

supplychainforesight

2008

Supply chain complexity and a company's ability to manage it, is directly correlated to its success in the marketplace.

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Introduction

The supplychainforesight report

The **supplychainforesight** report for 2008 seeks to demonstrate clearly and decisively what we have been arguing for five years now: that there is a significant correlation between supply chain reform and business success on many fronts, including both growth and profitability. In this year's research we have sought the answer to the key question: *are South African companies who respond to the challenges of globalisation through strategic supply chain reform more successful than those who do not?*

Correlating Supply Chain Reform and Business Success

In 2003 Deloitte produced a report in their series The Global Benchmark Study, entitled "Mastering Complexity in Global Manufacturing: Powering Profits and Growth through Value Chain Synchronization". The report shows that 'companies seeking to exploit global market, supply chain and engineering opportunities are hitting an invisible but nonetheless debilitating wall: mounting complexity across the value chain. And, it is bound to get worse.'

Deloitte coined the term 'complexity masters' for the small group of companies – 7 percent of their sample group – who have overcome this complexity in their value chains by synchronising customer-, product- and supply-chain-related strategies and operations while leveraging strengths in collaboration, flexibility and visibility. In Deloitte's estimation these reforms helped the 'complexity masters' to generate up to 73% higher profits, as well as growth rates that were markedly better than other companies studied.

In this year's **supplychainforesight** study, we seek to present a framework for understanding the urgent challenges facing South African supply chains now – taking our lead from the Deloitte study, which did not deal with Africa at all, we look at the need to deal with the tsunami of globalisation and find competitive advantage in it, and the

growth and profitability that are available to companies plotting this route successfully.

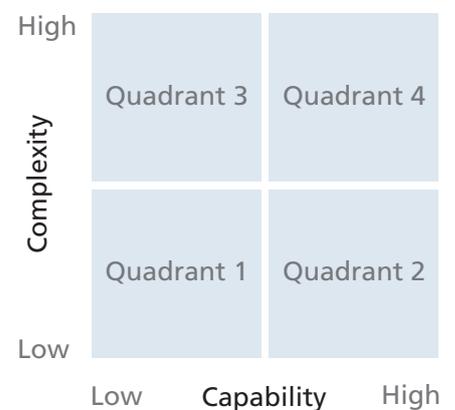
We also provide a specific framework for understanding the link between business success and supply chain innovation in the SA market, and a view of supply chain capabilities and the means to deal strategically with complexities brought about by globalisation. Our research thus tests the Deloitte theorem in the value chain context of South Africa's private sector specifically, and points to ways in which the private and public sectors in SA can collaborate to enable more successful supply chains for both.

A Groundswell of Executive Participation

One hugely encouraging factor for our research this year was the record level of participation. Over 400 senior executives in some of South Africa's largest companies responded to our questionnaire this year, almost double the participation of last year's study. Most of these responses again came from major corporations with global operations, and levels of participation by CEOs and General Managers were also at record levels – up to 29% from 18% last year. There is also a huge increase in the participation of logistics middle management, to 16%, up from 8% last year. This indicates not only the authoritative nature of the outcomes, but the value provided by **supplychainforesight** as a benchmarking and information tool.

The Capability and Complexity Question

In order to understand the position of SA companies on the global supply chain competitiveness map, we began our research this year by asking several questions of company leadership and supply chain executives designed to build on and modify the Deloitte approach to the 'complexity masters'. By mapping the co-ordinates of SA businesses on a grid between measures of supply chain capability and the extent of the complexity faced by their supply chains, we have been able to provide a clear answer to the question about the correlation between supply chain reform and company growth and profitability. This kicks off our study this year.



Getting to the Fourth Quadrant: Capability and Complexity in SA companies.

Complexity and Capability

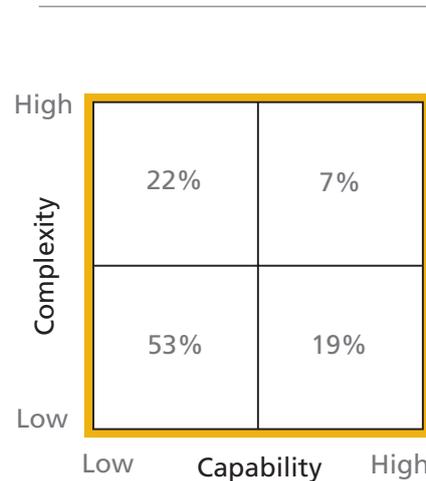
To map the grid positioning companies across the measures of the complexity of their value chains and the capability of these companies to deal with that complexity, we asked several questions.

On the complexity axis, we asked in which regions companies performed the business activities of sales and marketing, procurement, manufacturing and engineering, in order to gain a picture of the nature and extent of globalisation for the business, and by extension the complexity of the value chain.

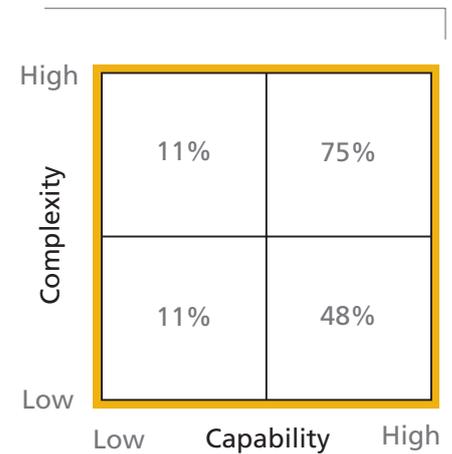
On the capability axis, companies were rated in terms of their relative competitiveness on factors such as product innovation, time to market, manufacturing flexibility, logistics effectiveness and supply chain reliability. The business success indicator was then determined when companies were asked to rate their success relative to their competitors in areas such as profitability, revenue growth, market share growth and customer retention.

We then plotted scores for complexity of the value chain against each companies' ability to deal with it, and were then able to organise companies into four different quadrants. We examined how many of the companies falling into each quadrant had reported having higher success measures than their competitors. The measures along the two axes, correlated with these success measures, enabled us to plot two grids, each into four quadrants, which had the following distribution:

► Distribution of companies as per the complexity and capability indices



► Percentage of companies per quadrant reporting greater success than their competitors



■ Quadrant 1

Quadrant One: Low Complexity, Low Capability

This quadrant accounts for the majority of respondents, at 53% of the total. However, only 11% of these companies rate themselves as more successful than their competitors. The vast majority of their activities are inside SA, with only a few venturing beyond our borders to the rest of Africa and beyond.

The top objectives for the companies in this quadrant reflect their more localised view, and are focused largely on cost reduction within individual supply chain functions, without much focus on the important methodologies that would provide these cost reductions. They wish to improve service to customers most, followed by reducing sourcing costs and investments in inventory.

