UNDERSTANDING THE EFFECT OF SKILLED LABOUR RESOURCE SHORTAGES ON SUPPLY CHAIN SUSTAINABILITY: A REVIEW OF THE LOGISTICS SKILLS GAP IN SOUTHERN AFRICA

L. Fransman[1], C.J. Savage[2], A.K. Jenkins[2]

[1.] The Namibian-German Institute of Logistics, Polytechnic of Namibia, Windhoek, Namibia,
[2.] BOSCAT, The Business School, University of Huddersfield, Huddersfield, United Kingdom

lfransman@polytechnic.edu.na, a.k.jenkins@hud.ac.uk, c.j.savage@hud.ac.uk

INTRODUCTION

The role of sustainable supply chain management as a facilitator to generate value within an organisation has become important in recent times. Gold et. al (2009) see it as a crucial to gaining competitive advantage when sustainability is sought at an inter-supply-chain level. Capabilities, capacity and core competencies come into play when trying to achieve a certain level of sustainability in managing supply chains. The component countries of southern Africa need to generate wealth to fund economic as well as social development and look to increased, sustainable trade to achieve this. The prerequisites for such trade include high and consistent levels of customer service, which in turn needs good, sustainable logistics management that understands the significance of the support it provides. It is therefore important to recognise the factors that influence logistics service provision; those to human resources are often neglected. As developing countries, such as those found in southern Africa, often lack skilled labour and management resources, this paper focuses on the research question: "What is the effect of skilled labour resource shortages on supply chain sustainability", it is based on evidence from Namibia and the Republic of South Africa.

To succeed in their development aims, southern African countries need to understand the effect the lack of skilled capacity may have on winning and retaining trade. If challenges are not understood, addressed and resolved, developmental prospects will be limited or even harmed. This paper draws on previous work that looked at the barriers to development within the Namibian industry and the skills gaps that exist in South Africa. By combining the findings of the research strands from these datasets, supported by additional stakeholder and academic feedback from conferences, workshops and publications, this research evaluates the affect that any skilled labour deficiencies will have on sustainable supply chain management.

In order to take advantage of global supply chains to attract and sustain trade, southern African countries need clear and well-managed supply routes. To become competitive and trade with international stakeholders, any skills shortages and barriers must be identified and addressed. The two data sets used here examine both barriers to development and skill shortages to provide a view of the impact on supply chain management. The paper further tries to provide an independent view on skills capability and the progress in capacity development in a discipline that is acknowledged as being vital for the future growth of the region and welfare of the population. It emphasises the need to invest in the cultivation of logistics and related skills in parallel with the more obvious areas such as infrastructure to ensure that the service levels offered are adequate to enable any predicted benefits to be achieved.

LITERATURE REVIEW

In today's globalized world supply chains that compete rather than individual companies or products (Christopher and Towill, 2001). Hence supply chain management (SCM) is a key strategic factor for increasing profitability and gaining competitive advantage. As southern Africa consists mainly of developing countries, the majority of them do not have a significant manufacturing base and so must acquire income through trade (Lambourdiere et al., 2012). The possible exception is South Africa, which is a BRICS (Brazil, China, India, Russia and South Africa) group country and does have manufacturing capabilities. It does, however, still rely on trade to import, export and distribute goods in order to generate wealth both directly and indirectly through the support services that they require. For physical goods to be traded, they have to be moved. Therefore, trade and logistics have been inextricably linked for as long as commerce has been taking place. This was recognised by Converse (1954) who stated that logistics was "the other half of marketing", see figure 1. Converse understood that, whilst marketing activities such as advertising and promotion can stimulate demand for trade by generating sales, this is pointless unless that demand can be satisfied. Supply chain and logistics functions such as warehousing, logistics information systems and transport are responsible for satisfying that requirement and thereby providing customer service.

