
draw comparative lessons. Despite this readily acknowledged limitation, the six international customers, through the use of the same rating system, provided us with a suggestive indication of the relative performance of competing suppliers.

2.3. International buyer perceptions of foreign supplier performance levels

The international buyers that were surveyed were generally satisfied with the performance levels of their other suppliers that manufactured similar products to the South African automotive component manufacturers. Whilst performance gaps were evident (as highlighted in Figure 5) they were not particularly striking, especially for the more important performance criteria of quality, price, delivery reliability and conformance to standards. For certain performance criteria such as packaging, flexibility, financial stability and geographical location, the international suppliers actually surpassed the customers' requirements.

The only area where the international suppliers lagged the customers' requirements by a significant margin related to their capacity to develop new products.

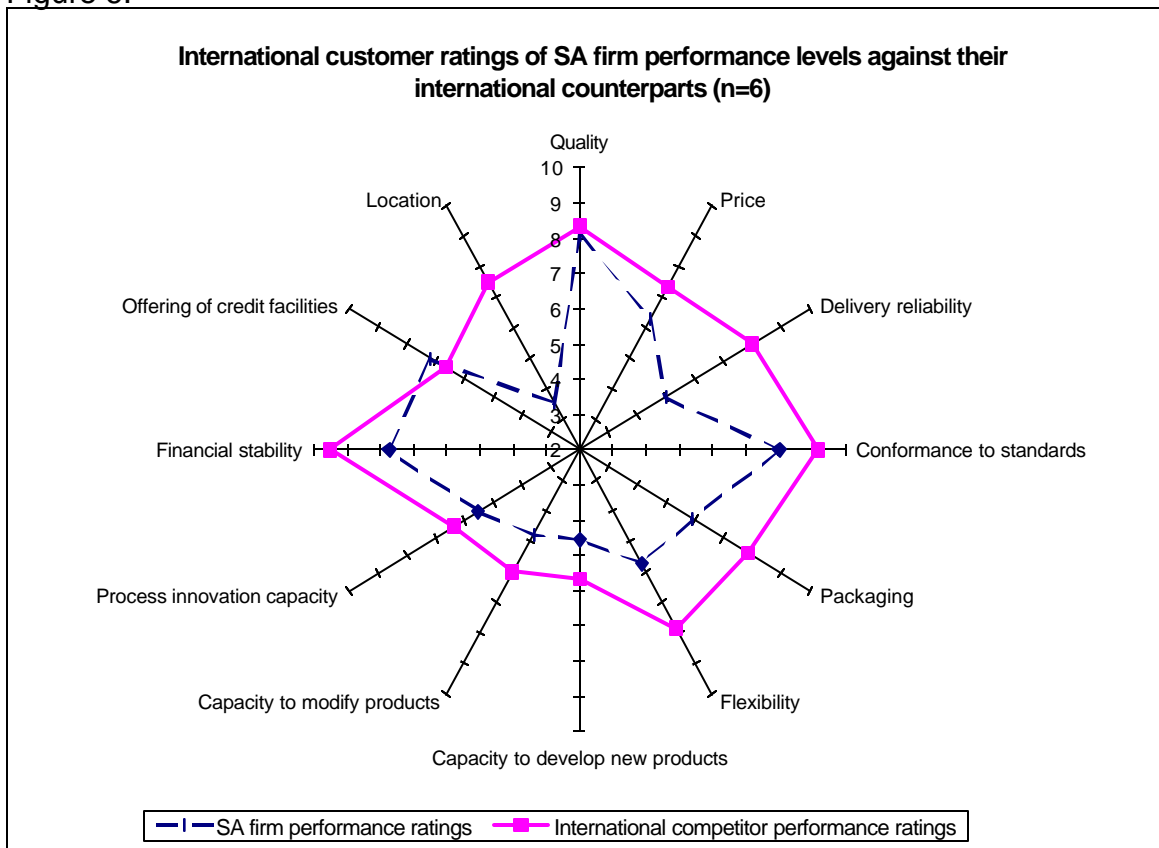
Figure 5.



