

Evaluation of Supply Chain Management Practices in Sub-Saharan Africa: Some Insights Learned

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Abstract: *Supply Chain Management (SCM), which has globally emerged as an important management function in the last two to three decades, comprises several cross-functional activities. The adoption of any management practice largely depends on the context in which it is being adopted. This depends on the rate and degree of organization growth. The fast economic development in Sub-Saharan African countries has caused a corresponding increase in the growth of organizations and management practices in Sub-Saharan African countries. This paper describes the historical perspectives related to the evolution and application of SCM practices in selected Sub-Saharan African countries like Botswana, Malawi, and Tanzania. The conceptual framework is based on a literature review focusing on experiences from these countries. The methodology applied in data collection is a questionnaire and interviews. The findings have revealed that the SCM practices in some countries are haphazardly done. The results also suggest that though SCM plays an important role in the economic and well-being of an organization. They further suggest that a very little attention and emphasis are being exercised by organizations. Moreover, decisions made are sometimes based on unrealistic facts and personal interests. Lastly, the experience provides a good lesson for lawmakers and enforcers to devise alternative means for involving SCM practices in the entire operations of the organizations. Generally, the results obtained in this study can be used as a step toward setting the tone for further research in the field of SCM in Sub-Saharan Africa.*

Keywords: *Procurement Function Growth, Supply Chain Management Practices, Management in Africa*

Introduction

Despite Supply Chain Management (SCM, henceforth) being widely researched in numerous domains during the last decade, there remains considerable confusion as to its meaning. However, in the recent past, there have been several attempts by researchers and practitioners to define SCM (Habib, 2011). Mentzer, et al. (2001) define SCM as a systemic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain, to improve the long-term performance of the individual companies and the supply chain as a whole. SCM today appears to be a relatively new field, particularly in the African context. However, SCM as an activity can be traced since the beginning of mankind—religious literature like the Holy Bible, mentions a similar concept. Indeed, the existence of man has all along depended on his ability to acquire materials of different types, move them to where they were required, and store the surplus for future use through using some sort of technology that today we may regard as being primitive. However, as a management function, the concept appears to be of recent origin Babbage (1832) included an SCM person among the ten key officers who ran a mining business and became overall in-charge of SCM functions. Kenneth and Farrington (2006) noted in their contribution that the history of SCM began to be acknowledged, valued, and documented in the literature in the early 1980s. They also concurred with other scholars, such as Lambert, D., Cooper, M. C., and Pagh, J. D. (1998), who claimed that SCM had a long history while tracing the concept's evolution in their study.

This suggests that the evolution of any SCM practice is a gradual process and depends largely on the application and adoption in the given context. The industrial and economic development in Africa is relative to newer origin and thus, the application of SCM also follows the same pace. It is important to note that most of the academic literature development on the subject is a function of how effectively and timely these SCMs are recorded (Tripathi, 2012). It can be observed that due to its relatively recent origin, the organization of SCM's knowledge in Sub-Saharan Africa is yet to make good progress. Therefore, keeping this in focus, the present paper broadly aims to examine how the SCM concept evolved in Sub-Saharan Africa with a special focus on Tanzania.

Literature Review

Chopra, et al. (2007) explain that the SCM as a concept traces its origin of evolution mostly in industries and a few other organizations that go together with the growth of business and industrial concerns. Due to the intense global competition, the evolution of SCM was noticed in the early 1990s. Habib, (2011) concluded that the evolution of SCM and its future trends was seen to exist in various industries, including manufacturing and service industries. Habib (ibid) and Berry and Wadsley (1994) specifically cited the

