Mining and Quarrying

supplychain**foresight**

2006

Many of our supply chains are not efficient or effective enough to compete in a global market. Increasingly, this will present a threat even on our home turf. There is a way forward but it needs urgent action.

Survey conceptualised and initiated by:

Barloworld Logistics

Research Results

The 2006 **supply**chain**foresight** survey is a comprehensive, independent study of the issues facing the South African supply chain and logistics market.

INTRODUCTION

The third national study of the South African supply chain industry, **supply**chain**foresight**, which is sponsored by Barloworld Logistics, has this year produced enough response from different industry sectors to enable a meaningful comparison between the supply chain picture in individual industries and the national picture. The mining and quarrying industry is very well represented this year, with 9% of the total sample coming from the industry.

The research findings for the mining sector highlight the traditional qualities of the industry, in particular the fact that there is a very dominant focus on operational efficiencies and on cost reduction. Since the nature of the industry is built around trading in commodity resources, any added value that can come from the increased effectiveness of supply chain processes and management would have a tangible business impact, but the focus of senior executives in some companies seems to be elsewhere.

The Leadership Vacuum

In the main **supply**chain**foresight** report, we grouped our analysis of the findings under six key findings. Some of these findings in the mining industry are similar to those reflected in the overall picture. Others are indicative not only of the state of the industry's supply chain strategies, but also of the industry's major challenges and priorities. The industry rates the importance of globalisation as highly as the rest of the sample in the national picture, but it is important to remember from the outset that the mining industry, since it deals in commodity resources, does not have the acute challenges in planning and forecasting demand and responding to rapid market changes on a global scale that is common, for example, in the FMCG and retail industries. The changes to demand for resources are based on macro-economics and global changes. An immediate consequence of this, as we have mentioned, is that the supply chain is inbound. Whilst reducing costs is a priority, our customers here are the operational management of the mine. The relative lack of strategic input into supply chain strategy is indicated strongly both by the poor participation to this survey by CEO's / MD's / General Managers (6% versus 22% for the total sample – the lowest of any industry) and also by the low level of their involvement as key participants in setting supply chain strategy.

Only 6% of the respondents from this industry are CEO's, MD's and General Managers – significantly lower than the 22% representation for the total sample and the lowest of any industry.

