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Commercialization and Business Feasibility of Campus Assets: Transforming Dormitories to Improve Financial Performance

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ABSTRACT

The current era of globalization requires universities to formulate strategies to optimize campus assets to make them more productive and contribute to the institution. The research focused on one of the real assets at University of Jambi University, namely student dormitories. The research analyzed how to optimize dormitories to benefit students and the university. Problems faced by flat assets included limited land for maintenance, inadequate infrastructure, and high maintenance costs. Another challenge was the lack of supporting facilities, such as adequate reading rooms, laboratories, and sports venues. The research applied a mixed method (qualitative and quantitative approach). Qualitative analysis was carried out to evaluate business potential and identify opportunities for commercialization of dormitories through a survey of students living around campus. The data obtained was then analyzed using the Strengths, Weaknesses, Opportunities, Threats (SWOT) method to determine the strategic position of the dormitories. Meanwhile, quantitative data was obtained through observation and interviews, which were then analyzed using the investment criteria of Net Present Value (NPV) and Internal Rate of Return (IRR). The findings in SWOT show several suggestions for dormitory management at University of Jambi. Moreover, the results show that the NPV value of this 5-year flat project is estimated at IDR 571,256,867 with an IRR of 38.08%. It indicates that this project is feasible to implement. With the right strategy, the dormitories will not only be a place to live but also a place that supports students' academic and social growth.

Keywords: commercialization, business feasibility, campus assets, dormitories, financial performance

INTRODUCTION

Commercialization and business feasibility analysis are two important aspects in an effort to encourage the optimization of campus tangible assets. In the era of globalization like today, universities are required to have a strategy that is able to make their campus assets more productive and make a meaningful contribution to the institution. Amid increasing competition, universities like the University of Jambi must adopt strategies to make their campus assets more productive. One of the main challenges is related to the limited funds for the maintenance and development of physical infrastructure. In addition, continuing to adjust and follow changes in government policies related to education budget allocation makes the university more efficient in managing and optimizing assets. Commercialization is concerned with the strategy of managing and utilizing campus assets to achieve business goals. In contrast, business feasibility analysis is used to measure the potential success and profitability of a planned project (Xiao & Tao, 2021).

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In the context of commercialization management, universities need to consider various factors, including the identification of assets that can be commercialized, the right business model, and the risks and impacts on the institution (Tweheyo et al., 2022). The preparation of the right strategy will help universities in optimizing the use of campus assets to support the financial sustainability of the institution (Dodescu et al., 2021). In addition, business feasibility analysis is also very important in evaluating the potential success of the commercialization project so that the decisions taken can be more measurable and profitable (Wang & Dong, 2019).

By implementing good commercialization management and conducting a careful business feasibility analysis, universities can make optimal use of their campus tangible assets to support institutional sustainability (Gu, 2023). Thus, universities can increase their non-academic income, improve the quality of facilities and services, and have a positive impact on all campus stakeholders (Utama & Syarif, 2023). Therefore, research and implementation of best practices in commercialization management and business feasibility analysis need to be continuously developed so that campus assets can become valuable and sustainable resources (Hakim et al., 2020).

One of the tangible assets of the University of Jambi is the student dormitories. The dormitories have great potential to increase its value and optimize the use of campus assets (Daliri Dizaj & Hatami Khanghahi, 2022). The dormitory buildings owned by the university are the most important facility in supporting academic and non-academic activities in the campus environment (Sun et al., 2023). With proper management and mature business feasibility analysis, the dormitories have the potential to be optimally utilized in attracting investments and funding that support the financial performance and development of campus infrastructure (Utama, 2023).

Universities can identify opportunities and challenges in optimizing the use of campus assets (Cho et al., 2019). By utilizing the right business model, the dormitories in University of Jambi can be managed properly and make a significant contribution to the development of campus infrastructure and increase the university's income (Zhao & Cui, 2022). Optimizing tangible campus assets such as the dormitories also has a positive impact in improving the quality of services and facilities for students, lecturers, and the general public who use these facilities (Khan et al., 2024). By making the most of the potential assets, the university can create a comfortable learning environment and encourage economic growth around the campus (Attlee et al., 2022).

