New Capacity Planning Project Proposal

Summary

Mapleleaf Corporation is currently dealing with a potential undercapacity in the upcoming years due to the increasing demand for its products. With its seven distribution centers and five production plans, the current capacity is 10,000 products per day while the daily demand is 7,600 units. However, the demand is expected to grow to 13,000 in 10 years with the possibility of exceeding the capacity soon in year 4 considering 90% available capacity due to downtime for maintenance. In order to be able to meet new demands and maintain the market position, immediate action is needed.

Proposed Solution

Following the last executive meeting about the option to construct a new plant in Guadalajara, a thorough analysis of the new facility has been done. Based on the forecast, Guadalajara has been experiencing a high demand for products and at this rate, the distribution centers will soon fail to satisfy the demand. Therefore, building the new capacity plant is strongly recommended. The new plant would increase the firm's daily capacity to 14,000 units and would positively impact the company's bottom line. If the plant construction begin as soon as possible, the new plant could start operating in year 3. For comparison, the estimated total for year 3, including production and distribution costs, is $43,151,250 with the current capacity of 10,000 units per day (3,000,000 per year). Building the new plant and starting its operations in year 3 will bring down the total cost to $35,328,750, resulting in total savings of 22.14%. The early start of the construction is crucial to account for possible delays as well as the unexpected demand growth. The executives together with the finance team should make this investment a priority as this project has a great potential in significantly reducing the business costs and thus improving the net profit. Apart from that, the positive NPV ($5,058,400), calculated from the discounted cash flows for the next 9 years, indicates an attractive investment with a payback period of 4.82 years.

From the production department perspective, the new production facility will become a major role in the production and distribution system. On the other hand, the lowest-capacity plant in Kansas City will no longer be efficiently utilized given the capacity constraints and high production costs (an average of $19 per unit). It is, therefore, recommended to shut this plant down and put resources in other potential projects, for instance, increasing the capacity of plants in Los Angeles and Toronto, which operate at full capacity on a regular basis. This will require HR managers to start managing employee relocation and hiring new personnel for the Guadalajara plant. The relocation packages must be attractive for transferring employees at all organizational levels.

Lastly, the success of the new plant will certainly be determined by the quality of a marketing plan. The marketing team should be put in charge of continuously assessing the market situation in Guadalajara and Mexico overall. The team's understanding of the marketplace, the competitors, types of customers, or any information on market trends, will be crucial in the company's growth and will potentially create new revenue streams.

In conclusion, the Guadalajara plant has enormous potential for increased efficiencies, earnings, and the company's cash flow strength.