Analysis of the Utilization of Mandala Krida Stadium and GOR Among Rogo Assets

by Rifki Khoirudin

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[1*]Rifki Khoirudin, [2]Joao Muni

Email : [1*]rifki.khoirudin@ep.uad.ac.id, [2]munijoao@yahoo.com
Universitas Ahmad Dahlan, Indonesia[1]; Dili Institute of Technology, Timor Leste[2].
* *Corresponding Author*

Abstrak

This article provides a review of the literature on asset management for multi-unit systems with an emphasis on two multi-asset methods: Cost Benefit Analysis and SWOT Analysis. As asset systems have become more complex, researchers have used different terms to refer to their specific problem. With the aim of facilitating readers in finding studies conducive to their interest, this paper establishes a new classification scheme for multi-unit systems according to important features such as asset diversity and intervention options. In addition, looking at the characteristic differences between cross-component and cross-asset interactions, we select three types of potential multi-component dependencies (performance, stochastic and resource) and extend their ideas to be applicable to multi-asset systems. This comprehensive information allows us to offer insight into the latest trends in multi-asset maintenance. We hope that the output of this review paper will not only emphasize research gaps in multi-asset systems, but more importantly help to systematize future studies on this aspect.

Introduction

The importance of the role of BMD in supporting local government governance has made BMD management one of the success indicators of the 2017-2022 DIY Rencana Pembangunan Jangka Menengah Daerah (RPJMD) with indicators: optimizing local government assets by increasing the effectiveness of regional asset management through utilization and third party cooperation. For this matter, it is necessary to take strategic steps in the implementation of the management of Regional Property.

Regional Property Management (BMD) has a very important role in supporting the regional economy. Because if the BMD can generate income, it can increase regional income so that it will support the economy. So that the income generated can be maximized, it is

necessary to conduct research related to asset optimization. This means that the use of assets, in this case BMD, must be optimally utilized. One of them is from a financial perspective. It is undeniable, sometimes the demands are in the social field, so that the maximum size or not of the utilization is not measured by money alone, but the benefits for the community. These things can actually go hand in hand, so they don't cancel each other out. If the asset's main function is social, then even though the local government's income is decreasing, it can provide a stimulus for the community, so that in the end it can increase prosperity or welfare for the community.

Cost Benefit Analyst (CBA) is a method that performs a systematic approach to getting recommendations policies that allow analysis to compare and recommend a policy by calculating the total cost in the form of money and the total profit in the form of money (Kinanthi, et.al., 2017). As part of the valuation method, CBA is a measurement method that. This study aims to determine the value of the benefits of an activity from an overall point of view (Chaerul & Rahayu, 2019). CBA is a practical method to determine eligibility and attractiveness a project, namely: the project is feasible to build, with the purpose of the project is to provide benefits to the owner (owner), for the state and for the community (Marini & Rochmach, 2014).

The main contribution of this reasearch is a strategic step in optimizing and increasing the effectiveness of BMD management, a comprehensive research is needed on BMD that has been utilized and idle BMD belonging to the Yogyakarta Special Region Government, especially in strategic BMD. For this reason, research on the strategic use of the DIY Regional Government BMD which is located in the Mandala Krida Stadium area and the Among Rogo Sports Center is very necessary. Many companies are now realizing that one of the key to success in the competitive world of business highly dependent on the ability to obtain useful information quickly and precisely wrong one on the nominal investment (Miswanto, et.al., 2020). Therefore, this research intends to provides a review of the literature on asset management for multi-unit systems with an emphasis on two multi-asset methods: Cost Benefit Analysis and SWOT Analysis.

Literature Review

Cost-benefit analyses have been used in all aspects of government planning and budgeting, from programs that can be analyzed with a fairly high degree of accuracy, such as waterworks, to programs that involve a great degree of subjective data, such as military outlays. Critics of cost-benefit analysis argue that reducing all benefits to monetary terms is

impossible and that a quantitative economic standard is inappropriate to political decision making (Lawrence & Mears, 2004).