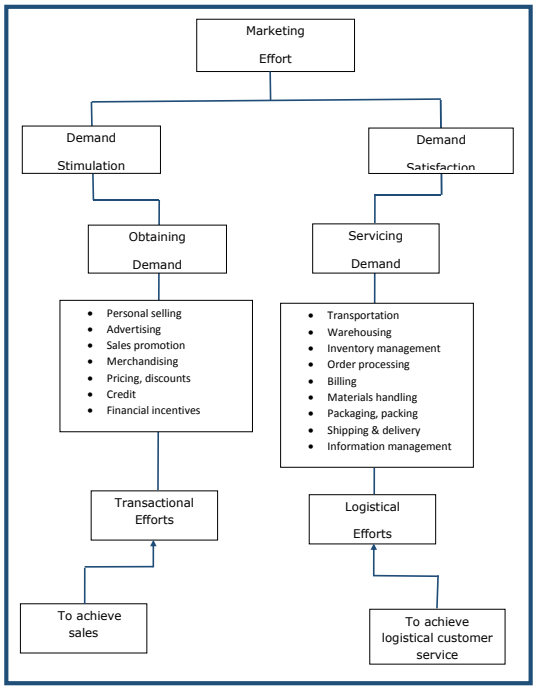

Figure 1: The two halves of the marketing process
Source: Converse, P., "The Other Half of Marketing", 1954, 26th Conference on Distribution, Boston. M.A.

To understand the significance of customer service and its impact on logistics, it is helpful to look at individual businesses. According to Drucker (1989) "There is only one valid definition of business purpose: to create a customer. It is the customer who determines what a business is. What it [the company] thinks it produces is not of first importance, especially not to the future of the business and to its success. What the customer thinks he is buying and considers 'value' is decisive; it determines what a business is, what it produces and whether it will prosper." Therefore, it is vital to determine what the customer wants to 'buy' and, having done so, to provide it. Provision alone however, is not enough; rather it is essential to identify and provide the "correct level" of customer service that will generate competitive advantage, without endangering the sustainability, or future profitability, of the company. This has long been recognised by logisticians; for example, Christopher (1998) points out that "Logistics is ultimately concerned with customer service and specifically with making the product available in the market place within defined cost and service parameters".

Savage and Bamford (1998) underline this link by demonstrating that measuring customer service factors is a quintessential part of benchmarking logistics performance. More recently, Christopher (2011) maintains that "Ultimately the success or failure of a business will be determined by the level of customer value that it delivers in its chosen markets". Customer value can be understood as:

$$\text{Customer value} = \frac{\text{Quality x Service}}{\text{Cost x Time}}$$

This equation (Johansson, 1993) is another illustration of the link between logistics and customer value as the former can affect both the "top" and the "bottom" half of the calculation. Once the importance of customer service is understood and accepted, it becomes imperative to define and understand the concept. This would appear to be straightforward, but there are many definitions of customer service, which can be confusing. Globalization, arguably one of the most influential recent trends in supply chains and their management, brings benefits to customers by increasing the range of goods available as well as reducing costs as suppliers source from low-cost countries. Bygballe et al. (2012) dispute this however, claiming that there is a lack of evidence that sourcing internationally actually leads to improved economic performance because of the difficulty in achieving a trade-off balance between purchasing and logistics costs (the total cost of ownership (Savage and Griffiths, 2007)) and customer service. It cannot be disputed that globalization implies ever increasing supply chain length, usually with a greater number of nodes. As supply chains increase in length, there are more opportunities for disruption and the risks increase as the probability multiplier effect comes into play because of the number of nodes. In some cases this can lead to manifestations of the "bull-whip" or "Houlihan" effect (Potter and Disney, 2006) where demand amplification can cause chaos in stock levels and manufacturing runs. The immediate impact of this is on the producer, but as soon as there is a risk of stock out or rationing, customer service will also suffer. This means that for supply chains to compete effectively by delivering good serviceability, there must be an high degree of integration supported by sophisticated IT systems. According to Zhao et al. (2008), effective integration also requires relationship and commitment between organizations, e.g. through partnerships, which may change the balance of power in the chains.

