Leveraging on Supply Chain and Supplier Development, towards Business Performance and Competitive Advantage in a Global Organization: The Case of Fan Milk Ghana

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Abstract

The study examined how multinational companies, operating in developing countries, can leverage on supply chain and supplier development to improve upon their business performance as well as gain competitive advantage at the global market place. The search light was on the operations of Fan milk Ghana, a subsidiary of Swiss delicacy multinational company, operating in the African sub-region. Among the specific objectives of the study, are to examine the factors that enhance supply chain and supply development management in addition to identify strategies for enhancing performance and gaining competitive advantage in the global business place. In conducting the study purposive sampling technique was employed in selecting key officials of the marketing, procurement, stores as well as finance and quality control of Fan milk Ghana, for their views on the study. The questionnaire technique afforded the respondents the requisite flexibility for using their leisure time in co-operating with the study. Findings of the study indicated that strategies such as integration of ICT, frequent review of operational equipment, and factory lay-out, enhancing shipping mechanisms as well as sustaining effort at building a capacity of human resource, all work together towards enhancing the supply chain function of an organization leading to improvement in business performance and gaining competitive advantage to withstand industry competition.

Keywords: Supply chain, Supplier development, competitive advantage, business performance and Value chain.

Introduction

Competition at the global market is such that organizations ought to ensure they parade quality products which can be offered at highly competitive prices thereby attracting the requisite patronage to keep expected inflows on course. Doing so entails evolving certain strategies which have the propensity of ensuring relatively lower cost of production leading to offering affordable prices to attract customers. One key element in reducing production cost has to do with ensuring effective procurement which centers on creating viable supply chain structures. For suppliers to behave in an anticipated fashion it is essential that organization like Fan milk Ghana helps in developing them. This will ensure that quality goods will be obtained at all times, at good prices and within good time. When suppliers’ values are properly optimized this way then Thomson and Strickland (2007) are of the conviction that the necessary business efficiency can be established to attract the needed competitive advantage so as to withstand various forms of pressure in the industry.

This research work looks at how Fan milk Ghana, a multinational company is leveraging on its supply chain as well as develop its suppliers, in order to improve performance and continue to lead to local industry. It begins by conducting a literature review on some concepts and factors that enhance the management of supply chain and supplier development.

Literature review

The review exercise takes a good look at the concept of supply chain and factors that influence supply chain management especially, the use of information technology, total quality management, importance of economies of scale, lean management and its ramifications, labour effectiveness, augmenting capital structure and strategic development of suppliers. It however takes a critical look at competition and sustainable development prior to examining supply chain concept.
Competition and sustainable development

An organization that seeks to grow in this global competitive environment needs to produce high quality goods at an affordable price under the backings of an enviable brand image. This is in consonance with the submission by Kotler (2007) that given the stiff competition in various industries, it is companies that produce at high quality and offer at competitive prices that could survive at the marketplace. Such a company should operate in strict compliance with current conventions on sustainable development (i.e. identifying green features) as it relates to low energy consumption and using recyclable materials.

In the opinion of Craighead & Meredith (2008), companies should produce in such a manner as to leave very little damaging effect on the ecosystem. This means it is essential to operate with materials that can be recycled rather than having to always damage the earth crust for ore to mine bauxite for producing steel and other metals necessary to keep the industries in continuous operation. It is in keeping with this concept of sustainable development that, industries in the Far East especially China, buy scrap metals from developing economies like Ghana.

According to Aboulnasr et al (2008), companies that respect global convention on environmental sustainability are able to market their products in leading markets on the globe. Going to new markets in Europe, Malaysia, North and South America etc would not be a problem provided the growing cost of operation is reversed. An example here lies with designing and developing products in Ghana but with production bases in China and India. This clearly indicates managements’ ability to manage operation cost in such a way as to enhance its supply chain activities thereby delighting customers with quality and affordable priced goods.

Supply chain

A company’s supply chain, according to Thompson & Strickland (2007) identifies the primary activities that create customer value and the related support activities. Fawcett et al (2002) also note that all the various activities that a company performs internally and externally combine to form a value chain because the underlying intent of a company’s activities is to do things that ultimately create value for buyers. Billington (2010) is of the opinion that a company’s supply chain system also includes an allowance for profit because a markup over the cost of performing the firm’s value – creating activities is fundamentally part of the price (or total cost) borne by buyers. This presupposes that unless a company succeeds in creating and delivery sufficient value to buyers to arrive at an attractive profit, it would be difficult to survive for long period.