Cost benefit analysis (CBA) is a systematic method for quantifying and then comparing the total cost to the total expected rewards of undertaking a project or making an investment. If the benefits greatly outweigh the costs, the decision should go ahead; otherwise, it should probably not. CBAs, importantly, will also include the opportunity costs of missed or skipped projects (Fred, 2011).

One way to accomplish asset management by performing Highest and Best Use (HBU) test, which is defined as the analysis of empty land utilization or the improvement of a property, that is enabled physically, legally allowed, financially feasible and able to reach maximum productivity (Kevin & Utomo, 2017)

For strategies in the context of implementing the optimization, SWOT analysis can be used. The main contribution of this study is identifies what are the strengths, weaknesses, threats or opportunities of each asset. Each of these aspects is detailed so that it can be taken into account in determining the utilization of these assets. In asset optimization, there are various ways as an indicator that the asset has been used optimally or not. Among them is to compare the income or profit with the cost, which is called the cost benefit analysis (CBA). With the CBA method, the nominal income and costs are compared, if more than one number is found, it can be said that the income is greater than the cost. However, the income is greater than the cost, it is not yet possible to identify whether it is actually profitable or not. This can be completed by applying the Net Present Value (NPV) method. In the NPV method, the income from an asset is projected according to the existing market and its utilization over a period of stable period. Then the projected income is discounted with a certain level of risk, so that it becomes the present value. If the present value is greater than zero, then the asset is profitable. Therefore, this research intends to provides a review of the literature on asset management for multi-unit systems with an emphasis on two multi-asset methods: Cost Benefit Analysis and SWOT Analysis.

Research Method

In cost benefit analysis, input (cost) and output (program result) is quantified by value money. Thus, it will be easy to determine Is the result of a program (output) comparable? with the investment made (Rahmiyati, et.al., 2018). Data that collected consists of primary data, which contains data on costs which are classified as cost elements and elements of benefits (benefits), and data secondary data containing nominal obtained from the results of the study documentation (Nuryadi, et.al., 2014).

Table 1. SWOT Table

Strengths	Weaknesses
What is our competitive advantage?	Where can we improve?
What resources do we have?	What products are underperforming?
What products are performing well?	Where are we lacking resources?
Threats	Opportunities
What new regulations threaten operations?	What technology can we use to improve operations?
What do our competitors do well?	Can we expand our core operations?
What consumer trends threaten business?	What new market segments can we explore?

Source : Rangkuti, 2011.

Result and Discussion

In this analysis there is a discussion of comparative analysis of income and costs, which then the next step is to find the Net Present Value (NPV) and Internal Rate Return (IRR). To find the NPV or IRR, it is necessary to measure the level of risk that is in accordance with the characteristics of the asset's operations. The assets for which the cost and benefit analysis is carried out in this chapter consist of seven (9) assets located in the Kaliurang tourist area, the Among Rogo Sports Center (GOR), and the Mandala Krida stadium. The following of table 2 is a detailed calculation of the level of risk and cost and benefit analysis of each asset. The assumptions used in calculating the discount rate are as follows:

Table 2. Discount Rate

Calculation Discount Rate			
Description		Number	Source
Cost of Debt	=	10,07%	Bank Indonesia
Risk Free	=	8,78%	www.investing.com per 18 juli 2018 Bond Tenor 30 T
Beta	=	1,06	Aswath Damoradan (2018)
Risk Premium Market	=	7,62%	Aswath Damoradan (2018)
Risk Based Default Spread	=	2,26%	Aswath Damoradan (2018)
Equity Ratio	=	100%	
Cost of equity	=	Risk Free + (Beta x Risk Premium Market)	
	=	14,48%	
Discount Rate	=	Risk Free + (Beta x Risk Premium Market)	
	=	14,48%	

Taking into account the above factors and the strengths/advantages and risks faced, we believe that the discount rate used is 14.48%.

