COVER PAGE AND DECLARATION

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Table of Contents

Introduction

In the current era, with advancements in technology and increased competition, many businesses strive to generate profitable returns for investors and sustain these levels. Consequently, the evaluation of different choices related to the allocation and administration of economic resources, as well as the analysis of cost and profit, is primarily focused on their influence on the desired profits. Hence, it is vital to furnish pertinent information that addresses the inquiries crucial for the decision-maker in formulating the company's strategy.

- What is the specific volume and monetary worth of production and sales required to reach the break-even point?
- How can changes in selling price or variable cost, or both, impact profits?
- What are the specific sales volume and value required to attain a particular level of profit?

To address these and other inquiries, numerical illustrations are employed to ascertain the influence of variable expenses on profits, as well as to ascertain the approach for analyzing the correlation between cost, production volume, and profits. The financial analyst requires information on the unit selling price, variable cost, total fixed costs for the period, production quantity, and sales volume. This data will enable the analyst to make an informed decision regarding the facility's fate and market position, determining whether it will continue and succeed or fail and decline based on the analyzed information.

Task 1: Prepare a profit statement for Swipe 50 Limited for the month of February and March using (absorption and variable costs)

The data provided will be used to establish the earnings for the months of February and March. Additionally, the size and break-even amount will be calculated to determine the appropriate size of profit, ensuring that losses are not incurred.

The contribution margin is calculated by dividing revenues by the variable cost. Net profit is determined by subtracting all costs and expenses from revenues. It compares the profit margin between profit and sales and provides an overview of the company's financial resource management. The contribution return is defined as Net income which is the amount that remains from sales revenue after deducting variable expenses. It is then allocated to cover fixed costs and contribute to the overall profitability of the business (Schmidt, 2023).

Gross profit is a fundamental metric for measuring profit, calculated by subtracting the cost of products, services, and directly associated expenditures (such as raw materials and labor pay) from revenue or sales (Krishnan, 2021).

<u>Profit Statement for Swipe 50 Limited</u>

First: Absorption Costing:

Month: February

Sales Revenue:

- Sales (14,500 units x €22) €319,000
- Cost of Goods Sold:
- Opening Inventory: -
- Production (12,500 units x €22) €275,000
- Add: Variable Production Overhead €29,000

- Total Manufacturing Costs €304,000
- Less: Closing Inventory (2,000 units x €22) €44,000
- Cost of Goods Sold €260,000

Gross Profit: €319,000 - €260,000 = €59,000

Selling and Administrative Expenses:

- Direct Materials €11,500
- Direct Labor €15,500
- Fixed Production Overhead €28,600
- Total Selling and Administrative Expenses €55,600

Net Operating Income: €59,000 - €55,600 = €3,400

Month: March

Sales Revenue:

- Sales (44,500 units x €22) €979,000
- Cost of Goods Sold:
- Opening Inventory: (2,000 units x €22) €44,000
- Production (7,300 units x €22) €160,600
- Add: Variable Production Overhead €8,500
- Total Manufacturing Costs €213,100
- Less: Closing Inventory -
- Cost of Goods Sold €213,100

Gross Profit: €979,000 - €213,100 = €765,900

Selling and Administrative Expenses:

- Direct Materials €8,500

- Direct Labor €57,100
- Fixed Production Overhead €28,600
- Total Selling and Administrative Expenses €94,200

Net Operating Income: €765,900 - €94,200 = €671,700

Second: Variable Costing:

Month: February

Sales Revenue:

- Sales (14,500 units x €22) €319,000

Variable Costs:

- Direct Materials €11,500
- Direct Labor €15,500
- Variable Production Overhead €29,000
- Total Variable Costs €56,000

Contribution Margin: €319,000 - €56,000 = €263,000

Selling and Administrative Expenses:

- Total Selling and Administrative Expenses €55,600

Net Operating Income: €263,000 - €55,600 = €207,400

Month: March

Sales Revenue:

- Sales (44,500 units x €22) €979,000

Variable Costs:

- Direct Materials €8,500

- Direct Labor €57,100
- Variable Production Overhead €8,500
- Total Variable Costs €74,100

Contribution Margin: €979,000 - €74,100 = €904,900

Selling and Administrative Expenses:

- Total Selling and Administrative Expenses €94,200

Net Operating Income: €904,900 - €94,200 = €810,700

Task 2: Reconcile the profit calculated using absorption costing to that using variable costing:

What is the definition of absorption cost?

The whole costs are occasionally referred to as the complete cost or absorption cost, encompassing all industrial and other expenses that are considered as production costs. Absorption costing is a technique used to determine the total cost of a product, where all manufacturing costs are allocated to the goods. The costs can be classified as either direct costs or indirect costs, which can further be categorized as constant or variable expenses. This form of cost calculation is necessary for financial reporting for external reasons, as well as for income tax purposes (Srivastav, 2023).

