

Managing Campus Real Estate in Malaysian Public Universities: The Plausible Role of the CREM Department

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ABSTRACT

Aside from the real estate sector, all businesses including universitiestend to incorporate CREM knowledge into managing their resources to increase revenues and support their primary business functions. An ideal CREM department in an organisation strives to assist core business operations by aligning its physical resources with its strategic goals and fostering organisational success. The roles of the CREM Department include maximising shareholder wealth through cost minimisation initiatives and leveraging real estate as a competitive enabler to capitalise on setbacks and turn them into opportunities for organisational advantages. This study investigated the existence of CREM portfolios in Malaysian public universities and their current job functions, considering the ideal CREM department from the literature. The study adopts a qualitative approach that involves thematic extraction and analysis of secondary data from the official websites of all 20 public universities. In addition, the investigation was supported by the results from an online survey. The findings suggest that few universities have established an adequate structure for strategically managing campus real estate. Most universities have separate departments responsible for each role, making up an ideal CREM portfolio. Despite being viewed as crucial to the digital revolution of teaching and learning in higher education, the ICT Division is not included in the CREM portfolio. This paper concludes that the CREM Department must be seen as indispensable to the institution and function as a stand-alone business unit that plays a pivotal role in real estate decision-making. A better understanding of CREM knowledge has proven beneficial to organisational success and aids in empowering higher education institutions. Therefore, findings could be significant in directing public universities and government officials to manage campus real estate towards maximising the higher education sector's overall efficacy.

1.0 INTRODUCTION

All businesses, irrespective of their nature, need real estate resources to function in one way or another. The phrase "real estate" refers to various properties owned or leased by a company, such as land, buildings, plants, and machinery. Most businesses' profit potential is obvious when matching their real estate demands to their business requirements, whether for revenue or profit growth and capital market facilitator. A range of business organisations in advanced countries have been using the knowledge of corporate real estate management (CREM) in managing their real estate resources as a strategic financial asset (Aarninkhof-Kamphuis et al., 2023; V. Der Voordt et al., 2015; Langford & Haynes, 2015; Morri et al., 2017; van den Beemt-Tjeerdsma & Veuger, 2016).

CREM recognition for assisting success and profitability in higher education has also become increasingly been known. Universities are empowered to steer their growth journey and manage real estate resources efficiently, creating the opportunity to generate revenues and profitability. Past studies recognised the integrated knowledge of CREM in matters concerning campus decision-making, such as campus management, asset management, space planning, and campus design (Beckers, 2016; Curvelo Curvelo Magdaniel et al., 2019; Den Heijer, 2011; Rymarzak & Trojanowski, 2015; Rytkönen et al., 2015). Real estate optimisation takes different forms and presents various challenges simply because it involves costs at all stages of tenure, from acquisition, ownership, operation and disposal.

Most university campus buildings have low occupancy rates and high operating and maintenance costs because they are historically designed to fulfil the needs of specific faculties without any utility value (Rytkönen et al., 2017). Real estate resources in universities tend to be undermanaged and misunderstood as overhead costs by top-level management (Beckers, van der Voordt, et al., 2015; Den Heijer, 2011). CREM executives face challenges in conveying ideas, demonstrating value for the benefit of organisations, and establishing their position in the organisation (Beckers, Van Der Voordt, et al., 2015; Rytkönen et al., 2017).

The problems prevail in Malaysia as CRE remains considered non-essential. Most public-listed companies in Malaysia do not have a CRE strategy (Ali et al., 2006), and corporations still lack knowledge of the importance of CREM (Sulaiman et al., 2015). As for Malaysian public universities, the problems contribute to worsening financial standing because their decision rights are more centralised at the Ministry level than the university itself, thus creating a supervisory burden and potential inefficiencies. To bring about the changes needed to manage various resources within the institution, Malaysian public universities need to incorporate CREM knowledge to support campus decision-making and inform or convince the various stakeholders and policymakers.

Therefore, managing campus real estate using CREM knowledge is, beyond doubt, supporting the financial sustainability agenda in Malaysian public universities (Mamat et al., 2021; Mohd Said et al., 2023). Hence, this study aims to examine the existence of the CREM Department in Malaysian public universities and to identify the degree of CREM's implicit holistic approach.

2.0 OVERVIEW OF THE CREM DEPARTMENT

CREM encompasses the management of all property, land, and building classes, such as office buildings, retail stores, hotels, manufacturing facilities, distribution facilities, and logistics. A definition according to Andreas Pfnür (Pfnür 2014, p. 14) as cited in Glatte (2021) :

"Corporate Real Estate Management (CREM) denotes the planning, decision, organisation, implementation and controlling of all those real estate activities necessary to provide, operate or liquidate real estate of corporates whose business is not real estate, simultaneously acknowledging the perspectives of the owner/investor, the user and the producer. CREM aims to support the overall corporate strategy by effectively and efficiently dealing with land and building matters".

