

More speed, less energy

It's too simple to describe logistics or a supply chain as being the delivery process that lies in the grey area between departure and arrival. It's much more than that. It involves a complex network of delivery processes that is far greater than, say, domestic transportation.

By Kerry Dimmer

Today's logistics is probably the most constantly evolving trend in business that exists. Advances in the electronic industry, technology, transport, corporate and government policies, infrastructure and even social development affect how the logistics industry manages itself. Everything, in other words, has a chain reaction, which puts immense pressure on those in the sector to be flexible, adaptable and to be able to demystify the constant challenge of change.

Let's throw into this mix the African Renaissance, the renewal of the continent as it reaches out for global acceptance; and more locally, the generally accepted positioning of South Africa as the sub-Saharan base, or hub, by which the flow and delivery of services and products should meet international standards in order to play with the big boys, whose real interest lies in trade and investment.

The development of the South African logistics environment is taken so seriously by the CSIR that it produces a comprehensive report, sponsored by Imperial Logistics, called the State of Logistics Survey. It is the only report, outside of the USA that annually investigates local logistics performance. Last year it released its seventh edition, which concentrated on 2009/2010, a year that highlighted what the country was capable of given the preparations for the 2010 World Cup.

Hans Ittmann, executive director of the CSIR Built Environment says that the aim of the survey is to provide a perspective of the state of logistics in South Africa, incorporating a macro-economic view, and an industry-level perspective. "One of the major findings reported on, is the cost of logistics as a percentage of the gross domestic product (GDP). For 2009 this percentage was down to 13.5 percent, which was the lowest it has ever been," says Hans. "This is a direct reflection of the downturn in the economy during 2009, when less freight was transported."

The transport of freight is the biggest concern in the industry. South Africa's preferred transportation is by road, and not because it is cost-efficient or the ideal mode of delivery, rather it is an infrastructure that is superior to any other available. But road transportation does not unfortunately tick all the boxes given that secondary roads are in a bad state of repair. It is difficult to measure the cost of such negatives on the logistics industry but what we do know is that the tonnage split of freight between road and rail is on average around 88.7 to 11.3 respectively (2009). This imbalance needs to be addressed urgently, and given impending tolls in Gauteng, efficient rail infrastructure needs to be revived, and quickly, say industry analysts.

The rail system is in dire need of repair, particularly in rural areas, and does not have the capacity to meet demand. A review commissioned by the Ports Regulator shows that the busiest harbour in South

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Africa, Durban, is rated the worst in terms of productivity as well as being the most expensive of the 12 international harbours that were reviewed. However, airfreight systems appear to be operating effectively.

In terms of overall logistics performance during 2010, according to a global survey, measured by the Council of Supply Chain Management Professionals (CSCMP), South Africa is rated 28th out of 155 countries. In fact, the country averages in the mid-20s in most categories except for timeliness, where it falls to 57th position, clearly indicating that service levels are not up to par.

Mike Manby, the Business and Supply Chain Development Director of Bidvest Panalpina Logistics, one of the largest suppliers of supply chain and logistics services in South Africa from ocean to door, says that were service and infrastructure issues addressed effectively, then South Africa has the potential to dominate the continent.

"It's not easy to work outside South Africa. Apart from corruption and poor infrastructure issues we also have to contend with, among other frustrations, rail and warehouse dilapidation, import controls that can effectively hold up vehicles for weeks, which strains the effectiveness of supply chains, in particular the cold

chain," Manby confirms. "Further we experience high shipping and port costs.

"That said however, we are seeing encouraging innovative solutions to overcome some of the challenges. The European model of centralised distribution centres is becoming more popular. This allows retailers like Shoprite and Pick n Pay to be more competitive and price lower because they have a better network."

Manby's take on gaining competitive advantage in the supply chain environment lies in finding opportunities to network; the development of efficient customer service strategies; taking manufacturing closer to customers; and collaborative integration. "And of course, innovation," he says. "The big globals drive innovation and best practices. We're constantly learning from new international organisations that come to South Africa. They have developed strategies that may appear very demanding and exacting, but ultimately there are significant savings to be had all the way down the chain.

"What we have to remember is that we are not insular," Manby continues. "At Bidvest Panalpina we have concentrated on developing strategic relationships with international companies that provide us with access to global networks and skills. We have also seen the advantage of mergers with companies that offer complimentary services, so under one banner we can leverage advantage and be more competitive."

For the past 23 years, *Logistics News* magazine has been hosting an annual Logistics Achiever Awards (LAA). It's convenor, Di Holton, describes LAA as the Oscars of the industry: "The objective is to recognise excellence in the effective application of strategic, tactical and operational logistics and supply chain management. Any company that voluntarily enters must be South African but can enter their operations in southern Africa."

