

FEASIBILITY STUDY ON OPENING A NEW BUSINESS BRANCH FOR SME VICTORIA PROPERTY FLOWER DECORATION

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Submitted: 27-09-2023, Revised: 27-10-2023, Accepted: 11-12-2023

ABSTRACT

Victoria Properti Decoration, an MSME that focuses on the business industry flower decoration operating in Pekanbaru City, Riau. After operation Approximately 3 years want to expand to the capital city, namely Jakarta. Of course Of course, expansion must involve many things that must be taken into account. First of all, you must also carry out market research first and must also consider the many alternative paths that are expected to be The best alternative for this MSME business to run in the future Capital City Jakarta. The aim of this research is to analyze all total costs arising from several alternatives procurement of products and selecting the lowest cost alternative from all alternative procurement routes goods.

1. Introduction

In the business industry, there are many costs that we have to take into account visible or invisible, so many problems will occur into account costs that are not visible when starting something business/enterprise, thus several problems will definitely occur, such as losses and not knowing where the money goes, especially to marketplaces that have commission fees that are automatically deducted) by the marketplace. Marketing costs such as advertising are mandatorily raised to increase turnover. So there is a great need for an analysis process that can also be used for the general public to know what costs are available effectively and efficiently so that efficient expenditure can be created for the business or general public businesses and in particular MSMEs Victoria Property flower decoration, where the analysis for this research, can be considered also things like what savings could be made for increasing maximum profits and further development processes.

2. Literature study

2.1. Feasibility Study

A critical tool in business and project management. It assesses the practicality, financial viability, and technical feasibility of a proposed bisnis. It also considers legal, social, and environmental factors, ensuring informed and strategic decision-making. Essentially, a well-conducted feasibility study is the cornerstone for project success and prudent investments [1][2].

2.2. Replacement Analysis

Replacement analysis guides efficient asset management by evaluating the cost-effectiveness of replacing aging assets versus maintaining them. It considers maintenance costs, asset conditions, and potential benefits that helping organizations make informed decisions aligned with their goals and budgets [3][4].

2.3. Market Forecasting

Market forecasting is a strategic compass for businesses. It analyses past data and trends to predict future demand and industry shifts, allowing companies to make informed decisions, allocate resources efficiently, and stay competitive. Accurate forecasting reduces risks, empowers adaptability, and guides businesses toward sustainable growth [5][6].

2.4. Operational Cost

Operational cost analysis is a cornerstone of financial efficiency for businesses. It involves a comprehensive examination of all expenses associated with running a company, helping identify areas for cost reduction and efficient resource allocation. By optimizing operational costs, businesses can enhance profitability, allocate resources effectively, and ensure long-term financial sustainability. Operational cost analysis is a strategic tool that empowers organizations to make informed financial decisions and maintain a competitive edge in the marketplace [7][8][9].

3. Research Methodology

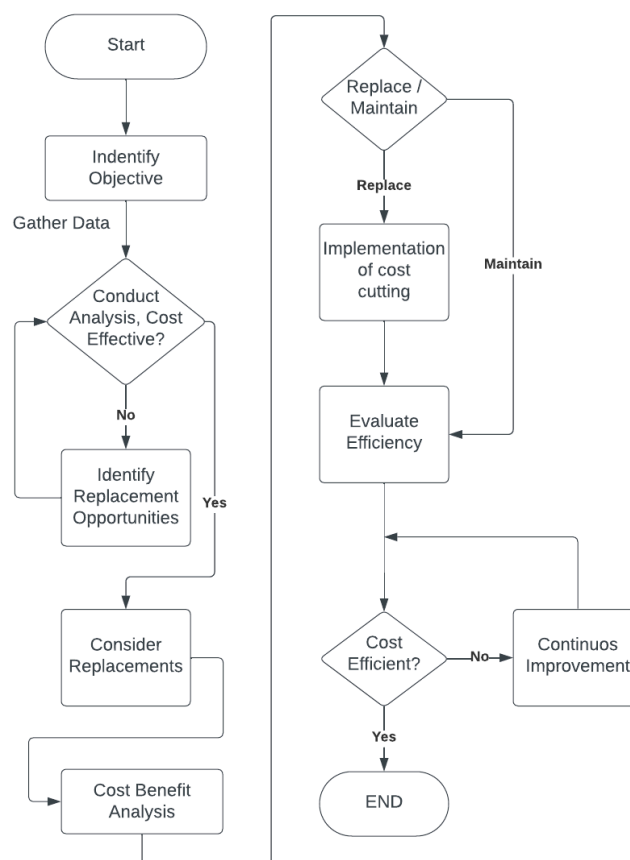


Figure 1 : Research Methodology

Explanation of research methodology flowchart from

3.1. Study of literature

A study of literature which comprehensive literature review of markets and markets where company branch will be opened. Understanding more background analysis more depth and the context of the relevant industry would assist in the implementation of business.

