The Challenges Of Third Party Logistics In Nigerian Pharmaceutical Industry

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Abstract: *Logistics outsourcing, also known as third party logistics (3PL) in supply chain management adds value, particularly with respect to improved customer service and reduce costs, by allowing the company to focus on its core competencies with logistics specialists focusing on providing the logistics services. This cannot be isolated from the pharmaceutical industry. The study reviewed outsourcing logistics in the pharmaceutical industry in Nigeria. Core Competences Theory formed the theoretical underpin under which this study was discussed. The research method which was qualitative was based on secondary data. The research design was historical/descriptive. The study showed that the overall trend in logistics outsourcing in pharmaceutical industry in Nigeria is moving in two directions: increase in the number of buyers of logistics services, and increase in the extent of usage of logistics services. It is recommended that the regulatory bodies in the pharmaceutical sector in Nigeria like the Pharmacist Council of Nigeria (PCN) and the National Agency for Food, Drug Administration and Control (NAFDAC) should enforce implementation of their regulations, guidelines, and policies that relate to access to safe medicines in Nigeria to improve equitable distribution of pharmaceutical products across the country.*

Keywords: Logistics, Third Party Logistics, Pharmaceutical Industry, Challenges.

INTRODUCTION

Third party logistics outsourcing has become an integral part of organizational supply chain processes. It involves passing on logistics-related activities in part or whole to an external party to execute. Organizations are increasingly practicing it with notable benefits: reduction in operations cost, improvement in flexibility and operationalization of logistics services, reduction in capital investment, and so on (Rahman, 2011; Zacharia, Sanders, & Nix, 2011). Companies have recourse to 3PL to reduce the load of logistics processes and achieve customer satisfaction and competitive advantage (Chen, Goan, & Huang, 2011). Pharmaceutical industry is not left out in the need for effective logistics outsourcing.

Pharmaceutical and medical service companies in Nigeria have recurred to outsource all or part of their logistics activities to a third party service providers. The assumption is that logistics outsourcing companies have an opportunity to provide their expertise in logistics to integrate and improve the supply chain in this industry. Partnering with a 3PL to manage the logistics activities can help pharmaceutical companies share some risks as well as reduce expenses by having a more efficient and reliable supply chain (Herrera, 2012). The pharmaceutical sector is a complex one, involving many different stakeholders such as the manufacturers themselves, national regulators, government ministries, wholesalers, third party service providers and the end users. There are about nine pharmaceutical manufacturing firms in Nigeria namely Drugfield Pharmaceuticals Ltd, Emzor Pharmaceutical Industries Ltd, Evans Medical Plc, Fidson Healthcare Plc, GlaxoSmithKline Nigeria, May & Baker Nigeria Plc, Mopson Pharmaceutical Industries Ltd, Neimeth International Pharmaceuticals and PZ Cussons PLC. These drug manufacturing firms export their products to various ECOWAS countries (Obukohwo et al., 2018).

Many studies have been conducted on the Nigerian pharmaceutical industry but few on the supply chains and little or none on the challenges into the logistics outsourcing. Although the study by Isola and Mesagan (2016) provides insights into the relationships and performance of the Nigerian
pharmaceutical industry, it does not address the issues of supply chain and logistics especially, third party logistics in the industries. Findings from other studies have highlighted factors such as limited access to drugs (Adebisi, 2013; Obuaku, 2014; Onwuka, 2016) and fake drugs syndrome (Oluwatuyi & Ileri, 2014) as challenges associated with the pharmaceutical supply chains and outsourcing in Nigeria. Sieverding and Beyeler (2016) undertake an extensive study on some channel players along chains. There exists no holistic empirical study on the challenges the industry faces especially in the area of third party logistics activities.

It is this gap this study tends to cover by highlighting the challenges that have affected effective implementation of the third party logistics in the pharmaceutical industry in Nigeria.