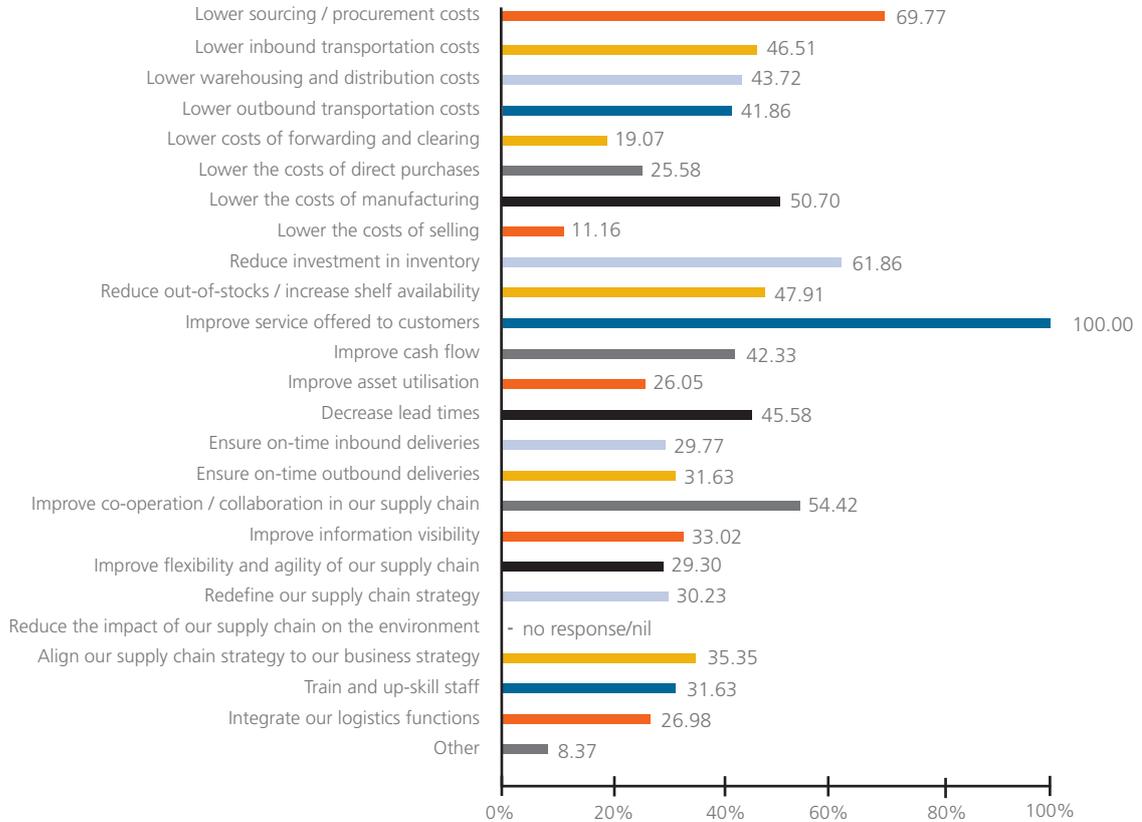
The quadrant one challenges to achieving these objectives reflect strongly the low levels of capability and the difficulty these companies are having in dealing with a changing global business landscape. The top challenge is planning and forecasting, followed by sourcing practices – which probably means they are struggling to compete with low-cost global sources of supply, and the challenges posed by increased volumes. In addition, complexity and diversity of customer needs are compounding their forecasting challenge. Also featuring strongly as challenges are IT capability and staff capability, indicating a sense of hopelessness that current solution sets will cope.

South African companies who respond to the challenges of globalisation through strategic supply chain reform

are significantly more successful

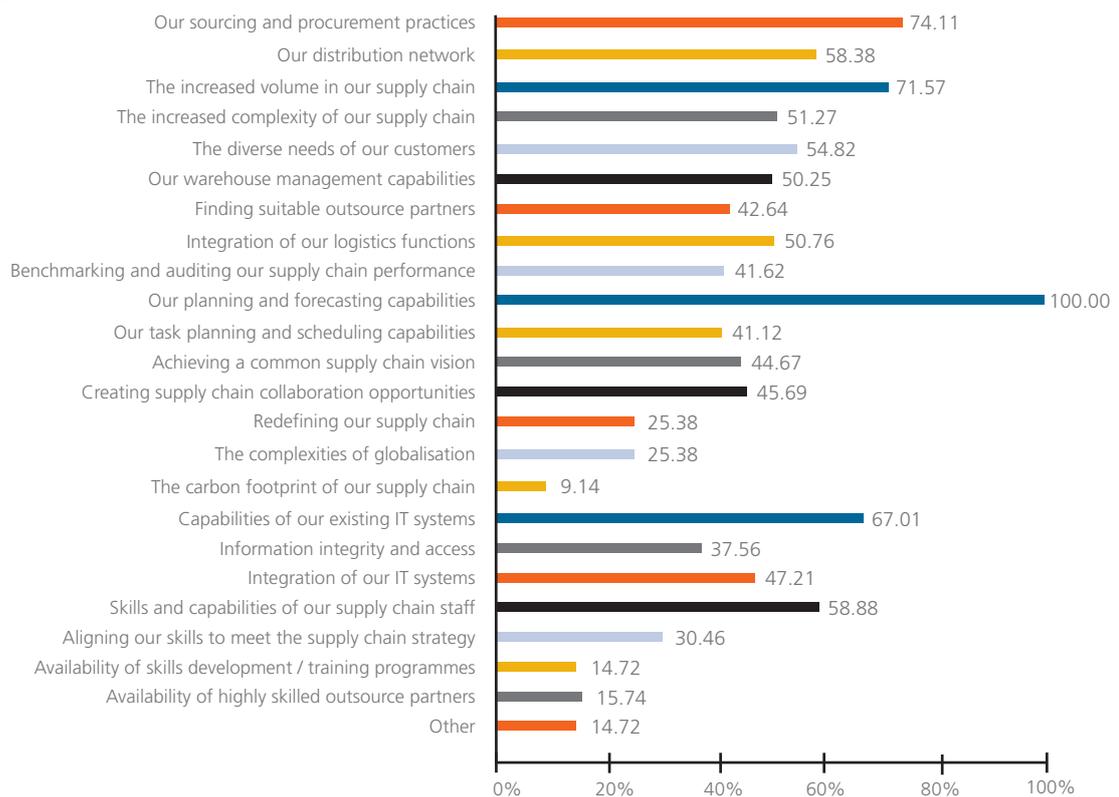
► Supply chain objectives:

Quadrant 1



► Challenges to meeting the objectives

Quadrant 1



Quadrant Two: Low Complexity, High Capability

This quadrant contains companies focused on silo-based efficiency in their value chain, in low-complexity environments. Almost a fifth (19%) of all companies surveyed fall into this quadrant, but, interestingly, a high 48% of those rate themselves as more successful than their competitors. The size of these companies is relatively smaller, with most (31%) coming from the lower than R100m turnover grouping.

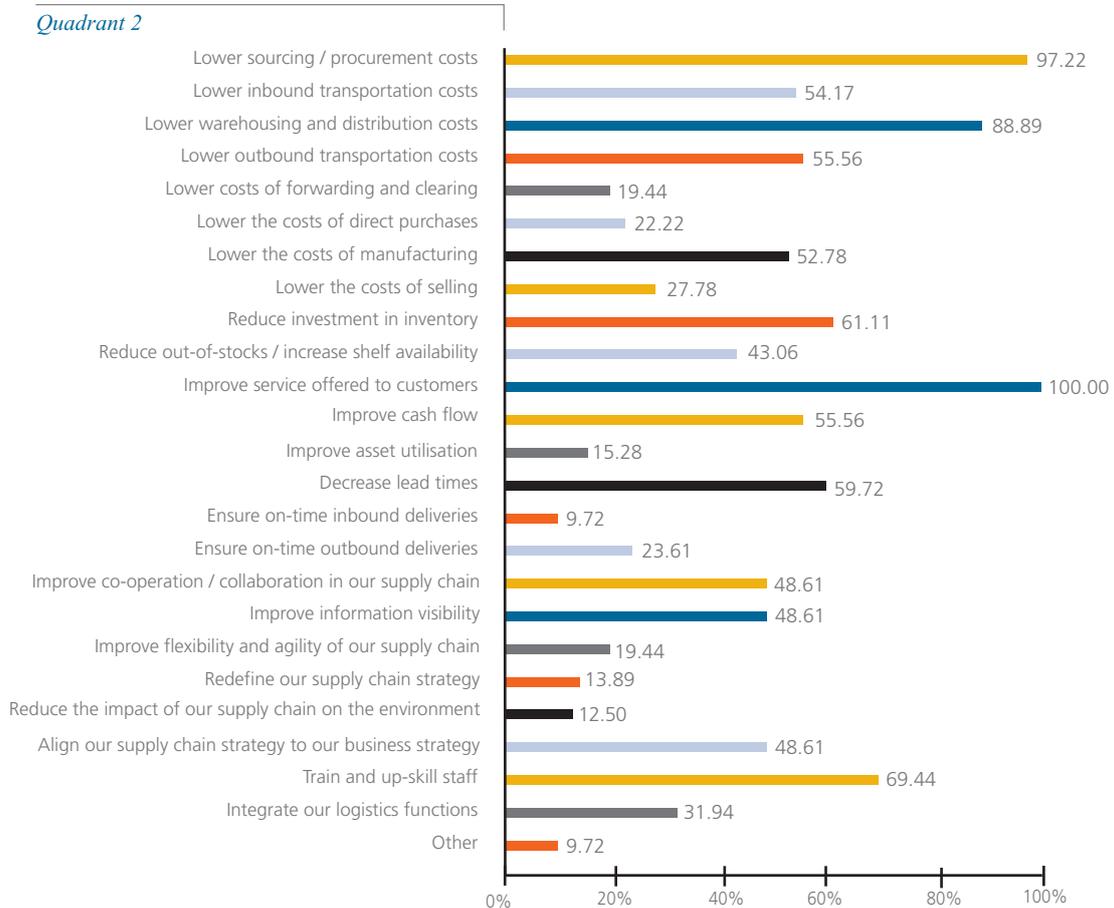
This quadrant, like quadrant one, is characterised by a localised business attitude, with only low levels of inbound or out bound activity outside of Africa.

