EFFECT OF WORKERS INVOLVEMENT IN SUPPLY CHAIN PERFORMANCE AND OPERATION MANAGEMENT

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ABSTRACT

This paper analysed the effects of workers involvement in supply chain performance operation management, on broader measures of supply chain and operations management. A theoretical and empirical analysis of literature in regards to supply chain performance and workers involvement was carried out and a comparison done to give a varied conclusion. From this paper human resource is seen as a key factor in supply chain performance in an organization through effective communication, continuous training, operations and trust amongst workers. The performance of supply chain is entirely dependent on the chain members and their skills and knowledge enhance its efficiency. It's therefore important to recognize and appreciate workers as partakers along all supply chains in order to enhance effective integration across all levels of management and eventually develop a good range of competence and improve supply chain performance. The paper therefore provides empirical evidence of the effect of workers involvement in supply chain and operation management and reflects how this directly affects supply chain performance.

Key words: Supply chain, Operations management, Performance, Organization culture, Supply chain management
Introduction
Supply chain involves the organizations that source for the materials and flows from the sourcing of raw materials and subassemblies into manufacturing and ultimately the goods and/or services are delivered to the consumer. On the other hand, value chain involves optimizing every step throughout the supply chain to ensure attainment of maximum value to the consumer. Supply chain management manages the flow of information through the entire supply chain to ensure harmonization of the processes and therefore attainment of service delivery at reduced costs (Deflonin, 2012).

Many organizations have invested resources in information technology from supply chain integration to customer satisfaction. In fact, some advocates of IT claim that IT can solve all the problems along the supply chain (Alkadi et al). Further research by Alkadi et al on IT in supply chain management suggested that all aspects of supply chain management to customer satisfaction could be solved by IT. However, information technology cannot perform all the critical features of supply chain. According to Kakati, managers must take into consideration organizational change as a means of attaining competitive advantage and increasing profitability.

It is the capability of the people in the systems that make sense of the technology the organization invests in. therefore, regardless of high advanced technology in any supply chain, the application of the same in achieving success lies with the workers that interact with the technology. In this study, we determine the roles played by workers on supply chain performance (D. Constant, D. Kiesler and L. Sproull, 1994). For a tremendous performance in supply chain, consideration of the organizational culture, training and education of the workers is basic in the achievement of success in supply chain (Deflonin, 2012).

Supply chain performance drivers
Facilities form an integral part in the operations of supply chain. This is the physical location where products are stored, assembled or manufactured. The key decision factors regarding facilities include the location, capacity, flexibility and the role of the facility. Facilities can be centralized or decentralized depending on the marketing strategy of the firm. For example,
Toyota has a policy of having manufacturing facilities in markets of domination and locations where they have major markets (Deflonin, 2012).

Information serves as mediation amongst the partners in the supply chain. Workers within the supply chain must be well equipped with the skills and knowledge for optimal dissemination of information. For high quality decisions, high quality and timely information is vital. Other performance drivers include sourcing and pricing (Deflonin, 2012).

Critical analysis of operations management and supply chain management

Operations management plays a key role in coordinating the activities of supply chain. Process selection is one of the activities that integrate supply chain and operations. It involves designing and the implementation of the transportation processes to best meet the needs of the customer and the firm. Process selections involve key inter-functional participants including engineering, marketing, finance human resources and IT (Deflonin, 2012). Forecasting is another activity that enjoins operations and supply chain. This involves the development and planning of activities needed for effective decision making. An interdepartmental cooperation is required including marketing, finance and accounting departments. An effective operations management should also include capacity planning. Capacity planning deals with the establishment of strategic capacity levels and tactical capacity levels (Deflonin, 2012).

Inventory management involves the management of the amount and placement of inventory within the company and the supply chain. Planning and control is another activity along the supply chain that involves the scheduling and the management of the flow of work through an organization within the supply chain. Purchasing is an important aspect within the supply chain that involves the identification and prequalification of suppliers for goods and services. This also encompasses the management of ongoing buyer-supplier relationships. Finally, logistics ensure the movement of physical goods within the supply chain (Deflonin, 2012). Supply chain processes
Throughout the processes, information stands out to be the link in the supply chain.

**The theory of organizational culture and effectiveness**

A research carried out in Pennsylvania University showed that several attributes influence organizational culture. These include involvement, consistency, adaptability and mission. While involvement and adaptability demonstrate a sense of flexibility, openness and responsiveness, consistency and mission are strong indicators of integration, direction and vision. While the former two contribute to growth, the latter contribute to profitability. In all, each of the attributes contributes to quality, employee satisfaction and overall performance.

Involvement can be achieved through teamwork and development of human capacity (Becker, 1964). This ensures that workers and managers are committed and feel a sense of ownership. Entirely, people within the organization feel that their input should be recognized in decision making (Katzenbach, 1993). Employee involvement engages treatment of each employee as a unique being. Each employee feels as a contributor to the growth and development of the organization. Employee involvement argues that employee should be recognised by the management.
Good performing organizations have strong cultures which are consistent, well coordinated and integrated (Davenport, 1993). The behavioural norms are well established in core values and the managers and the workers are able to reach a compromise even in times of divergent views (Block 1991).