Figure 1. Participation profile: Job function

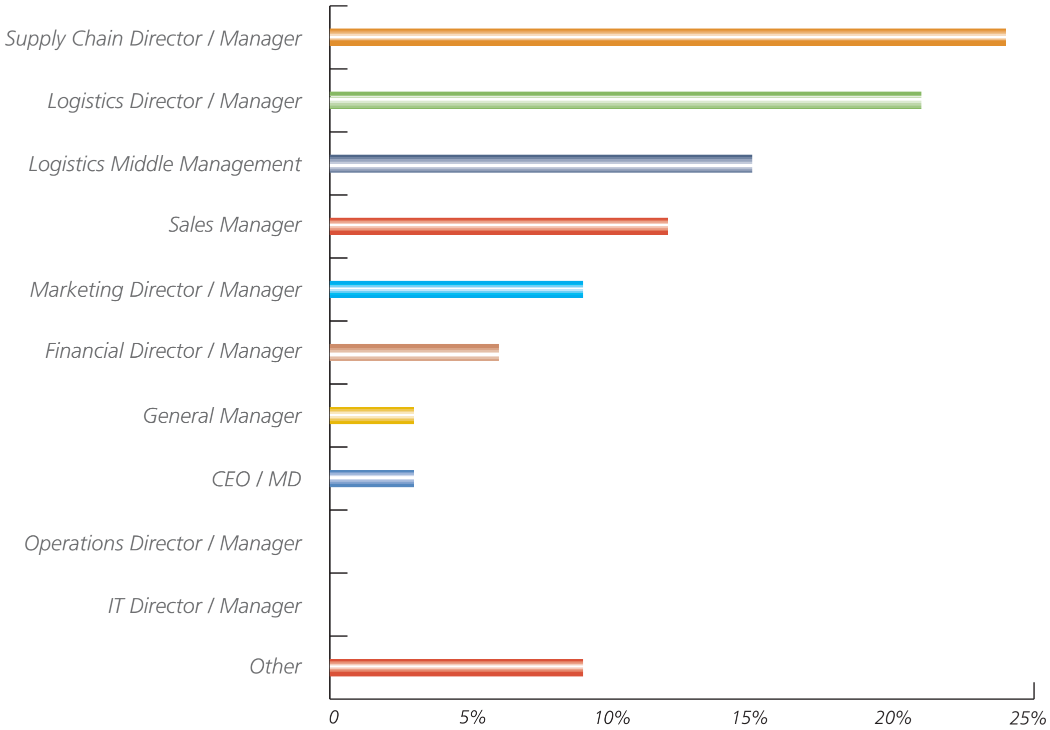
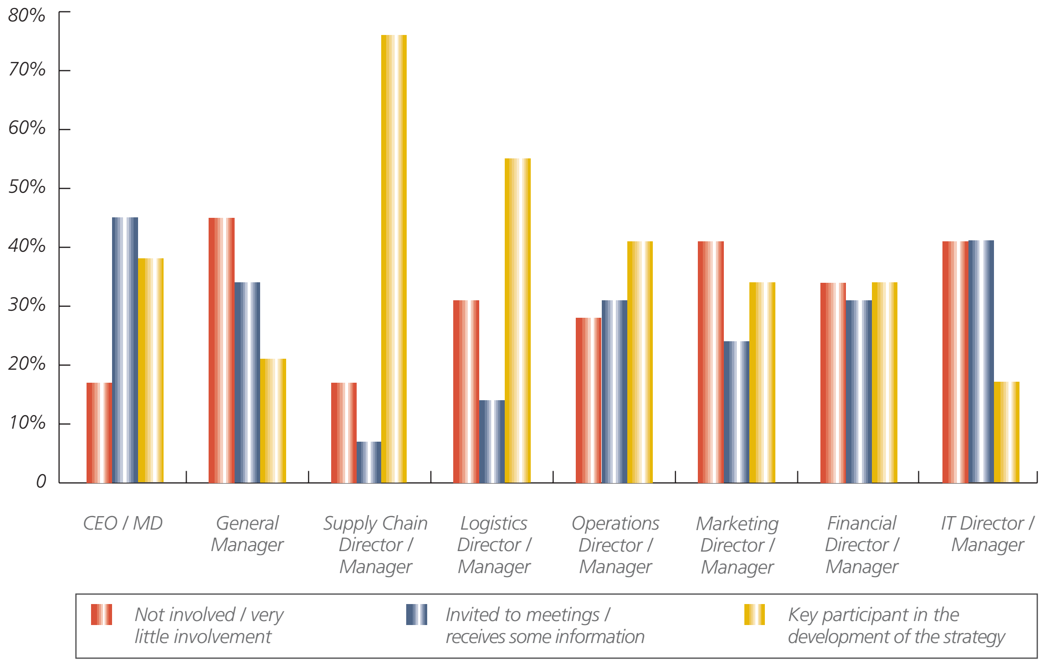


Figure 2. How involved are the following executives or managers in developing the supply chain strategy?