The top objectives for the quadrant are clearly silo-focused, with improved customer service the overall top objective. Other goals are focused on cost reduction across the supply chain, particularly in specific areas such as sourcing, warehousing and distribution and inventory costs. Significantly, the quadrant has a major training and skills improvement objective, reflecting their determination to improve functional efficiency.

The top challenges of this quadrant reflect the strain of maintaining their current efficiencies in a rapidly changing market. Sourcing is a major challenge, since their local focus makes them vulnerable to low-

cost global sourcing. Planning and forecasting challenges are exacerbated by increased volumes and complexity of the supply chain and the diverse needs of an increasingly demanding customer base. The perceived inability of current IT systems and supply chain staff skills and capabilities to achieve objectives are also problems for a sector which is reaping the rewards of having improved their supply chain capability but which has yet to take advantage of the possibilities that globalisation offers.

► **Supply chain objectives**



► Challenges to meeting the objectives

Quadrant 2



Quadrant Three: High Complexity, Low Capability

This quadrant might also be dubbed the 'chaos quadrant', and reflects graphically the difficulty of responding to the globalisation challenge without the right strategic approach to value chain reform and the right deployment of capability. Just over a fifth (22%) of companies surveyed see themselves as having highly complex value chains, and relatively low capability. Of these, only 11% see themselves as more successful than their competition. A total of 50% of the companies in this quadrant have over R5bn in turnover, indicating that they are large companies who have to compete on a global stage.

Both marketing and sales and procurement activities demonstrate a wide global market reach.

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The top objective for this quadrant is to reduce investment in inventory, while at the same time reducing out of stocks and improving service delivery. The high score for reducing

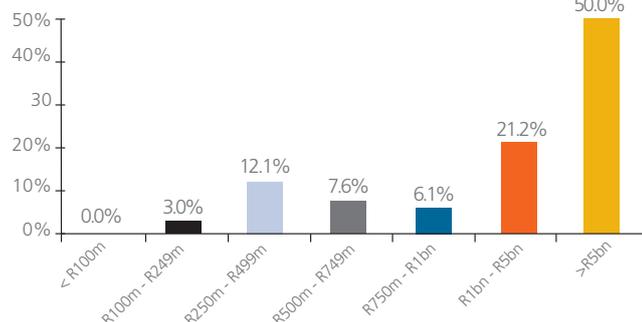
sourcing costs reflects the pressure of international competition, while the realisation that they need to improve collaboration, flexibility, agility and visibility in the supply chain, as well as aligning the supply chain and business strategies, indicates a realisation that improvements in capability are crucial.

The challenges to achieving these objectives reflect the position of companies with a

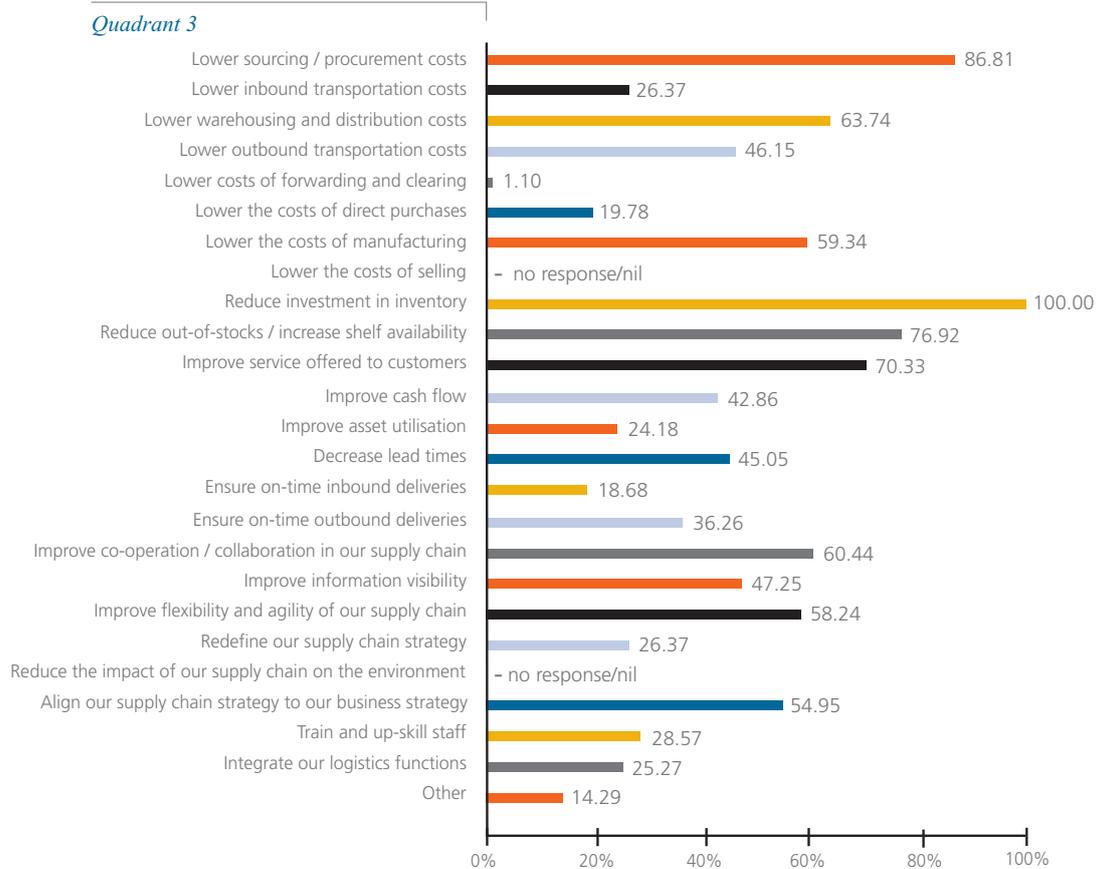
complex and multifaceted global value chain, without the supply chain capabilities to make it pay off for them. The top challenge is planning and forecasting, linked to the challenges raised by increases in volumes and complexity. Insufficient IT systems and their lack of integration are seen alongside the skills levels of their supply chain staff as being to blame for their inability to cope with this complexity.