2.4.SA component manufacturer performance levels versus foreign suppliers

The significant difference in international customer ratings of South African performance levels versus their international counterparts is captured in Figure 6 below.

Figure 6.



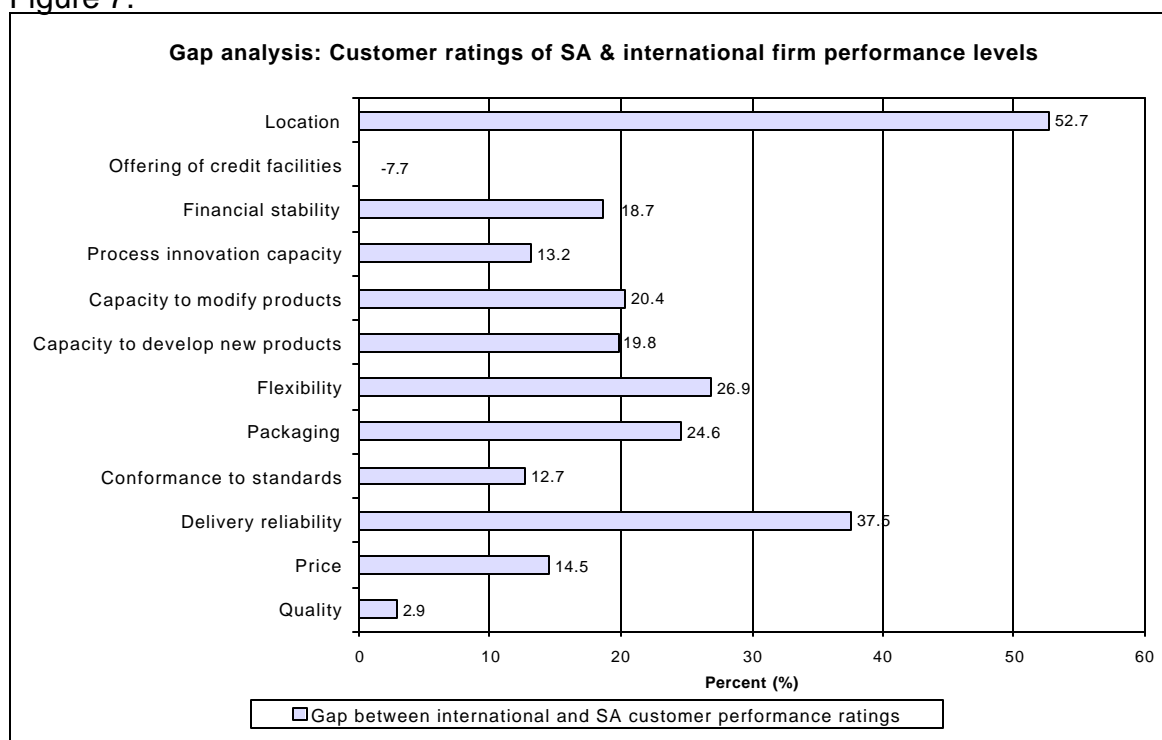
As revealed, large gaps are evident across almost all of the performance criteria explored. The only exceptions relate to the key measure of quality and the lesser important criterion of offering credit facilities. Other performance criteria with relatively small gaps are conformance to standards, price, capacity to develop new products (where both the South African and the international suppliers receive poor ratings), capacity to modify products, process innovation capacity and financial stability.

The most prominent performance gaps relate to those areas where the South African firms are recognised as being very weak – their delivery reliability and geographical location. The latter of these is unimportant given the low importance rating accorded to it by customers, but delivery reliability is clearly a major problem that impacts negatively on international customer perceptions of South African performance levels. In the open ended questions requesting comments on the comparative performance of the South African companies, the most

frequent complaint related to this aspect of their performance. Further investigation into this issue at the South African firms involved suggested that one of the key reasons for their poor performance in this regard related to their domestic customers (principally OEMs) receiving priority in terms of order sequencing and delivery scheduling. Firms are acutely aware of the importance of on-time deliveries to the South African based OEMs and as such sacrifice reliability in the international aftermarket when problems occur.