CONCEPTUAL REVIEW

Third Party Logistics

Third party logistics (3PL) is also called logistics outsourcing. It means that the company makes the outsources for some or all of its logistics-related activities to a third-party company or organization, and for them to take care (Etokudoh & Boolaky, 2017). Menon et al. (1998, 123) define the concept as "a for-hire provider performing logistics activities for the buyer or seller of raw materials, goods in process, or finished products", while Sink and Langley (1997, p. 165) interpret it as "using the services of an external supplier to perform some or all of a firm's logistics functions." The 3PL providers who remain stick to traditional service offerings may become victims of short-sightedness falling in declining efficiency, insofar as they focus on traditional service such as transportation, and warehousing rather than playing the role as integrator or lead service provider (Malindretos, 2008).

According to Knemeyer and Murphy (2004), 'third-party logistics' can be referred to as 'logistics outsourcing' or 'contract logistics'. Yet, there is no common definition of the concept. Knemeyer and Murphy (2005a) provide a comparison of two different concepts of definitions regarding third-party logistics. They propose a somewhat "broad" version of the definition, based on works of various authors. Coyle, Bardi, and Langley (2003, p. 425) for example define third-party logistics to involve "an external supplier that performs all or part of a company's logistics functions" and to "encompass suppliers of services such as transportation, warehousing, distribution, financial services, and so on."

Further contributions to this "broad" stream of third-party logistics definitions come from Menon, McGinnis and Ackermann (1998) and Sink and Langley (1997). These interpretations of third-party logistics do not distinguish between short-term and long-term considerations or between transactional and relational exchanges (Knemeyer and Murphy, 2005b). The other group of third-party logistics definitions takes a more "narrow" approach (Murphy & Poist, 1998; Bagchi & Virum, 1996).

Third Party Logistics in Nigerian Pharmaceutical Industry

The pharmaceutical industry is highly competitive, and firms adapt many competitive strategies to stay ahead of their competitors, reduce costs and generate more profits. One such competitive strategy followed by pharmaceutical firms is the 'offshore outsourcing' strategy. By outsourcing their non-core processes offshore, pharmaceutical firms leverage economies of scale, through the low-cost manufacturing services in Asian countries, particularly India and China (Leask & Parker, 2007; Capo et al., 2014). There is a growing international logistics industry trend for expansion of capabilities for handling temperature-sensitive pharmaceuticals, by 3PL developers. Moreover, pharmaceutical wholesalers are widening their service offerings and becoming health providers, supplying the pharmacy not merely with medicines, but with total solutions. Many wholesalers are also developing closer relationships with manufacturers, and offering them logistics services that have traditionally been the domain of 3PLs (Malindretos et al., 2009).

While outsourcing is a powerful tool to cut costs, improve performance, and refocus on the core business, outsourcing initiatives often fall short of management's expectations. There are three principles for effective implementation of outsourcing in pharmaceutical industry, which are requirements, coordination and communication (Lynch, 2004). More specifically, it has been constructively criticised that outsourcing has to overcome a list of 'seven deadly sins' according to Baitheiemy (2003) and (Artunian (2006) that underlie most of the failed outsourcing efforts. These 'seven deadly sins' include outsourcing activities that should not be outsourced; selecting the wrong vendor by overblown expectations; writing a poor contract, by blindly banishing projects; overlooking personnel issues; losing control over the outsourced activity; overlooking the hidden costs of outsourcing; and failing to plan an exit strategy, by negligence and end-game intolerance.

In response to these identified sins, the Nigeria Supply Chain Integration Project (NSCIP) emerged from the National Product Supply Chain Management Programme (NPSCMP) of the department of food & Drugs Services in the Federal Ministry of Health. A Steering Committee was inaugurated in March, 2015 by then Minster of Health Dr. Haliru Alhassan with the then Permanent Secretary; Mr. Linus Awute as Chairperson. Key stakeholders of the Steering Committee include Federal Government of Nigeria, The Global Fund, International States Agency for International Development (USAID), United Nations Population Fund (UNFPA) and Bill Melinda Gates Foundation. The Steering Committee meets quarterly or exceptionally as the needs arises.