The foregoing exposition on the importance of supply chain management points to the fact that management of industries really have to take cost reduction seriously in order to continue to produce high quality goods and sell at affordable prices. At the starting point, Billington (2010), notes that it is essential to examine the location of the existing production bases. For goods produced in China and exported to African for sale to be successful then Chinese companies must adopt cost leadership strategy which ensures much lower production cost necessary to charge international competitive prices. The cost of transportation and handling charges are all factored into pricing the goods and therefore Frohlich & Westbrook (2001) is of the conviction that proximity is essential in locating industries.

Supply chain in the opinion of Dooley et al (2010) is further enhanced when management finds it necessary to outsource certain production functions. Financial management writers such as Lucey (2005) and Madura (2008) all emphasize the fact that “make or buy-out” decisions often compare the comparative advantage of a firm in producing certain key parts internally or buying them outright from outside suppliers. For instance, a company producing electrical pumps and outsourcing as much as 80% of its key components such as motor and pumps, cases and covers, as well as switchgear and electronics, would enjoy cost efficiency of its operations provided these suppliers could supply high quality parts at good prices.

Information technology, total quality management and supply chain management

If a company’s headquarters is located in China and main sales markets on the West Africa sub-region, it is essential for such company to manage its information technology to ensure that goods and services move timely in order to meet corporate objectives. Sound IT application, according to
Craighead & Meredith (2008) is the bane of modern business success. Efficient IT system will ensure that suppliers dispatch the parts on time to manufacturing centres in China while effective IT system will also pave the way for timely flow of finished goods so as to adequately and timely replenish stocks on shelves in marketing outlets within the West African sub-region.

Contemporary marketing authorities like Kotler (2007) cautions against rising operating cost which invariably results in high prices with attendant product failure on the market. Many a time, company’s sound survival strategies are disrupted by high cost emanating from rising energy and component cost with their concomitant effect on trading margins. The moment business prospects are threatened as a result of margins then Talib & Rahman (2010) recommend Total Quality Management (TQM) principles which incidentally adequately address the number of areas of concern. In his arguments in favour of TQM, Saravanan & Rao (2006) explains that TQM enjoins business owners to sharpen their supply chain management systems to come out with high quality goods at highly competitive prices. This, in the opinion of Hollensen (2010) involves identifying a segmented market and targeting these groups with positioning strategies mainly the marketing mix i.e. 4 Ps being the price, product, place and promotional strategies.

**Importance of economies of scale to supply chain management**

Having identified the potential markets to serve notably Europe, Malaysia, North and South America, it is essential to work on the operational cost. A company may identify relatively high cost of labour”, as well as rising logistics costs” and “high central overheads” among others current impediments in achieving projected profit levels. Working on these involves striving to capture all available economies of scale. Economies of scale, in the opinion of Thompson & Strickland (2007) stem from an ability to lower unit costs by increasing the scale of operation.

It is essential to examine the plants being used to manufacture the ‘white colour’ products and explore the possibility of securing larger plants that are more economical to operate than medium scale or small plants. Management in some cases needs to examine the possibility of producing both small component and large parts at the same place rather than the existing arrangements where they are respectively produced in China and India.

In the opinion of Fisher (2007), manufacturing economies can be achieved by using common parts and components in different models or by cutting back on the number of models offered especially the slow-selling ones, and then scheduling longer production runs for fewer models. Krause & Scannell (2002) also argue that cutting cost in global marketing calls for making separate products for each country’s market instead of selling a mostly standard product worldwide.

**Lean management and supply chain efficiency**

Supply chain efficiency could also be improved by partnering with suppliers to streamline the ordering and purchasing process through outline systems, reducing inventory carrying costs through the Japanese system of just-in-time inventory practices, economizing on shipping and materials handling necessary to bring on board other cost-saving opportunities.

A company with a core competence or a distinctive competence in cost-efficient supply chain management can sometimes, in the opinion of Bustinza et al (2010), achieve a sizable cost advantage over ‘sleeping’ competitors. Dong et al (2001) also argue that if the costs of raw materials and parts are too high a company can either substitute the use of lower-cost items or maybe even design the high cost components out of the product altogether. Management further identified limited use of automation as one of the weaknesses of the company.