Briefly, CREM is concerned with the real estate assets of public or private corporations (corporates), commonly called corporate real estate (CRE). Therefore, from the standpoint of the real estate industry, these

companies are also known as non-property businesses. It's important to note that CREM's content and responsibilities differ from one organisation to the next because each has its own approach to achieving its final objectives. Nevertheless, CREM's primary concern is to ensure that a company's business and real estate strategies are in sync. Likewise, professionals in this discipline must have business and management skills and overall knowledge of property matters.

In a broader sense, CREM encompasses all strategic, tactical and operational levels of real estate value creation, i.e. portfolio management, asset management, property management and building management, and often even more comprehensive infrastructure services, also called facility services (Nävy and Schröter 2013, p. 12 as cited in Glatte (2021)). Hence, CREM focuses on connecting real estate to company demands and objectives at all management levels and considering the interests and desires of various shareholders and stakeholders. In short, CREM covers all aspects of real estate value creation (Glatte, 2021).

Corporate real estate often represents one of the largest cost blocks and a huge part of corporate assets (Glatte, 2021). The fact that the property is not part of the core business but purely from an economic point of view, a means of fulfilling the (core) business object, leads to some special features for corporates when dealing with their real estate, even if there are a lot of parallels with the classic real estate industry in terms of development, structure and distribution of tasks. Over the years, CREM has evolved into a significant resource for a range of businesses, meeting the needs of customers and stakeholders while also assisting in achieving organisational objectives.

Assets serve as the foundation for all activities, regardless of their organisational structures or ownership. The term "asset" encompasses all kinds of resources owned or controlled by the organisation, such as financial assets (e.g. stocks, bonds, mutual funds, bank deposits), land, buildings, plant and machinery, equipment and intangible assets (e.g. patents, copyright). Apparently, businesses are now examining the relationship between real estate and core business in three dimensions: financial assets, physical assets, and operational assets (Bon, 1994). Unlike traditional real estate management, CREM functions encompass all three dimensions for optimal benefits to the organisation (Glatte, 2021). The ultimate goal is to optimise CREM's value for an organisation by positioning CREM into the structural and operational of multiple management levels, cross-functional departments, and various environmental contexts.

CREM, FM, AM and PM are frequently misunderstood. Despite duplicating some activities and duties, they can be distinguished as independent disciplines that represent a variety of real estate management objectives at various levels. Property Management (PM), which primarily focuses on the day-to-day operations – covers the activity of maintenance of the building during its operating stage and related activities such as valuation, acquisition, disposal and lease negotiation – offering advice on the best ways of doing it. Asset Management (AM) is the systematic and coordinated activities and practices that ensure that an organisation's land and building assets are optimally structured in the organisation's best interest.

According to Lindholm (2005), in asset management, the owner and investor concentrate on the business's profitability; in property management, the technical manager focuses on the building and its equipment. Therefore, PM is comparable to AM in the sense that both are concerned with day-to-day activities at the operational level. Nevertheless, AM is long-term decision-making, and the implementation of the acquisition, holding, use, and disposal of real estate assets aims to minimise the overall costs to the organisation (Kaia, 2014). Meanwhile, Facilities Management (FM) is concerned with the tactical and day-to-day activities for a facility to run efficiently, adequately maintain, and keep its occupants safe and happy. FM generally looked at the operational assets. Typically, the range of services provided by FM and the responsibilities of facility managers include overseeing owner-occupied buildings or spaces in leased buildings, planning for building maintenance, coordinating space use and layout, and ensuring building safety and functionality.

Uniquely, Corporate Real Estate Management (CREM) offers a holistic approach encompassing all property, land, and buildings classes, such as office buildings, retail stores, hotels, manufacturing facilities, distribution facilities, and logistics. It provides a productive setting for businesses to house personnel, manufacture and distribute products, and offer market services. CREM attempts to get the highest potential return on investment

in the short and long term while managing real estate. As a result, CREM will concentrate on aligning real estate with organisational goals and embracing the needs and expectations of multiple stakeholders at the strategic, tactical, and operational levels (T. van der Voordt, 2017). Glatte (2021) illustrates that CREM differs from the real estate industry, which focuses on optimising the investment property's risk, return, and liquidity for optimal benefits to the organisation (refer to Figure 1).



Figure 1. Visualisation of CREM as a discipline. (Source: (Glatte, 2021).

2.1. Roles of the CREM Department

The traditional role of CREM as a "task-maker" focused on managing physical space and handling technical maintenance has ended (Van der Voordt, 2017). A "controller" 's extended roles include a comprehensive understanding of and ability to minimise real estate costs. Recognition of CREM in supporting core business further leads to CREM as a "dealmaker" by creating financial value and flexibility. With strong support from top management, CREM can perform as an "entrepreneur" by matching real estate resources with business plans and market options.