Holton says that from just five entries in 1989, the judges, who are nominated by 10 industry associations, now review in excess of 30. "It may not sound like a lot," says Holton, "but it's more than we cope with." Judges spend four months evaluating entries, inclusive of site visits, awarding points for satisfying 14 criteria categories. >>





'We have seen some ground-breaking world-class logistics applications. This proves that South African companies are among the best-of-the-best globally, which has motivated in recent years, the introduction of two new ovations, the Platinum and Enviro Awards,' says Holton.

The greener side of logistics had never really been a prime consideration until five years ago. Liesl de Wet, who is the sustainability champion for Barloworld Logistics, is also the chairperson of the LAA Enviro Committee. She says that in the past supply chains had been quantified in terms of the economic value only, with the wider social and environmental costs excluded from the balance sheet.

"Today we are all looking at the way operational logistics impacts negatively on the environment, particularly with regard to transportation and how we can mitigate this impact. There has been for example, enormous inroads made with the introduction of biofuels, research and development, the use of LPG vehicles and so on," de Wet says. "But the conundrum still remains how do we balance the economic and environmental impacts?"

Barloworld Logistics has some answers. It has introduced a programme that aims to educate its transporters on how to manage and reduce carbon emissions, and its Green Trailer project has gone a long way to prove that sustainability and profitability can be equalised. Green Trailer is an

aerodynamic design of a truck trailer that significantly cuts carbon emissions and fuel consumption, which in turn allows for an increase in load capacities. This translates into a major cost saving benefit to clients.

Even more importantly, and for the past nine years, Barloworld Logistics has been sponsoring an independent study that looks at, among other things, how the changing economic landscape impacts on supply chain management and logistics operations. *supplychainforesight* 2011 focused on the challenge of emerging markets, and what South African companies are and should be doing to become more competitive.

The research proved that South Africa is competing well but without a long-term improvement in the ease of doing business combined with the high costs of the national supply chain, this track record will stumble. The report also concludes that the country is in a transition period, a crossroads, and that SA needs to stay ahead of other emerging economy trading partners in order to develop competitive advantages.

Logistics is however, not only about freight and delivery. One of the largest and most powerful forms of supply chain execution is humanitarian, and make no bones about the concept of aid relief, it is still a business although not for profit. South Africa is very lucky to have return to our shores, Gerard de Villiers, who for four years worked as Chief Logistics Officer at WorldVision. >>



"There are many players involved in emergency response," explains de Villiers, "which requires careful co-ordination. When a major disaster occurs anywhere in the world, it's usually the United Nations that takes on the role of the management of aid. NGOs, like WorldVision and the Red Cross, unite to share ideas, resources, and plan the distribution of food or evacuation."

"Humanitarian logistics is not that different from the normal logistics supply chain management practice but the focus is instead on four main areas: transport, warehousing, procurement and security. You must bear in mind though, that when we talk about humanitarian logistics we have to look at South Africa and southern Africa as two separate environments because South Africa in this context operates very efficiently, but the southern African region has many challenges."

De Villiers points out that humanitarian aid and emergency relief is by nature very complex. "You have to consider a number of issues, first and foremost is response time. There are also categories of scale by which we need to measure the disaster being responded to – and the geographical location."

"Transport is obviously the most important factor in a disaster situation as you can't generally use ships or trains because of lengthy loading times, except," explains De Villiers, "in the case of an ongoing food crisis, like

that in the Horn of Africa. But in the case of a sudden emergency, like an earthquake, infrastructure damage means there is a dependency on road transport."

Warehousing, for the storage of aid, doesn't appear to be a problem in South Africa because it already has innumerable warehousing structures that can quickly morph into distribution centres for the needy.

Procurement is a challenge, and critical. As de Villiers says: "Where do you buy and what do you buy, and how do you prevent fraud and corruption? We're talking thousands, if not billions of dollars worth of items, be that tents, tarpaulins, food or medical supplies. Supplier contracts and rates need to be negotiated before a disaster happens so that capacity can be met when it's needed."

Security and protection of aid has an emotional angle. De Villiers relates his experience in Haiti, where he says one of the biggest challenges was how to protect the food aid. "When you or your children are really, really hungry, a gun does not prevent you from stealing, so this aspect has to be handled very carefully."

In a humanitarian crisis, De Villiers, who was involved in the debates after the flooding of New Orleans, says it is generally the private sector that rescues the situation, not the state. "The reason for this: who has the biggest stake? It's the big retailers that are able to distribute megatons of produce by simply re-routing their trucks."

"But make no mistake, there is a profit motive. Many retailers like the idea of the visibility, to be seen as the rescuers. It's actually scary and even nauseating to see how organisations fight for the limelight, to be heralded as the first to respond."

Looking ahead the SA logistics environment has to continue to evolve and its challenges are no different from that of the global market: increasing centralised distribution; sourcing services in a global market; cutting fuel and energy costs; reducing its carbon footprint; selective outsourcing; and improving delivery times. No business or country can prosper without logistics, it's that important. **17**

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