This issue can be addressed by employing online systems and sophisticated software to achieve operating efficiencies. In the opinion of Frohlich & Westbrook (2001) Data sharing, which starts with customer orders and goes all the way back to component production, coupled with the use of Enterprise Resource Planning (ERP) and Manufacturing Execution System (MES) software, can make custom manufacturing just as cheap as mass production and sometimes cheaper. Online systems and software according to Hakansson et al (2004) can also greatly reduce production times and labour costs. This source as an example in the case of Lexmark, indicates that the Company used ERP and MES software to cut its production time for inkjet printers from four hours to 24 minutes.
Labour effectiveness and supply chain management.

Addressing relatively high cost of labour facing a company or a business can be achieved by adopting such labour-saving operating methods as installing labour-saving technology shifting production from geographic areas where labour costs are high to geographic areas where labour costs are low, as well as avoiding the use of union labour where possible (Thompson and Strickland, 2007). This is because accommodating the demand of the union especially on costly fringe benefits could stifle productivity. Management of companies could also relocate company’s headquarters, example in order to cut its high cost of operations, Barclays bank PLC moved its corporate headquarter from England to one of the emerging markets of Asia i.e. Malaysia as a strategy for reducing labour cost.

Augmenting capital structure

Augmenting the capital base of a company for carrying out its business development agenda entails considering the possibility of listing on an International Stock Exchange. The Hong Kong Stock Exchange, (HKSE) London Stock Exchange (LSE), New York Stock Exchange (NYSE) are reputable financial markets where companies could source funds to facilitate their globalization endeavour within the medium to long term plan for growth and profitability. However, getting listed on these world class stock exchanges entails maintaining efficient financial records which can stand the test of time (Lucey, 2005).

Additionally, for companies to thrive in the mist of mundane challenges in the current global business landscape, it will be prudent for business to engage in partnership, alliances or agreement. According to Thompson & Strickland (2007) in most industries, manufacturers are forging strategic partnership with selected suppliers in efforts, not only to reduce inventory and logistics costs (for instance through just-in-time deliveries) but also speed up research in making available the next generation of components.

Strategic development of suppliers

Building strategic alliance with suppliers also enhances the quality of the parts and components being supplied and as much as possible reduce defect rate as well as squeeze out important cost savings for both themselves and their suppliers.

In the opinion of Vickery et al (2003), the more opportunities that exist for fruitful efforts between a company and its suppliers, the less their relationship is characterized by who has the upper hand in bargaining with the other. Collaborative partnerships between a company and a supplier, according to Sprague & Callarman (2010) tend to last so long as the relationship is producing valuable benefits for both parties. Companies or business therefore ought to develop a close collaboration with its suppliers in order to influence the way suppliers conduct their affairs with the company.

A company’s supply chain, according to Terpend et al (2008), to a large extent, is embedded in a larger system of activities that includes the supply chains of its suppliers and the value chain of whatever distribution channel allies it uses in getting its product or service to end users. Supplier’s value chains are relevant because suppliers perform activities and incur costs in creating and delivery the purchased inputs used in a company’s own value-creating activities. It is from this background that one supports Hendricks et al (2009) assertion that management of companies should do anything in their power to help suppliers to drive down the costs of their value chain activities or improve the quality and performance of the various parts being supplied so as to enhance their own competitiveness. If the suppliers are able to improve upon their own supply chain, the end product is that they would be able to supply at highly competitive prices.

Walmart company files (2004) indicate that its standard practice to liaise extensively with suppliers on all aspects of the purchasing and store delivery was necessitated by the need to obtain mutually beneficial cost savings. The use of relevant software such as Enterprise Resource Planning (ERP) will certainly allow suppliers to keep tract of the inventory levels at company’s warehouse so as to facilitate the production processes.

The extensive use of various e-procurement software packages can help streamline the purchasing process by eliminating paper documents, such as requests for quotations, purchase orders, order acceptances and shipping notices. Such online systems according to Thun (2010) allow warranty claims
and product performance problems involving supplier components to be instantly relayed to the relevant suppliers so that corrections can be expedited to keep production on course.

**Research methodology**

Descriptive research design which in the opinion of Babin and Zikmund (2010) enable a researcher to find answers to who, what, how, when, where, etc. was adopted in soliciting information to meet the objectives of the study. The study population happens to be Fan milk Ghana which has its production facilities in the light industrial area of Ghana. The company produces a broad spectrum of delicacies which appeal to various shades of ages i.e. children, youth, adult as well as senior citizens. Purposive sampling technique was employed in picking up officials from relevant organizations notable marketing, production, procurement, quality control, stores as well as finance for their views on the objectives of the study. The questionnaire technique was the main instrument while information captured from the questionnaire were collated and analyzed as findings indicated here-under.