Cost and Benefit Analysis for GOR Among Rogo Yogyakarta:

Table 3. Cost and Benefit GOR Among Rogo in Rp

Year	2015	2016	2017	2018
Gross Income	**511.550.000**	**765.250.000**	**693.850.000**	**930.940.000**
Operational Cost				
Telephone	5.454.041	5.741.096	6.043.259	6.361.325
Electricity	228.463.710	240.488.116	253.145.385	266.468.827
Cleanliness	934.511.263	983.696.067	1.035.469.544	1.089.967.941
Security	368.216.134	387.595.930	407.995.716	429.469.175
Building Maintenance	176.102.000	200.000.000	223.673.950	310.705.000
Clean Water Installation	2.525.019	2.657.915	2.797.805	2.945.058
Electrical installation	2.020.015	2.126.332	2.238.244	2.356.046
Wastewater Installation	2.499.769	2.631.335	2.769.827	2.915.607
Phone Installation	2.020.015	2.126.332	2.238.244	2.356.046
Computer Network Installation	2.499.769	2.631.335	2.769.827	2.915.607
Heavy Equipment Maintenance	5.050.038	5.315.829	5.595.610	5.890.116
Total	**1.536.645.148**	**1.617.521.208**	**1.944.737.410**	**2.122.350.747**
Net Income	-1.025.095.148	-852.271.208	-1.250.887.410	-1.191.410.747
Growth		-16,9%	46,8%	-4,8%
Terminal Value				-11.940.113.459
Cash Flow				-13.131.524.206
Discount Factor				0,8735
NPV				-11.470.871.198

From the table 3 above, it can be seen that the ratio between income and costs is greater than the cost, causing negative net income or income or in other words experiencing financial losses. Because the net income generated is negative, the Net Present Value (NPV) will also be negative, so there is no need to prove it through IRR. Thus, it can be concluded that GOR Among Rogo's assets are not profitable for their current use from a financial point of view.

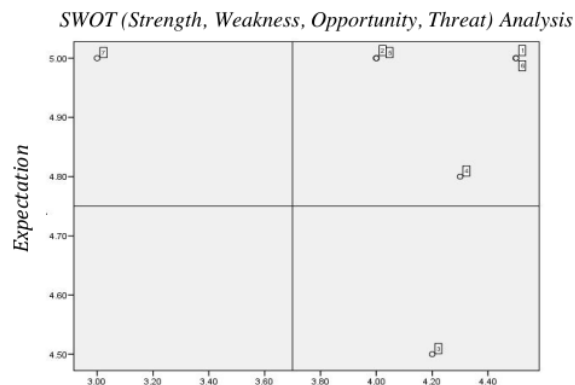*SWOT (Strength, Weakness, Opportunity, Threat) Analysis*

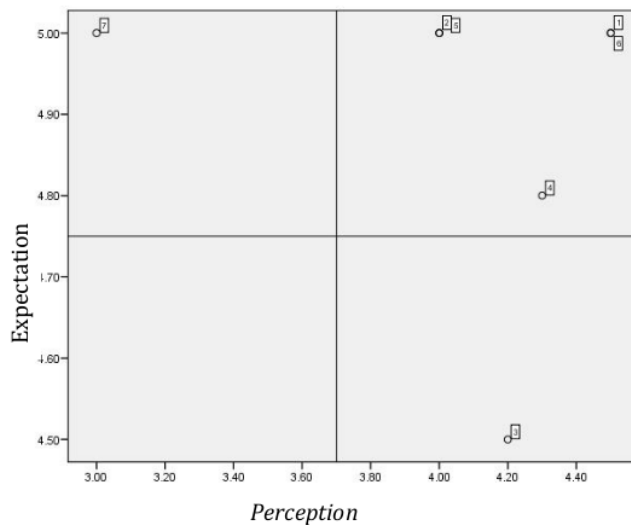Image. 1. Picture Analysis of the Cartesian Quadrant Gor Among Rogo

Image 1 analysis shows the need to improve performance for the attributes of the cooperation system. The management system attributes included in quadrant D are meant for excessive performance but are not yet required by the market. Meanwhile, for other attributes, achievement performance is obtained, further strengthening and development is needed.