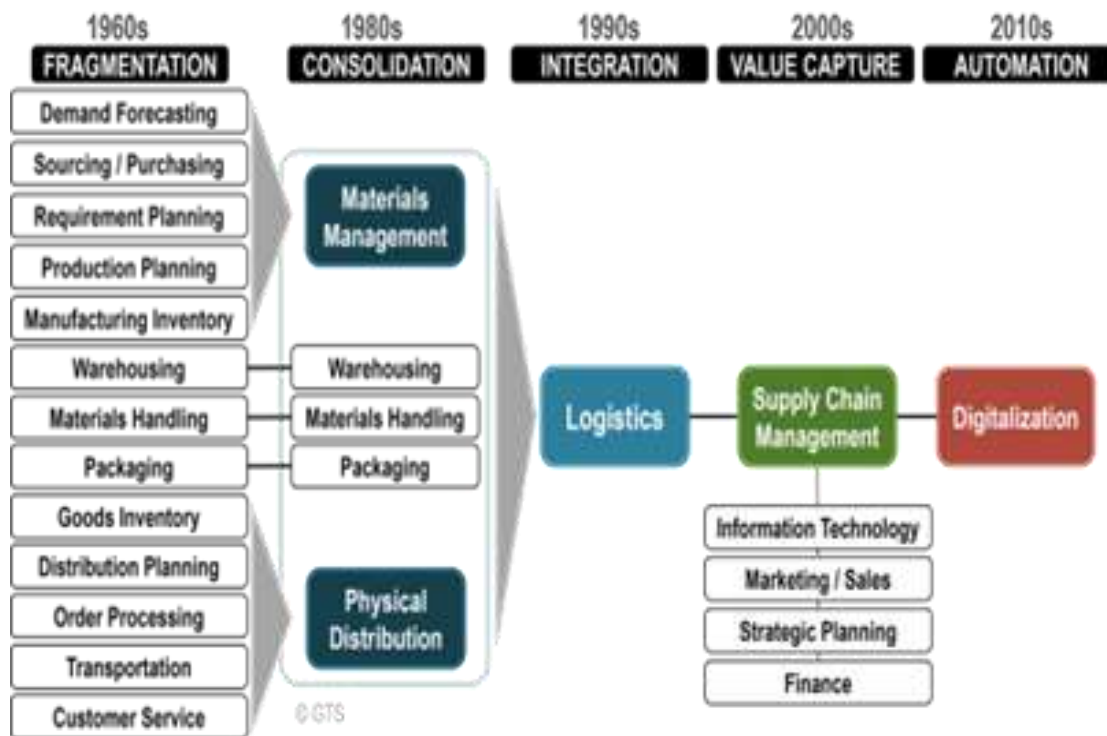
application of SCM in the electronic industry, whereas Ferie (1995) adopted SCM in the National Health Services (HNC). Kathawal and Abdou (2003) explored SCM applications in the service industry in the early days.

Initially, certain advantages would accrue if and where individual functions, such as purchasing, stores, traffic, production scheduling, inventory control, and quality control were separated and made full-time managerial assignments. The primary advantage of this separation is certainly, to underscore the importance of occupational specialization. However, with the emergence of the independent functions, there developed a problem of coordination. Malcom (1999) maintains that to attain efficiency and cost-effectiveness is considered to be more advantageous and appropriate to integrate all interrelated materials activities under one responsible individual, and this is one of the bases for the development of modern SCM concepts. Inda, et al. (2012) certainly argue that the SCM practices encompassing internal firm integration, integration with suppliers, and customer integration are related to SCM agility components.

Jabbour, et al. (2011) stress that SCM represents a new single form of managing businesses and their relationship with other members of the chain. Lambert, Cooper, and Pagh (1998); Lambert and Cooper (2000). Limmus and Vokurka (1999), and Li, Ragu-Nathan, Ragu-Nathan and Rao (2006) define SCM practices as a set of activities carried out to promote efficient management of its supply chain.

The historical perspective of SCM may be summarized and represented by the diagram as shown in Figure 1A below.

Figure A1: The Trends of SCM Practice Evaluation



Source: Researchers' conceptualization (2023)

The evolutionary stages from one to another were influenced by various factors like scarcity, changes from barter trade to money as a medium of exchange, competition, and economic challenges.

Countries experiences

According to the literature review presented in this study, it was observed that within Sub-Saharan Africa (SSA), the evolution of SCM has evolved in the same manner as in any other developing country. It was observed to have climbed off from the clerical stages to nowadays strategic levels. In some other countries, SCM has attained some managerial emphasis. It has also grown from primitive and barter stages to modern technology as shown in Figure 1A above. SSA countries faced a major problem of recognition of the function similar to other nations (Msimangira and Tesha, 2014; Mhango and Niehm, 2005). The degree of differences between SCM practices between one country and another in principle existed mainly in the decision-making where it is characterized by

bureaucracy and red tape. The majority of organizations in developing countries had their SCM divisions or departments manned by unskilled personnel. In Botswana, for instance, the researcher found out that the heads of purchasing departments were not professionally trained in purchasing, materials management, or SCM. Hence, such evidence supports the argument that purchasing is not a profession and does not necessarily require training, (Msimangira and Tesha (ibid)).

