Case Study

Institutional Affiliation

Student’s name

Course

Date

**Case Study: The Realco Bread master**

1. **Master production schedule for the bread maker.**

A master production schedule is a plan for different commodities that are expected to be produced within a certain period of time. It is normally influenced by manufacturing, where the planning shows the demand for that particular product at different periods of time. The quantities of each item that needs to be completed at the end of every week are also specified. All agendas are included in this gender (Meyr et al, 2015). All the mappings including the future productions are also represented. It helps in creating a business plan which is usually affected by different external and internal factors affecting the effectiveness of the organization. The final outputs are usually very important in making the important decisions which affect the productivity of the company.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Sales Forecasts | 20, 000 | 20, 000 | 20, 000 | 20, 000 | 20, 000 | 20, 000 | 20, 000 | 20, 000 |
| Sales orders | 23,550 | 23,200 | 21,000 | 15,500 | 13,000 | 11,500 | 5,200 | 1,800 |
| Inventory 7000 | 3,400 | 3,000 | 1,400 | 5,000 | 6,300 | 8,500 | 14,500 | 17,700 |
| Available to promise | 3,500 | 4,100 | 5,400 | 2,000 | 6,100 | - | - | - |

According to the schedule, the projected ending inventory is low. At the same time, the available to promise value is relatively low in the first five weeks as compared to the first three weeks of the production. This is due to insufficient products to meet the demands. For this reason, it is clear that they would end up disappointing their customers.

I think the company should adjust its production numbers. This would be a good strategy of ensuring that the customers are not disappointed. It is the goal of each and every company to ensure that all the needs of the customers are met. Most businesses have implemented effective communication systems within their organization, just to ensure that there is a clear understanding of the requirements of each customer.

The advantage of this is that it enables the managers to identify all the needs of the customers, which in turn increases the satisfaction level of the customers. It is also an important strategy that can be used to increase customer loyalty. This will finally enable the form to have its own pool of customers thereby increasing the customer shares. For this reason, it is very important for Realco to identify the needs of its customers. This can only be made possible if at all adjustments are made in the forecasts or the production levels in order to match the needs of the customers. This will play an important role in increasing the number of customers, their loyalty as well as the total revenues.

1. **Advantages and disadvantages of Jack’s approach**

The approach of Jack on promising the customers is very strategic. This is because it influences the market in such a way that the customers need not get the products they need from the competitors. At the same time, weekly allowance created just in case something comes up is also relevant in preventing the customers from being disappointed. This strategy increases customer loyalty. It would make the customers feel obligated to purchase their products from Realco Company only. This will be beneficial to the company. It is also expected that the customers would pull up their friends and family due to the kind of fulfillment they receive from the company. The strategies implemented gives the company competitive advantages when it comes to the ability to tap the market, increased revenues as well as higher profits.

We also have advantages created from selling and producing at the same time. This means that the costs used are recovered within the shortest period of time (Lalieu et al, 1990). It also shows that there is an increased value of money moving in and out of the company that results from the velocity of money. For this reason, the amount of cash available is in a position to carry out transactions, thereby increasing the returns of the company.

Apparently, Jack’s plan would be disadvantageous if at all things does not go as planned. For instance, if the customers fail to take the orders produced then greater losses would be incurred. This is because there will be an instance of overproduction that would definitely lead to massive losses. The fact that they are orders then it would be frustrating if the customers are not pleased with the products delivered to them. This would, in turn, lead to customer dissatisfaction. Such a situation is dangerous to the company since it would probably lead to a loss of customers. They would probably prefer shifting to other companies where all their needs are well met.

Such a problem can be addressed through encompassing formal master scheduling. This is because of the actual production and the forecast would match the needs of the customers. The cases of incurring losses will also be greatly reduced (Montani et al, 2017). The products provided will also be on the basis of products- available-to-promise. This would imply that the customers would only receive what they requested. At the same time, the loyalty of the customers would be built thereby enabling the company to make maximum profits.

In ensuring that this strategy works, there will be a need for making necessary changes within the organization. For example, the production would be based on the requests made by the customers and not on the experience if the company. This means that the past experiences of the company will have nothing to do with the kind of productions made at any given period of time.

1. **Acceptance and failure to deliver orders**

 Failing to deliver after accepting the order of the customer is the worst thing a company would do. This is because the goal of almost all companies is to meet customer needs. Failing to deliver what they need to would probably inconvenience the customers. If the same customers place their orders in another company and they are provided with what they ordered, they would probably feel that their needs are taken into consideration.

Master scheduling enables the firm to identify whether the predictions made are sufficient in meeting the kind of orders placed. The master production schedule is also significant in protecting the lead time and also booking future deliveries. This is due to the clear records made involving the same. This is important when it comes to decision making, of ensuring that all the needs of the customers are well met. The schedule also enables the firm to identify the demands of the customers earlier enough thereby coming up with possible ways of dealing with them. The decisions made are also made more effective with the aid of the available date. It is also a communication tool for the company among the members involved in the production of various goods and services.

1. **Impact on average inventory levels**

 If at all the production of Realco are to be reduced by a half to two thousand per week, it means that the firm would not be in a position to meet most of the orders placed. This is due to the variation in the number of orders at different times. At times they exceed the available products. For this reason, the levels of inventories will also be reduced. This is because the orders will finish all the available products leaving no products for the inventory. The goods available would also reduce since the master schedule usually plays an important role in ensuring that stability is attained.