The factors that influence supply chains and therefore their customer service provision are numerous and complex, but they all have an impact on logistics. According to Ruske et al. (2010), new trade corridors between Asia and Africa, Asia and South America and within Asia will re-chart global supply chains. Trade volumes will shift towards emerging markets and the least developed countries will take their first steps into the global marketplace. The southern African states wish to exploit this and become significant players in the global supply chain community. To do so successfully, they have to compete in the global market by ensuring that logistics serviceability levels reach international standards and match or better those offered by alternative destinations.

The southern African region has massive economic potential demonstrated by its economic growth rates over the past ten years. Although the region experienced slowdowns in 2008, 2009 and 2011, these were largely driven by the global economic situation, and the region shows relatively consistent growth. (Banco Nacional de Angola, 2012, SADC, 2012). "Southern African Development Community (SADC) region has an immense growth potential linked with natural resources availability. Investment opportunities arise in mining, agriculture, manufacturing, financial services, ICT, tourism and infrastructural development. Yet, the regional performance continued to fall short of its potential …." (Banco Nacional de Angola, 2012:4).

There reasons for southern Africa not yet reaching its full potential are diverse and include a multitude of obstacles to trade such as delays, complex documentation requirements, skills shortages and unpredictable border procedures. All of these contribute to the high costs and restrict

the trade in the region. Hasse (2012) states that "Africa's economic development and ability to compete internationally depend on removing these roadblocks."

A review of the literature revealed that supply chain skills shortages are not unique to the region, but rather are global. In a worldwide survey done by Manpower Group polling approximately 39,000 employers in 33 countries across the globe, 30% reported having difficulties in recruiting appropriate staff due to a lack of suitable talent (Zieminski, 2009). Zieminski (2009) goes on to state that 'Work is getting more complex, employers are looking for more specific skills, so there is more of a mismatch between supply and demand.' Although this pertains to skills in general, the problem appears to be high in the supply chain; e.g. in the UK nearly 10% of the working population is engaged in supply chain activity, yet the sector suffers from an acute recruitment crisis that extends way beyond truck drivers (Kelly. P., 2015). According to Christiane Beimel, vice-president of value added services at DHL Global Forwarding: "Supply chain managers are retiring faster than they can be replaced. There simply are not enough young people to backfill the pipeline (Kelly. P., 2015). Kisperska-Moron (2010) illustrates this when she asserts that a different skills set will be required in the future as excellence is required from the beginning of operations as there is no time to improve performance during its [the supply chain's] lifetime, which she regards as usually not more than 5–7 years.

Southern African countries need trade to develop. Sustainable trade needs logistics to support it and provide consistent customer service. Users perceive logistics in the light of the customer service it provides and good service can only be achieved by people with sound logistics skills at all levels from management to shop-floor. Therefore, it is important to understand whether a region has the skills it needs and, if there is a shortfall, what can be done to address it.

METHODOLOGY

This research is focused on the logistics industries of Namibia and the Republic of South Africa. It is explorative, adopting a critical realism approach to examine tendencies rather than laws, looking at entities, events and experiences, regarding perceptions and reality to derive its data. It draws together data sets from these two countries based on extensive stakeholder interviews and surveys. These were purposefully targeted to ensure coverage of a broad spectrum of stakeholders rather than attempting to achieve a statistically based sample. The initial research had been disseminated in the form of academic papers (Heyns and Luke, 2012, Heyns and Luke, 2013, Savage. C.J. et al., 2013, Fransman et al., 2014, Luke and Heyns, 2014) and practitioner workshops. Feedback and comments from these have been incorporated into this paper's data.

The paper uses the combined international data to examine the customer service levels provided by the logistics industry across the two countries as an indicator of skills availability. It examines the skills requirements behind these levels to identify gaps and surfeits. In doing so it evaluates the differences and similarities, their possible causes and the impact on future development of the industry and thus on the countries. In addition, because many of the problems encountered are believed to be common throughout southern Africa, it is not unreasonable to make a cautious extrapolation of the results to give a view across the region.