According to (Karter, 1983), some organizations are well integrated and such are least responsive. This is what is called adaptability. On the other hand, mission defines a clear sense of purpose, well defined goals and strategic objectives that a company wants to accomplish. A well set mission expresses a vision of the future (Mintzberg, 1987)

The Theory of Organizational Culture and Supply Chains

An organizational culture is a combination of factors including nationality, the tasks performed by the organization, information technology and the people working in the organization. While alliances are vital for supply chain performance, the cultural diversity brought by the integration may either be a barrier or a bridge. The firms’ cultural diversity must be taken into account during such alliances because these will affect supply chain performance (J.C. Brau, S.E. Fawcett, G.M. Magnan and M.W. McCarter 2005).

Senior management has the mandate to encourage participation and team work in the organization. This should be cultivated into the organizational culture and encourage the sharing of information across the different elements of the supply chain. The sharing of new information ensures effective operations and ultimately a competitive supply chain. If any supply chain alliance is unable to transform information to vital knowledge, then that supply chain will not compete effectively against other supply chain in the industry (M. Zeleny, 2002). In order to have a synergistic environment, managers must work with the employees to ensure that information is shared and that knowledge flows through the processes within the supply chain.

If the right culture is put in place, then the supply chain will be able to use the employees effectively in attainment of supply chain initiatives.
Case Analysis

Russian Management System
In the olden times, the Russians adopted decision making that was centralised. Decision making took the form of the conventional levels of strategic management as illustrated in the diagram below. In this kind of management, Russian managers were punished due to negative results regardless of the cause of the results (Kets de Vries, 2000). To counter this problem, it is necessary to involve the employees so as to reward their efforts and hold them accountable for their action.

HRM practices always reflect the national and organizational culture of the company. A study conducted at the Tuer Cotton Mill involving 66 Russian managers showed that extrinsic rewards and behavioural management increased employee performance (Luthans, Welsch and Rosenkratz, 1993). Puffer and Shekshnia (1996) were of the opinion that individual bonuses should be tied to personal accountability and that organization should arrange for social events and provide mid-term and long-term incentives. Workers appear to be highly motivated by development opportunities. According to Fey and Bjorkman (2001) training is highly valued and is linked to firm performance.

Supply Chain Education and Training
For an organization to remain vibrant and competitive over its competitors, workers need to engage in continued training. This enhances the capability of the workers and aids the organization in adapting to the dynamic nature of supply chain. Organizations in a supply chain must therefore manage knowledge (H.C. Peterson, 2002). The supply chain partners learn from each other in what is called a “learning supply chain” in order to attain competitive advantage over their competitive. In a bid to have a “learning supply chain” the partners in a supply chain must employ educated workers and keep training them. Education and training within the supply chain provides the employees with the knowledge to understand the needs of SCM.

Workers can be trained to adapt new realities within the supply chain. For improvement and integration of supply chain, workers must be empowered through education. Formal corporate improvement in supply chain management training has gone as far as the
establishment of corporate universities. In a research performed by …., many companies work hand in hand with the government of the day to sponsor training programs. Such companies provide training to employees while encouraging supplier – personnel participation. During the lessons, managers mingle with the middle level and lower level workers which enhance friendship and understanding for longer –term business relationships.

**Contribution of workers to supply chain**

Customer service involves meeting the needs of the customers and responding to any complains. Within the processes of the supply chain, the customer service may take the form of; after sales services, quick delivery of products, ensuring zero defects of products and supporting company operations. The department does not work in isolation but engages the rest of the organizations’ departments including marketing and sales, logistics and transportation departments.

Logistics and materials planning keeps in track the existing procedures, reviews them for streaming, production, purchasing warehousing and distribution. Within the logistics department, the staffs also engage in marketing of transportation, warehousing and other distinguished services to other firms. Transportation as part of logistics strives to meet private, third party and contractual assignments to ensure short lead time and cost efficiency of various shipments. The international logistics manager will on the other hand work hand in hand with manufacturing, transportation and purchasing to reduce lead time and ensure cost effective import/export supply chain.

The commodity manager will study the specific market from which the organization procures materials and services. In addition, he or she will formulate commodity strategies and manage long term relations with selected suppliers. The sourcing manager will on the other hand measure supplier performance, identify improvements of suppliers and facilitate efforts to improve supplier processes. Finally, the sourcing department will identify global sources of raw materials, select suppliers, screen them and manage on-going contracts.

With division of labour, specialization of the skills of workers can raise efficiency. For improved labour efficiency, cross training and appropriate reward structure helps reduce
transition penalties and lead to high motivation of employees. This motivation will lead to improved customer service.

Conclusion
An effective supply chain requires a vibrant human resource. The key aspect for an effective supply chain includes information, communication, cooperation and trust. In order to enjoy the benefits of technology in attainment of customer service, workers involvement is key in decision making. Specialization brings about experience as defined in the learning curve. This ultimately leads to efficiency in performing routine duties. The performance of the supply chain is dependent on the members of the entire supply chain. The skills and knowledge of the workers therefore play a key role in enhancing efficiency. Information is vital for business operations. Its flow whether vertical or horizontal can be optimized through employee involvement.

Recommendations
Workers should be recognized and their input included in decision making. Cross functional experienced management team should be put in place to avert the challenges that occur due to value added activities through the organization. In order to facilitate integration a cross functional team will help develop a wide range of competencies. A supply chain model that is standardized provides significant benefits. Once benchmarking is established, good practices are uncovered that help in gaining competitive advantage. Workers along the supply chain need to be trained on the attributes that contribute to better performance.
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