

Supply Chain Operations Reference

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Abstract- In this paper we have discussed the privacy and security in detail. This paper is focused towards the investigation of Supply Chain Operations Reference (SCOR) Model. The paper investigated the importance of practical application of SCOR model in organizations. Different research works conducted in past relevant to SCOR model were also reviewed to formulate conclusion on the application and importance of SCOR model at the organizational level. As the study reviewed the literature related to SCOR model that is why the nature of the study is qualitative in nature. The study opted a simple methodology of reviewing the literature relevant to SCOR model to formulate conclusion of the study. There are different multinational giant organizations that have successfully implemented SCOR model in their organization to improve the efficiency of their supply chain performance. One of the most significant names out of these organizations is Intel, which have implemented this SCOR model in their organization. The advantages that are realized from the implementation of SCOR model in an organization are mostly qualitative in nature. The case study of Intel organizations suggested that with the implementation of SCOR model in their organization, the supply chain knowledge of the employees was increased; the supply chain process was improved, the supply chain performance was overall enhanced, the relationship as well as the association within supply chain was also improved. These significant advantages of SCOR model provide the evidence that it should be implemented in organizations to enhance the efficiency level of their supply chain performance (Cambria Press, 2009).



Introduction

Different authors have defined SCOR model in a different manner. The Supply Chain Council has developed the concept of SCOR model to improve the practical importance and efficiency of supply chain management. The SCOR model can be defined as a process reference model that was initially created by supply chain council and was endorsed by the council as the cross-industry standard diagnostic tool to support the functioning of supply chain management. This model is considered to be a proven standard methodology and tool that has been successfully implemented at the practical level by different organizations ranging from Fortune 500 to different small and medium enterprises. One of the main significant advantages of implementing this model is that it

supports the supply chain performance of the company and helps to optimize the supply chain performance of the company (Supply Chain Council, 2015).

There are different frameworks of SCOR model developed by Supply Chain Council. These developed frameworks are Supply Chain Operations Reference model, Customer Chain Operations Reference Model, Design Chain Operations Reference Model, and Product Life Cycle Operations Reference Model. Each of these frameworks has its importance in organizations. SCOR model is linked with the supply chain performance of the company while Customer Chain Operations Reference Model is linked with supply chain partners. Design Chain Operations Reference Model is linked with supply design

partners. Product Live Cycle Chain Operations Reference Model is linked with the product, innovation and most importantly portfolio management.

Components of Supply Chain Operations Reference Model:

If we analyze supply chain operations reference model, then we come to know that this model has been divided into three major components. These three major components of the model process modeling, performance measurements, and best practices. All of these three basic components are further based on different management processes. Process modeling is based upon five different management processes that include planning, resourcing, making, delivering, and returning. Performance measurement consists of two different type of elements that are performance attributes and metrics. Performance attributes simply measure the reliability, responsiveness, agility, cost, and assets related to supply chain performance. There are different definitions of best practices related to supply chain performance. SCOR model defines best practices as a method of current, structured, proven, and repeatable tools

that are used to have a positive impact on the output of supply chain performance.

Importance of Supply Chain Operations Reference Model in an Organization:

The implementation of this model is considered to be significant in different aspects. One of the most significant advantages of implementing this model in the organization is to enhance customer service level. Thus, this model is used to have superior customer service implementation in the organization. Effective supply chain management is directly linked to customer satisfaction. This model helps to measure and understand the amount that is required to be supplied to customers. This amount is measured by using a specific framework provided by this model. It also helps different supply chain managers and organizations to evaluate cost and performance tradeoff, it helps in the formulation of different strategies to meet new customer expectations, and most importantly it helps to respond to domestic as well as international market growth.

Another significant advantage of implementing this model in the organization is to control the

supply chain operating costs. It helps to compare different supply chains with different supply chain strategies. This model provides a common language for communication which is one of the most significant advantages of this model. By having a common language, the organization could have effective and better communication with their management as well as partners of the organization. There are many other different features that are included in this model other than enhancing the efficiency of supply chain performance in the organization. Some of the significant features included in this model are related to the enhancement of job skills of the employees, critical skills of the employees, job performance measurement of the employees, and supply chain management credentials.

Literature Review:

One of the research conducted by (Huang, Sheoran, & Keskar, 2005) investigated the implementation and importance of supply chain operations reference model. The study indicated that in past different models were created to enhance the efficiency level of supply chain management. The supply chain operations

reference model provided by supply chain Council is considered to be one of the most significant models. This model provided by supply chain Council is supported by more than 650 member organizations that include both academic as well as level industry organizations at international level. The study indicated that usage of this model helps to tackle the complexity and complex issues in supply chain management. This model is mostly used by upper-level management of the organizations. The paper focused on the importance of supply chain configuration as it is considered to be one of the most significant elements in the implementation of this model.

Another research was conducted by (Li, Su, & Chen, 2011) to investigate the increase in efficiency level of supply chain quality performance by using supply chain operations reference model. The paper suggested that by adopting standards like ISO 9000 series, the companies can develop the supply chain management process, and it is also suggested by the supply chain operations reference model to adopt such international standards to enhance the efficiency level of supply chain management. The data for the study was collected

by using survey and about 232 companies were included in the sample of the study. The study divided the supply chain operations reference model into five different decision areas like the plan, source, make, deliver, and return. The results of this study suggested that there prevailed a positive and direct relationship between every individual decision area and customer-facing supply chain quality performance. This suggests that with the implementation of the supply chain operations reference model in the organization, supply chain quality performance will also be increased and vice versa. The study also found that decision areas, plan, and source are most significantly important to enhance the supply chain performance as compared to make the decision.

