

Free report on smitheford pharmaceuticals total cost analysis

[Business](#), [Company](#)



Abstract

Firms make strategic and operational decisions every day. Firms must make decisions that are consistent with the mission, vision and objectives of the firm. The sole purpose of any business is to maximize owner wealth. In order to maximize owner's wealth, businesses must maximize revenues while minimizing costs. When a firm is choosing which manufacturing process to adopt, the firm must carry out a lead cost analysis in order determine which of the possible alternatives has the lowest cost. The firm also needs to consider other qualitative factors that may not be reflected in the costs directly.

Introduction

Smitheford Pharmaceuticals is a firm that is faced with a decision of choosing between two alternative manufacturing techniques; a low technology option and a high technology option. This paper seeks to establish the lead cost for Smitheford Pharmaceuticals between the high technology option and the low technology options for years 1, 5 and 10 that will help Smitheford Pharmaceuticals come up with a decision. This paper also intends to discuss the qualitative factors that may influence the decision to centralize of manufacturing and to adopt a higher technology.

Lead cost refers to comparing total costs between various alternatives in an effort to determine which option has lowest costs. Lead cost for Smitheford Pharmaceuticals between the low technology high technology options for years 1, 5 and 10 will be determined as follows;

The computations above demonstrate that the lead cost is low technology

options for years 1 and 5. Conversely, in year 10, the high technology option is the lead cost. This can be explained by the change in total costs as the number of units produced increased over the years. That is the fixed costs per unit will reduce as the units produced increase.

The variable cost per unit that is required to rationalize a transition from the low technology option to the high technology option at year 5 can be determined as follows;

Total cost of the low technology option in year 5 = \$4300,000 + (16.09 * 190,000) = \$3,487,100

The total cost of the high technology process should be less than \$3,321,300 to make it viable.

Total cost = Fixed cost + (Variable cost per unit * units produced)

Total cost = \$1220,000 + (170,000 * Vc)

But the total cost ≤ \$3,487,100

Therefore,

$$\$190,000Vc + \$1220,000 \leq \$3,487,100$$

$$\$190,000Vc \leq \$3,487,100 - \$1220,000$$

$$Vc \leq \$11.93$$

The variable cost per unit of the high technology option should be $Vc \leq \$15.89$ to make it validate a transition to the high technology option in year 5

Breakeven point in units = Difference in the fixed expenses / Difference in the v. c per unit

The fixed costs are given as \$1, 220, 000 and \$430, 000 for the high technology option and the low technology options respectively.

The variable costs are given in the data as 13. 21 and 16. 09 for the high technology option and the low technology options respectively.

Breakeven point in units = $(1, 220, 000 - 430, 000) / (16. 09 - 13. 21) = 274, 306$ units

Several factors are put into consideration when deciding on whether a firm should centralize or not. Such factors usually differ from firm to firm depending on the aim of the firm's management and the kind of products the firm manufactures. Some of these factors of centralization are discussed below.

The functions of the various departments in a company play a big role in centralization. Large firms prefer to decentralize their duties to the departments. However, to cut down on costs and for easy management, the management could decide to centralize the firm. For example, the sales and marketing departments would be centralized into one single department.

The size of the company is another factor when it comes to centralization decisions. A small firm will have small departments and its scale of production is small too. In such a case, the management will prefer the centralized system of management so as to cut down on costs of operation. Even large firms can opt for the centralized system because in a centralized system the flow of resources and information is faster compared to a decentralized system.

Unification of a firm is also another reason in deciding to opt for

centralization. A company could have been diversifying on the types of products it produces. The different products could have been previously produced in different firms. The management can decide to produce the different products at a central place. This could be aimed at cutting down on transport costs.

The firm's management intention is another factor that influences centralization decisions in a firm. The management could be opting to adopt a system whereby the top management of the firm retains the organizational, control and the decision making powers in the firm. In this system, the orders and decisions come from the top management in the firm.

Companies aim at embracing the highest technology options for various reasons. However, these decisions to adopt new technology depend on some factors. When firms adopt new technology, they do it to improve their efficiency, cut down on costs and increase their productivity and sales. Some of the factors a firm will consider are discussed below.

The quantity of a product produced is a major factor in adopting new technology. If the firm wants to increase the production size, it will want to cut down on manual labor. Technology in form of machines will enable faster and higher production at a lower cost. This is the factor of economies of scale. The pharmaceutical company will therefore consider its production when deciding on whether to adopt new technology. This will help the company to capably compete with other firms in the pharmaceutical business.

The company could be aiming at enhancing the quality of its products,

reduce its costs and the time used in production. New technology will also increase the level of efficiency in the firm. The pharmaceutical firm could adopt new technology by acquiring new machinery to transport raw materials to the firm and that of the finished goods to the market. The machinery needed to manufacture drugs can also be acquired.

Conclusion

References

- Hansen, D. R., & Mowen, M. M. (2003). Cost management: accounting and control (4, illustrated ed.). London: Thomson/South-Western.
- J, H., & B, R. (2012). Operations Management (10, edition ed.). Upper Saddle: Pearson Education Inc.
- Oliver, L. (2000). The cost management toolbox: a manager's guide to controlling costs and boosting profits (illustrated ed.). 1601 Broadway New York: AMACOM Div American Mgmt Assn.
- Stenzel, C., & Stenzel, J. (2002). Essentials of Cost Management (1 edition ed.). New York: Wiley.