

Food Processing and Packaging

Question 1

What type of products are you making and selling? How complex are they, in terms of materials used to make them, and configurations they are sold in. For example, if furniture, how many different woods are used (can I buy a sofa with oak, maple, and cherry), how many different fabrics, how many styles of arms, legs, etc. How many different combinations of each item are sold? If you are making packaged foods, how many choices of pizza topping, or meatball sauces, or types of canned beans, etc.

When running a packaged food processing firm, the focus is on the food that one will produce and the packaging materials that will be used to package the food. For the industry, one will have to consider resource management for the packaging materials essential for processed food to be consumed in the market. The design of the package will determine the shelf life of the food product in the market with regard to the material used as it is distributed to the market and stored. The materials that I will use in food packaging include glass, aluminum foil, tin plates, paper boards, and plastics. This will also involve combining several materials to achieve a robust final product. The materials will keep the food safe during the transport and storage processes and will not cause any harm to the food or the consumer (Ojha et al., 2015). These materials will also be environmentally friendly and adhere to the set standards of the federal government's packaging procedures.

Question 2

What types of manufacturing processes do you use, are they similar or very different from each other? In addition to the materials used that will be in the finished product, what other supplies and materials are required to make the finished products.

The manufacturing process for a food manufacturing company entails a variety of approaches in manufacturing and packaging. This requires various machines that will help the company manufacture, process, and package the food for the consumer. The various food processing procedures include freezing the food to maintain its freshness, using radiation to improve the safety of the food by killing any microorganism, the pasteurization process for killing any harmful organism and ensuring that it doesn't harm the consumer, and extrusion, which entails cutting the food into consistent shapes and sizes. There are mixing gases in the package to ensure the food stays fresh for a long time before going bad. The equipment needed in the food manufacturing process includes cleaning machines like sprayers and graders to test the quality of the food. Also, mixers, food sorting machines, mechanical processing machines to process the food and slice the food that is being processed, and lastly, packaging machines in accordance with the packaging materials (Biering, 2020). These may include vacuum packaging machines that remove air from the package to increase the shelf life. Additionally, labeling machines to label the product accordingly and sealing machines to seal the final product to offer protection.

Question 3

What are the primary issues your company has in running effectively? Estimate in dollars what you think these inefficiencies cost you per year.

The company is currently facing material planning problems. The process should determine the quality of materials needed for the production process to begin and the materials that should support the production process. This planning process should indicate the materials required, when and where the materials should be sourced, and the amount of material that should be ordered for the production to start. The second problem is production scheduling of production processes, which entails determining when the production process should start, how long the production process should take, and the machines that are required to take part in the production process (Baldea & Harjunkoski, 2014). The overall cost of production is also determined. The third problem the company has is accounting problems with no proper accounting and bookkeeping procedures. The bookkeeping process is manual, and this may lead to inefficiency since it is overwhelming to manage all the accounting procedures manually, and some critical documents may get lost. The business may lose up to 10,000 dollars due to production planning and poor accounting processes.

Question 4

Of the issues that you have identified, rank them in cost order, and identify which ones the ERP software would help you solve.

The first problem to be ranked in order of cost is the management of materials, including purchasing records, receipts from the purchase of raw materials, and inventory. The second rank is financial accounting, which includes accounting for the inflow and outflow of goods and payments. The third is controlling the production process to reach the final product, and the last to be ranked is the control of assets in the company. The ERP will mostly solve the accounting problems and the production planning problems (Kanellou & Spathis, 2013).

Question 5

Pick the two issues that you think have the greatest benefit to your company in solving and write one paragraph describing exactly how the ERP software would help to solve the problem.

Accounting problems are one of the challenges affecting the business. The ERP software will effectively solve this problem since the tasks related to the accounting procedures will be automated. More specifically, the automated system will manage the receivables and payments (Lindsey, 2022). The ERP system will also solve the problem of production planning since the system is automated to manage all the production processes centrally, and this will give the managers a view about the planning of production and the resources that are needed for the production process.

Question 6

Pick a specific ERP package that fits your business well. How will you implement the software? What external resources will you use? Will you run it on your own hardware, in the cloud etc.? What do you estimate the onetime costs, and the annualized costs will be?

Implementing a system like Sage X3 to help manage a business will take less than 30 days. It will need external resources like training personnel to train the team on using the system and servers to store the data. The system will be run on the companies' hardware in conjunction with setup, report design, and the user interface. The data will be stored in the cloud, and the estimated cost is \$75 per month or \$900 annually (Sage, 2022).

References

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