**Findings and discussion**

Presented here-under are findings emanating from interactions with key officials of Fan Milk Ghana on strategies for enhancing supply chain management with the view to gaining competitive for strengthening leadership role in a global marketplace.

**Reducing distributors and dealers by selling directly to customers**

It was revealed that Fan Milk Limited currently sells through distributors and dealers who enjoy between 10 and 20 percent discount on goods invoiced to them. Other multinationals in town like KFC sells directly to consumers who visit the shop floor to eat. Reducing the number of dealers and selling more directly to consumers, in the opinion of Krause & Scannell (2002) could have the propensity of cutting down cost in order to improve upon supply chain activities and invariably enhance business prospects.

Selling directly and bypassing the activities of expensive distributors or dealers according to Hendricks et al (2009) can involve having management directing its own sales force in this case dispatching the company’s sales force to supply its products to various institutions, supermarkets, retails, etc. It also has to do with conducting sales operations at the company’s website which may be substantially cheaper than employing wholesalers and other intermediaries. According to Thun (2010) costs in the wholesale/retail portions of the value chain frequently represent 35-50 percent of the price final consumers pay and therefore reducing or eliminating those middlemen could enhance the supply chain management activities of the company.

**Replacing certain supply chain activities with faster and cheaper information technology tools**

It came out from the study that integrating more ICT in its operations will ensure that Fan Milk operates more efficiently. Production, procurement, finance, etc. will all be networked to ensure that transactions are conducted much more smoothly. Suppliers of raw materials and other accessories could also be brought on board by creating an intranet portal, from which they could monitor the stock levels of the company thereby acting appropriately to replenish stock levels. This way the company would not need to tie down huge capital in stocks of raw materials but rather maintain a lean inventory system analogous to the Japanese Just-In-Time (JIT) inventory management technique.

According to Thun (2010), in recent years the internet and intranet technology applications have become powerful and pervasive tools for conducting business and reengineering company and industry value chain. For instance, Internet technology has revolutionized supply chain management, turning time consuming and labor-intensive activities into paperless transactions performed instantaneously.

Retailers can install online systems that relay data from cash register sales at the check-out counter back to manufacturers and their suppliers. Manufacturers can use online systems to collaborate, closely with parts and components suppliers in designing new products and shortening the time it takes to get them into production. Online systems in the view of Frohlich & West brook (2001) allow warranty claims and product performance problems involving supplier components to be instantly relayed to the
relevant suppliers so that corrections can be expedited. Online systems have the further effect of breaking down corporate bureaucracies and reducing overhead costs. The whole back-office data management process (customer accounting, order processing invoicing, and other kinds of transaction costs) can be handled fast, accurately, and with less paper work and fewer personnel.

**Reviewing operational arrangements by removing low-value-added- unnecessary work-processing and activities**

The study observed that Fan milk Limited could streamline its operational systems and “weed out” all cost consuming activities and replace them with more efficient arrangements. This should result in internal re-arrangement thereby cutting down on internal transport to improve efficiency. It was noted that computer-assisted design techniques, standardizing parts and components across model and styles can be brought on board to enhance production processes. This way, suppliers can be trained to collaborate to combine parts and components into modules so that products can be assembled in fewer steps, thereby shifting unto an easy-to-manufacture product design.

In the opinion of Fisher (2007), layout in the factory floor as well as positioning of some plants and equipment could be counterproductive in that they waste productive time and add to or swell up operational cost. The source therefore recommended a periodic review of production systems in line with best practices in an industry.

**Enhancing shipping and handling activities through relocating production facilities.**

The study found out that Fan milk Ghana’s production facilities are currently situated at North Industrial Area within the Accra business district which is about 40 kilometers from the Tema port where its imports enter the country from Switzerland and other places. The traffic situation in the capital is nothing to write home about and therefore journey from Tema Harbor to the production site which could have been conducted between 45 minutes and one hour now takes between 2 to 3 hours if not more. Cost of Transportation is also high.

