ABSTRACT

Efficient and effective inventory management is one of the absolute requirement for every company that have ability to compete with their competitor. Supply Chain Management is the answer of that demand because supply chain management integrate a relationship from supplier, company and customer. Supply chain management also have to supported by a good database that reserve accurate information for supplier, company and customer.

One of supply chain concept that so many people used is Vendor Managed Inventory, actually VMI is an inventory model where inventory responsibility is fully handled by vendor, begin from shipping volume, shipping spread time, and inventory management in the warehouse. Supplier invigilate buyer inventory and having responsibility to determine when they will ship the material base on the initial data of production raw material requirement of a buyer or customer demand that reserved by buyer. For now, VMI concept is used by many big company, because they think for a long term this concept is very profitable for both sides. In one side, vendor financially it’s profit will be increased and know raw material that buyer need form time to time accurately, determine by it’s self to ship raw material. On the other side company as a buyer won’t be late on receiving raw material from supplier and always have material on warehouse whenever it need, buyer will no longer frustrated thinking about raw material.

There is so many condition affecting VMI on the application, That’s why we need a tool that can help us to appears some decision alternative considering some condition and help the decision maker to make a decision. Decision Support System is an effective tool for it. DSS also give an accurate and up to date information through decision maker about condition surrounding the VMI model. That’s because DSS have a database which save historical data and can be used to make decision in the future.

In this thesis will be discussed the application of Decision Support System to determine buying volume of a buyer, transportation cost and the price in the concept of Vendor Managed Inventory. This study is done in CV Kayu Murni as vendor and PT Anita Vira Andika as buyer, and tying this model to wodd material. Result of this thesis show that Decision Support System is very usefull to determine some decision about raw material needed by a company.

Keywords: Decision Support System, Vendor Managed Inventory, Cost