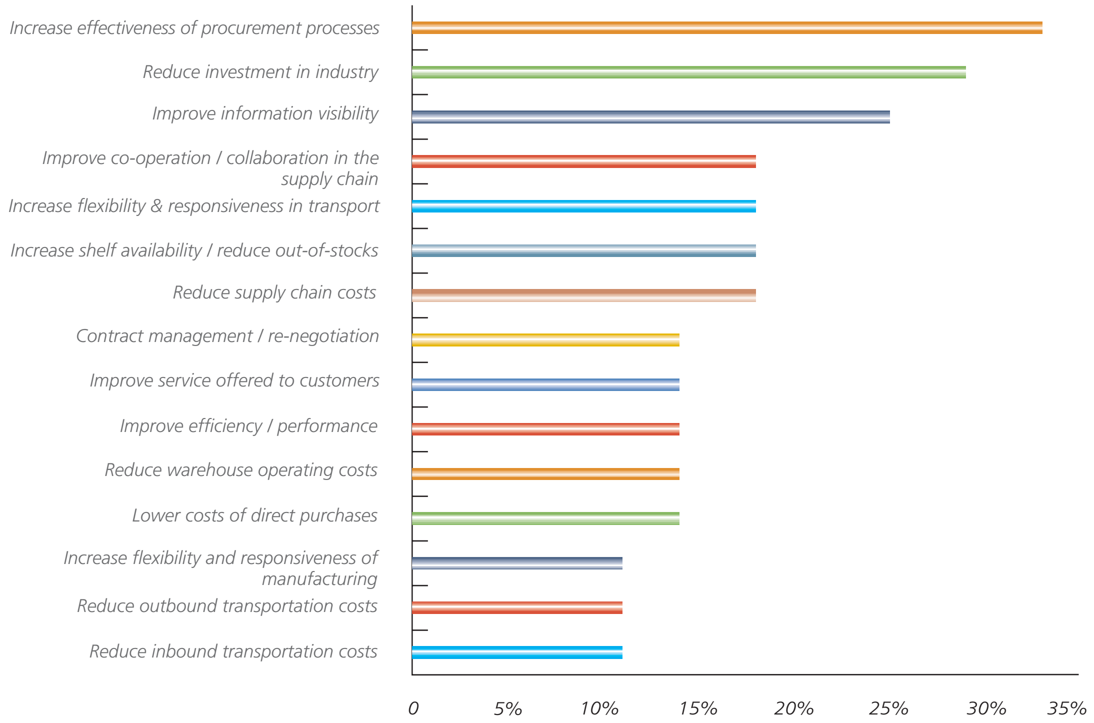


The correspondingly high degree of involvement of sales and marketing executives, who numbered 21% in mining, as compared to only 11% in the total sample, indicates the emphasis on a tactical and operational agenda driven by sales and operations. The executive involvement profile is confirmed as thoroughly operational by the almost total absence of IT executives from the mining industry response. The lack of a prominent IT agenda in the mining supply chain indicates a potential lack of awareness regarding the importance of information visibility in the supply chain. This lack of visibility will cause both inventory and assets to be procured in order to hedge against out-of-stocks and an increase in the cost of storage and transport. The lack of involvement of senior executive management in the industry is of serious concern, since it has been shown that effective supply chain reform is often stillborn without strategic leadership at board level. Quite simply, if the potential for cost reduction is not recognised by the CEO, inter-functional rivalry usually delays and seriously impairs the potential benefits.

Going Nowhere Fast on Cost Reduction

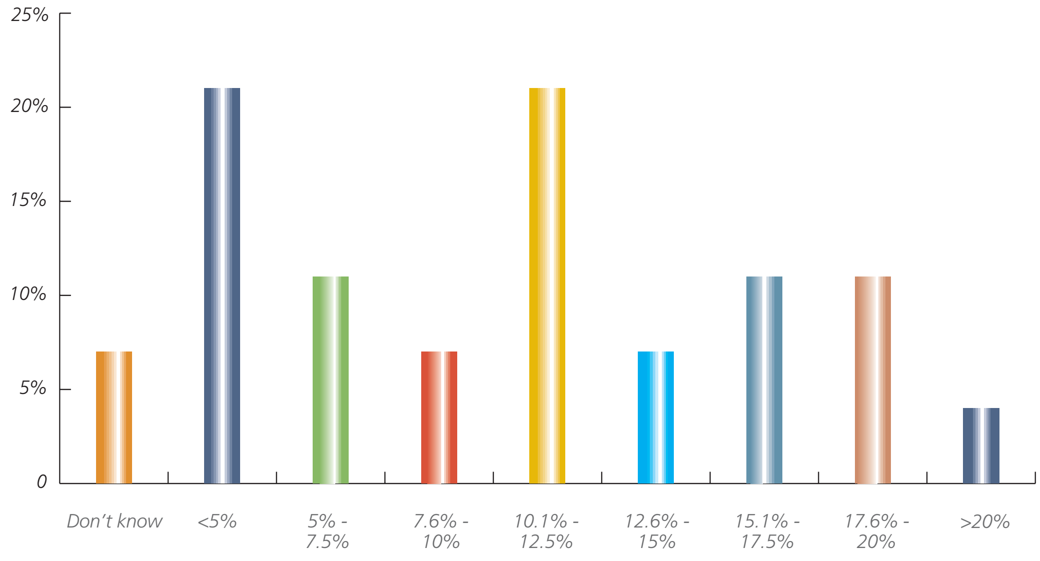
The mining industry's supply chain objectives for the coming year provide further corroboration for the suggestions of a purely operational focus we have gleaned from the executive involvement picture. Improving procurement processes and reducing investment in inventory are the top two objectives, which tell us that cost reduction is at the top of the supply chain agenda. This urgency about costs reduction may emanate from the strong rand and low resources price mix of a few years ago, resulting in a clear focus on leaner, more cost-efficient operations.

