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Challenges in Managing University Land Use to Generate Income: A review

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Abstract

Public universities have recently struggled to maintain operating costs due to a budget reduction from Federal Government. Thus, universities must diversify their revenue streams by utilizing the land as one of their valuable assets. However, since the university is not a for-profit institution, it is difficult for them to generate income from land use. This study examines the challenges that universities encounter when managing the usage of their land for the purpose of generating income. The challenges are determined using content analysis of secondary data and the result of this study has identified the four main challenges.

Keywords: University Land, Income Generation, Managing University Land Use

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1.0 Introduction

Public universities worldwide are experiencing financial difficulties managing their operations (World Bank, 2015). One of the reasons behind this is the reduction of budget allocation by the higher government (McLaren & Struwig 2019). Consequently, public universities worldwide are urged to evolve their revenue sources because depending on government funding is no longer reliable to ensure their financial sustainability. According to Garland (2019), universities have traditionally received financial resources from government grants and student fees. However, universities today need to generate additional revenue from sources other than those traditional ones. As a result, universities have implemented various initiatives to diversify their revenue streams (Koryakina, 2018), such as income from donations, services given by the university, intellectual assets, leasing and rental of assets, and investments (Hatakenaka, 2006; Rozmus & Cyran, 2012; Garland, 2019; Chinmay & Ashwin, 2019). In Malaysia, according to the "University Transformation Programme Purple Book" (Minister of Higher Education Malaysia, 2016), the Minister of Higher Education Malaysia (MOHE) has suggested seven initiatives for the university to generate income. One of the initiatives is the monetization of the asset. Therefore assets that can generate university income are land use, rental equipment, consulting services, research product, etc (MOHE, 2016). However, this study only focuses on land, as an asset for university to generate income. This is because university is typically located in urban areas with lots of options for

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income generation. Consequently, there is a significant demand for university land in development. In addition, this approach is also seen to be able to improve infrastructure development at the university. University has land resources but doesn't have financial resources for infrastructure development. Therefore the approach of Public-private-partnerships it seen can help university to develop their infrastructure. For example, a company that wants to develop a hospital on university land should be able to help the university improve its health infrastructure. In other aspects, the university can also use the hospital for their research or industrial training. Therefore, this matter is seen to benefit both parties. However, according to Ahmad et al. (2019), public universities in Malaysia are not yet ready to generate income other than the university's traditional sources of income. This is because universities are seen as lacking in experience and lacking in income generation structure. Accordingly, it is a challenge for universities to generate income. This is because land development is a complicated process that requires knowledge and skills in various real estate aspects such as strategy, policy, finance, land use legislation and etc. In relation to that, this study will identify the challenges that universities have to face in order to generate income. Therefore the aim of this study is to explore the management of university land use to generate income to help universities stabilize their financial resources. The objective of this study is to identify the challenges that need to be faced by the university in managing its land use to generate income.

2.0 Literature

This part discusses the general overview of university management and university land use in Malaysia. These two discussions are an important basis for reviewing the challenges of university land management to generate income.

2.1 An Overview of University Management

In general, Abd Hamid (2015) defines a university as an institution of higher education and research that grants academic degrees in various subjects and provides both undergraduate and postgraduate education. Alemu (2018) defines a university as a higher education institution that operates teaching, learning, and research activities such as arts, humanities, and science faculties and more specialized university institutions in agriculture, engineering, science, and technology. In this paper, university refers to higher education institutions whose primary business is teaching, learning, and research, which ultimately issues an academic degree. University management usually focused on education and research since it was their core business. Nowadays, university management covers a broad scope. According to Srinivasa Rao et al. (2015), the management of universities falls into four main groups: education, students, public relations, and auxiliary activities. Meanwhile, Heijer (2011), through his study on managing university land, has classified four components of campus management based on stakeholder's perspectives which are strategic, financial, functional, and physical, as shown in Figure 1.