► Participant profile: Company size (by annual turnover)

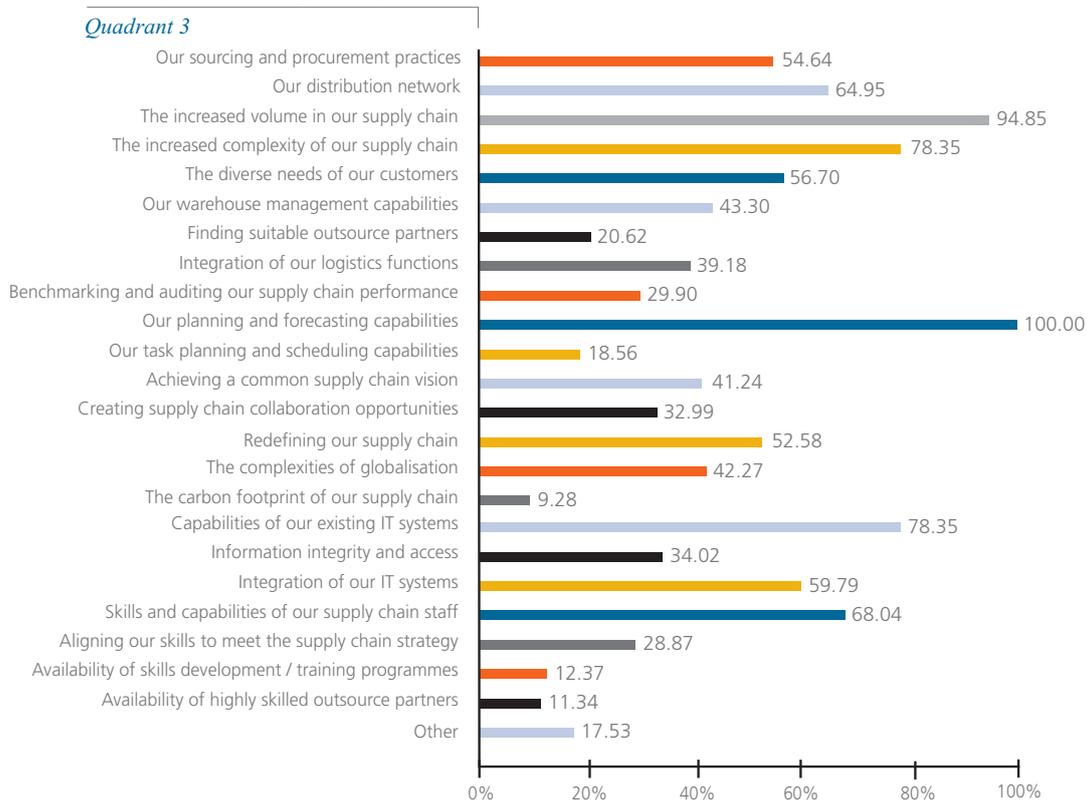
Quadrant 3



► Supply chain objectives



► Challenges to meeting the objectives



Quadrant Four: High Complexity, High Capability

In this, our 'complexity masters' quadrant, only 7% of companies surveyed rate themselves as both complex and capable. But by far the majority of these companies - 75% - rate themselves as more successful than their competitors. A total of 60% of these companies are also large and multinational in size and character, with over R5bn in turnover.

As one would assume, both their sourcing and selling activities show a good spread of global markets, especially sales into the major trade

areas of Western Europe, the Middle East and South-East Asia, as well as the rest of Africa.

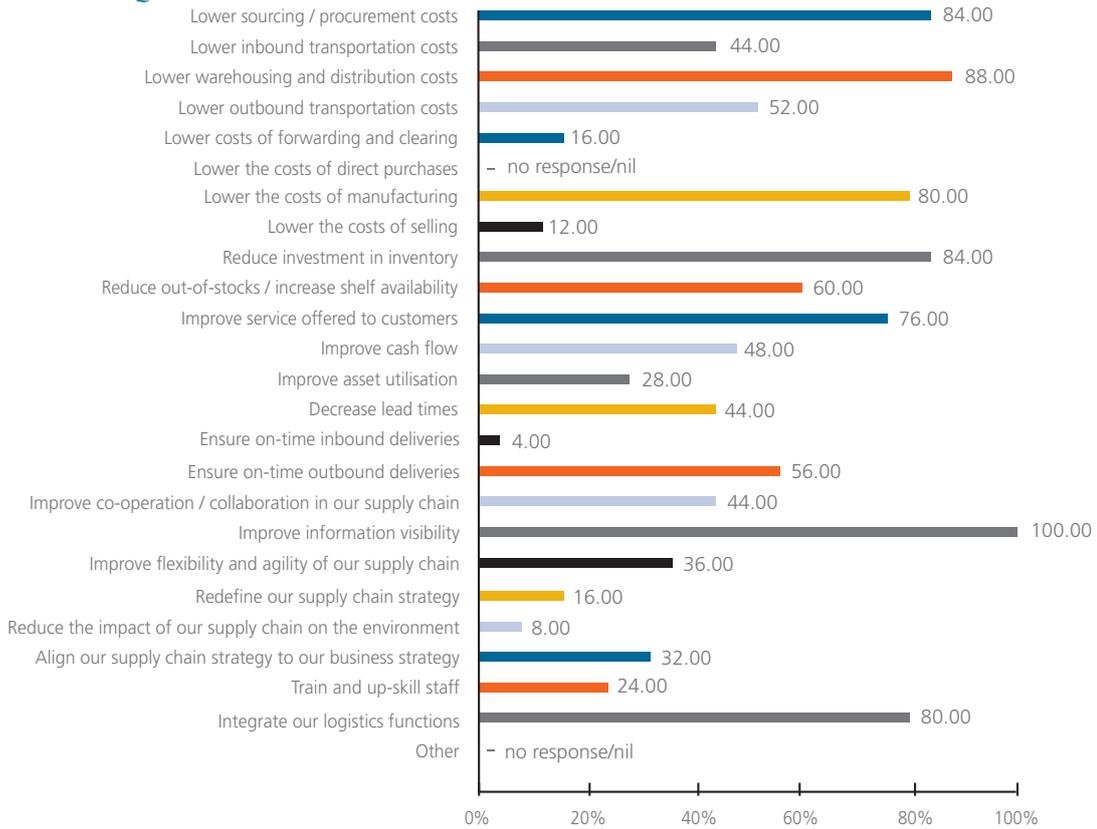
The top objectives for this group reflect the reasons for their success. Their complex approach to globalisation is reflected by their high level of supply chain capability. Thus their objectives reflect not only the traditional supply chain objectives of cost reduction and service enhancement, but also the methods by which these may be achieved in an increasingly globalised economy – chiefly through

information visibility and the integration of logistics functions.

When one examines the challenges facing quadrant four companies, it is unsurprising to find planning and forecasting as the top challenge given the diverse needs of global value chain partners. However, the distinguishing difference of companies in this sector is their recognition of integration as a key challenge. Once again the quadrant exhibits a focus on the 'how' and not only on the 'what'.