Malawi, like other developing countries, suffers from the same syndrome of standardized SCM practices (Mhango et, al. 2005). They further developed an SCM model that describes the distribution related to the sale of second-hand clothing as a product of an SCM practice. However, the non-recognition features witnessed in Botswana also featured in Malawi and there was no legal framework backing their practices. The model was a path from merchandise supplier to retailer and was inversely related to a country's economic development.

The gaps along the distribution channel create opportunities for entrepreneurship. Sternquist (1998), indicated that developed countries' channel length was shorter due to reduced mediate whereby there were fewer middlemen involved in the SCM system the factors.

According to him, the stretched channel includes infrastructure, road and communication, fragmented channels, small retail institutions, and existing serial rules, laws, and obligations surrounding the economic exchange. Similarly, Arnould (1995) added that SCM practices were influenced by such factors.

In Tanzania, Materials Management as a terminology was used to describe all functions related to purchasing, procurement, store management, inventory management, logistics, and physical distribution. In the recent past, procurement or purchasing function has drawn the attention of ancient as well as modern traders more than the other two functions of warehousing and distribution. The profession has been recognized as noble and attracts phrases like "Caveat Emptor" or "buyer beware" to emphasize the diligence required in SCM practices. It is argued that any saving in SCM practice plays a more important role in enhancing the profitability of a firm. This cements the saying that a shilling saved in SCM activities is equal to a shilling incremental direct into the profit. Indeed, this saying stands the test of time.

Statement of the problem

Many logistics agree that SCM practices are the heart of all operations in the organization (Porters, 2014). However, the evolution of SCM practice is not well-paid attention to by most scholars. The clear understanding of the concept and its stages need to be surveyed in SSA and the world, specifically Tanzania like any developing country in Africa did not easily recognize the benefits of its practices.

Despite these being so clearly propagated, to date some institutions have not realized the importance of SCM in their economic undertaking. Therefore, though essential for economic development, SCM has not been accorded status that is equal to that accorded to other professions. Continuous efforts must be made to promote the importance of SCM practice in the country's operations. Therefore, this study investigates the evolution of SCM practice in sub-Saharan Africa to see how it has evolved in Tanzania.

The Study objective

The main objective was to trace the evolutionary stages of SCM in Tanzania. This ends with how the SCM practices concept has evolved and its overall orientation.

Research questions

The research questions amplifying this objective are:

- (i) Are there SCM practices in Tanzania?
- (ii) What is its stage of development?

In terms of the legal framework and relevant institutions, Tanzania is doing fine not only in procurement but also in sustainable public procurement (SPP) as observed by Tesha (2004).

Methodology

This study employed a qualitative approach to select participants and to analyze the data. The researcher selected participants based on their educational background and working experience from two public organizations and one private organization in Tanzania. The reason for selecting both public and private organizations was to have a good picture of how both operate SCM in their organizations. The study used 20 participants from which, 5 were experts in SCM, 5 heads of SCM departments, and 10 logistics

managers. 10 respondents were interviewed using focused group discussions (FGD) that were semi-structured and 10 were given questionnaires to fill in. The data were analyzed in thematical order where themes were coded.

Findings and Discussions

Data were analyzed qualitatively. Themes were coded and interpreted in accordance with their approaches, transformations, operations, and similarities to other SSA countries.

SCM Practices Approaches in Tanzania

The findings from the twenty respondents have shown that the evolution of SCM in Tanzania took a similar approach to one taken in any other developing country in Africa and elsewhere. Some African countries that have adopted SCM practices in their activities include Tanzania, Kenya, Botswana, South Africa, and Malawi just to name but a few.

SCM Transformations in Tanzania

Our focus is Tanzania. Therefore, in Tanzania, the SCM practices first evolved as a materials management concept gaining popularity in the mid-1970s in industries, big/large manufacturing firms, and trading companies, like the famous Regional Trading Companies (RTCs). The role of SCM by then was more concerned with the movement of industrial raw materials, bought-out parts, and finally the physical distribution of the final products to the end consumer through official retailed systems such as that of the RTCs or own outlets. Within this context, therefore, several forces and factors influenced the growth and challenges in the practices of SCM practices in SSA, in general, and Tanzania, in particular. However, as might be noted, things like interference in the system either politically or otherwise, were very high especially when Tanzania had a one-party political system. Under the Party Supremacy, the Political Commissars attached to each economic entity were very powerful and influential in many avenues including SCM practices.

