

Supply Chain Management of Petrol

[Name of Student]

[Submitted to]

[Date of Submission]

[Name of University]

Table of Contents

An Overview of Supply Chain..... 3

Supply Chain of Petroleum Industry..... 3

Traditional Supply Chain of Petrol..... 4

Supply Chain Challenges and Opportunities 5

Potential Solutions and Recommendations..... 6

DO NOT COPY

Supply Chain Management of Petrol

An Overview of Supply Chain

Different academics define supply chain management in different manners such as some of them describe it as a strand of interconnected operations. Since it is a highly significant domain for any industry, the organizations keenly want to strengthen their supply chain management. It is a simple process that involved in transporting a commodity or service from manufacturers to consumers. Furthermore, supply chain is responsible for the transformation of raw materials, natural resources and constituents into a finished product and transported to users (Stadtler 2015: 3).

Supply Chain of Petroleum Industry

Petroleum industry is one of the most thriving global industries in terms of turnovers and supply chain. However, the giants of petroleum industry such as Saudi Arab and Nigeria are responsible for global supply chain of petrol (An Wilhelm and Searcy 2011: 3763). Over the last few decades, petroleum industry has been often facing severe supply chain challenges particularly in the area of logistics that usually do not exist in other sectors. Such challenges have a large impact on oil cost and as well as the cost of byproducts. Chima (2011: 27) discusses that there are more chances for managing actions across a supply chain even in such multifaceted setups as oil and gas, because of advancing information methods and communication technologies.

Supply chain of petroleum industry is very complicated when it comes to the comparison with other businesses. It is distributed into two segments: the downstream and upstream supply

chains (Chima 2011: 27). Downstream supply chain initiates at refinery where crude oil is transformed into usable products which is the distinctiveness of petro-chemical companies and refineries. Furthermore, downstream supply chain includes the procedure of predicting, manufacturing and the logistics administration of transportation of crude oil byproducts to consumers across the world. On the other hand, the upstream supply chain encompasses the procurement of oil, which is the forte of oil corporations. In addition, the upstream procedure comprises the investigation, forecasting, making, and logistics administration of supplying crude oil from remotely situated oil bores to processing plant. Therefore, it is found that supply chain of petroleum industry is complex and difficult to sustain.

Traditional Supply Chain of Petrol

The prevalence of supply chain management in petroleum industry emerged during the era of 1990's. The traditional concept of supply chain deliberates the discrete corporations and elements within an organization as single units that signify "functional" entities. The conventional model depicted that the different parts of supply chain frequently confront each other due to contradictory objectives. As a result, the influence of supply chain was incompetent and unresponsive to the needs of clients.

