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Application of the Break Even Point (BEP) Method for Profit Planning in PT. XYZ's Umrah Ticket Sales

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Abstract

This study aims to analyze the application of the Break Even Point (BEP) method as a profit planning tool at PT. XYZ, a company engaged in the field of umrah and hajj travel services. PT. XYZ faces the problem of unstable umrah ticket sales, which affects employee welfare and the company's profit planning. So far, the profit planning strategy has only been based on previous period experience without a measurable quantitative approach. Therefore, this study seeks to provide a solution through the application of the BEP method to determine the break-even point of sales and identify strategies that can support the achievement of the company's desired profit. This study uses umrah ticket sales data from January to March 2024 as the basis for calculations and projections for April 2024. The analysis was carried out by identifying fixed costs, variable costs, and selling prices per unit of umrah tickets. In addition, BEP calculations were carried out both in sales units and in nominal rupiah. The results of the study show that PT. XYZ needs to sell 1,449 umrah tickets to reach the break-even point, with a nominal value of IDR 19,333,333,333. April's sales projection of 7,079 tickets shows significant profit potential, with total revenue estimated to reach Rp106,892,900,000. This shows that the implementation of the BEP method is very effective in helping companies determine minimum sales targets to remain stable and efficient. This study provides practical contributions to PT. XYZ in profit planning, cost management, and strategic decision making. In addition, the results of this study can be a reference for other companies facing similar challenges in the travel industry. Suggestions for further research are to design more effective marketing strategies, such as product diversification, price optimization, and more aggressive promotions, to maximize company profitability amidst increasingly fierce competition.

Keywords: Break Even Point, profit planning, umrah ticket sales, company strategy, operational efficiency.

Introduction

PT. XYZ, a company operating in the umrah and hajj travel services sector, is currently facing significant challenges due to unstable umrah ticket sales. This instability has created financial unpredictability, adversely impacting both profit planning and employee welfare. Historically, the company has relied on prior sales data and experience to forecast profits, without employing a measurable and systematic approach. As a result, there is an urgent need for a more strategic and quantitative method to enhance profitability and ensure business sustainability.

This study aims to address the issue of profit planning by applying the Break Even Point (BEP) method, a widely recognized tool used to determine the sales volume required to cover both fixed and variable costs. The BEP method will enable PT. XYZ to establish a more reliable profit planning framework and support its operational decision-making.

In an increasingly competitive market, it is essential for companies to develop strategies that not only minimize costs but also optimize pricing and sales volume. The objective of this research is to calculate the break-even point for PT. XYZ's umrah ticket sales, thereby providing a clear benchmark for the company to meet in order to avoid losses and achieve profitability. Additionally, the study seeks to provide valuable insights into how the BEP method can serve as a foundation for future business strategies, helping the company manage its financial operations more effectively.

The integration of the BEP approach into PT. XYZ's business strategy is expected to yield practical benefits, including improved financial stability, better cost management, and more accurate sales forecasting. Furthermore, this study serves as a guide for other companies in similar industries to apply BEP analysis as a tool for making informed and data-driven decisions, ultimately enhancing their competitiveness and profitability in the marketplace.

Methods

The methods should include a set of strategic planning from the beginning of a research that is intended as a guideline for researchers in the field, the process of conducting the research and the role of each researcher in the field, the devices or tools that are utilized in obtaining the data as well as their property status, whether they are being lent or owned by the researchers or a specific institution. In some cases, a detailed utilization of software, preferably that has institutional license must be included as well.

In the section, please explain clearly how to conduct your research in order to: (1) enable readers to evaluate the work performed and (2) permit others to replicate the research. The author must describe exactly what he/she did: what and how experiments were run, what, how much, how often, where, when, and why equipment and materials were used. The main consideration is to ensure that enough detail is provided to verify the findings and to enable the replication of the research.