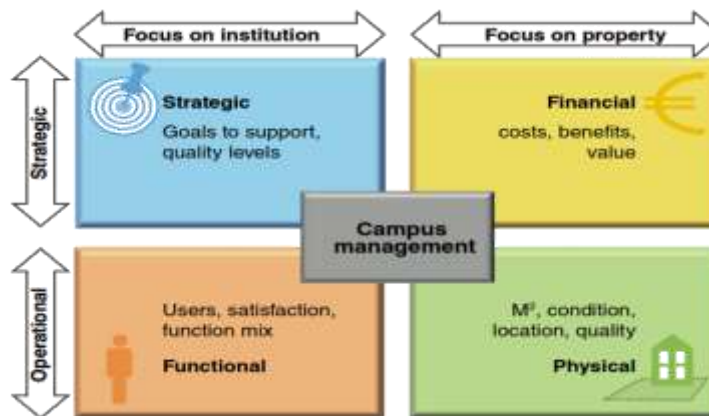


Figure 1: Campus management perspectives with their corresponding key performance indicators
(Source): Heijer (2011)

The four components as shown in Figure 1 actually can be applied in another scope of management such as asset management as detailed by Heijer (2011) below:

- i. A strategic perspective is how and to what extent institutional goals and education, research, human resource, and valuation of knowledge support are achieved or obstructed with the current real estate portfolio.
- ii. Functional perspective is the number and types of users that must be accommodated, the satisfaction with the current campus, occupancy, and frequency rate.
- iii. The financial perspective includes the campus investment, resources on real estate, and the values the campus represents.
- iv. A physical perspective is the quantity and quality of current and future campus, including location characteristics, types of space, condition, and age of the building.

In this discussion, explain in general about university management that needs to be emphasized in managing their assets. Therefore, in general, if the university wants to generate income from its land, the university needs to have a management system that supports the matter. Based on that perspective, it will be used as a guide to finding out the challenges in university land management to generate income.

2.2 University Land Use in Malaysia

Land use control is essential for every city worldwide (Kono et al., 2019). Land use control is a method used by authorities to control land development in their area (Williamson et al., 2010; Kono et al., 2019; Ghazali et al., 2021). According to Kono et al. (2019), authorities have various purposes for controlling land use. The objectives are to control environmental pollution, provide a balanced city infrastructure and increase the city's static value (Kono et al., 2019; Ghazali et al., 2021). Therefore, land use control is a method used by governments to achieve a goal in their country. Typically, university land use category in Malaysia is buildings. Accordingly, the implied conditions of section 116 (1) NLC 1965 are applied to the land. The conditions are as follows:

- i. That, unless on the relevant date such building is already existing on the land, there shall within two years from that date be erected on it a building suitable for use for one or more purposes as specified or mentioned in subsection (4) ;
- ii. That no part of the land shall be used for agricultural or industrial purposes (except to the extent that the erection or maintenance of any building for a purpose or purposes included in paragraph (j) or (g) of subsection (4) can be such a use);
- iii. That every building on it (whenever it is erected) shall be well maintained;
- iv. That no such building may be destroyed, altered or added without the prior written consent of the appropriate authority.

Based on section 116 (4) (d), NLC 1965, an institution building is a building that provides educational, medical, sanitary, or welfare facilities, etc. In addition, university land use must comply with community guidelines gazetted by the Town and Country Planning Department of Peninsular Malaysia as shown in Table 1.

Table 1 Specific Guidelines for Institutions of Higher Learning (IPT)/Colleges/Polytechnics

Matter	Preparation Requirements
Population catchment	Required for each State/Region
Minimum area	Category A Area: 4 - 20 hectares (10 - 50 acres) * Category B Area: 8 - 40 hectares (20- 100 acres)
Student/class ratio	35 - 60 students/class
Main component	<ol style="list-style-type: none"> i. Central Library ii. Faculty Resource Center iii. Room/Lecture Hall/Examination Hall iv. Tutorial Room/Discussion Room v. Studio vi. Science/Engineering/Language/Computer Laboratories, etc. vii. Workshop viii. Student Dormitory/Residential College ix. Student Affairs Office/Administration Office
Support facility components	<ol style="list-style-type: none"> i. Health Center ii. Canteen iii. Gymnasium iv. Recreation Park v. Field vi. Game Court vii. Bathroom/Toilet viii. Guardhouse ix. Garbage Disposal x. Parking/Motorcycle/Bicycle xi. Lay-by for buses and cars xii. Walkway xiii. Mosque/Surau/Prayer Room

Source: *Bahagian Penyelidikan dan Pembangunan JPBD (2011)*

Based on Figure 1, clearly shows that the development of university land is to support complete ecosystems as an educational institution. However, it is not clearly stated to what extent university can use their land to generate income. Therefore it is a challenge from a legal point of view for the university to use its land to generate income. Therefore from the point of view of this discussion will review at the challenge from the land legislation and regulation angle.