FINDINGS

In common with most emerging countries, Namibia and South Africa have strategic plans to achieve their development aims. Both see logistics as essential to the facilitation of trade in order to generate the income needed to enable economic development; but there are significant obstacles that hinder such stratagems. Previous research based on stakeholder experiences (Savage et al., 2014) suggests that customer service issues are major barriers to advancing logistics in the region, whilst work by Heyns and Luke (2013) investigating skills requirements and shortages in the South African logistics

industry also showed that lack of customer related skills was a major problem. The findings of this paper draw together the findings from both of these research streams together with some work on customer service in the Namibian logistics industry (Fransman et al., 2014) to investigate the impact of the logistics skills gap on customer service in southern Africa.

The two practitioner surveys conducted identified the most sought after skills in South Africa supply chains and the collated results are shown in Table 1. The findings of the Namibian study, indicating the greatest barriers to effective logistics systems the development are presented in Table 2.

Table 1: Top 25 Mean rating of supply chain skills requirements in South Africa

RANK	SKILLS ITEM	Average (Max value = 5)
1	Customer focus	3.64
2	Ability to plan and prioritise	3.62
3	Business ethics	3.62
4	Ability to see big picture	3.57
5	Team work	3.56
6	Problem solving	3.55
7	Ability to think outside the box	3.51
8	Communication skills	3.48
9	Business process improvement	3.47
10	Decision making	3.47
11	Time management	3.38
12	Inventory management	3.34
13	Leadership	3.33
14	Cross-functional coordination skills	3.31
15	Change management	3.29
16	Warehousing / Materials Handling management	3.28
17	Supply chain cost knowledge	3.28
18	Knowledge of the industry	3.24
19	Demand forecasting	3.23
20	Spreadsheet abilities	3.23
21	Motivation skills	3.22
22	Negotiating skill	3.21
23	Quality management	3.19
24	Transport and related regulation knowledge	3.17
25	Supply chain design	3.17

As mentioned above, both data sets suggest that customer service issues are of paramount importance despite the samples being from different populations. The 'lack of international standards of customer service' identified in the second table suggests that there is a major skills gap in this area that will need be addressed across southern Africa. This paper postulates that this illustrates the need for customer focused management education. Further, the findings suggest that this issue has already been acknowledged as being a barrier to logistics development.

Correlations between the Namibian barriers and the South African skills requirements data show that a lack of management education is a barrier to logistics and its development, with 7 out of the top 10 skills requirements directly relating to this weakness. Skills, such as the ability to plan and prioritise, problem solving and decision making, are essential for managers operating in today's environment

Table 2 Barriers to logistics development in Namibia

RANK	BARRIER	%
1	Lack of international standards of customer service	11.3
2	Customs procedures/clearance	9.6
3	Limited management education	8.7
4	Harmonisation of regional (&SADC) trade procedures	8.7
5	Attitude (Siloism, narrow mindedness, reluctance to take responsibility for own actions, willingness to work etc.)	8.7
6	Lack of integration of parastatals with industry	7.8
7	High road and rail transport rates	7.0
8	Corruption	7.0
9	Lack of government awareness (of Logistics needs)	6.1
10	High fuel costs	6.1
11	Limited driver/operator training	5.2
12	Work permits & conditions (for non-nationals)	4.3
13	Port Capacity	4.3
14	Safety	3.5
15	Nepotism in appointments and contract awards	1.7

where the most important aspect is to ensure the customers' requirements are met or exceeded without endangering business prosperity. Other important skills are the ability to be aware of the big picture and think outside the box, which are key attributes of successful middle and top managers. This has become very important to ensure sustainability in the highly competitive global environment where every organisation is striving to enhance their service levels to retain their customers and stay ahead of their competitors. This requires skilled individuals that understand the sector and its customers, as well as how to improve it and ensure supply chain disruptions are minimized.