The Steering Committee was set up to provide oversight function to the Nigerian Supply Chain Integration project for a three-year period. It might be extended, if necessary, according to the analysis of the situation as agreed by the government and donors. The Steering Committee has among other specific mandates to govern supply chain design decisions. One of the measures taken by the Ministry to achieve this mandate was to embark on the enhancement of the capacity of State Logistics Management Coordination Unit (LMCU) to develop distribution plans and coordinate activities of third party logistics (3PLs) in the identified six geographical zonal hubs of Lagos, Abuja, Gombe, Imo, Sokoto & Calabar and with a standardised business plan. Consultants were recruited to mentor government staff on specific areas of logistics and project management through the Logistics Management Information System (LMIS)/Logistics Management Coordination Unit (LMCU).

THEORETICAL UNDERSTANDING

Core Competences Theory (CCT) is one of the most used frameworks that can be used to explain or decide on outsourcing. CCT states that an organization has to invest and focus on resources and activities that are core competences, and outsource or purchase any other activities (Prahalad & Hamel, 1990). Core competences theory adopts three tests that can be applied to identify the core competencies within a company. First, a core competence has the potential to provide access to a wide variety of markets. Second, a core competence has to be an important contribution to the perceived customer benefits of the end product; third, a core competence needs to be difficult for competitors to imitate.

Shilesh and Senthilkumar (2019) explain that the above three tests can aid a firm to decide on whether to outsource a certain product or not. Although the tests are more related to a product or innovation rather than a service (that is, logistics). It is still assumed that the tests are of significant importance for organizational decision making regarding a specific service. Moreover, one of the reasons for the company to outsource to the third party service providers has been that it was not their core business. Porter (1990) and Snow and Hrebiniak (1980) argue that firms that concentrate on their unique competence and outsource the other additional operations to different members in the network, thus disintegrating their functions proved to be highly competitive firms and achieved a high degree of flexibility and focus in their operations. An intelligent 'down scoping' of the activities of the firm is preferred for implementing this strategic orientation that enables companies to concentrate on their core competencies (Jarillo, 1988; Sydow & Windeler, 1998).

Core competencies in companies give rise to various decisions, which shape or change the structure of a supply chain. It has been observed that a company could take decisions to focus on their core activities, while outsourcing or offshoring non-core parts of the supply chain (Huq et al., 2016). For example, if the core activity of a focal firm is research, there is a possibility that the company will outsource the Active Pharmaceutical Ingredient (API) manufacturing and formulation parts of the chain to contract manufacturing organisations (CMOs). This could cause different configurations in the supply chain structure depending on the factors that are considered indecision making.

Similarly, Carolis (2003) states that core competencies are an accumulation of knowledge as organisations learn, actualize that learning in competencies and deploy those competencies in their product market strategies. He also argues that competencies are typically embedded in an organisation acquiring a distinct bundle of competencies involving important resource investments such as capital, individuals and management vision.

RESEARCH METHODOLOGY

The methodologies covered in this paper included the research method which was qualitative based on secondary nature and sources of data. The research design was historical/descriptive. The method of secondary data collection for this study were published and unpublished content or documentary analysis and textual analysis from textbooks, magazines, newspapers, journals, internet, government official publications, international donor agencies bulletins etc.