Results and Discussions

1. Results

The results of this study are based on the sales data from PT. XYZ for the first quarter of 2024 (January to March), as well as the cost structure for April 2024. The data collected was used to perform various calculations, including determining the break-even point (BEP) in both unit sales and nominal value, along with projecting sales for April 2024. The sales figures for the first three months of 2024 are as follows:

Table 1. Sales Data for January to March 2024

Month	Umrah Seat Sales Volume for the 1445 H Season in Surabaya				
	12-Day Program	16-Day Program (Tuesday)	16-Day Program (Sunday)	Sales from External Agents	Total Sales
Jan	1967	1754	999	1647	6367
Feb	1419	1243	1039	3073	6774
Mar	1694	1400	1655	1751	6500
	5080	**4397**	**3639**	**6471**	**19641**

The total number of tickets sold over the three-month period amounts to 19,641 units. This data provides a basis for forecasting sales for April 2024. The cost structure, which includes both fixed and variable costs, is as follows:

Table 2. Cost Structure for April 2024

Number	Description	Total (IDR)
FIXED COSTS		
1	Staff salaries	300,000,000
2	Vehicle depreciation	250,000,000
3	Electricity and water	7,500,000
4	Building rent	20,000,000
5	Telephone expenses	1,500,000
6	Office email	200,000
7	Bank administration fees	200,000
Total Fixed Costs		**579,400,000**
VARIABLE COSTS		
1	Airport handling staff expenses	4,000,000
2	Shipping costs	3,500,000
3	Domestic and international ticket costs	7,200,000
Total Variable Costs		**14,700,000**
Total		**594,100,000**

The total costs for April 2024 amount to IDR 594,100,000, which includes both fixed and variable costs. Using a linear regression model, the projected sales for April 2024 are calculated based on the data from January to March 2024. The regression equation used to estimate the sales for April is:

Table 3. Working Paper on Sales Estimation for January–March 2024

Month	Seat Sales (Y)	X	X^2	XY
Jan	6367	-1	1	-6367
Feb	6774	0	0	0
Mat	6500	1	1	6500
	19641		**2**	**133**

The projected seat/ticket sales can be determined using the following equation:

Y = (a + b).x

Y = Dependent variable (Sales projection)

a = Fixed costs

b = Variable costs

x = Causal variable

The values of variables a and b are as follows:

$$a = \frac{\sum y}{n} = \frac{19.641}{3} = 6.547$$

$$b = \frac{\sum XY}{X^2} = \frac{133}{2} = 67$$

Based on the results obtained, the estimated seat/ticket sales can be calculated as follows:

Y = a + b.x
= 6.547+133 . 4
= 7.079 Tiket

Thus, the estimated seat/ticket sales for April amount to 7,079 tickets.

To address the identified issues, the problem-solving process is carried out through several stages, including:

a. Fixed Cost Identification

Fixed costs refer to expenses that remain unchanged regardless of the number of umrah tickets sold. At PT. XYZ, the fixed costs include:

- ✓ Staff salaries
- ✓ Vehicle depreciation
- ✓ Electricity and water expenses
- ✓ Building rental costs
- ✓ Telephone expenses
- ✓ Office Wi-Fi expenses
- ✓ Bank administrative fees

According to Table 2, PT. XYZ's total fixed costs for April 2024 amount to IDR 579,400,000.

b. Variable Cost Identification per Unit

Variable costs refer to expenses that fluctuate in accordance with the number of tickets sold. The variable costs incurred by PT. XYZ include:

- ✓ Airport handling staff costs
- ✓ Shipping and delivery expenses
- ✓ Domestic and international ticket costs

Based on Table 2, the total variable costs for April 2024 are IDR 14,700,000 per month.

c. Determining the Selling Price per Unit

The selling price per unit refers to the price at which umrah tickets are sold to customers. At PT. XYZ, the base selling price for an umrah ticket starts from IDR 15,100,000 per ticket.

d. Break Even Point (BEP) Calculation in Units

The Break Even Point (BEP) in units represents the minimum number of tickets that must be sold for the company to cover all fixed and variable costs without incurring losses. The formula used is:

$$BEP\ (units) = \frac{Fixed\ Costs}{Selling\ Price\ per\ Unit - Variable\ Costs\ per\ Unit}$$

$$BEP\ (units) = \frac{579.400.000}{15.100.000 - 14.700.000} = \frac{579.400.000}{400.000} = 1.449\ tickets$$

Thus, PT. XYZ must sell at least 1,449 umrah tickets to reach the break-even point in units.

e. Break Even Point (BEP) Calculation in Revenue (IDR)

The Break Even Point (BEP) in revenue represents the total income required for the company to achieve financial equilibrium, where total revenue equals total costs. The formula applied is.

$$BEP\ (revenue) = \frac{Fixed\ Costs}{1 - \frac{Variable\ Costs}{Sales\ Volume}}$$

$$BEP\ (revenue) = \frac{579.400.000}{1 - \frac{14.700.000}{15.100.000}} = \frac{579.400.000}{1 - 0{,}97} = \frac{579.400.000}{0{,}03} = 19.313.333.333$$

Thus, PT. XYZ needs to generate at least IDR 19,313,333,333 in total revenue to reach the break-even point.