Corruption and nepotism feature in the top 15 barriers to logistics development, which correlates with the need for business ethics that is ranked second on the list of requirements for managers. Corrupt practises are common South Africa and Namibia who are ranked 71 and 56 respectively out of 177 countries on the corruption perceptions index (Transparency.org, 2013). This issue, together with the lack of customer focused skills, may seriously inhibit the attraction of international customers to the region or retention of them long enough to sustain trade for development. Customers, particularly the ones potentially interested in entering foreign trade markets, investigate the transparency and ease of doing business as well as the measures to protect their investments. If a country has difficulty in conforming in these areas, potential customers may be deterred. Attitude, ranked 5th in the findings, is a barrier that relates to the lack of willingness to work or reluctance to take responsibility for ones actions. Like the other factors noted, it plays vital role in determining the level of customer service delivered in a country or region and can only be improved by attention to education and training at all levels of management education and operator training.

Barriers not directly related to human skills such as the high fuel, road and rail transport costs or the limitations of port capacities are influenced by infrastructure shortcomings and/or outside market prices. Though the specific skills to manage these factors were not tested, they are likely to be affected by similar issues. The problems with work permits & conditions also relates to skills, since if there were enough 'home-grown' managers, it would not be necessary to employ so many overseas personnel. Safety, or its understanding, was not listed as a specific skill required for managers, but fell under business functions such as: manufacturing, warehousing, material handling and transport.

For businesses (and countries) to succeed in meeting international customer service levels, the critical barriers will need to be addressed. Understanding the impact of skills and education

shortages on logistics barriers is of essential to ensure mitigation measures are implemented. South Africa and Namibia have tried to mount education programmes in recent times but do not seem to have been effective or led to them catching-up with the developed world levels of economic well-being. The basic education in both countries is being questioned because a lack of literacy is having an impact on their economies (World Economic Forum, 2013). Recent figures show that there has been a decline of the South African economy that directly influences Namibia and other southern African countries, against those of developed countries, and further weakening is forecast (Maswanganyi, 2014, Pani, 2014). These difficulties place the region in a weakening trading position, so it is vital that this is not exacerbated by any lack of international customer service standards or skills. If these issues are not addressed it may become difficult for South Africa, Namibia and other southern African countries to retain existing let alone develop the international trade that is needed to achieve the thriving economies predicted in their, possibly over-optimistic, development plans.

These results show that there are major barriers to developing appropriate logistics systems in southern Africa, most of which are exacerbated by the shortage of necessary skills. The lack of a sufficiently educated workforce is frequently cited as one of the most problematic factors of doing business in southern African countries and limited logistics skills are a specific issue; so it seems unlikely that these countries will be able to reach their desired trading volumes in the near future.

CONCLUSION

The findings from this research demonstrate that southern Africa's logistics development is being inhibited by a number of significant barriers and that the region lacks the skills to fully develop the sector. Further, the results show that both the Namibian and South African logistics services will be unable to supply a level of customer service commensurate with the countries' visions and ambitions of enabling economic and social development through the benefits of membership of the 'global supply chain community'. Analysis of the research has revealed that the problems besetting both countries' industries are similar and, at least to a substantial degree, due to human capital related issues just as much as more concrete ones such as infrastructure limitations.

Although the data analysed is from only two of SADC's fifteen or Southern African Customs Union (SACU)'s five member states, it is not unreasonable to postulate that similar issues are likely to prevail across both communities and therefore across southern Africa as an whole. Although this would need confirmation by further research, it suggests that the achievement of internationally recognised customer service levels is unlikely to be achieved in the near future. The literature review established that good customer service levels are essential for achieving competitiveness and sustainability in supply chains. Without such competitiveness, companies and their host countries are not able to support the trade necessary to generate the wealth that is needed for development, particularly in emerging economies. Further, the review confirmed that good logistics and supply chain management are needed to generate serviceability; also that effective and efficient logistics management rely upon high levels of human skills.

The findings show that there is an acute shortage of logistics skills even compared to current demand which is acting as a significant barrier to the achievement of objectives. In the near future, it is unlikely that skill levels will improve enough to allow the achievement of good levels of customer service. This will act as a serious obstacle for national development in Namibia, South Africa and, in all probability, across the southern Africa. This is because for trade to flourish along southern African corridors it is essential that all their components, whichever country they occur in, are aligned and offer similar and consistent levels of service.