3.2. Analysis of Business and Strategy

Analysis of Business and Strategy (SWOT) analysis (Strengths, Weaknesses, Opportunities, Threats) for identify strengths, weaknesses, opportunities and threats might affect the success of the branch. In order to improve quality from internal and external factors, evaluation will also run more smoothly relevant [10].

3.3. Data Collection

Data Collection which collects cost data on costs that need to be incurred, such as collecting data on property prices and rental costs as an example main.

3.4. Financial Analysis

Financial Analysis which calculates projected costs and revenues. Use financial tools such as analysis of NPV (Net Present Value), IRR (Internal Rate of Return), and payback period to evaluate the financial benefits of the project and Break Even Point (BEP) [11][12].

3.5. Sensitivity Analysis

Sensitivity Analysis which performs a sensitivity analysis to identify how things change in variables such as costs or benefits can influence the results replacement [13].

3.6. Comparative Study

Comparative Studies, finally, compare the results of different replacement options, such as repair existing assets or replace them with new ones, for determine the best solution based on the analysis that has been carried out.

4. Data Calculation and Analysis

4.1. The swot analysis

The SWOT analysis for this flower decoration business shows in figure 2:

| Strenght | Weakness |
|-------------------------------|--------------------------|
| Growing Interior Decor Market | Competition |
| Year-Round Demand | Perceived Quality |
| Diverse Consumer Base | Environmental Concerns |
| Cost-Effective: | Supply Chain Risks |
| Low Maintenance | Initial Investment: |
| Opportunity | Threats |
| Online Presence | Market Saturation |
| Customization | Changing Trends |
| Collaborations | Economic Fluctuations |
| Eco-Friendly Options | Regulatory Compliance |
| Tourist Market | Supply Chain Disruptions |

Figure 2 of SWOT Analysis for Flower Decoration Business

4.2. Financial analysis and Forecasting

To forecast the demand, we took the couples that are married each year at Jakarta, Bogor, Depok, Tangerang Area. Next, error testing on 4 forecasting methods: SMA, DMA, SES and DES. The lowest error comes from DES with Alpha 0,9.

Table 1 . Forecasting Result

| Year | Married couples in Jabodetabek Area |
|------|-------------------------------------|
| 2012 | 462311 |
| 2013 | 441031 |
| 2014 | 422212 |
| 2015 | 403566 |
| 2016 | 362145 |
| 2017 | 380265 |
| 2018 | 405623 |
| 2019 | 405632 |
| 2020 | 369865 |
| 2021 | 342365 |

4.3. Financial Analysis and Forecasting

Error Testing Process using POM QM application on the desktop, based on the data that are taken from Indonesia's Central Bureau of Statistics. The error testing shows that the most compatible forecasting method for this data is Double Exponential Smoothing with Alpha 0.9 and Beta 0.1.

Table 2. Forecasting Error for each method.

| Error | SMA-2 | DMA-2 | SES | | | | | DES | | | | |
|---------------|------------|------------|------------|------------|------------|-----------|-----------|------------|------------|-----------|-----------|-----------|
| | | | 0,1 | 0,3 | 0,5 | 0,7 | 0,9 | 0,1 | 0,3 | 0,5 | 0,7 | 0,9 |
| ME | -18111,13 | -18111,13 | -51435,48 | -31094,38 | -21888,57 | -17252,49 | -14424,81 | -47271,79 | -23827,4 | -14091,45 | -9985,504 | -10261,11 |
| MAD | 29887,63 | 29887,63 | 51435,48 | 32326,11 | 28520,84 | 25610,31 | 24022,16 | 47271,79 | 28411,22 | 26346,52 | 25768,33 | 23930,07 |
| MSE | 1115101000 | 1115101000 | 3161004000 | 1470903000 | 1023723000 | 832757600 | 705494900 | 2701918000 | 1058874000 | 808651400 | 744949500 | 658446300 |
| MAPE (%) | 7,90% | 7,90% | 13,58% | 8,53% | 7,47% | 6,69% | 6,28% | 12,49% | 7,46% | 6,86% | 6,69% | 6,22% |
| Tracking Sigr | -4,848 | -4,848 | -9 | -8,657 | -6,907 | -6,063 | -5,404 | -9 | -7,548 | -4,814 | -3,488 | -3,859 |
| Next Periode | 356115 | 356115 | 416019,1 | 378356,2 | 363812,4 | 353620,3 | 345470 | 408082,3 | 365369,8 | 349650,2 | 340633,9 | 337533,2 |