Based on the initial survey, the problems faced by the dormitories at the University of Jambi include limited land maintenance, inadequate infrastructure, and high maintenance costs. Another problem is the lack of supporting facilities such as reading rooms, laboratories, and adequate sports venues. In addition, management is also the main obstacle in improving the condition of the dormitories at the University of Jambi. Then, the lack of hygiene and safety factors of facilities causes environmental problems that are often overlooked. The lack of regular maintenance also makes the condition of the dormitory buildings worse. This situation can affect the comfort and safety of its residents, as well as reduce the asset value (Wu et al., 2021). With the challenges and problems faced, it is necessary to take comprehensive improvement steps to maintain and improve the quality of the dormitories at the University of Jambi.

The dormitories are one of the solutions that is expected to meet the housing needs of students in the campus environment (Wong & Jie, 2022). The University of Jambi, as a higher education institution, has the responsibility to provide facilities that support the comfort and sustainability of the teaching and learning process (Jameel & Agiel, 2023). In the world of business and investment, making the right decisions is essential to achieving success (Aditama & Rofiudin, 2020). One aspect that is often the main focus is the analysis of investment feasibility (Agbloyor et al., 2021). The need for affordable and comfortable housing becomes more urgent with the increasing number of students. In addition, a dormitory can also be a source of income for the university if managed properly (Au-Yong et al., 2023). In this context, it is important to conduct an in-depth analysis of the market's potential, marketing strategies, and realistic financial projections (Kotler & Keller, 2021). The research provides a clear picture of how dormitory assets can be optimally utilized to provide benefits for students and the university.

In recent years, many universities in Indonesia have tried to commercialize their assets to increase revenue and support institutional development. In the process, challenges arise that hinder the success of these efforts. Some factors that cause the failure of asset commercialization efforts on several campuses include a lack of expertise in business management, a lack of strategic partnerships with industry, and a lack of understanding of market needs. However, there are also the successes of several universities that can commercialize their assets well, such as the development of innovative technology or the provision of quality training services (Naibaho, 2019).

Based on the description, the research problem is formulated: What is the business potential and identification of commercialization opportunities for dormitories at Jambi University? What is the right strategy to commercialize dormitories? What is the business feasibility and financial projection of the dormitory business plan? The existence of dormitories is one important aspect that is often overlooked in business planning. Therefore, it is important to analyze the business potential and commercialization opportunities for dormitories at University of Jambi.

METHODS

The research methods are qualitative and quantitative approaches (Åkerblad et al., 2021). Qualitative and quantitative methods complement each other in the research. The qualitative method helps in understanding the respondents' views, preferences, and attitudes regarding dormitory assets. It is done through in-depth interviews, focus group discussions, or observations. On the other hand, the quantitative method provides more measurable data on financial projections related to the commercialization of dormitory assets. By combining these two methods, researchers can gain a comprehensive understanding of the potential commercialization of dormitory assets and their business feasibility. The combination of qualitative and quantitative methods can strengthen the validity and reliability of research findings.

Qualitative analysis is carried out to analyze the business potential and identify opportunities for the commercialization of dormitory assets through a survey method of students living around the campus to identify their preferences and needs (Moleong, 2021). This survey involves 100 respondents. In addition, secondary data are taken from the Sub State Property and Sub Households of the University of Jambi. Then, the commercialization strategy is carried out through interviews with dormitory managers and related parties at the University of Jambi to gain insight into the challenges and opportunities in dormitory management. The analysis uses the Strengths, Weaknesses, Opportunities, Threats (SWOT) method to identify the strategic position of the dormitory (Puyt et al., 2023). With this approach, a comprehensive picture of business feasibility and appropriate commercialization strategies for the dormitories at University of Jambi can be obtained.