Fixed Overhead

Fixed overhead is often allocated using a pre-established load absorption rate. Multiple overhead absorption rates can be employed, and the cost of the product prepared for sale encompasses all production costs. This implies that the direct materials cost, direct labor cost, and indirect industrial costs (i.e., all industrial costs) are allocated to the production-in-progress account as follows (Srivastav, 2023):

- Direct materials refer to the specific materials that are included in the final product.
- Direct labor refers to the expenditure incurred for the workforce directly involved in the construction of the product.
- Variable industry overheads refer to the expenses associated with running a manufacturing facility, such as the cost of air conditioning in production departments or power for production equipment. These costs fluctuate depending on the volume and quantity of output (Bragg, 2023).

- Fixed manufacturing expenditures refer to the costs associated with running the manufacturing facility that remain constant regardless of the output volume or value. These expenses, such as rent, ensure that all costs involved in calculating the selling price of a product or service are covered (Team, 2023).

How to Calculate Absorption Cost?

Based on the given example, the absorption cost may be calculated in the following manner:

To compute the load absorption rate for product A, we can assign the overhead based on the hours worked.

The overall cost assigned to the product in February using absorption costing is the sum of direct materials, direct labor, and fixed overhead expenses, which amounts to 91,200 (55,300 + 35,900) = 91,20

With each product priced at $253,000, the absorption costing mechanism determines a profit of $161,800, with no profit per unit sold.

The overall cost attributed to the product in March using absorption costing is the sum of the direct materials, direct labor, and fixed overhead expenses, which amounts to 37,850.
The absorption costing technique determines a profit of $203,400, which is equivalent to $0 per unit sold, given that each product is priced at $277,250.

The method of applying the absorbent cost to the inventory may be elucidated in this manner. Calculating the total cost of inventory by including all manufacturing costs. The fixed cost associated with inventory closure is transferred to the next year. Hence, the fixed cost associated with the starting balance of the period is allocated to the current year rather than the preceding year.   Therefore, under absorption costing, not all fixed expenses are allocated to the income for the year in which they are incurred.

The impact on earnings in connection to inventory may be elucidated as follows:

The impact on financial gain, due to variations in inventory values, the approach and magnitude of profits varies in the context of absorption. When inventory levels rise, absorption costing results in higher profit. This is because fixed overhead costs that are included in the closed inventory are carried over to the next accounting period instead of being expensed in the current period. Conversely, if inventory levels decline, absorption costing leads to a loss (Besharov, 2019).

Assuming stock levels remain consistent, both techniques provide identical profits.   We encounter challenges in implementing it and find the technique of its usage unclear, despite its alignment with internationally recognized accounting standards.

The advantages and cons of absorption cost may be stated as follows (Tuovila, 2022):

Advantages:

- Costs that are allocated to products or services based on the resources consumed in their production or provision. It is crucial to recognize the significance of incorporating fixed production costs when calculating the cost of a product and establishing its pricing strategy. Absorption costing ensures that fixed production expenses are allocated proportionally to the production of goods and services, just as variable production costs.
- Absorption costing adheres to the principles of accrual and accrual accounting, ensuring that expenditures are matched with revenue within a certain accounting period.
- The cost of absorption has been calculated for the purpose of creating external reports and assessing inventory, which is a significant subject.

- It is unnecessary to distinguish between fixed and variable expenses if it is difficult or inaccurate to do so.
- If there is an omission, it is indicated by the underestimating or over-absorption of the absorption cost of integrated plant resources. This suggests the usage of production resources that are either inefficient or efficient but not cost-effective.
- The allocation and distribution of fixed expenses in a factory or firm to cost divisions or departments enhances managers' attentiveness and accountability for costs and services rendered to them and their respective centers/departments.

Disadvantages:

- Numerous accountants' express disapproval of include fixed expenses, whether associated with manufacturing or marketing and management, as period expenditures that do not provide any future advantages. Consequently, they argue that such costs should not be incorporated in product and inventory prices.
- Absorption costing lacks use for financial analysts in the process of decision making. Variable cost analysis is essential for resolving many management and operational issues, such as determining production volume, optimizing capacity utilization, selecting product mix, deciding whether to acquire or produce, and evaluating alternative options.
- We have determined that absorption costing is ineffective in cost control and the functions of planning and forecasting. It does not assist in ascertaining responsibility for expenses. Assigning accountability to a management for costs that are beyond their jurisdiction is not feasible, resulting in a misleading perception.
- We rely on financial analysis to determine the magnitude and optimal use of the financial mir.

Task 3: Explain how each method differs from the other method and explain the importance of each method.