Figure 3. What are the top 3 objectives for your supply chain over the next 12 months?



Probably as a result of the same market conditions that prevailed until recently in the industry, there is evidence that miners are better than most South African industries at understanding the cost of their supply chains. Only 7% confess to no knowledge of supply chain costs, compared to a national figure of 16%. Of the rest, 39% underestimate the costs of the supply chain at less than 10% of sales, versus 46% in the total sample. As we have discussed in the overall report, the underestimation of supply chain costs, relative to the cost of logistics as a percentage of GDP, is common across industries which generally don't separate supply chain costs from the Costs of Goods Purchased, or include the cost of financing their inventories. The fact that this industry is more in touch with its real supply chain costs is probably a result of the higher costs of the physical logistics, and supply chain assets typical of the industry. All the more reason one would think that leadership would be interested and involved in a strategic effort to harness the value from simultaneously reducing costs and increasing service levels to the mines.

Figure 4. What is the cost of your company's supply chain, expressed as a percentage of sales?



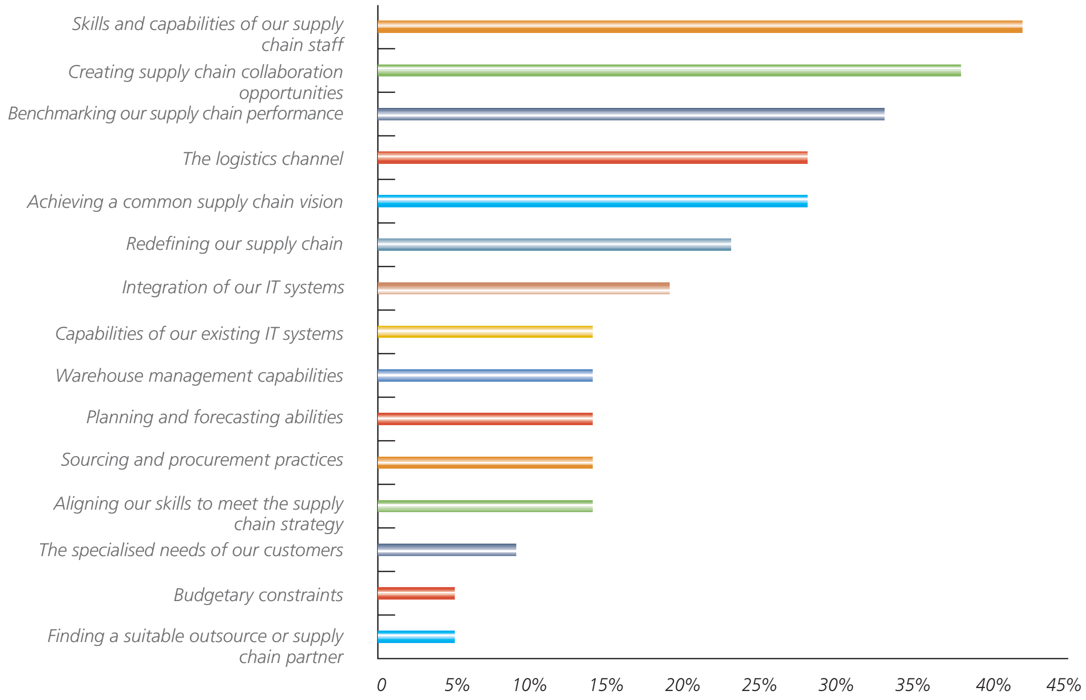
The Challenge of Supply Chain Strategy

The chief supply chain challenge in the industry relates to a paucity of skills among supply chain staff, followed by the creation of collaboration opportunities and benchmarking. We have remarked on the skills issue at length in the general report, but the issue in the mining industry is exacerbated by the apparent lack of involvement of senior executive leadership in some companies in reforming supply chain strategy. The lack of leadership in these companies will lead to cost reduction programmes often being silo based, reducing their chances of success. In a mining environment the obvious, but incorrect conclusion is often that increasing inventories is the best way to improve service levels. These CEO's would do well to pay attention to the old maxim. "If you want things to be different – do things differently."