Furthermore, quantitative data are obtained through observation and interviews analyzed using Net Present Value (NPV) and Internal Rate of Return (IRR) investment criteria (Subramanian & Taghizadeh-Hesary, 2021). NPV is a method used to calculate the present value of the expected future cash flow of an investment minus the initial cost of that investment (Subramanian & Taghizadeh-Hesary, 2021). NPV can be expressed by Equation (1). It has PV as present value, F as future payment (cash flow), i as discount rate (or interest rate), and n as the number of periods in the future the cash flow. If the NPV is positive, the investment is considered profitable.

$$\text{NPV} = \text{F}/[(1+\text{i})\text{\^{}n}] \quad (1)$$

IRR is the discount rate that makes NPV equal to zero (WallStreetMojo Team, 2015). IRR can be thought as the expected rate of return on an investment. The higher the IRR value is, the more attractive the investment will be (Huang, 2023). IRR can be calculated by finding a value (r) that satisfies Equation (2). It has C_T as net cash inflow over period t, C_0 as total initial investment cost, R as IRR, and T as number of time periods.

$$IRR = NPV = \Sigma \frac{C_t}{(1 + IRR)^t} - C_0 = 0 \quad (2)$$

Several stages of integration of qualitative and quantitative data are carried out. First, in the identification of key variables, researchers determine variables from qualitative data that can be used as input in quantitative investment analysis, such as preferences of prospective tenants or market trends. Second, the researchers convert qualitative to quantitative data by changing qualitative findings into metrics or quantitative variables that are entered into the investment analysis model. Last, there is joint analysis, combining qualitative and quantitative data in investment analysis to gain a thorough understanding of the business feasibility of dormitory assets. By integrating qualitative data from surveys and interviews with quantitative investment analysis, companies or researchers can make more informative and comprehensive investment decisions regarding the commercialization of dormitory assets and analysis of business feasibility.

RESULTS AND DISCUSSION

The results show a great potential to develop the dormitories in University of Jambi as student housing. In the context of the development of higher education in Indonesia, decent housing for students is an important factor affecting the quality of their learning and life. From the survey conducted, 70% of respondents state that they prefer to live in a dormitories if the facilities provided are adequate and the rent price is affordable. The result shows that students pay great attention to the aspects of comfort and accessibility in choosing a place to live. Adequate facilities include fast Internet access, comfortable study rooms, and sports and recreational facilities. According to the findings, students who live in a supportive environment, such as a dormitory with complete facilities, tend to have better academic achievement. In addition, the main strength of the dormitories is a strategic location and a conducive environment for learning. The University of Jambi is located not far from Jambi City, which makes it easy for students to access various public facilities such as libraries, shopping centers, and public transportation. As such, this location is very advantageous for students who want to maximize their study time.

The SWOT analysis for the dormitory asset commercialization strategy is as follows. In strengths, dormitories are in strategic location on campus or lecture center. Then, there is the possibility of investment funds from partners, governments, or financial institutions. Furthermore, existing dormitory facilities can be modified according to commercialization needs. Lastly, there is a management team led by the university's business management agency.

For weaknesses, transformation costs may be large to convert a dormitory into a commercial asset. There is also no previous experience in the commercialization of campus asset business. Then, there is the possibility of rejection or differences in perception from those who have used the dormitories previously.

In the opportunities, there is a growing commercial property market around campus. There is also the potential for partnerships with private companies or educational institutions for joint management. Furthermore, students' demand for housing near campus is high.

For threats, it has competition with other existing commercial properties around campus. Then, property market fluctuations can affect the financial performance of assets. Additionally, government regulations or laws hinder the transformation of dormitories into commercial assets.

The right steps in the commercialization strategy and business feasibility of this campus asset are as follows by taking into account the SWOT analysis. First, there is a need to improve the facilities offered, such as the provision of fast internet access, shared study rooms, and sports facilities. Second, using social media and cooperation with student organizations can be a strategic step to increase the visibility of the dormitories. Third, the university can consider comprehensive market studies and negotiations with related parties to mitigate weaknesses and look for profitable partnership opportunities. Fourth, managers also need to conduct periodic evaluations of the facilities provided and listen to input from residents. Managers can better understand their needs and expectations by involving residents in the decision-making process. It not only increases residents' satisfaction but also creates a stronger sense of belonging towards the dormitories.