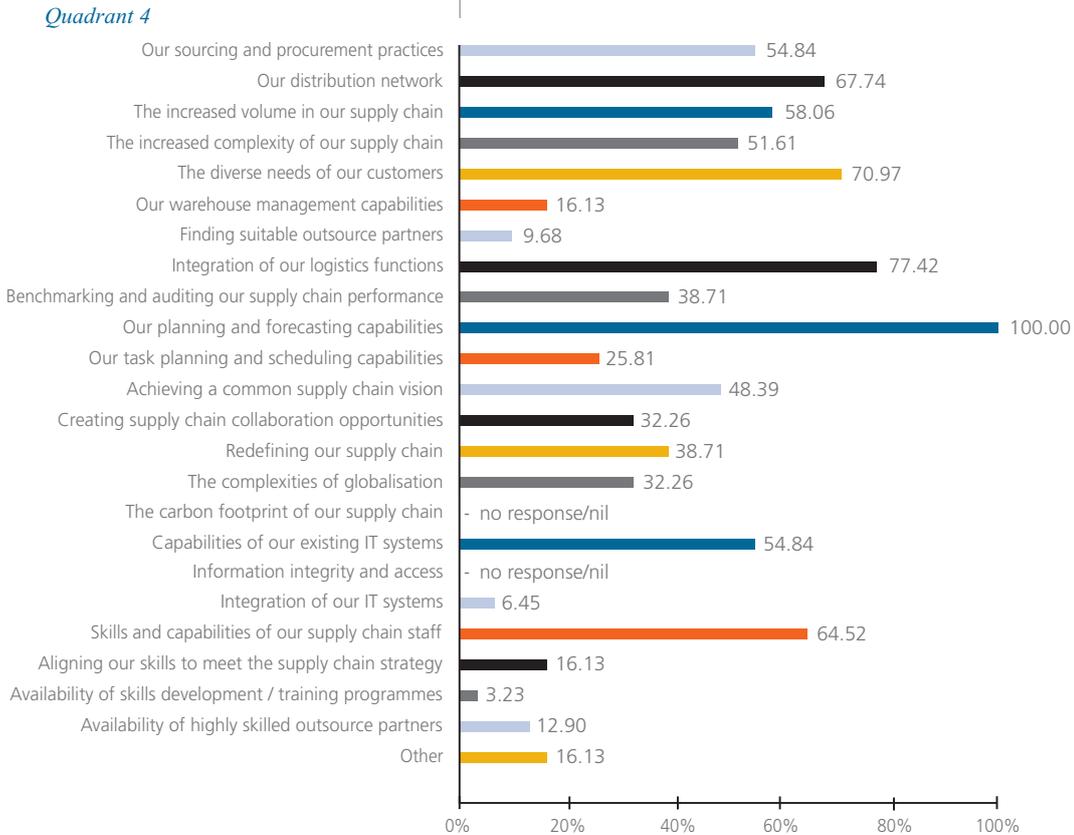
► **Supply chain objectives**

Quadrant 4



75% of all quadrant 4 companies are more successful than their competitors

► Challenges to meeting the objectives



Summing Up

It's clear that it will be easier for some companies to migrate their business to the desirable fourth quadrant than it will be for others. For companies in quadrant one the immediate goals should be to rescue their situation by increasing efficiencies in their supply chains in order to begin to compete. A response to global complexities is ineffective without first having such capabilities and efficiencies, as quadrant three companies are finding to their cost.

Overall, the companies in quadrant two demonstrate good business practices, but in the context of the pressures on globalising

supply chains these are inappropriate inasmuch as they are failing to respond to complexity. They are, however, better geared to do so, and lack only a strategic view perhaps, or the burning platform which requires the move outward into global markets.

Those companies in quadrant three are putting their business at risk because moving into a complex, globalised value chain without the capability to respond to its challenges means lost sales to more capable competitors.

These businesses will tend to be playing catch-up with more capable competitors, and will struggle to gain competitive advantage.

In the quadrant four scenario, the capabilities are appropriate to the complexities these businesses face in their value chains, with a consequent emphasis on information visibility for management, and the effective integration of functions across the chain. Here, strategies are aligned with tactics, and these businesses are already seeing the rewards of early adoption of globalised supply chain systems and processes.

Remaining in either quadrant *1 or 3* is simply not a sustainable option

Creating Competitive Advantage in a Skills Crisis

The skills and capabilities of supply chain staff is one of the most consistent challenges of the entire sample group again this year. But how is it being addressed?

The approach to outsourced service providers

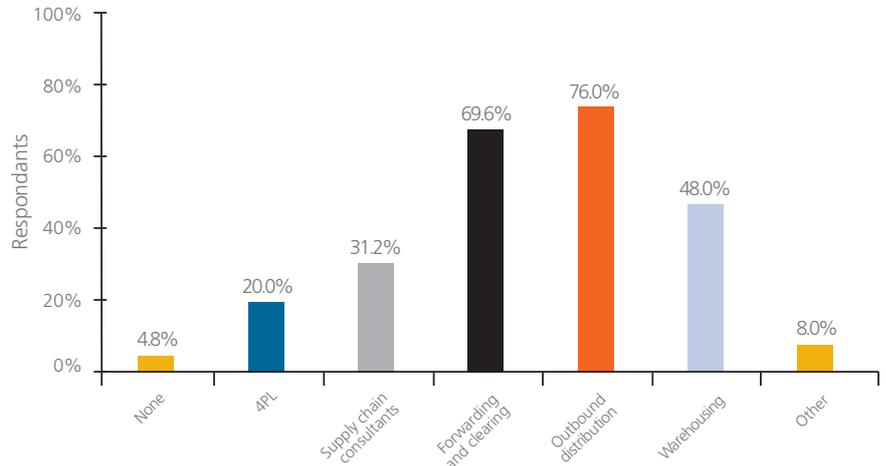
What we are seeing is a radical change to outsourcing practice in response to the skills shortage. It is still being used in the more traditional mode of a cost reduction through the outsourcing of non-core activities, but there is also a marked increase in the use of outsourcing as a route to competitive advantage.

In comparing this year's findings on outsourcing with last year's, we have stuck to the views of the supply chain and logistics managers, who have a more hands-on knowledge of the range of outsourcing activities going on in companies. In terms of using external service providers, 76% of respondents use outsourced outbound distribution, quite appreciably up on last year's figure of 67%. Around 70% use forwarding and clearing companies, the same as last year. The use of outsourced warehousing is marginally down to 48% from 52% last year.

These areas are largely the province of 3PL commodity service providers, so of more strategic interest is the increase in the use of 4PLs for the total sample. One in 5 companies (20%) is using 4PL service providers, compared with 11% last year. The number using supply chain consultants has stayed steady at just over 31%. In addition to the large current increase in the use of 4PL service providers, another 8% indicate they will be using 4PLs in the next year, coupled with a further 25% who say they will use supply chain consultants in the next year.

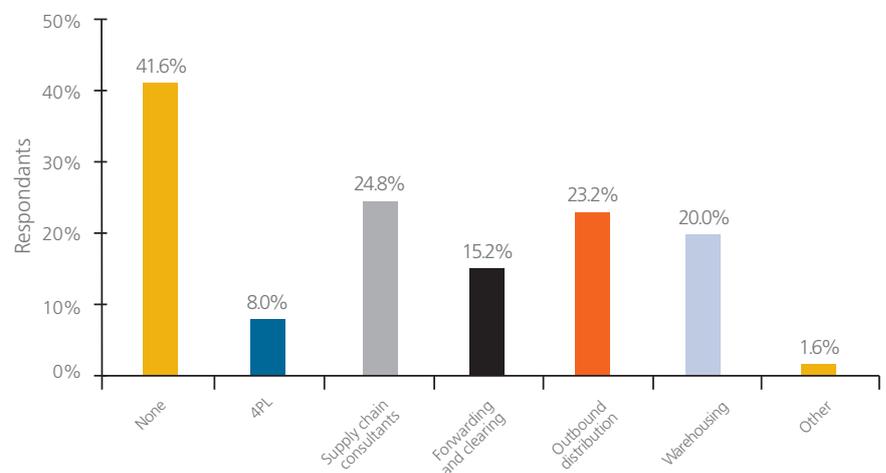
► What types of logistics service providers does your organisation currently use?