The expenses associated with the project until the manufacturing process is finished may be categorized into two parts: fixed costs and variable costs. The latter encompass expenditures and outlays that do not impact the quantity of output. Consequently, we may identify the expenses that are not relevant to the variables. Specifically, these include expenses such as rental costs, insurance fees for risk coverage, recurring payments for utilities, and interest payments for credit utilization.

Could you please provide information on the expenses related to variable costs? Within this cost category, costs encompass factors that directly impact production output, whereas variable costs encompass expenses such as direct materials, staff bonuses, packaging purchases, and indirect costs.

1. Actual costing

The actual cost is the most precise approach for determining costs in a cost accounting system. Financial accounting uses it to facilitate the preparation of financial statements. Cost accounting does not utilize real expenses, as its objective is to achieve the most accurate projected figure (Bragg, 2023).

The reason for its actuality and realism, although not being accomplished, lies in the convenient accessibility of material pricing.

The real labor costs are determined by considering the projected hours worked by employees and their pay. On the other hand, the indirect industrial costs are calculated using predicted rates, which helps account for the variations in unit cost that arise while estimating the actual cost. Therefore, under typical circumstances, the indirect expenses incurred in the industrial sector are allocated and accounted for as applicable manufacturing overhead (MOH). In contrast to the direct costs, the indirect industrial costs are the real costs (referred to as MOH actual) (Bragg, 2023).

2. Total costs

The total cost is the combination of fixed costs and variable costs. Fixed costs remain constant at zero output, while variable costs increase as production increases in the manufacturing process. Therefore, the total cost is the sum of fixed costs and variable costs at each production level. The graphic representation of the total costs curve is shaped by the variable costs curve first, but then increases by the amount of fixed costs to reach its peak (Roy & Roy, 2021).

3. Extended Normal costing

This complete pricing approach expands the use of standard rates to encompass all expenses, including direct materials, direct salaries, and indirect manufacturing costs.

The cost is calculated based on the product life cycle as follows (Kenton, 2023):

- Direct materials: calculated by multiplying the standard rate of direct materials by the actual amount used.
- Direct wages: determined by multiplying the standard rate of direct wages by the actual hours worked.
- Indirect industrial expenses: obtained by multiplying the standard rate of indirect industrial costs by the actual rate.

This approach effectively calculates the price of items by considering all costs incurred over the whole lifespan of the product, encompassing both manufacturing and post-production expenses. Similarly, pre-production expenditures, including research and development expenses and product design costs, are sometimes referred to as upstream costs. Downstream costs refer to expenses incurred after manufacturing, such as marketing and customer service (Kenton, 2023). The variable costs are categorized into various departments based on the scale and characteristics of the activity. This includes direct materials and labor hours, as well as indirect materials and other costs that are challenging to ascertain due to their direct connection to production and the manufacturing process.

Task 4: Explain three ways that Swipes 50 Ltd. can improve its accounting system.

1. Target costs:

Target costing is a technique used to calculate the cost of a product's whole life cycle. This cost must be enough to cover the development of the product's targeted performance, quality, and operational functions, while also assuring the desired profit and specific strategy. The target cost is the upper limit of the cost that may be allocated to a product or service, while still allowing the firm to achieve the desired profit margin and meet the predetermined price of the product (K., 2021).

The target costs for a certain activity are determined by estimating the anticipated production costs for a particular product, using the following equation: Target price = target costs + target profit

The target price is equal to the sum of the target costs and the target profit.

Target cost is a cost management method that seeks to minimize the cost of a product during its initial stages, namely in the planning, development, and design phases. This involves ensuring the product's quality, functional capabilities, and the level of trust from consumers and external stakeholders are maintained.

The target cost method is a cost management technique that is guided by numerous fundamental concepts, with the most significant ones being (K., 2021):

- Managing the target selling price inside the costing system.
- prioritize customer satisfaction and strive to strike a harmonious equilibrium between the company's objectives and the wishes of consumers. This may be achieved by assuring excellence in quality, competitive pricing, prompt product delivery, and maximizing the value offered by each product feature to the customer.

- The objective is to provide development and training to cross-functional teams in order to facilitate the design and development of the product.
- The objective is to minimize the overall expenses associated with the whole lifespan of the product, including distribution, procurement, operation, maintenance, and disposal costs.
- Emphasizing the critical, significant, and high-risk phase of product design, which is responsible for generating costs at the beginning of production and establishing the foundation of the firm.

Therefore, meticulous focus is given to every step of the cost chain, starting with the initiation of supplier relationships to the provision of services and support to clients after sales.

Therefore, it is often regarded as one of the most superior and significant cost-efficient approaches.

2. Activity costs:

Activity-based costing (ABC) is a cost allocation method that emphasizes the processes and activities involved in the production of goods. ABC refers to the initial cost that is allocated to activities and subsequently assigned to goods, including their depreciation expenses. This costing approach operates under the assumption that activities play a crucial role in establishing the costs associated with items. Products are billed according to the specific utilization of each product for every action (Tamplin, 2023).