Through those approaches, it is hoped that dormitory occupancy can increase sustainably. It is important to pay attention to the sustainability aspect in the development of the dormitories. With the increasing awareness of environmental issues, students now prefer environmentally friendly housing. Hence, managers can consider implementing environmentally friendly practices, such as good waste management, use of renewable energy, and efficient building design. It not only can attract the attention of students who care about the environment but also reduce operational costs in the long run.

Then, the researchers have the calculation of NPV and IRR from the rent of the dormitories, with a total of 105 rooms. The following information is obtained: renovation cost of IDR 800,000,000, annual operating cost of IDR 300,000,000, rent per room per month of IDR 600,000, occupancy rate of 90%, Rent period of 5 years, and discount rate of 12%. The discount rate is the interest rate used in Discounted Cash Flow (DCF) analysis to assess the present value of future cash flows. Assuming a discount rate of 12% indicates the expected rate of return on an investment or project. In this context, the higher the discount rate is, the greater the present value of the expected future cash flows are. In the current circumstances, a discount rate of 12% can be considered a decent rate of return based on the risks associated with the investment or project. However, it should be kept in mind that the discount rate can vary depending on various factors, such as market risk, monetary policy, and economic uncertainty.

Revenue Calculation starts with counting the number of rooms filled. With 105 rooms and a 90% occupancy rate, the number of rooms filled is 94.5 (105 rooms × 0.9). Then, rent income per year is calculated as shown in Equation (3). Meanwhile, with the rent data, the annual net cash flow is calculated in Equation (4).

$$\begin{aligned} \textit{Rent/year} &= \textit{filled room} \times \textit{room rent/month} \times 12 \textit{ months} \\ &= 94.5 \times 600{,}000 \times 12 \\ &= 680{,}400{,}000 \end{aligned} \tag{3}$$

$$\begin{aligned} \textit{Annual net cash flow} &= \textit{rent income/year} - \textit{operating expenses} \\ &= 680{,}400{,}000 - 300{,}000{,}000 \\ &= 380{,}400{,}000 \end{aligned} \tag{4}$$

Furthermore, the NPV for 5 years is calculated in Equation (5). The 5-year NPV has a positive value, which is IDR 571,256,867. The positive NPV shows that the investment in the renovation of the dormitories is feasible and can provide profits. With an NPV of IDR 571,256,867, this project shows good potential returns for investors.

$$\begin{aligned} NPV &= (380{,}400{,}000/\ (1+0.12)\ \text{^}t\} - 800{,}000{,}000 \\ &= (380{,}400{,}000/1.12\text{^}1) + (380{,}400{,}000/1.12\text{^}2) \\ &\quad + (380{,}400{,}000/1.12\text{^}3) + (380{,}400{,}000/1.12\text{^}4) \\ &\quad + (380{,}400{,}000/\ 1.12\text{^}5) - 800{,}000{,}000 \\ &= (380{,}400{,}000/1.12) + (380{,}400{,}000/1.25) + \\ &\quad (380{,}400{,}000/1.40) + (380{,}400{,}000/1.57) + \\ &\quad (380{,}400{,}000/1.76) - 800{,}000{,}000 \\ &= (339{,}642{,}857 + 303{,}252{,}551 + 270{,}761{,}206 + \\ &\quad 241{,}751{,}077 + 215{,}849{,}176) - 800{,}000{,}000 \\ &= 1{,}371{,}256{,}867 - 800{,}000{,}000 \\ &= 571{,}256{,}867 \end{aligned} \tag{5}$$