SCLMs



► Is your organisation planning on using any additional logistics service providers within the next 12 months?

SCLMs

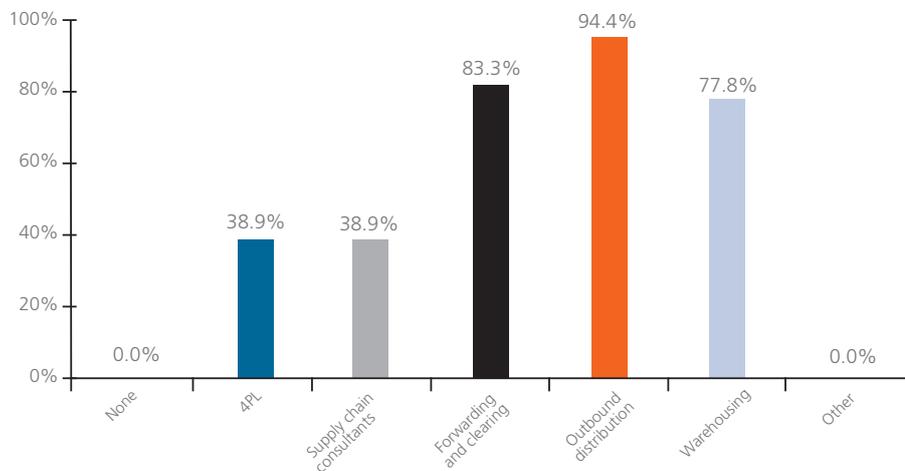


This shift in emphasis for the use of external skills is being driven by the quadrant four companies. Among them, the use of 4PL and supply chain consultants is at 35% for both. Clearly, these companies are seeing better results from outsourcing whole parts of their

supply chains rather than the outsourcing of functions. But for quadrant four companies, the use of 4PLs and consultants is not limiting their use of 3PL service providers across the board.

► What types of logistics service providers does your organisation currently use?

Quadrant 4



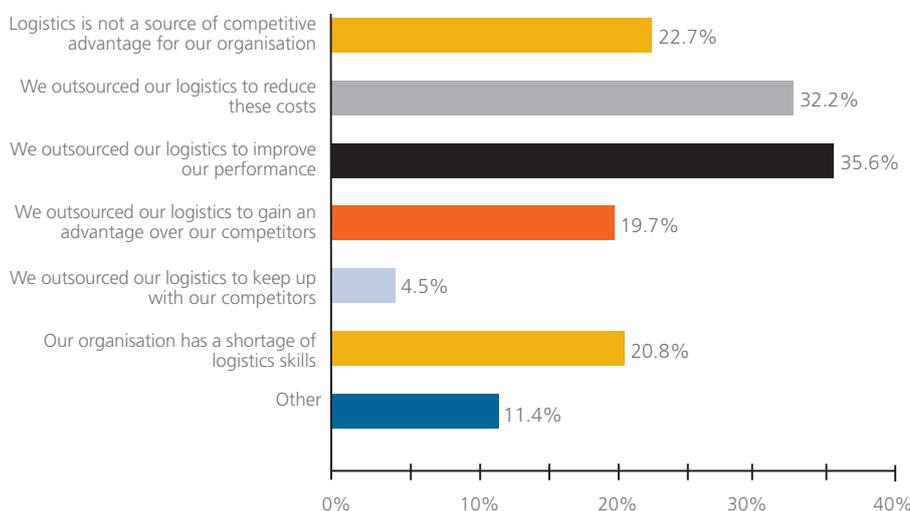
A lesson here, especially for those companies with excellent capabilities and efficiencies in quadrant two, is that the achievement of functional excellence through using service providers, is followed for quadrant four companies by the integration and sometimes the management of processes, using the skills of 4PLs and consultants. The greater success of the quadrant four companies indicates that their focus on improving visibility and integration may be enhanced by the holistic outsourcing of parts of the supply chain to 4PL service providers or to internal managers who seek to achieve similar ends.

We also asked respondents to provide their reasons for using external service providers. In the main analysis, the primary reason was to improve performance, at just over 35% of respondents, followed by cost reduction at 32%. For quadrant four companies, the main reason followed the main sample, but at a much higher level, with 65% of respondents claiming performance improvement as the key driver. Significantly, the quadrant four second most popular reason for outsourcing is to gain advantage over their competitors (41%).

Since they are successful at doing so, we can assume that working with external service providers represents a strategic competitive advantage for quadrant four companies, rather than a focus on cost reduction, and that probably a constructive and integrated partnership approach is replacing the old outsource win-lose approach.

► Which of the following statements most closely reflect your organisation's reason(s) for using logistics service providers?

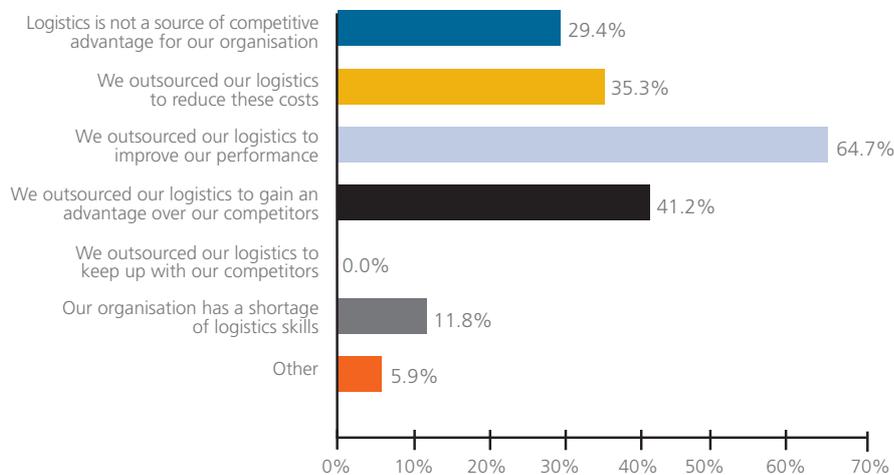
Total Sample



Section Two

- Which of the following statements most closely reflect your organisation's reason(s) for using logistics service providers?

Quadrant 4



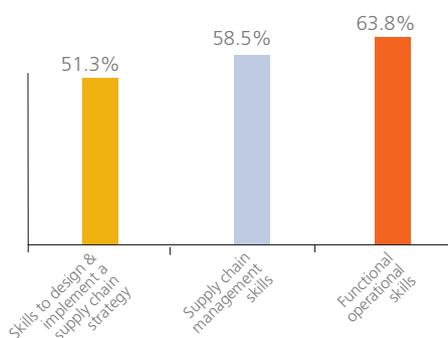
Locating and Filling the Skills Gap

When quizzed on the specifics of the skills shortages, the main sample group identify the biggest shortage of skills at a functional, operational supply chain level (64%), followed by supply chain management skills and finally skills to design and implement a supply chain strategy, at 59% and 51% respectively.

At the strategy design and implementation level, the corrective action of 28% of the whole sample group is to train and educate existing resources, appoint external consultants (20%) and to recruit staff (13%). For the supply chain management level, fully 43% of the group will educate and train existing resources, followed by 20% who will recruit skills, and only 9% who would use consultants. Finally, at the operational level, 54% will focus on upskilling resources, and 13% on recruiting.