3.0 Methodology

The objective of this study was to identify the challenges of university land use management to generate income. Accordingly, to achieve the objective, the qualitative method will be used. The qualitative method used for this paper is a content analysis which is a technique to examine the content information available in written documents (Neuman, 2014).

Based on the approach, the study began by collecting secondary data such as statutes, journals, and books from various sources, namely Publish or Perish, Web of Science, Google Scholar, and CrossRef. In relation to that secondary data that has been selected is guided by overview university management and university land use legislation. After that, the content analysis approach is used for the data analysis. The two viewpoints that were discussed in the literature section are taken into consideration while doing this content analysis. Therefore a clear picture of the current challenges faced by universities to generate income can be identified.

4.0 Finding and Discussion

This study has determined four challenges universities must face enabling university land as a source of income generation. Therefore, the challenges universities face are a strategic plan, policy and procedures, financial management, Governance, land legislation, and regulation.

4.1 Strategic Plan, Policy, and Procedures

A strategic plan is a blueprint for achieving an organization's goal. Donaghy et al. (2017) describe the plan outlines the institution's land development goals and desired outcomes should be frequently revisited and evaluated; and is designed to achieve multivariable outcomes, which include both programmatic support, cost economy, and revenue generation. However, based on the results of this study, the university still faces some problems in forming an income generation strategy. Ahmad et al. (2019) explained that university in Malaysia still does not have a specific strategy to generate income; they still depend on traditional sources of university income. Concerning that, lack of experience is one of the reasons university does not have a strategy for income generation. For university to generate income from land, they need to have strategic plans, policies, and procedures, such as policies and procedures related to university land use applications by investors or land use plans involving the percentage of land use for education and income generation. Strategic plans, policies, and procedures, must be compatible with the university resources to generate income. However, based on the lack of experience, many areas need to be improved by the university to generate income through land. According to Oliver et al. (2013) and Ahmad et al. (2019), income generation is new in university management, and the university needs time to adapt to this change.

Besides that, land use information is needed to formulate strategic plans, policies, and procedures. The land use information is needed to support university decisions making to optimize the potential use of the university land (Heijer et al., 2011; Mudyazhezha & Mudyazhezha, 2020). Therefore for income generation, university need information that can support their goal. The information can be the current development needs in the area and the resources available at the university (Magdaniel, F. C., 2012; Oliver et al., 2013). However, according to Mudyazhezha & Mudyazhezha (2020), university is still managing their land use information by only focusing on land use for educational purposes. Therefore, it is seen as a challenge for the university to develop land to generate income without appropriate information. This is because precise information is necessary to develop a strategic plan.

4.2 Finances management

Next challenge is financial management. In this context, the development fund is seen as a challenge for university. Based on the current situation, as stated by the World Bank (2015), university have problems managing their expenditure. One of the reasons behind this is the reduction of budget allocation by the higher government (McLaren & Struwig, 2019; Chikafalimani et al., 2021). Therefore with this minimum budget, it is seen as a challenge for university to obtain land development funds. This is because land development requires significant funding. Considering that, universities must find the initiative to generate the fund. Universities can't rely on government funds to solve the challenge. Therefore Chikafalimani et al. (2021) and MOHE (2016) recommended public-private partnerships, leases, rent, and many more initiatives as potential mechanisms that can be used to raise funds. This approach can help the university gain funds for its project. They no longer need to depend on government funds. University just needs to develop a financial management strategy for their funds.

Next, finances management challenge is the impact on land development. Universities are exempt from assessment tax imposed by Local Authorities. However, universities still have to pay other related costs. According to Wiewel et al. (2007), some universities pay other payments instead of taxes. In Malaysia, all land, buildings, hospitals, university, etc. for public use are required in Article 156 of the Federal Constitution to make a rate assistance contribution to the Local Authority. However, if university land is converted to commercial, the university will be subject to assessment tax by the Local Authority, where the rate charged is higher than the rate assistance contribution. Therefore in this perspective, if the land development project is successful, it will generate profit for the university. On the other hand, if the project is unsuccessful, it will force the university to accommodate extra expenses based on tax increases.