**Case Study: Supply-Chain Challenges in Post-Earthquake Japan**

**Advantages and disadvantages of the supply chain**

Supply- chain challenges in post-Japan the March 11 earthquake in Japan affected the Japanese automakers in a negative way (Bilau et al, 2015). It exposed their weaknesses on the lean production system. Most operations were shut down after most suppliers became affected as a result of the earthquake. It became impossible to secure the production flow on time. Lean production encourages the manufacturers to produce only the products that are on demand, with the aim of reducing any form of wastage that might occur in the production system.

There are various advantages and disadvantages related to the lean production system. After attaining stability after the massive destruction caused by the earthquake, the Japanese automakers came up with the foolproof supply chain which ensured that there was the availability of the required production parts. The plan was effective in helping the automakers deal with Walt natural Lassoers and even some AT ten generalness that was being faced by the automakers. Looking at the disadvantages, most of the Japanese used the lean strategy whose main aim was to ensure that the automakers also produce what is required at the right time.

There were also a number of advantages associated with the system. First, there was a significant reduction in the cost of production. This is because there was little direct labor that was provided, and other unimportant activities related to the production were eliminated. This is due to the production of various parts in a number of factories which are then delivered to the motor makers who end up working together in accomplishing the final process of the production.

Additionally, there is very little space used and even the warehouse space per unit output. There are also limited delays of the schedules since there is continuous production of vehicles depending on the number of demands made. Another advantage is on the high quality if the productions made. This is due to the quality control that is being used in the systems of production. Failures that might occur in the system or present are usually detected at the source of parts before they are allowed to be mixed with other parts for the sake of making the end product. This strategy gives Japanese automakers a competitive advantage since they are in a position to make their adjustments quickly to economic changes. Lastly, lean production also enhances better communication between different function (Bilau et al, 2015). This includes various functional units like marketing, design, production and other units. This is simply because the production is based on customer needs. It is evident that companies with lean systems have developed communication systems with their suppliers since they are the only group of people that supply according to the market demand.

The system also has a number of disadvantages. One of them is that the systems do not operate well in unstable systems. In an unstable system, the production flaw is negatively affected. For instance, the earthquake affected the transportation systems and even some of the suppliers. For this reason, arts was required in the production of cars which could not be delivered. The system therefore only operate effectively in regions with minimum constraints like the production process can be negatively impacted by a single delay in the supply chain. Another weakness is the disability of the system to operate in a region where the demand cannot be predicted, and also in an environment where there is a high variety and the stock keeping is level.

**b) Consistensy of supply chain with Lean production philosophy**

The new proposed plan was inconsistent with the lean production philosophy. The system will be needed to make their products in bulk and store. This is a measure that the company could as a way of being prepared in case of anything like an earthquake (Taylor et al, 2019). The first proposed change in the supply chain is to have all the suppliers who are needed in the low chain to hold the entries which would be needed for a given period of time. According to the researchers, the suppliers should be in a position to identify the inventory necessary which could enable the firm to attain customer satisfaction.

The new supply chain will also need independent supply chain in each region, in order to increase the number of supplies made in order to achieve maximum production. In such a case, the proposed supply chain is not that lean as expected by the Toyota in an attempt to increase the number of parts which are produced by the suppliers. The approach would also increase warehouse costs.

1. **Ways of improving the company plan**

Forecasting of the areas is one way Toyota company can implement in improving the ‘foolproof’ in areas where there are higher demands for the cars and also the building of more hubs. This can be achieved by implementing numerous suppliers of parts. Having multiple sources for a single part reduces the chances of insufficiencies, thereby making the supply more competitive. The development of more sources is also important in ensuring that the quality required by the automakers are all met when it comes to the production process.

1. **Impact of Toyota plan on relationship management**

 The proposed will definitely impact the way Toyota handles its relationship management in the supply chain. There will be greater involvements with the suppliers since the suppliers will also be required to adopt all the strategies that are proposed in the new plan. This may involve constant revising on the number of inventories which requires a specific supplier to hold in their working areas and also dictating regions the suppliers need to set up new branches in order to minimize the risks associated with the supply chain. There are also significant challenges which are associated with the plan, specifically in the communication between Toyota and its supplier. For instance, Toyota will need to get much involved with the suppliers during the process of production since the keeping of inventories might result in much wastage of resources.

To add to that, the change in Toyota needs will experience a number of difficulties. This is because the inventory will have to be involved (Cole et al, 2017). There are a number of advantages which are offered in the lean system. One of them is the reduction of costs and wastage of resources. Assurance of quality is also a positive advantage associated with the new system. There is also the elimination of the delays and enhancement of better communication between the functions or the units of the production. At the same time, the major disadvantage was exposed during the earthquake, which was basically the difficulties associated with the production in case of any instability.

For this reason, Toyota realized the need of coming up with a new effective plan that would ensure the process of reduction does not interfere with any kind of natural disaster. According to the new plan, the suppliers are required to have a few months’ inventories and create independent production units in different regions. However, this is not consistent with the lean philosophy system. Having multiple sources is one step that can be taken in improving the plan, as well as the creation of a new production hub in the new countries. This is one of the plans that will require maintenance of communication between the company and the suppliers.

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