Another significant study was conducted by (Lockamy & McCormack, 2004) to link supply chain operations reference model with supply chain performance. The nature of this study was exploratory as it investigated the relationship between supply chain operations reference model planning practices and supply chain performance. This study included four decision areas related to

this model that are the plan, source, make, and deliver. This study also included nine different significant supply chain management planning practices that were derived from experts and practitioners related to supply chain management. The results of this study suggested that planning process is considered to be an important element in the formulation and implementation of the supply chain operations reference model in any organization. It was also suggested that it is significantly important to have collaboration between decision areas like plan, source, and make. This study found that teaming element is not considered to be a significant element to enhance supply chain performance management as compared to decision areas like the plan, source, and make. The results of this study indicated that future studies should be focused towards the investigation of other significant decision areas related to supply chain performance or supply chain management.

Another study conducted by (Stewart, 1997) investigated the usage and implementation of supply chain operations reference model at the industrial level. This study also investigated the

influence of this model on supply chain management at the industrial level. There are different significant factors that are required to be effectively implemented in the organization to have effective implementation of the supply chain operations reference model. To have an effective model, the organization must have integration and consistency between their business strategy and operational strategy. The structure of the organization should be flexible to change and adapt according to rapid decision making. The management practices being implemented in the organization must be facilitated with proper systems and information technology. Most importantly, different performance metrics and targets should be created to motivate the employees and management to influence the required outcome in the positive sense. If these conditions are properly implemented in the organization, then the organization can compare its supply chain process with this process of other companies and benchmark companies. These conditions will also help in effective implementation of the supply chain operations

reference model and will help to enhance the supply chain performance of the organization.

Another research conducted by (Stephens, 2001) investigated the usage of the supply chain operations reference model to improve supply chain efficiency and to achieve best practice results in the organization. This study discussed the development and the usage of this model. The widespread usage of this model helps to enhance the customer and supplier relationships, software systems in the organization, and measurement tools. The supply chain Council provides teachings and tutorials to understand that how this model is used at the industrial level. Supply chain council is also arranging different workshops to understand the implementation and usage of this model effectively. If we look at the implementation methodology of the supply chain operations reference model, then we come to know that the implementation methodology of this model is very simple and straightforward. It helps to provide a simple and straightforward framework that is used to identify, evaluate, define, and implement change products. With the passage of time, the implementation of this model is enhancing because

the implementation of this model is positively linked with supply chain performance of the organization. Different organizations whether they are small in size or large are using supply chain operations reference model to enhance the effectiveness and efficiency level of their supply chain performance. This helps to provide them the competitive advantage over their competitors in supply chain process and eventually increases their business activities.

(Stewart, 1995) Conducted research investigating the importance and implication of SCOR model on supply chain performance of any organization. The study also investigated the shortcomings and issues in traditional supply chain process. The traditional supply chain process increases unnecessary cost for the organization, it also has several days of delay in adapting to market changes and implementing them, and traditional supply chain process also undermines the competitive positioning. The study suggested that there some ingredients that must be present in an organization to practically and successfully implement SCOR model in that organization. The organization must possess the ownership of their

supply chain process in order to implement the SCOR model, the supply chain in the organization should be handled in such a manner that it should demand business results, all of the operational elements in the supply chain should be properly integrated with each other in order to have effective implementation of SCOR model, there must be continuous improvement in the supply chain performance and management of the company in order to enhance the effectiveness and efficiency of supply chain process implemented in the organization, and most importantly that there should be support for both steady state management and change management in order to have effective implementation of SCOR model in the organization.

Conclusion:

This study was focused towards the investigation of the implementation of SCOR model in different organizations. The study conducted thorough literature review related to the formulation, importance and implementation of SCOR model at the industrial level. The results of the study found that SCOR model is significantly important for organizations to enhance the supply chain performance of the company. It also helps to improve the efficiency level of supply chain performance in the organization. The results of the study found that implementation of SCOR model is not only important in multinational organizations but is also important for small and medium companies. Thus, literature supported the fact that SCOR model has been implemented in all sizes of companies ranging from small to multinational.

The study also found that there are many several advantages of implementing SCOR model. Some of the advantages found are reduction in supply chain cost in long term, increase in knowledge of employees and teams working in the organization

related to supply chain process being implemented in the organization, increase in efficiency of supply chain performance, less time required to adapt to the market change, enhancement inability to meet the demands of the customers and to meet their expectations.

References

Cambria Press. (2009). Application of the SCOR Model in Supply Chain Management. Cambria Press.

Federal Trade Commission. Protecting America's Consumers. Found at: <https://www.ftc.gov/tips-advice/business-center/privacy-and-security>
Gordon Stewart. (1995). Supply chain performance benchmarking study reveals keys to supply chain excellence. *Logistics Information Management* , 38-44.

Huang, S. H., Sheoran, S. K., & Keskar, H. (2005). Computer-assisted supply chain configuration based on supply chain operations reference (SCOR) model. *Computers & Industrial Engineering* , 377-394.

Stephens, S. (2001). Supply Chain Operations Reference Model Version 5.0: A New Tool to Improve Supply Chain Efficiency and Achieve Best Practice. *Information Systems Frontiers* , 471-476.

Stewart, G. (1997). Supply-chain operations reference model (SCOR): the first cross-industry framework for integrated supply-chain management. *Logistics Information Management* , 62-67.

Supply Chain Council . (2015). SCOR. Retrieved 12 01, 2015, from Supply Chain Council : <http://www.apics.org/sites/apics-supply-chain-council/frameworks/scor>

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