The exact magnitude of the gap between the international customers' ratings of their South African supplier's performance levels against international competitors is highlighted in Figure 7.

Figure 7.

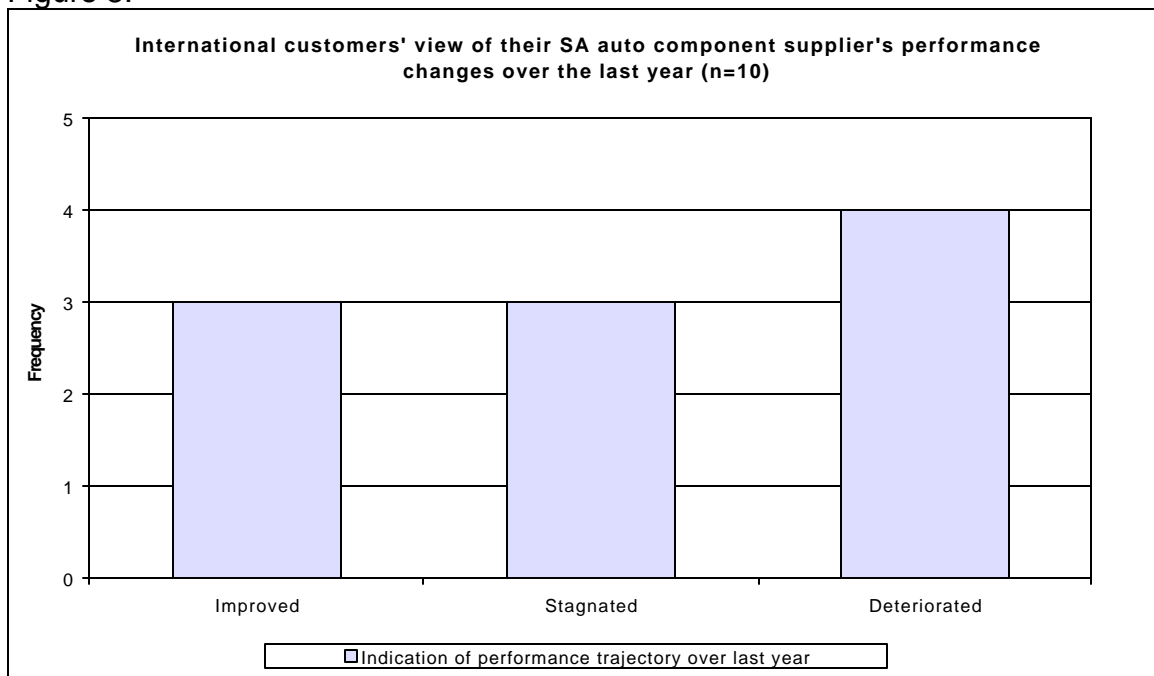


2.5. Performance changes over the last 12 months

All of the figures presented in this section of the report are static, in the sense that they reveal international customer viewpoints of performance at a given moment in time. Whilst they clearly reveal the overall comparative weakness of the South African automotive component manufacturers against their international customers' requirements as well as against the comparative performance of their international competitors, they fail to indicate whether this is an improvement or deterioration on previous performance levels. This is critically important as one could actually see the large performance gaps positively if the gaps have significantly decreased over the last year. In order to gauge the progress of the South African component suppliers over time we consequently asked the international customers to indicate whether their performance had

improved, stagnated or deteriorated over the 12 months prior to receiving the perception questionnaire. The responses were unfortunately far from conclusive with the ten customers that had been purchasing components from their South African supplier for a period longer than 12 months holding varying views. Three customers indicated that their South African suppliers' performance levels had improved, three that performance levels had stagnated and four that performance had deteriorated. These views are graphically presented in Figure 8.

Figure 8.