2. Discussions

The discussion of this study primarily centers on the application of the Break Even Point (BEP) method to assess profit planning for PT. XYZ, a company engaged in the umrah and hajj travel services industry. PT. XYZ's challenge lies in the unstable sales of umrah tickets, which has created an imbalance in profit forecasting and employee welfare. This paper argues for the integration of the BEP approach to help the company navigate this instability and better plan for its profits.

From the analysis conducted, it is evident that PT. XYZ needs to focus on achieving a certain sales volume in order to cover both fixed and variable costs. Specifically, the company must sell 1,449 umrah tickets to reach its break-even point (BEP) in terms of units, and a nominal value of IDR 19,333,333,333. This suggests that achieving the break-even target is crucial for the stability of the company's operations.

However, the study also shows that PT. XYZ's projected sales for April 2024—7,079 tickets—surpasses the BEP threshold, indicating significant potential for profit generation. The estimated revenue of IDR 106,892,900,000 further highlights the financial benefit of using BEP analysis in business planning, as it offers a clear target for the company to aim for in terms of both sales volume and revenue generation.

The discussion should emphasize that, although the BEP method provides valuable insights into the minimum sales required for stability, the real potential for profit is unlocked when the company exceeds this threshold. In this case, the company could optimize its profit margins by adjusting its sales strategies to further improve its market position. For example, the introduction of aggressive marketing strategies, such as offering attractive packages or increasing promotional activities, could stimulate greater demand, thereby raising the company's overall sales performance.

Moreover, this paper underscores the importance of managing both fixed and variable costs efficiently. By keeping a close eye on these costs and adapting them to the fluctuations in ticket sales, PT. XYZ can ensure its financial health and operational sustainability. For instance, fixed costs such as staff salaries and rent need to be optimized for maximum cost-efficiency, while variable costs, especially those tied directly to ticket sales (e.g., transportation and staff handling at airports), should be managed in a way that aligns with the company's sales projections.

Additionally, it would be beneficial for PT. XYZ to incorporate other financial tools, such as Cost-Volume-Profit (CVP) analysis, which can help the company better understand how changes in costs and sales volumes affect its profitability. This would allow the company to anticipate financial outcomes more accurately and make informed decisions in response to market fluctuations.