- At what level does your organisation experience a shortage of supply chain skills

Total Sample

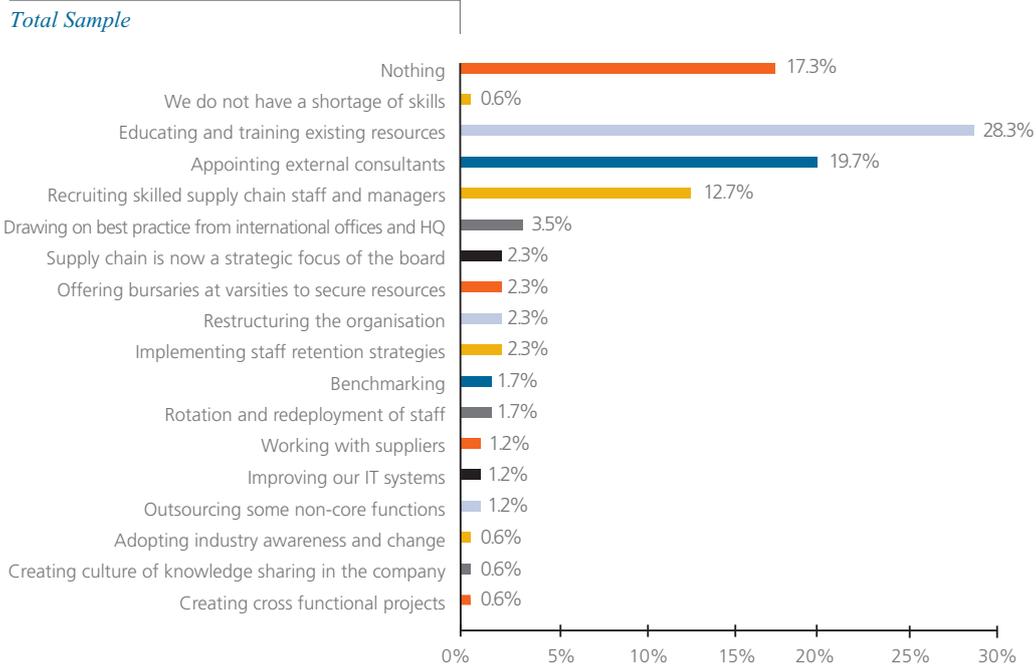


By strong contrast, the successful quadrant four companies take a very different view of coping with the skills gaps.

The biggest skills shortage perceived in quadrant four is exactly the opposite of the general sample, with 86% of respondents claiming a shortage of skills to design and implement a supply chain strategy. Fully 79% of the group feel supply chain management skills are in short supply, and 71,4% feel the lack of operational skills. Their approach to corrective action is also instructive. At the strategic design and implementation level, 40% feel that education and training is needed, followed by 20% who go for recruitment. None of the group wishes to appoint external consultants for this requirement. At the supply chain management level, education and training is the route for 62% of respondents. At operational level, 57% wish to train existing staff, and 14% wish to recruit.

The most successful companies are outsourcing to improve performance and to gain competitive advantage

► What actions are your organisation taking to address the shortage of supply chain skills at the strategy design and implementation level



► What actions are your organisation taking to address the shortage of supply chain skills at the supply chain management level?

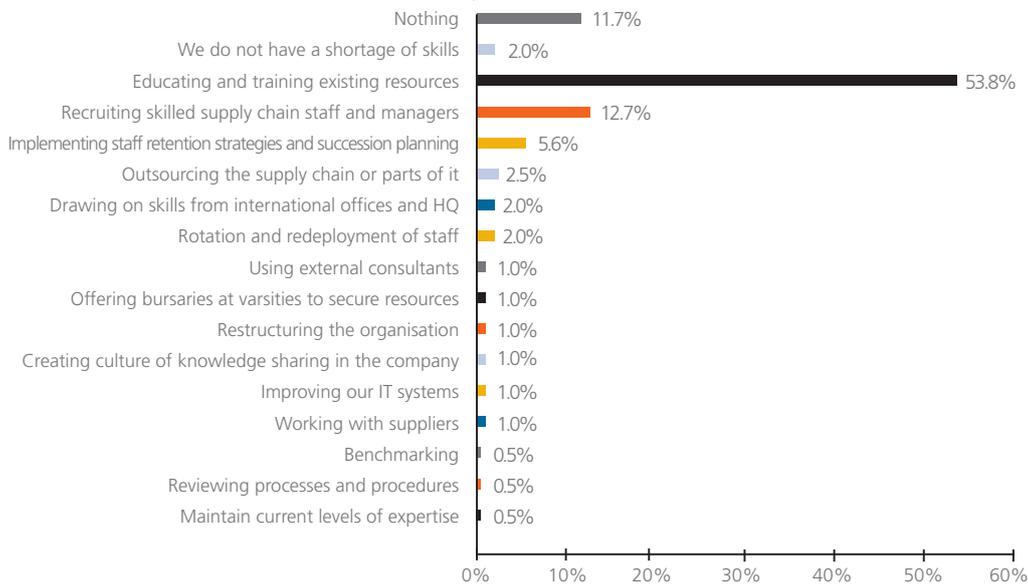


The shortage of skills is already a major inhibitor of strategic reform. **Quadrant 4** companies are increasingly solving this problem through **outsourced partnership**

Section Two

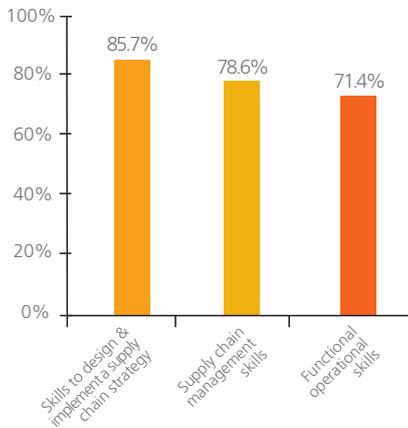
► What actions are your organisation taking to address the shortage of supply chain skills at the functional operational level?

Total Sample



► At what level does your organisation experience a shortage of supply chain skills?

Quadrant 4

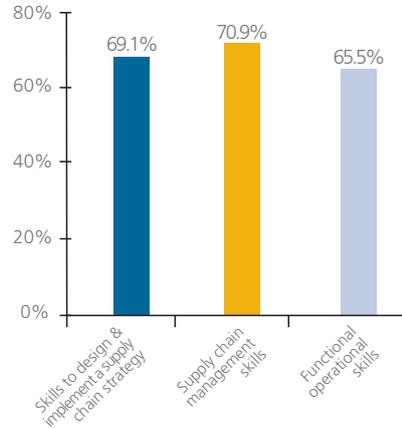


What is most notable is the higher levels of the quadrant four responses who feel there is a skills shortage, and that they feel it most in the most strategic area of their supply chain.

An interesting and instructive comparison on the skills question is that of the views of company business leadership on one hand, and supply chain management on the other. CEOs and General Managers see the largest shortage as in supply chain management, at 71% of the sample, followed by the shortage

► At what level does your organisation experience a shortage of supply chain skills?

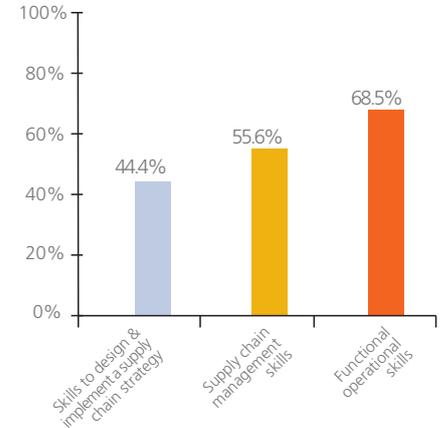
Leadership



of strategic design and implementation skills (69%). A relatively low proportion of 66% see the shortage as being functional or operational skills. The views of supply chain management on the same issue follow the trend of the main analysis, as might be expected. This relates back to the CEOs lack of confidence in the organisation having the right skills internally to deliver effective supply chain reform, and thus taking a more strategic view of the outsourcing process to compensate for the skills gaps.

► At what level does your organisation experience a shortage of supply chain skills?