Findings reveal that Management would be better off, if it shifted its production base to Tema while maintaining the infrastructure in Accra as its administrative headquarters. Moreover, most local suppliers in Ghana source their wares from Tema and therefore this envisaged relocation will enable local suppliers to reduce the time of service delivery.

**Reducing product offering to enhance efficiency**

It came out from the study that in an attempt to meet the taste of all segments of its customers, Fan Milk Ghana maintains a broad spectrum of product profile. The Fan Ice, Fan Yogo, Fan Chocolate, Yogurt, Lollipop, etc. are all popular products. Yogurt for instance has relatively low sugar content and therefore has found favour with most health-conscious Ghanaian residents. People with terminal diseases like diabetes also find solace in Yogurt consumption. This means this particular brand appeals to wider segment of its patrons and therefore gives management the impetus to re-organize production arrangements in favour of the production of Yogurt and its derivatives.

Fan ice cream is also an old brand with general acceptability. Both young and old enjoy the Vanilla flavor of fan ice cream. The chocolate flavor is another product with good market. A little more market studies would help management to prune its product profile to a barest minimum thereby marshalling resource properly to gain competitive advantage in the industry.

**Securing state of the art production facilities**

The study found out that Fan milk can compete better if it secures state of the art production facilities to improve upon its service delivery. Fan Milk can learn from the global merchandise giant, Wal-Mart in the USA, which, according to Lansiti & Levien (2004) invested heavily in state-of-the-Art equipment and automation within its distribution centres and was empowered to efficiently operate a truck fleet that facilitated daily deliveries to its network of stores. Generally, Kotler (2007) says improving upon one production facilities is the surest way of producing high quality goods which can be sold at highly competitive process. Management of Fan milk could further strive to leverage the product mix in order to achieve high levels of sales turnover.
Sharpening HR to improve upon supply chain management

The study noted that one other area where Fan Milk could examine critically to achieve competitive advantage lies in the management of its Human resources. Management could embark upon a system of compensating staff in a manner that will make them happy while producing lower labour costs as well. With the right motivation strategies in place, Fan Milk employees will re-dedicate themselves helping to improve upon the supply chain management system of the company thereby gaining the requisite competitive advantage to re-capture and sustain its industry leadership position into the foreseeable future. In the opinion of Daft (2006), a well-trained staff constitutes the greatest asset that a business could have. The skills of production staff as well as distributive staff could be developed periodically to ensure that new ideas picked from best practices within the industry are brought to bear to help strategize the future direction of the company.

Developing suppliers strategically

The study found out that Fan milk Ghana could effectively develop its supplier base by organizing series of workshops as well as other capacity building packages with the view to making the suppliers more sensitive to its operations. Such training programs will help the suppliers to know exactly how the company operates, thereby coming up with raw materials, parts, components and other essentials within the expected time. Developed suppliers will, according to Thomson and Strickland (2007), act as business partners who see the success of Fan milk as an indication of the viability of their own businesses. This way, efforts will be made by the suppliers to strike a symbiotic relationship leading to a win-win affair.

Conclusion

By way of conclusion it is worth asserting that succeeding in the international marketplace really entails sound supply chain management strategies which include effective development of suppliers. Well-resourced suppliers invariably see themselves as “shareholders” and operate in a manner that ultimately strengthens the supply chain apparatus of a company. Gaining competitive advantage at the global marketplace involves using the ICT to streamline supply chain activities as well as focusing organizational resources on producing marketable goods and services. Fan milk ought to learn from international practices in respect of designing its factory layout thereby removing delays in its production systems and shorten its production period. This way the company will be poised towards servicing its leading role in the local delicacy market.