This opinion is confirmed by the result that major challenges to the achievement of objectives in this industry are "achieving a common supply chain vision" at 28% and "redefining our supply chain" at 23%. Both figures are considerably higher than the national norm.

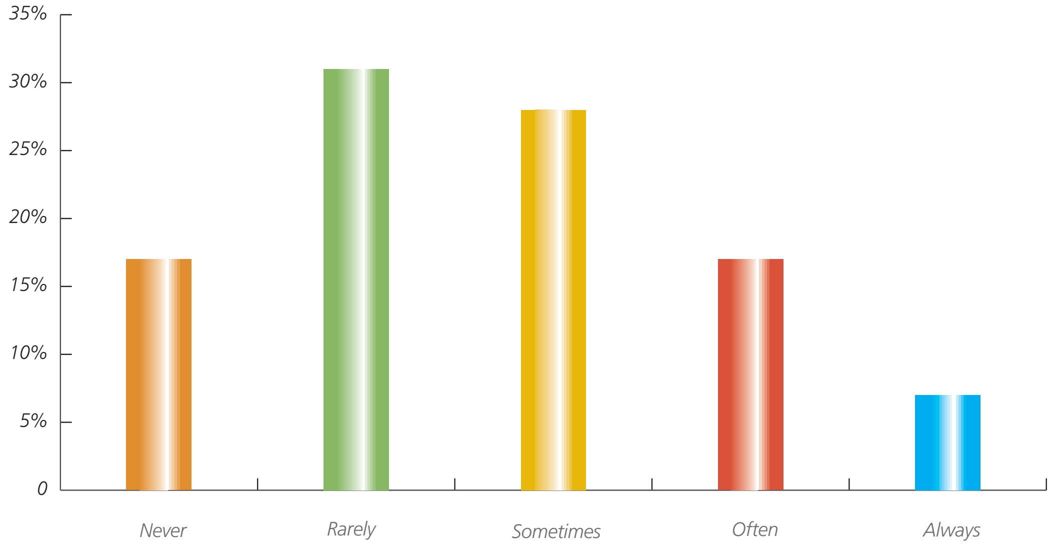
The Challenge of Supply Chain Strategy continued...

Figure 5. What are the top 3 challenges to achieving your supply chain objectives?



The listing of the benchmarking of supply chain performance as a challenge is not surprising when we look at the level of benchmarking of service levels and performance in the industry – fully 76% of respondents, compared to 66% in the national picture, benchmark their supply chains only 'sometimes' at best. The rating of the information visibility of the chain is also rated as low, which may be a further consequence of the lack of involvement of IT executives in the research. It also indicates a lack of relevant IT systems in place to enable visibility.

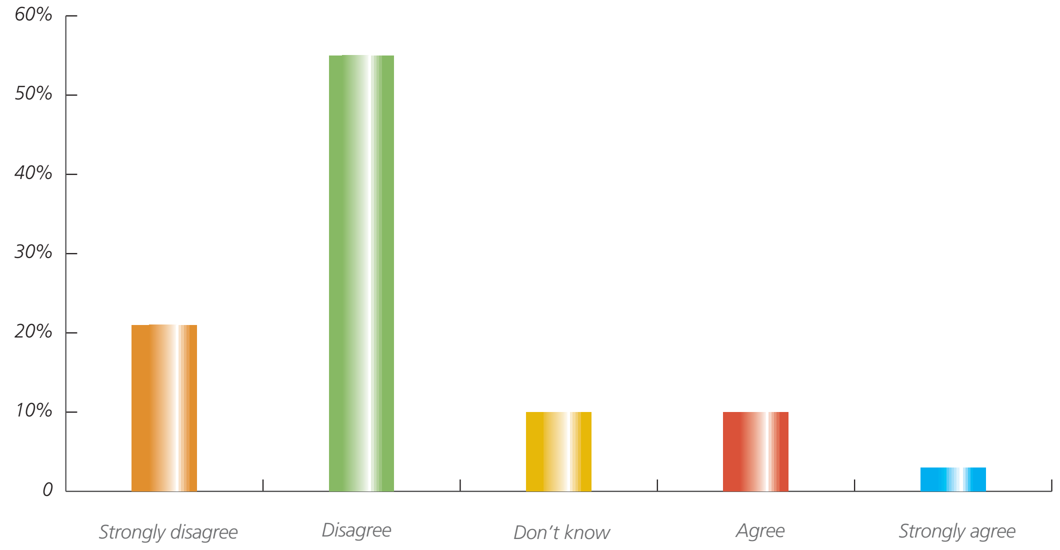
Figure 6. How often do you benchmark your costs against your competitors or other industries?