This research has enabled conclusions to be drawn, but inevitably there are a number of limitations that should be addressed by future research both to validate and enhance the conclusions. Possibilities for future work can be considered on three levels:

1. *Consolidation & checking* - In order to ratify the conclusions drawn from the analysis it will useful to replicate the research already carried out in the reciprocal countries. That is, to carry out a logistics barrier survey in South Africa and a skills one in Namibia. This is already being planned and will be carried out at the same time as expanding and updating the existing samples.
2. *Extension through southern Africa* - Having established and proved the effectiveness of the methodologies used, it will be useful to extend the research into other SADC / SACU countries. This will enable the team to test the homogeneity of these issues across the southern African region. Preliminary arrangements have already been made to start this process in Botswana.
3. *Comparison with more developed countries* - As noted above, the general conclusions of this work suggest that limited human capital, in logistics education and training, is inhibiting the growth of efficient logistics and supply chain operations within the southern African region. It does not imply that these are the only limitations or that their rectification would bring "instant success". In other words, a reversed hypothesis of (say) "Enhancing the levels of logistics skills will lead to a sea change improvement in supply chain capability" may not be valid. Therefore, it would be interesting to examine the impact of skills levels on barriers in countries that are regarded as slightly more developed than South Africa and Namibia. These could be selected on a number of criteria such as the World Bank logistics Performance Index (LPI), the Human Development Index (HDI) or by membership of an economic bloc such as the BRICS group.

Notwithstanding the potential further work, the research to date makes it abundantly clear that, if South Africa and Namibia want to achieve their potential within the global supply chain market, they must offer customer service levels that are appropriate for the task. To do so, it is vital to address the skills shortage issues in order to overcome the logistics barriers that have been identified. These skills shortages occur at all levels from the driver or warehouseman to managers, directors and government officials. It is apparent that, although this cannot guarantee immediate success, as improving human capital is inevitably a slow process, starting suitable programmes must be treated as a very high priority. Such education must address cultural issues and human resource based skills as well as the more obvious functionally related ones. It is therefore recommended very strongly that the governments of Namibia and South Africa immediately allocate resources to fully identify the logistics educational needs and address them as a matter of great urgency. Failure to do so may negate any efforts to improve service levels through infrastructure development and condemn both countries to be spectators to globalisation rather than benefiting from it.

BIBLIOGRAPHY

BANCO NACIONAL DE ANGOLA 2012. An integrated paper on recent economic developments in SADC.

BYGBALLE, L. E., BØ, E. & GRØNLAND, S. E. 2012. Managing international supply: The balance between total costs and customer service. *Industrial Marketing Management,* 41**,** 394–401.

CHRISTOPHER, M. 1998. *Logistics and Supply Chain Management,* Harlow, Prentice Hall (FT).

CHRISTOPHER, M. 2011. *Logistics & Supply Chain Management,* Harlow, U.K., Pearson Education Limited.

CHRISTOPHER, M. & TOWILL, D. 2001. An integrated model for the design of agile supply chains. *International Journal of Physical Distribution & Logistics Management,* 31**,** 235 - 246.

CONVERSE, P. 1954. The Other Half of Marketing. *26th Conference on Distribution.* Boston, M.A.,.

DRUCKER, P. 1989. *The Practice of Management,* Oxford, U.K., Butterworth-Heinemann.

FRANSMAN, L., SALOMO, E. N. & SAVAGE, C. J. 2014. Customer service in the Namibian logistics industry: Benchmarking for the future. *Namibia Customer Service Conference.* Windhoek, Namibia: Polytechnic of Namibia.

HASSE, K. 2012. *Non-taffif barriers choke Afican trade* [Online]. Good Governance Africa. Available: http://gga.org/analysis/non-tarrif-barriers-choke-african-trade [Accessed 12th March 2013].

HEYNS, G. J. & LUKE, R. 2012. Skills reqirements in the supply chain industry in South Africa. *Journal of Transport and Supply Chain Management,* 6**,** 107-125.