Currently, with the ongoing worldwide reforms, Tanzania under the Ministry of Finance established six institutions that are responsible for playing procurement and supplies management roles. For this study, these roles may be christened as SCM activities. These institutions include the (i) Procurement and Supplies Professionals and Technicians Board (PSPTB) which is purely a result of transforming PSPTB and is responsible for regulating and monitoring the conduct of procurement and supplies professionals. (ii) Government Procurement Services Agency (GPSA) which is the result of transforming the Government Stores. GPSA coordinates and manages the procurement of commonly used items. (iii) Public Procurement Regulatory Authority (PPRA) which came into existence due to transforming Central Tender Board. PPRA is responsible for regulating and monitoring procurement activities in public procuring entities. (iv) Government Assets Management Division (GAMD) which is the result of transforming the Stock Verification Section. GAMD is responsible for the valuation, control, and management of Government Assets. (v) Procurement Appeals Authority (PPAA) is mandated to hear and determine appeals and complaints from bidders. and (vi) Public Procurement Policy Division (PPD) was established to develop and monitor procurement policy. Both PPD and PPAA are new institutions born out of the reforms.

SCM Practices Operation

In terms of the legal framework and relevant institutions, Tanzania is doing fine not only in procurement but also in Sustainable Public Procurement (SPP) as observed by Tesha (2004). SPP initiatives through policies, legislations, programs, projects, instruments, and infrastructure exist to ensure eco-product production and procurement. These included the Occupational Safety and Health Authority, Tanzania Traditional Energy Development, Organization National Environmental Management Council, the Cleaner Production Centre of Tanzania, and the Tanzania Bureau of Standards (TBS).

The similarities in operations to other SSA countries

Coming back to our fundamental question, therefore, the SCM practices exist in Tanzania similar to those in Botswana, Malawi, and Kenya. Tanzania seems to be a little bit more professionalized compared to other countries in SSA. This is witnessed by the legal system in existence, the availability of political will, system setup, and institutions that oversee the SCM practices in the country and, as earlier alluded to. In some developed countries, currently, the SCM can be considered to be in its third phase of evolution. The phase started in the 1960s with an emphasis on the development of Physical Distribution Management concepts (PDM). A similar phase has been observed by Stephen (2014) in the UK who observed that SCM focuses on the outbound side of the firm's logistics system.

Conclusion

The objective of this paper was to trace the evolution of SCM practice in Tanzania. This objective was supported by two research questions which examined whether the SCM practices exist in Tanzania and its development stages. The study, as summarized in Figure 1A above shows that SCM took five stages. The first stage, started from 1960s to 1970s, which is known as fragmentation.

This stage involves activities like demand forecasting, manufacturing inventory, and transport. The second stage (consolidation) started in 1980s and concentrated on materials management and physical distribution. The third stage which is known as integration stage, started in 1990s and the stage involves practice like logistics management. The fourth stage started in 2000s which is known as value captured concentrated in supply chain management. The last stage (automation) started from 2010s to present. The stage concentrates on the digitalization.

Limitation

The researcher faced the following challenges:

First, disjointed supply chain networks made it difficult for the researcher to get from one organization to another on time. Additionally, the investigator discovered that there is instability in the regulatory framework, which could account for variations in respondents' answers. Furthermore, the researcher's available funds were insufficient to cover his living and transportation costs for the duration of the study. Finally, the researcher encountered difficulties since some organizations were located in remote places, which made it difficult for the researcher to provide support to those organizations.

Recommendations to the Government and Stakeholders

- i. The nation ought to promote a suitable legislative framework to reduce the limitations on supply chain management practices for industrial end users and the digital generation. Furthermore, Tanzania needs to expand SCM technology in other areas in order to sustain steady economic growth for the current and upcoming generations.
- ii. For economic growth in SSA countries, strategies and infrastructure for boosting SCM practice in both public and private businesses must be implemented together.
- iii. More emphasis should be made on human capital development and technological advancement, to boost infrastructure, machinery, and equipment quality in SCM practices in SSA nations and accelerate Tanzania's economic growth,

Recommendations for Further Studies

The current study concentrates on the evolution of SCM practices in SSA countries, specifically in Tanzania. The researcher recommends further studies to be conducted in the following areas:

- i. A study of the connection between Tanzania's economic growth and the advancement of SCM techniques.
- ii. Investigating ways to enhance supply chain partners' cooperation and coordination.
- iii. Researching how implementing cutting-edge technology can enhance supply chain management in SSA nations.
- iv. Analyzing the implementation and efficacy of ecologically friendly and sustainable supply chain management techniques in SSA
- v. An examination of how laws and regulations affect supply chain management practices in Sub-Saharan Africa.

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