SCLMs



Senior leadership support for the increases in 4PL outsourcing we have seen happening in the sample this year is a direct result of their views that they face serious shortages at high levels, and that the consequent outsourcing will yield competitive advantage.

Trendwatching: Challenges and Objectives for the South African Supply Chain

When we roll up these findings for the quadrants into the objectives and challenges of the whole sample group, we find a markedly different picture from that of the most successful quadrant four.

The top five objectives for the whole sample are:

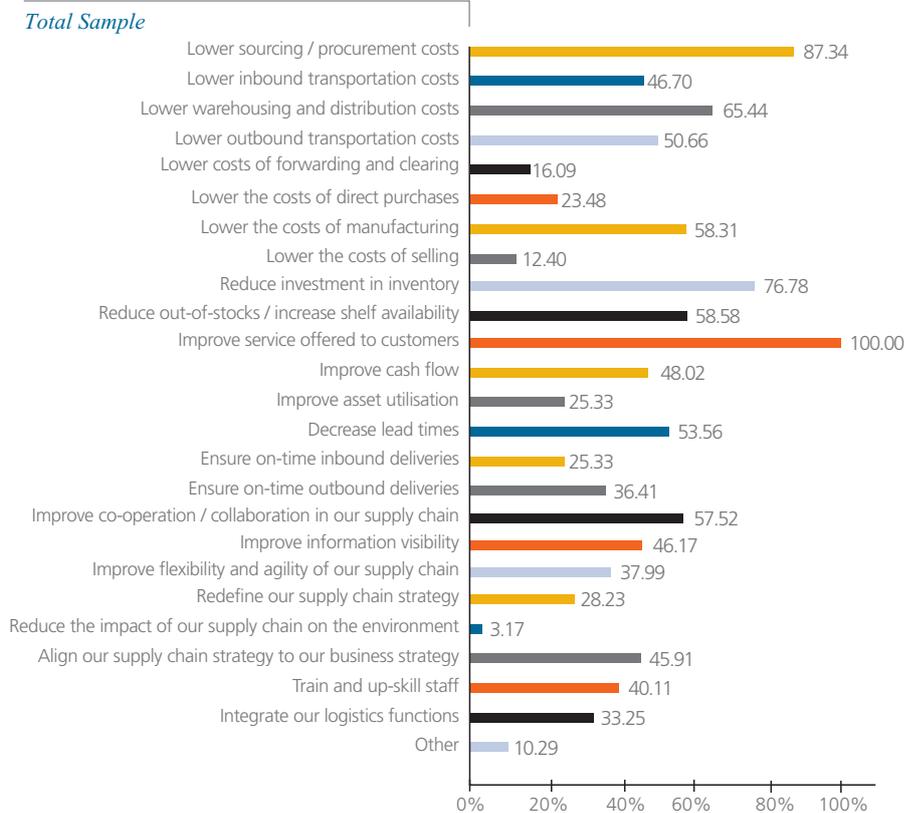
- Improving service to customers
- Lowering sourcing costs
- Reducing investment in inventory
- Lowering warehousing and distribution costs
- Increasing availability

The cost focus in these objectives reflects a need to control supply chain processes that are steadily growing in size and complexity as globalisation continues. Gone are the focuses on information visibility and integration we saw as major goals for the most successful companies in the sample.

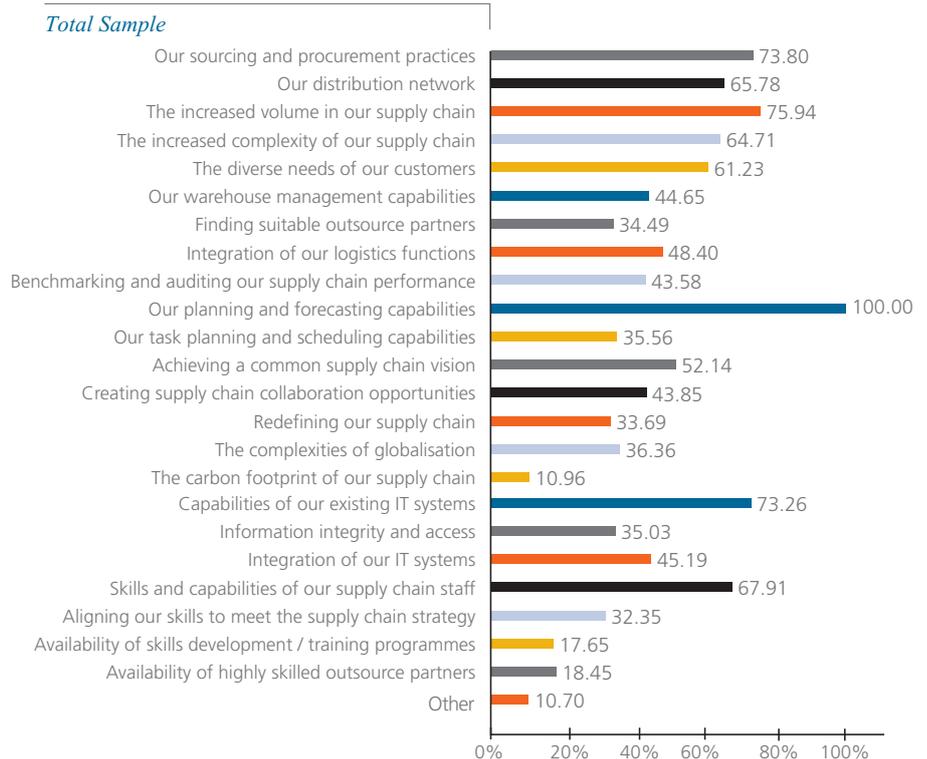
The top five challenges are dominated by what may be interpreted as fear – fear that the current capabilities, in IT and staff skills in particular, are not up to meeting the challenge of planning and forecasting for a far more complex value chain with much more volume. The challenges are:

- Planning and forecasting
- Increased volume in the supply chain
- Sourcing and procurement practices
- Capabilities of existing IT systems
- Skills and capabilities of supply chain staff

► Supply chain objectives



► Challenges to meeting the objectives



Section Three

Conclusion: Sustaining Success

It is clear in this year's analysis that the companies focusing on dealing with complexity through information visibility and process integration across their value chain are those who are reaping the profit and growth rewards. There is conclusive evidence that this approach, in the Quadrant Four companies, is leading to a virtuous cycle of effective and reliable supply chain activity, and a consequent ability to deal with the growth challenges and complexities inherent in a globalised sourcing and selling value chain scenario.

The lessons for companies in the other quadrants of our schema are clear: in a macroeconomic environment where global trade flows are an inevitable impact on the business, staying efficient in a relatively localised market, as in the quadrant two companies, will yield short-

term benefits, but will, sooner rather than later, see competitors overtaking you. The efficiencies and reliability of supply chain function exhibited by these companies, which makes them more profitable than most, will stand them in good stead for the shift into quadrant four and more global complexity, volumes and diversity in their value chains.

Among quadrant one companies, a focus on competitiveness might most realistically be achieved by increasing supply chain capability. These companies are floundering in an undifferentiated and inefficient supply chain space. Trying to compete on a global stage without the necessary efficiencies will, like as not, put them out of business.

Quadrant three companies face the inverse problem. For these, usually large, businesses, competing globally has become an urgent

necessity. But the tidal wave of global change has meant that they have embarked on a globalisation drive without the requisite supply chain capabilities to facilitate it.

The lesson for SA as a country is as clear: we do have the benefit of the relative efficiencies and capabilities our supply chain infrastructures exhibit in comparison with our peers in developing economies, as is clear from our rank of 24th in the world for trade logistics performance in a recent World Bank report. But there also needs to be a coherent strategic approach to dealing with the complexities of global competition in many different key industries, one which must incorporate constructive collaboration between government and private enterprise.

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