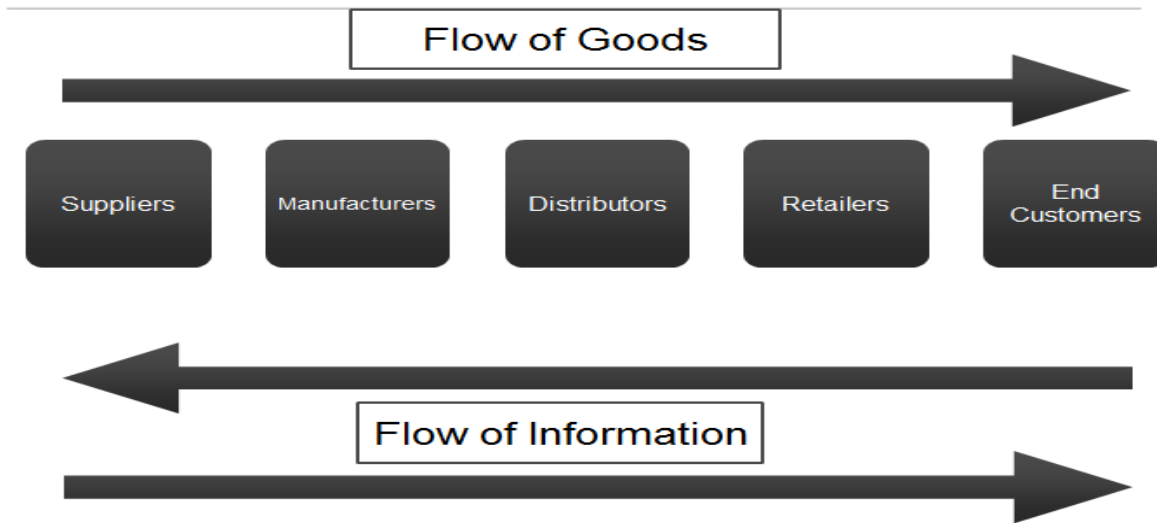


Figure 1 the Traditional Supply Chain Model ((Fernie and Sparks 2014: 24).

The main features of traditional supply chain models included inappropriate planning, inadequate long term development plan and focus, consideration of individual performance, lack of mission statements and visions and old legal system. Regardless of these flaws, traditional supply chain model of petroleum industry worked significantly and transformed into modern supply chain models that incorporates strong network between suppliers, explicit aims and objectives, effective relationship between procurement managers and suppliers, and higher profitability.

Supply Chain Challenges and Opportunities

It is a fact that every organizations aim to maximize their capital and assets but these organizations must increase advantages and decrease prices along the supply chain (Fernie and Sparks 2014: 1). Some of the existing issues in modern supply chain management of petrol are as follows;

- The inner operation stream of the supply chain is not competent enough.

- The supply chain has insufficient crosswise integration.
- The general extent of information of the supply chain is not abundant.
- The organizational arrangement is detrimental to the supply chain management.
- The current estimate indexes of growth have problem to adapt the requirements of supply chain management.
- Inflexibility in logistics.
- Influence of globalization and the modernization of information technology.
- Fluctuating behaviors of supply chain partners.

Potential Solutions and Recommendations

In spite of above mentioned challenges, there are some potential solutions as well that could optimize the supply chain management in petroleum industry (Diabat and Govindan 2011: 659). Some of them are as follows;

- To rearrange the innovativeness and make effective operation flow.
- To fortify the crosswise incorporation of the supply chain.
- To improve the supply chain operations by efficiently utilizing the information systems.
- To modify and improve the organizational arrangement.
- To develop a new performance appraisal approach of the supply chain.

In the context of Resource dependence theory, supply chain of petrol can raise their standards and performance because this theory claims that procurement of external resources of companies impacts negatively on their attributes (Bode et al 2011: 833). Businesses in the petroleum sector, though, acquired the idea of outsourcing and established that one approach of outsourcing the logistics operations is to cooperate and ally with the competitors. However, these

companies are mainly dependent on the acquisition of third party logistics. Therefore, association among major companies should adapt swapping business strategies because it may sustain turnovers and introduce new opportunities of supply chain management.

DO NOT COPY

References

- An, H., Wilhelm, W.E. and Searcy, S.W., 2011. Biofuel and petroleum-based fuel supply chain research: a literature review. *Biomass and Bioenergy*, 35(9), pp.3763-3774
- Bode, C., Wagner, S.M., Petersen, K.J. and Ellram, L.M., 2011. Understanding responses to supply chain disruptions: Insights from information processing and resource dependence perspectives. *Academy of Management Journal*, 54(4), pp.833-856
- Chima, C.M., 2011. Supply-chain management issues in the oil and gas industry. *Journal of Business & Economics Research (JBER)*, 5(6)
- Diabat, A. and Govindan, K., 2011. An analysis of the drivers affecting the implementation of green supply chain management. *Resources, Conservation and Recycling*, 55(6), pp.659-667
- Fernie, J. and Sparks, L., 2014. *Logistics and retail management: emerging issues and new challenges in the retail supply chain*. Kogan Page Publishers
- Sinha, A.K., Aditya, H.K., Tiwari, M.K. and Chan, F.T., 2011. Agent oriented petroleum supply chain coordination: Co-evolutionary Particle Swarm Optimization based approach. *Expert Systems with Applications*, 38(5), pp.6132-6145
- Stadtler, H., 2015. Supply chain management: An overview. In *Supply chain management and advanced planning* (pp. 3-28). Springer Berlin Heidelberg