Table 4. Cost and Benefit GOR Mandala Krida Stadium in million Rp

Year	2015	2016	2017	2018
Gross Income	**188.185.000**	**203.700**	**267**	**320**
Operational Cost				
Telephone	776.066.699	816.912.315	859.907.700	905.166.000
Electricity	32.508.571.735	34.219.549.195	36.020.578.100	37.916.398.000
Cleanliness	132.973.531.777	139.972.138.713	147.339.093.382	155.093.782.507
Security	52.394.231.776	55.151.822.922	58.054.550.444	61.110.053.099
Building Maintenance	75	84	7	45
Clean Water Installation	359.290.138	378.200	398.105.416	419.058.333
Electrical installation	287.432.110	302.560.116	318.484.333	335.246.666
Wastewater Installation	355.697.237	374.418.144	394.124.362	414.867.750
Phone Installation	287.432.110	302.560.116	318.484.333	335.246.666
Computer Network Installation	355.697.237	374.418.144	394.124.362	414.867.750
Heavy Equipment Maintenance	718.580.277	756.400.291	796.210.833	838.116.666
Total	**218.652.401.988**	**230.160.423.145**	**244.893.663.275**	**257.782.803.486**
Net Income	-218.652.401	-230.160.422.941	-244.893.663.007	-257.782.803.165
Growth		5,3%	6,4%	5,3%
Terminal Value				-2.583.454.887.538
Cash Flow				-2.841.237.690.703
Discount Factor				0,8735
PV				-2.481.926.018.828
NPV				**-2.481.926.018.828**

From table 4 above, it can be seen that the ratio between income and costs is greater than the cost, causing negative net income or income or in other words experiencing financial losses. Because the net income generated is negative, the Net Present Value (NPV) will also be negative, so there is no need to prove it through IRR. Thus, it can be concluded

that the assets of the Mandala Krida Stadium are not profitable for their current use from a financial point of view.

Table 5. SWOT Weighting Analysis for Mandala Krida Stadium

No	Attribute	X (Perception)	Y (Expectation)
1	Physical condition of the building	4,5	5
2	Environmental characteristics	4	5
3	Management system	4,2	4,5
4	Financial management	4,3	4,8
5	Marketing system	4	5
6	Utilization value	4,5	5
7	Cooperation system	3	5

In the quadrant values of image 2, the following analysis is obtained:

Image. 2. Picture Analysis of the Cartesian Quadrant Mandala Krida Stadium

The above analysis shows the need to improve performance for the attributes of the Cooperation System. The management system attributes included in quadrant D are meant for excessive performance but are not yet required by the market. Meanwhile, for other attributes, achievement performance is obtained, so further strengthening and development is needed.

Conclusion

After conducting various analyzes through Cost and Benefit analysis, SWOT analysis and potential analysis, the forms of utilization of the analysis are the use of the Among Raga GOR is in accordance with the City Planning Regulations, and its ideal designation is as a sports facility. In order to increase benefits and increase professionalism in management, the consultant recommends that management be carried out through the Public Service Agency. Management through BLU is more flexible in management, efficiency, and optimization of productivity but also prioritizes service to the community.

The utilization of the Mandala Krida Stadium is in accordance with the City Planning Regulations, and its ideal designation is as a sports facility. In order to increase benefits and increase professionalism in management, the consultant recommends that management be carried out through the Public Service Agency. Management through BLU is more flexible in terms of management, efficiency, and optimization of productivity but also prioritizes service to the community.

From a financial perspective, based on CBA and NPV calculations, it shows that the Mandala Krida Stadium and the Among Rogo GOR have suffered losses. However, this does not necessarily mean that these assets are not optimal. In practice, these two assets can be utilized by the community for free or at a lower rate than it should be. So, the two assets are not fully financially productive because there is an element of being a public good even though it is not completely free. This is indeed a dilemma in its management. On the other hand, it will be a polemic in the community if in its use it must increase the tariff. In this regard, the local government must also bear the operational costs. However, the use or access to these two assets from the community at a low cost or even free of charge can increase achievement in the field of sports. This should also be considered by the local government. It may be necessary to increase tariffs so that operational costs do not swell, but by taking into account the capabilities of the community, so as not to hinder the development of interests and talents in the field of sports and their coaching. Moreover, with the predicate of Yogyakarta province as a student city, this can support or legitimize the icon.

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