

The process design for riordan manufacturing

[Business](#)



Introduction In order to help Riordan Manufacturing realize its objective, the PD consultants have prepared an elaborate proposal that the company should adopt in its production plan for the electric fans.

The proposal prepared by the consultants focuses on the key areas such as the material requirements planning, MRP, new process design for production, supply chain, production forecast, and implementation plan for the proposal (Riordan, 2013). The proposal will ensure that Riordan Manufacturing Company is able to become the market leader in the production of electric fans in China as well as compete favorably in the global market. Material Requirement Planning Material requirement planning, MRP, is very important software in the management of inventory and production planning of a company (Evans, & Lindsay, 1999). Organization's MRP system is used in the management of manufacturing processes in order to ensure smooth flow of production materials and regular supply of products to customers. Also, it ensures that a desired amount of raw materials and end products are maintained in the company stores (Burns et al, 1991). Riordan Manufacturing should be able to forecast its sales for any given period of time, and schedule production of electric fans to be able to meet the forecasted sales.

In sales forecasting , the company should make use of sales information for the last two years in order to project the sales for the current year. The MRP system of the company should be computerized in order to keep track of the sales and production process. The company should install a hybrid MRP system that will ensure that inventory and sales information is managed thorough computer integrated network. It will ensure that the management is informed of the production process in order to make appropriate decision

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of the quantity of electric fans to produce as well as the amount and time to purchase materials that are used in the production. The system will allow the company to maintain adequate inventory and ensure that there is a constant and regular supply of raw materials from the suppliers (Chase et al, 2001). A New Process Design The current process design that is used by the Riordan manufacturing is not efficient in production of electric fans.

The current process design used in the production of the electric fans does not consider customer specification. It makes it impossible for the company to produce customized electric fans, hence, reduces its market share and profitability. Also, it leads to wastage of the company's resources as there is accumulation of inventory in the company stores resulted from the lack of market for the products. It makes the company incur inventory cost reducing its profitability. In order to avoid wastage and high inventory cost, PD consultants recommend Riordan Manufacturing to use a computer aided design system in the production of the electric fans.

The system is composed of technologies that help to check the quality and characteristics of products at different levels of production process (Benton & Shin, 1998). The use of computer aided design in the production process will allow Riordan Manufacturing Company to manufacture the electric fans according to the specification of the customers. Also, it ensures that the products manufactured by the company are of the required quality and standard. The computer aided design technology will ensure that the produced goods are delivered to the customers at the appropriate time.

Supply Chain Supply chain involves the flow of materials from suppliers to the manufacturing company, and subsequent distribution of the products from
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the company to the consumers (Nollet et al, 2005). The supply chain that an organization uses will determine its production and delivery efficiency.

Riordan Manufacturing has both domestic and international customers who regularly purchase its electric fans. The company should ensure that the supply chain used to acquire raw materials from suppliers and transport the end products to customers is reliable, convenient, and cost effective. Since the company has various clients, it would be advisable to outsource the transportation services to a reputable transport company. It will allow the company to concentrate in production and ensure quality electric fans. Outsourcing will also reduce the cost associated with distribution of products to customers as well as supply of raw materials to the company premises. The supply chain model of the company should consist of distributors and agents.

Distributors will relieve the company from the storage burden and help it to reduce the cost. Also, they will act as agents of the company in oversee markets and ensure constant supply of the products to its international customers. Production Forecast Production forecast is a technique used in determination of the quantity of good to be produced in order to meet the demand in the market. An accurate production forecast will increase the profitability of a firm by ensuring that there is no wastage as a result of overproduction. Also, it helps in meeting of the customers' demands and in retaining of the existing customers.

Riordan Manufacturing has relied on the sales forecast for the past two years in the determination of the level of production in the current period.

However, this technique is not accurate as there are chances of changes in the market condition and the economy. To be able to determine an accurate production forecast, the Riordan Manufacturing Company should liaise with all its customers to identify the quantities of electric fans they will require in any particular period. The information should be kept in the company inventory and used in the determination of the level of production (Powell, 2006). The company should also consider assessing the prevailing economic conditions as well as the trend in electric fans market. This consideration should be taken by the company when making decision on the amount of electric fans to be produced in any particular period.

Implementation Plan For the proposed process design to be successful the company should take appropriate steps in the implementation of the programs. Each step should be given a specific time period for its implementation. There should be frequent evaluation of the outcomes of the new design implementation at each step in order to ensure its success. (Ettlie & Stoll, 1990). The company should be able to identify any bottlenecks at any given stage and correct it immediately before proceeding to the next stage of implementation. The implementation of the process design should take a period of 9 months.

Each activity should be implemented in the appropriate month as indicated in the Gantt chart. After the implementation of the entire design proposal, the company can start using the new process design in the production of electric fans. Conclusion The implementation of the new process design for Riordan Manufacturing will enhance quality, production, and profitability of the company as well as help in the cost reduction (Jacobs et al, 2009). Also, <https://assignbuster.com/the-process-design-for-riordan-manufacturing/>

there will be reduction of wastages of the company resources due to proper inventory management that will be ensured through the installation and use of computerized techniques in production process. The whole implementation of the design process is estimated to take a period of nine months.