2.6.Future purchasing from South African suppliers

Despite the poor performance ratings accorded to the South African automotive component manufacturers and the mixed perceptions of their performance improvement over time, it was quite striking to note that in every instance the international customers viewed their South African suppliers as long-term suppliers. The 11 international customers held very different reasons for their perceptions in this regard, however. For certain customers purchasing from the South African supplier was expected simply because the companies fell under the same ownership umbrella, whilst other customers indicated that they were largely satisfied with the progress being made by their South African suppliers. In at least two cases, the international customers indicated that they were reliant on their South African supplier for niche products that they were unlikely to obtain elsewhere – thus giving the local manufacturer a comparative advantage over international competitors. The general quality of the products being manufactured by the South African automotive component manufacturers was also recognised as largely satisfactory, with this further verifying the findings presented in Figures 3 and 6.

CONCLUSION

The findings generated from the 11 international customer perception surveys undertaken for the six automotive component manufacturers are suggestive. They highlight the critical importance of non-price factors in the international automotive market, whilst at the same time illustrating the extent to which a small sample of long-established South African automotive component manufacturers are meeting their international customers' performance requirements. Whilst the overall picture is far from positive, with the South African automotive component manufacturers generally receiving poor performance ratings against customer requirements and the performance levels of the customers' other international automotive component suppliers, the findings are also not particularly bleak.

There appeared to be widespread customer recognition of the technical competence of the South African automotive component suppliers, with most of the negative perceptions pertaining to the poor service levels of the South African suppliers. Despite their significant outward orientation (average levels of exporting as a percentage of turnover was 37% at the six South African firms) the poor service levels of the firms appeared to relate to their continued domestic market orientation. This is particularly apparent in terms of the poor delivery reliability records of all of the South African automotive component manufacturers.

From a DTI policy perspective the continued successful growth of exports from the automotive component industry is obviously key and it is therefore critically important that focus be given to supporting manufacturers with an export presence and/or potential for export growth. In order to do this the DTI and other industry stakeholders should be focusing on supporting those performance areas which international customers view as critically important and where they deem their South African suppliers to be either weak or strong. Where South African performance is strong, further support should be given to the manufacturers to ensure that their competitive position is maintained and where it is weak support should be given to facilitate improvements to the SA component manufacturers' performance. The lesser important international customer requirements should be monitored as their relative weightings will alter and certain requirements may become critically important over time. However, immediate support would be unnecessary for those performance criteria.

In terms of immediate priorities, industry stakeholders should be focusing their attention on those key customer performance areas where South African component manufacturer performance is deemed to be weak. On the basis of the international customer questionnaires that were used in the study, as well as the performance ratings that were calculated, an overview of the performance of the South African suppliers was schematically developed. This overview is presented in Figure 9 and as is clear the area of intervention for the DTI and other industry

stakeholders should be in the lower left quadrant – price and delivery reliability. If these two critical performance issues were pushed up into the upper left quadrant, the opportunities for automotive component export success would increase substantially.

Figure 9.

<p>Critical customer requirement and strong SA performance (Rating of 8+ and gap <15%)</p> <ul style="list-style-type: none"> • Quality • Conformance to standards 	<p>Less important customer requirement and strong SA performance (Rating of <8 and gap <15%)</p> <ul style="list-style-type: none"> • Offering of credit facilities • Financial stability • Packaging
<p>Critical customer requirement and weak SA performance (Rating of 8+ and gap >15%)</p> <ul style="list-style-type: none"> • Price • Delivery reliability 	<p>Less important customer requirement and weak SA performance (Rating of <8 and gap >15%)</p> <ul style="list-style-type: none"> • Capacity to develop new products • Capacity to modify products • Process innovation capacity • Flexibility • Geographical location

Importantly, this research report has only focused on international customer perceptions regarding the performance of their South African based automotive component suppliers. Broader issues that impact directly on the ability of component manufacturers to export successfully, such as value chain relationships and linkages into MNC controlled global purchasing networks have not been covered. These issues are of course critically important and need to be recognised as such. The international customer buyer analysis presented in this report does, however, fill an extremely important conceptual gap in terms of industry stakeholder understandings of the requirements for firm-level success in the very demanding automotive export market.

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