4.4. Financial Analysis and Forecasting

Results of Forecasting with Double Exponential Smoothing with Alpha 0.9 and Beta 0.1 can be seen below.

Table 3.

| Year | Forecast of Married couples in Jabodetabek Area | Forecast Of WO/EO assuming 0.1% uses WO/EO | Forecast Market Share 10 % of WO/EO |
|------|---|--|-------------------------------------|
| 2023 | 331304 | 331,304 | 33,1304 |
| 2024 | 325792 | 325,792 | 32,5792 |
| 2025 | 320992 | 320,992 | 32,0992 |
| 2026 | 317792 | 317,792 | 31,7792 |
| 2027 | 313751 | 313,751 | 31,3751 |
| 2028 | 308827 | 308,827 | 30,8827 |
| 2029 | 304051 | 304,051 | 30,4051 |
| 2030 | 300726 | 300,726 | 30,0726 |
| 2031 | 298373 | 298,373 | 29,8373 |
| 2032 | 296125 | 296,125 | 29,6125 |
| 2033 | 294125 | 294,125 | 29,4125 |

4.5. Financial analysis and comparison

There are 2 key factor of running this new branch that have been analyzed :

4.5.1. Location of operation

Buying office space faces some major financial problems like huge capital needing to be taken out at the beginning just by making this purchase, alternative, getting a loan for this purchase will help further optimize the cost of opening. But getting a loan will be a challenge in itself, because of the strict banking policy of getting a loan. An example Credit Score and income, without a good credit score and reliability, it is hard to take this option. But since we're going to take a loan for a business expansion it is likely able to be approved.

Renting the place, with renting there are going to be 2 options there are going to be a place where it is fully furnished so we don't need to spend on furniture needed, and the one with no furnish where we need to have a bit more cost upfront but cheaper on the annual cost side. Which is going to make a lot of difference in the long run.

4.6. Financial analysis and comparison

There are 2 key factors of running this new branch that has been analysed. Supplier will just have an alias such as Supplier A and B. Supplier A is located in Vietnam where it is still new in the business and has a higher price, but cheaper freight cost and faster arrival time. Supplier B is located in China prices are cheaper, but the shipping cost is higher, and longer arrival time. Need to really forecast the inventory to avoid supply chain disturbance.

4.7. Financial analysis and Operational Cost analysis

Financial analysis on the 6 alternatives

| Alternative | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------|---------------|---------------|---------------|--------------|---------------|--------------|
| MARR | 15% | 15% | 15% | 15% | 15% | 15% |
| NPV | \$ 109.056,97 | \$ 164.614,85 | \$ 15.917,01 | \$ 71.237,25 | \$ 29.118,43 | \$ 84.438,67 |
| IRR | 30,07% | 40,37% | 18,29% | 31,10% | 20,95% | 33,92% |
| BEP | 1,250081579 | 0,970978377 | 0,922988615 | 0,716914801 | 0,856909228 | 0,665588826 |
| B/C Ratio | 2,95 | 3,56 | 2,18 | 2,91 | 2,33 | 3,08 |
| Payback Period | 2,165511 | 2,968093 | 3,647447 | 2,238249 | 3,125497 | 2,486347 |
| Capital Invested | \$ 132.704,69 | \$ 121.392,55 | \$ 100.858,97 | \$ 89.546,83 | \$ 100.978,68 | \$ 89.666,54 |

5. Conclusion

The Analysis Concluded that Alternative 2 is the best to be taken, even with a large capital invested it has a good amount of NPV compared to the other 5 alternative available. It also has the highest IRR than the other alternative. The Analysis study conclude that Buying a Property then taking orders of supplies from Supplier B is the most efficient way of cost and expenses, and so this conclude this feasibility and cost analysis study. The costs that are avoid due to this alternative is rent and overpriced supply

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