The IRR calculation shows that NPV is 0. With several estimates so that IRR = NPV = 0 (see Equation (6)), the figure obtained is 38.08 %. With an IRR of 38.08%, the rate of return on investment is higher than the discount rate used, which is 12%. It means that the project is not only profitable but also more attractive than other investments with the same risks.

$$\begin{aligned} IRR &= NPV = 0 \\ &= ((380{,}400{,}000/(1+IRR)^1)) - 800{,}000{,}000) \\ &\quad + ((380{,}400{,}000/(1+IRR)2)) - 800{,}000{,}000) \\ &\quad + \ ((380{,}400{,}000/(1+IRR)3)) - 800{,}000{,}000) \end{aligned}$$

$$+ ((380,400,000/(1+IRR)4)) - 800,000,000)$$
$$+ ((380,400,000/(1+IRR)5)) - 800,000,000) = 0 \quad (6)$$

The research is in line with the research conducted by Mubarak et al. (2023), studying Islamic universities in Indonesia that face challenges in maintaining operations and improving service quality. The previous research also conducts a feasibility analysis based on NPV, with a positive NVP value and argues that sharia dormitory business units can contribute to the sustainability of Islamic state universities by generating additional revenue. Then, it is also in line with previous research conducted by Susilowati et al. (2018), examining the potential development of student dormitories at Budi Luhur University, with positive NPV research results and an IRR of 21%.

In addition to these projections, several potential risks are associated with investing in dormitories, namely fluctuations in student demand. If the number of students who need accommodation in dormitories fluctuates significantly, it can have an impact on the level of occupancy and income. Then, the changes in operational costs, like an increase in operational costs of electricity, water, and building maintenance, can affect the profitability of investment in the dormitories. Furthermore, changes in government regulations or policies related to student residence can also be an investment risk that needs to be considered. Then, competition from other dormitories or alternative housing for students can also affect the occupancy rate and profitability of the dormitories. Additionally, security risks such as theft or property damage also need to be considered in dormitory investment.

Finally, collaboration between the parties of universities, governments, and the private sector is very important to achieve the goal of developing a better dormitory. By working together, the three parties can create an ecosystem that supports the development of quality student housing. Through this synergy, the dormitories at the University of Jambi can become the main choice for students and contribute to improving the quality of education in Indonesia. With the right measures, the dormitories will not only be a place to live but also a community that supports students' academic and social growth.

CONCLUSIONS

From the research findings, it can be concluded that the dormitories of the University of Jambi has great potential to be commercialized. With the right management and marketing strategy, the dormitories not only can meet the needs of students for housing, but also become a source of income for the university. Furthermore, the University of Jambi should immediately repair dormitory facilities and implement a more aggressive marketing strategy. In addition, it is important to conduct regular evaluations of the dormitory's performance and listen to feedback from residents to improve the services provided continuously.

Based on the NPV and IRR calculations, the investment in renting a campus dormitory with a total of 105 rooms is feasible. The NPV for 5 years of this dormitory project is estimated to reach IDR 571,256,867 with an IRR of 38.08%. The number shows that this project is feasible to implement.

There are several suggestions for future research on the potential policy implications of the commercialization of campus dormitory assets at the University of Jambi. First, the future research can be conducted to analyze the potential income generated from the commercialization of dormitory assets. It includes determining the costs involved in managing, renovating, maintaining the asset, and identifying possible sources of income from renting dormitory space. Second, future research can be conducted to evaluate the business feasibility of the commercialization of dormitory assets, such as market analysis to determine the demand for dormitory space rentals and competitive studies to see how competitors in similar industries operate. Third, the future research can examine the policy implications of the commercialization of the dormitory assets, including necessary changes in university regulations or government policies related to the management of these assets. Fourth, future research can also involve analyzing the social and environmental impacts of commercialization. Last, future research can focus on evaluating the user experience of the commercialization of dormitory assets. It includes a research of student satisfaction living in a dormitory that has been commercialized, as well as input from other related parties such as asset managers, academic staff, and the surrounding community. Conducting in-depth research can provide valuable insights for decision-makers in managing these assets effectively and sustainably.

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