DISCUSSIONS

The Challenges of Third Party Logistics in Nigerian Pharmaceutical Industry

Globally, the pharmaceutical industry is facing a productivity crisis. Notwithstanding extraordinary scientific achievements such as completing the sequencing of the human genome, the rate at which the industry generates new products appears to be shrinking (Cockburn, 2004). This is synonymous with the Nigerian pharmaceutical market as distribution of medicines is highly problematic. This is because too many organizations and stakeholders are involved. Some major manufacturers contract private logistics organizations to distribute medicines while some international development partners even use the services of courier companies for delivery of medicines (Isola & Mesagan, 2016). According to United Nations Industrial Development Organization (UNIDO), the implication of this is that, in some cases, medicines expire before they reach the end users. In the private sector, manufacturers and importers have their own distribution channels and can sell to wholesalers, retailers and hospitals. The result of this is often that medicines and medical supplies are sold in unregistered and unlicensed premises and, in some cases, by non-pharmacists (UNIDO, 2010).

Supply chain challenges in pharmaceutical industry and HealthCare services in Nigerian and other developing countries were identified by in a workshop by the World Health Organization (WHO) in 2006. The WHO (2006) outlines the difficulties of the medicine supply of African countries; the main challenges being poor information, communication and consumption data, inadequate storage facilities and temperature control systems and a lack of quality assurance procedures. The workshop designed a regional framework to improve procurement and supply management systems for essential medicine in African regions and

outlines challenges, goals and tasks for quantification and forecasting, and storage and distribution (Schöpperle, 2013). Over the years, the pharmaceutical supply chains in Nigeria and sub-Saharan Africa have faced many challenges which have impacted negatively on the performance of the chains. These challenges include but not limited to:

Corruption
The efficiency of healthcare delivery in any country is dependent on the judicious use of both human and financial resources to serve the sick population (Tormusa & Idom, 2016). Corruption a big threat in all aspects of national development. At a rank of 136 out of 176 by 2014; Nigeria is classified as one of the most corrupt nations in the world (Transparency International, 2015). According to Transparency International, "corruption is everywhere: even the health and medical services, considered the least corrupt government institution, are considered very corrupt by 41 per cent of Nigerians". In 2016, the Global Fund for the control of HIV/AIDs in Nigeria found widespread of corruption involving program funds running into millions of US Dollars (Global Fund, 2016).

Stock-outs
Stock-outs in the pharmaceutical sectors have become a worldwide phenomenon and not restricted to countries of low- income levels in recent years. This trend can be a consequence of several causes, including, but not limited to procurement and supply chain management-related issues (Iyengar, Forte, & Hill, 2016). In a study to assess Primary Health Centre (PHC) facilities service readiness with focus of availability of essential drugs and medical equipment covering 2480 healthcare facilities from all the 6 geopolitical zones of Nigeria, Oyekale (2017) reports that availability of some basic drugs as low as between 10.48% and 25.2%. In Nigeria, stock-outs of basic medicines healthcare facilities have been reported (Sieverding & Beyeler, 2016).

Expired Drugs
Medicines are unlike some products which have no expiry dates. Medicines expire and lose potency. Accordingly, any incidence of expiration of medicine poses a critical problem across the pharmaceutical supply chain as it reduces the net quantity of medicines available to the patient(s) and hence the overall quality of healthcare (Sauls, 2016). The chaotic drug distribution system in Nigeria allows for easy occurrence of expired drugs in the pharmaceutical supply chains (Olatunji, 2013). Some unscrupulous drug traders have been reportedly found re-packaging expired drugs from other countries to sell in Nigeria (Oluwatuyi & Ileri, 2014).

Fake and Counterfeit Products
The issue of fake and counterfeit drugs has become a global challenge and is now endemic in the various drug supply chains. Statistically, between 13% to 35% of worldwide sales of fake and counterfeit drugs come mainly from India, Nigeria and Pakistan (Khan & Khar, 2015).

