Compound Supply Chain Efficiency Model Application in the Gabonese Supply Chain: The Case of Comilog

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ABSTRACT

In an effort for global excellence in international business, Gabon supply chains must achieve a competitive advantage by ensuring that they are as effective as possible. This paper develops the compound supply chain efficiency model using variables expressly identified as problem areas encountered by Gabonese supply chains. The compound supply chain efficiency model evaluates the supply chain global efficiency based on the efficiency of reliability, velocity, and cost. It identifies barriers along the supply chain and determines key focus areas for corporations if they want to ameliorate their global efficiency and become more competitive. The compound supply chain efficiency model can either be used to compare various supply chains or it can be used to compare the same supply chain over time to determine if any improvements have been made. The composite supply chain efficiency model can also identify areas of deficiencies along the supply chain. The composite supply chain efficiency model is an efficient and inexpensive model that can be applied to determine if Gabonese supply chains are operating efficiently or not. The results obtained from the compound supply chain efficiency model can help companies and entire supply chains identify areas to focus on to ameliorate their efficiency levels and in so doing make them competitive.

Keywords: Comilog, Compound Efficiency Model, Gabonese Supply Chain, Moanda, Supply Chain Efficiency

INTRODUCTION

The model in this study has been built with the purpose of improving the Gabonese’ supply chains efficiency. In an attempt to analyze and explicate the current model operations, in this research we will depict how the model is adapted to a functional supply chain. It will analyze the decisions that are made under certain circumstances and the motivations of these decisions. It will also analyze the effect of the choices and the developments that are possible.

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LITERATURE REVIEW

Definition of Supply Chain and Supply Chain Management

Supply Chain Definitions

The development and functioning of supply chains have become important subjects for academicians with a resultant increase of definitions and phrases. Definitions that have been investigated for the intention of this paper are as follows:

- As reported by Beamon B. (1998), a supply chain is “a structured producing proceeding wherein raw materials are transformed into finished goods, then delivered to end customers”;
- Tecc.com.au (2002) defines supply chain as “a chain starting with raw materials and finishing with the sale of the finished good”; 
- Bridgefield Company (2006) defines supply chain as “a connected set of resources and processes that starts with the raw materials sourcing and expands through the delivery of finished goods to the end consumer”;
- Pienaar Walter (2009b) defines supply chain as “a general depiction of the process integration involving organizations to transform raw materials into finished goods and to transport them to the end-user.”

The above definitions centralize on the core determinants of an effective supply chain. They connote the need for a provenance and a destination within which goods flow and accept the approach that Supply Chains start with resources, combine a number of value adding activities and finish with the delivery of finished goods to consumers.

The following definitions are more complicated. They include an extended view of a supply chain and integrate extra activities in the operation of the supply chain:

- Arthur D. Little (1999) defines supply chain as “the interconnected or joined flows of goods from origin to final destination, also the information flows that are linked with it”;
- According to Chow and Heaver (1995), supply chain is the group of manufacturers, suppliers, distributors, retailers and transportation, information and other logistics management service providers that are focused in supplying goods to consumers. supply chain comprises both the external and internal associates for the corporate;
- Ayers (2001) defines Supply Chain as life cycle processes involving physical goods, information, and finance flows whose objective is to satiate consumer requisites with goods and services from diverse, connected suppliers;
- Mentzer, W. DeWitt, Keebler, Min, Nix and Smith (2001) defines supply chain as a set of firms promptly involved in the supply and distribution flows of goods, services, finances, and information from an origin to a destination.

The difference in approach between both definitions categories and the all-embracing descriptions combined in the latter render it very difficult to define a supply chain in practice if each of the definitions is to apply. Various systems of distribution organized to work through transport connections and nodes and recognized as supply chains in industry do not concede any of these definitions.

For the objective of this study, it is consented that the role supply chain is to add value to a product by transporting it from one location to another.

Supply Chain Management

Different Supply Chain Management Definitions

Several academicians have asserted that we are now attending in a new epoch where corporate performance and competitive advantage will
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