References

[1]. Aboulnasr, K., O. Narasimhan, E. Blair and R. Chandy (2008). “Competitive Response to Radical Product Introductions,” Journal of Marketing, (72), July, pp. 94-110.
[2]. Billington, C. (2010) “Cycles are Cycles,” Journal of Supply Chain Management, (46:1), January, pp. 5-6.
[3]. Bustinza, O.F., L.M. Molina and L.J. Gutierrez-Gutierrez (2010) “Outsourcing as Seen from the Perspective of Knowledge Management,” Journal of Supply Chain Management, (46:3) pp. 23-39.
[4]. Craighead, C.W. and J. Meredith (2008). “Operations Management Research: Evolution and Alternative Future Paths,” International Journal of Operations and Production Management, (28:8), pp. 710-726.
[5]. Dong, Y., C.R. Carter and M.E. Dresner (2001). “JIT Purchasing and Performance: An Exploratory Analysis of Buyer and Supplier Perspectives,” Journal of Operations Management, (19:4), pp. 471-483.
[6]. Dooley, K.J., T. Yan, S. Mohan and M. Gopalakrishnan (2010). “Inventory Management and the Bullwhip Effect During the 2007–2009 Recession: Evidence from the Manufacturing Sector,” Journal of Supply Chain Management, (46:1), January, pp. 12-18.
[7]. Fawcett, Stanley E. and Gregory M. Magnan (2002), “The rhetoric and reality of supply chain integration,” International Journal of Physical Distribution & logistics Management, 32 (5), 339-61.
[8]. Fisher, M.L. (2007). “Strengthening the Empirical Base of Operations Management,” Manufacturing and Service Operations Management, (9:4), pp. 368-382.
[9]. Frohlich, M. T. and R. Westbrook (2001). “Arcs of Integration: An International Study of Supply Chain Strategies,” Journal of Operations Management, (19:2), February, pp. 185-200.
[10]. Germain, R., C. Claycomb and C. Dro’ge (2008). “Supply Chain Variability, Organizational Structure and Performance: The Moderating Effect of Demand Unpredictability,” Journal of Operations Management, (26:5), September 2008, pp. 557-570.

[11]. Håkansson, Håkan and Göran Persson (2004), ”Supply chain management: The logic of Supply Chains and networks,” The International Journal of Logistics Management, 15 (1), 11-26.

[12]. Hendricks, K.B., V.R. Singhal and R. Zang (2009). “The Effect of Operational Slack, Diversification and Vertical Relatedness on Stock Market’s Reaction to Supply Chain Disruptions,” Journal of Operations Management, (27:2), pp. 233-246.

[13]. Hollensen, Svend (2010) Marketing Management: A Relationship Approach 2nd ed. Prentice Hall Financial Times.

[14]. Kotler P., Keller K. (2007) Contemporary Marketing 12e, Pearson Prentice Hall, Publishers

[15]. Krause, D.R. and T.V. Scannell (2002). “Supplier Development Practices: Product and Service Based Industry Comparisons,” Journal of Supply Chain Management, (38:2), March pp. 13-21.

[16]. Lao, Y., P. Hong and S.S. Rao (2010). “Supply Management, Supply Flexibility and Performance Outcomes: An Empirical Investigation of Manufacturing Firms,” Journal of Supply Chain Management, (46:3), 2010, pp. 6-22.

[17]. Madura, J. (2008). International corporate finances 9th ed, Thompson international publishers.

[18]. McKone-Sweet, K. and Lee Y. (2009). “Development and Analysis of a Supply Chain Strategy Taxonomy,” Journal of Supply Chain Management, (45:3), July 2009, pp. 3-24.

[19]. Saravanan R, Rao KSP (2006) An Analysis Of Total Quality Service Dimensions In Service Sector-A Case Study. International Journal of Management and Systems 22: 261-267.

[20]. Selvaraj M (2009). TQM in Indian Commercial Banks: A Comparative Study. Journal of Marketing and Communication 4: 59-70.

[21]. Sprague, L.G. and T.E. Callarman (2010). “Supply Management is Not the Beer Game,” Journal of Supply Chain Management, (46:1), January, pp. 9-11.

[22]. Talib F, Rahman Z (2010). Studying the Impact of Total Quality Management In Service Industries. International Journal of Productivity and Quality Management 6: 249-268.

[23]. Terpend, R., B.B. Tyler, D.R. Krause and R.B. Handfield (2008). “Buyer–Supplier Relationships: Derived Value Over Two Decades,” Journal of Supply Chain Management, (44:2), January, pp. 8-25.

[24]. Thompson A. and Strickland A. J. (2007): Strategic Management; Concept and Cases.9th Edition. McGraw-Hill Inc.

[25]. Thun, J. (2010) “Angles of Integration: An Empirical Analysis of the Alignment of Internet-Based Information Technology and Global Supply Chain Integration,” Journal of Supply Chain Management, (46:2), pp. 30-44.

[26]. Vickery, S.K., J. Jayaram, C. Droge and R. Calantone (2003). “The Effects of an Integrative Supply Chain Strategy on Customer Service and Financial Performance: An Analysis of Direct Versus Indirect Relationships,” Journal of Operations Management, (21:5), December, pp. 523-539.