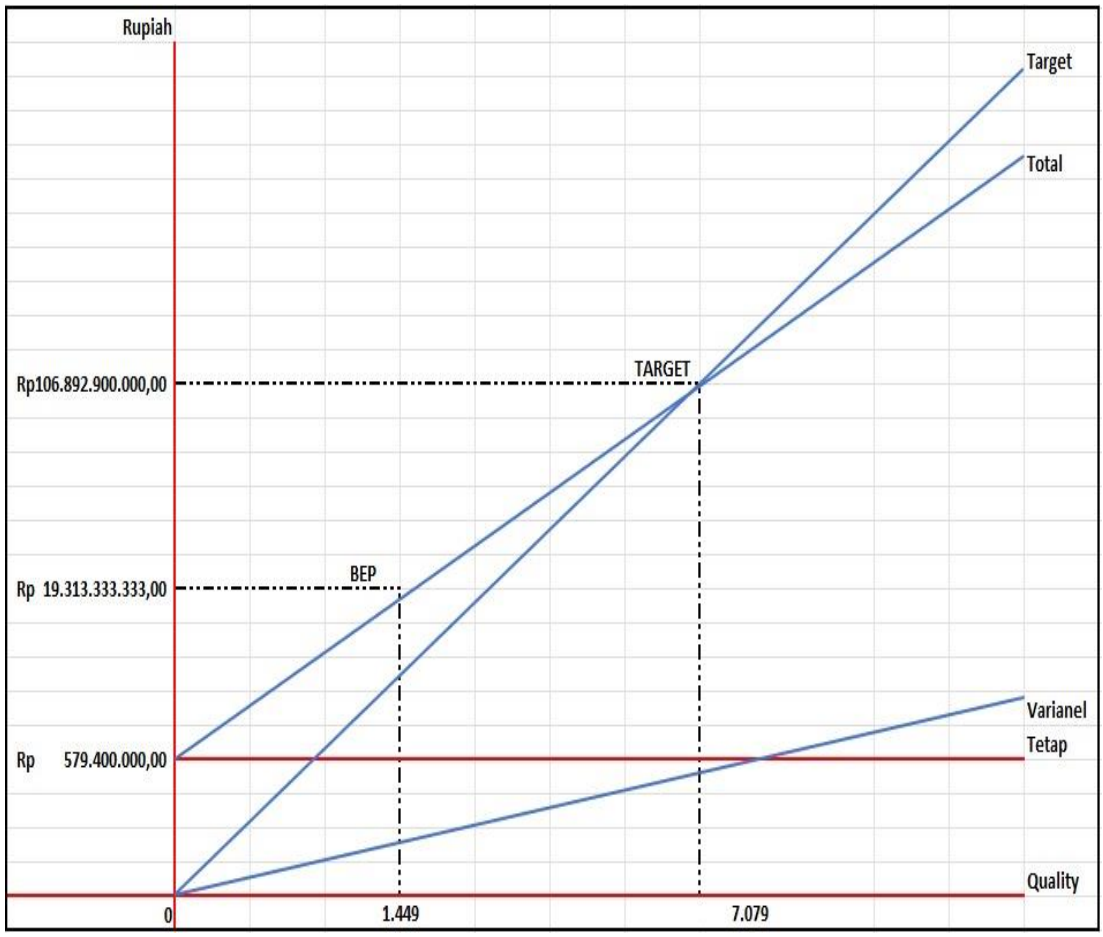

Figure 1. Kertas Kerja Atas Estimasi Penjualan Januari-Maret 2024

The study also highlights that BEP can serve as a fundamental tool in decision-making, particularly in terms of pricing strategies. Since the sales price per ticket is a critical factor in determining whether the company reaches its BEP, PT. XYZ could explore opportunities for pricing optimization. For instance, offering tiered pricing or early-bird discounts may increase the sales volume, further contributing to the company's profitability.

Looking forward, further research should focus on identifying specific marketing strategies that could help PT. XYZ increase its sales and achieve profitability above the BEP. This could include product diversification, promotional offers, strategic partnerships with other service providers, and enhanced digital marketing efforts targeting specific demographics. By refining these strategies, PT. XYZ can not only stabilize its sales but also improve its competitive advantage in a growing and dynamic market.

The findings from this study demonstrate that the Break Even Point method is a highly effective tool for PT. XYZ in managing its profitability and ensuring operational stability. The company's ability to meet or exceed its break-even target will be crucial in maintaining a strong financial position. Additionally, adopting complementary strategies such as improved marketing efforts and cost management will further enhance the potential for greater profitability.

Conclusion

Based on the discussion, the author concludes that the findings can provide valuable insights for the future development of the company. The company can utilize the Break Even Point (BEP) calculation method for strategic planning, particularly for sales and profit planning, where it can determine the desired profit margin. In calculating the Break Even Point (BEP), the company must first identify and categorize its costs into fixed costs and variable costs. This classification helps the company effectively use the BEP calculation for informed decision-making.

The sales volume required to reach the Break Even Point (BEP) in both units and nominal terms for the next period is 1,449 tickets (BEP in units) and IDR 19,333,333,333 (BEP in nominal terms). However, the estimated ticket sales target for April is 7,079 tickets. This implies that with the projected sales of 7,079 tickets, at a selling price of IDR 15,100,000 per ticket, the total revenue will amount to IDR 106,892,900,000. Therefore, the profit for April is expected to exceed the initially planned profit.

By reaching the Break Even Point (BEP), PT. XYZ can be considered to have achieved financial stability, indicating that the company is operating effectively and efficiently in terms of sales. As a result, the company is expected to see an increase in profit compared to previous sales figures.

For future researchers, it is recommended to continue exploring the design of marketing strategies aimed at optimizing profits and further enhancing the company's competitive advantage.

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