4.3 Governance

In this perspective, challenges faced by the university are from the perspective of leadership and expertise in land use management. Both perspectives are important in their respective roles in generating university income. The challenge from a leadership perspective is the lack of attention to generating income. According to Wang et al. (2013) and Wang et al. (2015), leader lack enough attention, think behind the times, and lacks initiative in administration is a challenge for university to generate income. The role of the leader is the decision maker that establishes all activities at the university. A leader will play a part in developing plans, appointing staff, and approving every strategy for making an income that is required. Therefore, based on that role it is a challenge if the leader's perspective lacks attention to generating income.

Besides that, universities need to have land use management expertise (Wang et al., 2013; Mudyazhezha & Mudyazhezha, 2020). It can be a challenge for university if they do not have expertise in land use management. This is because generating income from land use is a challenging process. It must go through a process at the university level and at the local government level. However, it is seen that university lack of expertise in land use management for income generation. In this regard, Ahmad et al (2019) state that university do not have a solid organization structure to implement income generation.

Meanwhile, Wang et al. (2013) and Mudyazhezha & Mudyazhezha (2020) state that lack of expertise also happens because of overlapping job scopes and lack of training. To overcome this problem, appointing staff within the unit is preferable to someone with a land management background. This is because they must make effective decisions at university. According to Wang et al. (2015), the university can provide professional training from time to time to improve staff awareness of land management and professional competence among the staff.

4.4 Land legislation and regulation

One of the challenges is complying with land legislation and regulations. Land legislation and regulations are a method used by authorities to control land development in their area (Pejabat Daerah Tapah, 2007; Williamson et al., 2010; Kono et al., 2019; Ghazali et al., 2021). Based on Section 18 Town and Country Planning Act 1976 TCP 1976, local authorities have the power to restrict a person from using land or building except according to local plans. Besides that, local authorities can specify certain exceptions for development initiated, undertaken, or carried out without planning permission Section 18 TCP 1976. Due to this reason, if the university wishes to build something on its land, it must follow all regulations provided by the local authorities. In relation to that Land legislation and regulation, challenges refer to the university land use category. Based on section 116 (4) (d) NLC 1965, university land is land under the building category that provides educational facilities. Besides that, specific Guidelines for Institutions of Higher Learning (IPT)/Colleges/Polytechnics issued by JPBD (2011) do not clearly describe university land use to income generation. Concerning that, it becomes a challenge for the university because the land use conditions are unsuitable for generating income. Accordingly, for universities to be able to make income from their land, the university needs to change the conditions of their land use. This matter can be referred to base on section 124 (1) (a) NLC 1965, where the landlord can apply to the state authorities for variation of any category of land use. In order to do that university need to throw the development process. There are also challenges in implementing the process of changing the conditions of use of this land. The challenge involving the condition change process refers to the delay in the approval process. Delays in the approval process can occur from the applicant or the land office (Rozaidi, 2004). Based on that, bureaucratic issues are one of the factors that contribute to application approval delays (Wahab, 2015; Junaidi et al., 2016). According to Wahab (2015), this bureaucratic problem is similar to an incomplete list of applicants, which causes application delays. Furthermore, the delay caused by the permission process involving multiple departments in the government office causes the approval process to take a long time (Rozaidi, 2004; Junaidi et al., 2016). In this case, universities must consider this in their land management. The consequences of this delay will increase expenses and the risk of losing investors. Therefore, to ensure that every matter runs smoothly, the university needs land use rules and legislation expertise.

5.0 Conclusion

In conclusion, based on this study, it can be seen the challenges that must be overcome by the university management if it wants to make the land a source of income generation. The challenge appears by land use legislation and university land use management. Accordingly, university need to have a good land use management administration in order to support their goal of generating income. In relation to that, the findings of the study have limited knowledge in overcoming the challenges of land use management. This study contributes to increasing the knowledge of those who make decisions either at the level of national administration or university management. By knowing these challenges, a better strategy can be formulated to realize the agenda of generating income from the use of university-owned land.

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Paper Contribution to Related Field of Study

This paper contributes to the Public Sector Environment because it will help universities sustain their operation cost by income generation and depending by movement fund. It will also help university to manage their land efficiently.

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