Weak Regulatory System
The regulatory system in Nigerian pharmaceutical industry is ineffective and characterized by irregular regulatory inspections, weak enforcement and pervasive infringements and associated negative health outcomes (WHO, 2010; Usar et al., 2017). Causative factors according to Erhun et al. (2001) include but not limited to inadequate and often overlapping legislation, official corruption, poorly trained personnel and underfunding of regulatory institutions. Garuba, Kohler and Huisman (2009) and Lowe and Montagu (2009) conclude that this has resulted in widespread unregulated and sometimes illicit sale of restricted pharmaceuticals, often without prescription and frequently by unqualified staff. There is also, high burden of fake, adulterated and substandard drugs in the market and an equally high prevalence of adverse drug events due to poor or weak regulatory mechanism in Nigeria.

Disruptions
Supply chains are exposed to disruptions consequential from various sources, factors and risks that hinder the performance of one or more of their constituent entities (Sayed & Sunjka, 2016). Some of risks are disruptions that physically prevent product flows and even in end-product failures across the supply chains (Zegordi & Davarzani, 2012). Pharmaceutical supply chain management in disrupted counties where there is severe sectarian, tribal, religious conflicts and overall weak systemic governance can be very challenging (Kohler et al., 2012). The security challenge of the Boko Haram insurgency in the North-East, the incidence of banditry in the North-West, Herdsmen-Farmers clashes in the North-Central of Benue and Plateau states, South-West and South-East and South-South of Edo State, have had massive negative impacts on the regional pharmaceutical supply chains and healthcare delivery systems as destruction of facilities and sometimes killing of personnel are typical outcomes.

Poor Infrastructure
Poor infrastructure has also been identified as one of the significant structural barriers in the health systems of sub-Saharan African countries (Fowkes et al., 2016). In comparison with other economies like the middle- and high-income countries, Nigeria has one

of the least-developed road networks with approximately 200 metres of roads per km2 pared compared to 1400 metres in high-income countries (Schürenberg-Frosch, 2014). The supply chains of pharmaceuticals require steady, uninterrupted electricity for the storage and potency of thermolabile products like vaccines and antibiotics. The absence of a stable source of power also negatively affects certain aspects of the pharmaceutical supply chains especially the cold chains (Yakum, 2015).

CONCLUSION AND RECOMMENDATIONS

The role of the pharmaceutical industry in a country like Nigeria in the provision of safe, pure, quality and affordable products to meet the healthcare need of the populace cannot be over-emphasized. Also, the importance of the third party logistics providers in the industry has stood the taste of time over the years. Movement of the pharmaceutical products across the country has helped to make the products available to the stakeholders in the industry, the challenges therein notwithstanding.

The study found out that the overall trend in logistics outsourcing in pharmaceutical industry in Nigeria is moving in two directions: increase in the number of buyers of logistics services, and increase in the extent of usage of logistics services. The research further found that corruption, stock-outs, expired drugs, fake and counterfeit products, weak regulatory systems, disruptions, and poor infrastructure are among other challenges hindering effective supply chain management in Nigerian pharmaceutical industry. Nigeria has progressed a lot in pharmaceutical manufacturing, still there are many unsolved issues in managing the information flow in the pharmaceutical supply chain.

It is therefore, first recommended that the regulatory bodies in the pharmaceutical sector in Nigeria like the Pharmacist Council of Nigeria (PCN) and the National Agency for Food, Drug Administration and Control (NAFDAC) should enforce implementation of their regulations, guidelines, and policies that relate to access to safe medicines in Nigeria to improve equitable distribution of pharmacies across the country. Such regulations include those on marketing and sales of counterfeit, substandard and expired drugs in Nigerian market.

Second, it also recommended here that the regulatory agencies should enforce the establishment of pharmaceutical shops two hundred metres apart each other, review of the licensing and issuance of permits to patent medicine shops owners and vendors.

Third, COVID-19 pandemic has changed the way business is done globally. The pandemic has also altered the operations of all the sectors of global economy across countries both developed and less developed ones. Evidences during the peak of the lockdowns in 2020 showed that logistics was most affected globally. It is then recommended further that organizations should review the way they carry out their logistics practices in time of COVID-19.

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