In terms of implementing supply chain strategy, the mining industry has a strong DIY culture, with no real affinity for supply chain partnerships indicated. Outsourcing on the other hand, possibly as a means to cut costs, is strongly indicated however, but this tends to be in non-core areas such as transportation.

Given that the largest challenge to the achievement of cost reduction objectives are the skills and capabilities of the industry's own staff, it is surprising that partnering with companies that have these skills is not high on the agenda. If the CEO, as is indicated, is generally under-involved in strategically aligning the supply chain to business strategy, this situation is unlikely to resolve itself anytime soon.

Figure 7. "We believe that the optimal way to manage a supply chain is with partners who agree to share risk and reward."



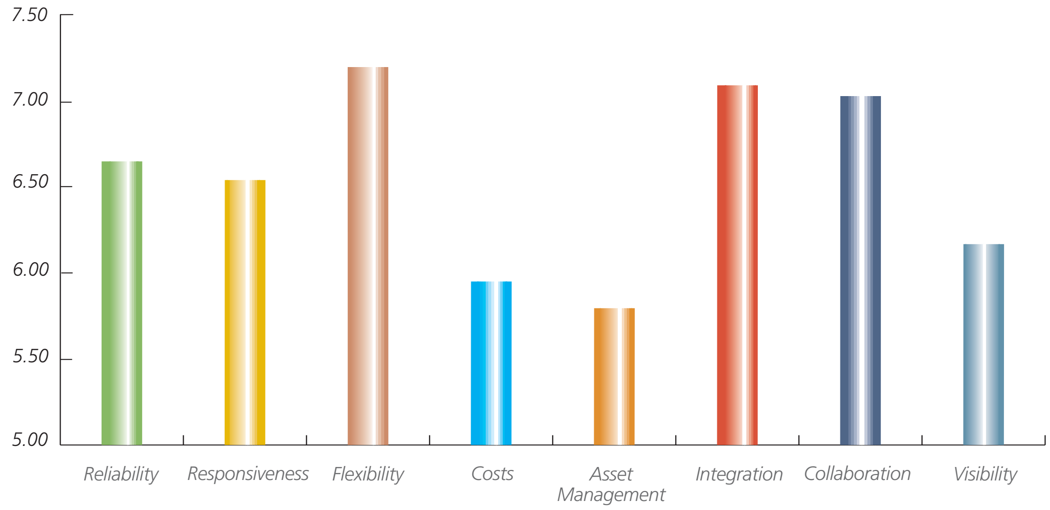
Overall, the lack of performance measurement and benchmarking in the industry, coupled with a lack of strategic leadership and focus, does not augur well for the achievement of sustained cost reduction and increase in the returns on supply chain assets which are desired.

The biggest challenge to achieving the supply chain objectives is the skills and capabilities of the staff.

How Vital is the Mining Industry?

The Health Check is a simple tool for measuring different aspects of supply chain performance on a scale ranging from 2 to 10. In terms of the industry's assessment of itself against supply chain measurement and benchmarking criteria such as responsiveness, agility, flexibility and so on, the picture is generally very similar to that of the national supply chain.