Activity-based costing (ABC) is a well-established costing method that has undergone extensive development and critique. It is considered one of the most effective ways to allocate manufacturing overhead costs per unit in a more logical manner, as compared to traditional costing methods, regardless of variations in production and manufacturing techniques. Activity-based costing is a two-stage process in which overhead expenses are initially allocated to specific activities, referred to as "cost groups," and then assigned to the product in a subsequent phase. Only things exclusively ordered by the activity itself will have distinct costs ascribed to them, leading to a more precise and rational cost per unit value. This methodology elucidates the process of ascertaining the production expenses, effectively overseeing, and regulating them, and formulating them in a manner conducive to informed decision-making (Tamplin, 2023).

3. Standard Costing Method

This approach operates by utilizing budget planning and significantly focuses on estimating, forecasting, and information collection. These projected costs are compared to the actual costs that were monitored in order to identify and enhance the strengths and weaknesses, and to minimize them. Additionally, any errors that were made are corrected (Bragg, 2023).

Errors and deviations can be divided into the following:

Material deviation refers to the divergence of materials from the specified rate, which might involve either excessive or insufficient consumption of raw materials, or the utilization of unsuitable quantities of resources in industrial processes (Material Deviation Definition: 177 Samples | Law Insider, n.d.).

- Wage variation refers to the situation when the wages given for a particular task are either greater or lower than the wages that were originally planned and budgeted for.
- The variation of indirect expenses, particularly after obtaining precise information about the nature of the activity and its potential costs.

These categories are regarded as crucial techniques for effectively evaluating expenses and assisting management in achieving their desired strategy and objectives.

Task 5: State why managing accounting jobs are important in a manufacturing company

Companies consistently aim for sustained success and a favorable market position in relation to their industry, which is marked by intense competition, a growing number of companies, and constant technological and communication advancements. The provided information accurately pertains to the various components of product costs, allowing for enhanced control and management over cost elements. This facilitates the identification and elimination of unnecessary costs, thereby minimizing product costs while satisfying customer preferences. Consequently, it leads to increased product sales, maximized profits, and improved overall financial performance. To attain continuity and enhance competitiveness in the business market, companies must initially implement contemporary accounting and cost accounting systems, such as activity-based costing systems. Additionally, they should adopt modern approaches to cost reduction, such as continuous improvement while upholding quality, target cost, and market share. Due to the wide range of activities and the enormous scale of enterprises, it has gained significant popularity in a complete manner. Implementing cost accounting in a manner that aligns with the company's objectives, connects all departments, and provides accurate data on cost elements is a challenging task. This approach is crucial for companies to effectively manage costs, ensure product quality, and exercise oversight and control, only then can we determine the significance of cost accounting (The Significance of Management Accounting to Manufacturing Firms, 2016).

Cost Accounting

Cost accounting is a crucial branch of accounting that is essential for all types of businesses. It focuses primarily on determining and controlling costs, which play a significant role in the success of any activity, product, or service. Therefore, accounting is of utmost importance in this regard (Baluch, 2022).

The costs are as follows (Baluch, 2022):

- Diligent supervision and thorough administration of all expenses by gathering and documenting all cost components associated with the company's product or service.
- Categorizing and prioritizing expenses based on production importance using cost accounting methods and tools that can distinguish between various types of costs.
- Cost accounting plays a crucial role in managing the pricing of products and services by providing cost reports that enable the determination of pricing. It may also optimize the utilization of contemporary pricing strategies, such as the target and estimated cost technique, to decide product and service prices and build budgets, hence maximizing benefits. Preliminary estimation and incorporation of the desired profit margin prior to commencing manufacturing.
- Enhance profitability while maintaining quality and meeting consumer preferences, hence boosting competitiveness. In the absence of cost accounting, organizations would lack the capacity to determine the expenses associated with their goods and services, as well as effectively manage and control these expenses. Consequently, they would be unable to minimize costs and maximize earnings to the greatest extent feasible. He is deemed satisfactory.
- Conventional plans and budgets are created. By employing cost accounting techniques, the company can establish strategic plans and projected budgets. To create these budgets, it is necessary to gather data on the actual costs incurred by the company in previous years. This information enables the company to make informed predictions about future

expenses. By carefully planning budgets, it is feasible to effectively manage and regulate cost elements by comparing actual costs with standard costs. This allows for the identification of deviations, strengths, and weaknesses, which can then be analyzed and addressed to rectify cost inefficiencies.

- Providing essential cost reports to aid the administration in decision-making and cost analysis. These reports help identify and strengthen necessary costs while eliminating unnecessary expenses, particularly in key cost centers that enhance customer satisfaction and improve the product's competitiveness in the market.

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