HEYNS, G. J. & LUKE, R. 2013. Skills shortages as a barrier to the development of South Africa's global supply chains. *Pan-Pacific Conference XXXI: Forging the legacies of emerging economies.* Johannesburg, South Africa.

JOHANSSON, H. J., MCHUGH, P., PENDLEBURY, A.J., WHEELER, W.A., 1993. *Business Process Engineering,* Chichester, U.K., John Wiley & Sons.

KELLY. P. 2015. *Spread the word – a scheme that could help solve supply chain recruitment crisis* [Online]. The Load Star - making sewnse of the supply chair. Available: http://theloadstar.co.uk/spread-the-word-a-scheme-that-could-help-solve-supply-chain-recruitment-crisis/ [Accessed 15th June 2015].

KISPERSKA-MORON, D. 2010. Evolution of copmpetencies of logistics and supply chain managers. *Electronic Scientific Journal of Logistics,* 6**,** 21-31.

LAMBOURDIERE, E., SAVAGE, C. & CORBIN, E. 2012. Global supply chains, logistics clusters and economic growth: What it could mean to Caribbean territories?'. *C.O.T.E.,Conference on the Economy* Trinidad & Tobago.

LUKE, R. & HEYNS, G. J. 2014. The skills required to ensure supply chain sustainability in South Africa. *23rd Annual IPSERA Conference: Purchasing and supply management in difficult times: The sky is the limit.* Pretoria, South Africa.

MASWANGANYI, N. 2014. IFM likely to cut SA's growth forecast. *Business Day*.

PANI, M. 2014. *Stong growth in sub-saharan Africa, but pockets of difficulty* [Online]. International Monetary Fund. Available: http://www.imf.org/external/pubs/ft/survey/so/2014/CAR102014A.htm [Accessed 1st September 2014].

POTTER, A. & DISNEY, S. M. 2006. Bullwhip and batching: An exploration. *International Journal of Production Economics,* 104**,** 408–418.

RUSKE, K. D., KAUSCHKE, P., REUTER, J. & VON DER GRACHT, H. 2010. Emerging Markets – New hubs, new spokes, new industry leaders? *Transport & Logistics 2030.* Supply Chain Management Institute.

SADC 2012. SADC facts and figures.

SAVAGE, C. J. & BAMFORD, C. G. 1998. Measuring Customer Service factors as a preliminary step in benchmarking logistics performance: A case study of in the UK publishing industry. *International journal of Logistics: Research and Applications,* 1**,** 283 - 295.

SAVAGE, C. J., BAMFORD, C. G., FRANSMAN, L. & JENKINS, A. K. 2014. The response of key stakeholders to the proposed Walvis-bay port-centric hub development. *Logistics Research Network.* Huddersfield, UK.: CILT / LRN.

SAVAGE, C. J. & GRIFFITHS, J. 2007. Global supply chains: saints or sinners. *In:* HULL, T. U. O. (ed.) *LRN 2007 Conference.* The University of Hull, U.K. .

SAVAGE. C.J., FRANSMAN. L. & JENKINS. A.K. 2013. Logistics in Namibia: Issues and challenges *Journal of Transport and Supply Chain Management,* 7**,** 8 pages.

TRANSPARENCY.ORG. 2013. *Corruption perceptions index 2013* [Online]. Available: http://cpi.transparency.org/cpi2013/results [Accessed 1st September 2014].

WORLD ECONOMIC FORUM 2013. Global competitiveness report 2013-2014.

ZHAO, X., HUOB, B., FLYNN, B. B. & YEUNGA, J. H. Y. 2008. The impact of power and relationship commitment on the integration between manufacturers and customers in a supply chain. *Journal of Operations Management,* 26**,** 368–388.

ZIEMINSKI, N. 2009. *Help still wanted, global talent crunch persists.* [Online]. Available: http://www.reuters.com/article/2009/05/28/us-manpowertalent-idUSTRE54R0SO20090528 [Accessed 12th March 2012].