Figure 8. Health Check



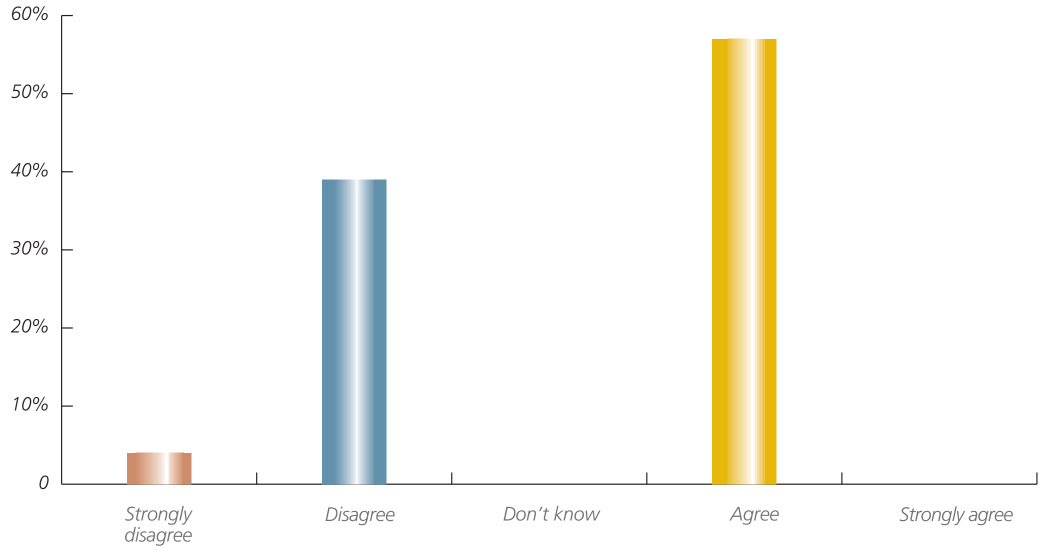
The perception of service levels is high in the industry, but 45% of responses also estimate service levels at below 90%. Granted, the industry does not have the service level priorities of other, less commodity based industries, but this is still a very low expectation of acceptable service levels. Costs, in the self-assessment exercise, are estimated as too high, which, as we have mentioned, reflects too much inventory, and a lower than deserved return on expensive supply chain assets. The vitality of the industry is thus unremarkable, but its challenges are clear.

A full 45% of respondents estimate service levels at below 90%

It seems that the huge benefits of supply chain reform are destined largely to be harvested only when CEO's face compelling events (like the currency / resource price dilemma of a few years ago).

When asked whether they only improve the supply chain when they have a problem there was surprising polarity in the response. But 57% sadly agreed. The 39% who disagreed offer some hope.

Figure 9. "We only improve our supply chain when we encounter a problem."



Conclusions

The mining industry is clear about the challenges it faces and the objectives it has. In a globally competitive commodity industry, where it is very difficult to clearly differentiate your product from that of your competitors, cost and efficiencies are key, and the focus on procurement processes and reducing other costs testifies to a strong awareness of this. There have been procurement and strategic sourcing initiatives in the industry, and attempts to centralise distribution systems. These initiatives indicate that the industry has the willingness to take on board cost reduction approaches. Added to this is a clear awareness that costs can be considerably reduced through such mechanisms as collaboration and benchmarking, and information visibility. Cost reduction is clearly the motivation, as it has been one presumes for decades, but a new approach, clearly proven in other industries beckons.

What is holding such reform back from achieving even the goal of efficient cost reduction are three key issues:

- a shortage of supply chain skills at a strategic level
- a preference for outsourcing of supply chain functions over the institution of collaborative partnerships with supply chain specialists who can bring much needed skills to the mix
- the lack of strategic involvement of senior executive leadership in supply chain reform.

Addressing even these issues will begin to provide a different context for efforts at procurement process improvement and other supply chain cost reduction. Until this is seen in a holistic and strategic light, however, the industry will continue to experience costly and cumbersome supply chain operations.

The 2006 supplychainforesight study is proudly brought to you by Barloworld Logistics, the initiators of this survey. With the growing presence of South African companies in the global marketplace, information of this nature is critical to strengthen our competitive position as a nation.

Thank you to TerraNova, the CSIR and the various logistics council heads for their support, as well as the many respondents who participated in this survey.

Survey conceptualised and initiated by:

Barloworld Logistics

Corporate Head Office Johannesburg

180 Katherine Street, Barloworld Park, Sandton
Tel: +27 11 445 1600
Fax: +27 11 445 1630/1632
Email: info@barloworld-logistics.com
Website: www.barloworld-logistics.com

Research conducted by:

TERRANOVA

Tel: +27 11 463 5713
Email: survey@tnova.co.za