The highest achievement for a CREM Department would be as a "business strategist" who contributes to the company's overall success by focusing on the organisation's mission. Past studies have acknowledged the critical role played by CRE in maximising property value, such as healthcare services (T. Van Der Voordt, 2016), higher education (Beckers, Van Der Voordt, et al., 2015; Den Heijer, 2011), banking and financial services (Langford & Haynes, 2015), manufacturing (Morri et al., 2017), and municipal states (van den Beemt-Tjeerdsma & Veuger, 2016). Businesses that integrated CRE knowledge whilst administrating their properties and resources enjoyed a stream of revenues and supported core business operations.

In principle, CREM seeks to align asset objectives with organisational objectives to ensure efficient and effective use of assets in the medium/long term. If a project provides substantial overall advantages at high financial costs, it may be a good value for money, yet these financial expenses may not be affordable.

Scholars	Roles of CREM and activities					
(Bon, 1994)	Investment planning and management;					
	Financial planning and management;					
	Construction planning and management;					
	Facilities planning and management;					
Jorroff et al. (1993)	Organisational cost control;					
	Financial value creation;					
	Real estate entrepreneurialism;					
	Business strategy formulation and implementation					
Lopes (1997)	Real Estate Administration,					
	Finance and Law;					
	Acquisitions, dispositions and leases;					
	Design, Construction, Renovation, and Engineering;					
	Space management;					
	Support services and Building Services Management and Maintenance;					
	Building Management and Building Maintenance (fabric).					
Gibler (2004)	Planning and Facility location					
,	Property Acquisition and Disposition					
	Property Financing					
	Facilities Management, Property Management, Asset Management					
Heywood & Kenley (2013)	Factor of production					
	Corporate asset					
	Business Investment					
	Commodity activities					
	Public Infrastructure					
Omar (2014)	Physical and environmental management					
	Building operations					
	Property administration and master plans					
	Workplace planning					
	Property support to business units					
	Central property decision-making					
Gluch et al. (2023)	Governance					
	Facilities					
	Sustainability					
	Technology change					
	Communication					
Autio et al. (2023)	Innovation					
	Environmental, social and corporate governance (ESG)					
	Marketing and sales					
	Financial management					
	Leasing management and tenant satisfaction					
	Competitive environment and portfolio management					
	Outsourcing and strategic partnerships					
	Cost and operation optimisation					

Table 1. Roles of CREM and main activities.

From the literature, the critical roles of CREM can be grouped into four essential functions. Firstly, CREM aims to maximise the shareholder's wealth. Every organisation must learn how to utilise their existing assets fully, regardless of occupation assets or investment assets. A risk-free investment decision will ensure the investment beats the hurdle rate. Strong CREM knowledge combined with solid negotiation skills has

demonstrated the ability to formulate both short- and long-term business plans based on the hypothetical profit and loss, the daily change in the marked-to-market value of a portfolio.

Secondly, CREM focuses on cost minimisation initiatives. Any business organisation must select qualified personnel to look into cost-advantage opportunities at every organisational level. Having economies of scale will result in greater operational efficiencies and synergies. A business can decide to implement economies of scale at any stage of the operational level by zooming in on its most critical services. Later benefits include reduced logistics costs, promotion costs, buying in bulk, cheaper capital, less energy consumption, and minimising occupancy costs.

One of the primary objectives of professional CREM is to achieve cost efficiency, which involves strategically utilising available resources and implementing cost-cutting measures for operationally necessary properties. As long as the need is largely operationally justified, these properties are operationally required. However, this operational need may vary throughout the lifespan of a property due to various reasons. Therefore, a CRE manager must be able to identify and optimise the use of properties within the organisation that are not necessary for its operations.

Thirdly, CREM attempts to capitalise on obstacles and transform them into opportunities for organisational benefits. The valuation report is crucial throughout the negotiation process and in determining how to source real estate strategies. Once the operational necessity ceases to exist, the property is no longer required for operational purposes. Such property must be declared "surplus" and monetised, and its revenues must be reinvested in the organisation's primary operations. In short, from a CREM perspective, when a property previously used for operations is declared as "not necessary for operations," it must be reassessed as an investment property (Glatte, 2021).

Finally, CREM always strives to use real estate as a competitive enabler. The significance of technology in higher education is undeniable. Digital technology and capabilities are essential to more resilient tertiary education systems (Arnhold & Bassett, 2021). For example, implementing a systematic central monitoring system enables rich data information for market intelligence and data analytics, which enhances operational excellence and efficiency. Ultimately, digital transformation in higher learning accelerates academic excellence, stimulates institutional growth, and equips students for success in the digital era. A study by van der Voordt (2017) suggested that most organisations with extensive facilities have a separate department (CREM) for taking care of real estate and development. Another department (FM) will focus on maintenance, operations, and hands-on support. Hence, merging ICT into the CREM department's job functions is crucial.

3.0 METHODOLOGY

This study investigates the existence of a formal and well-organised CREM department in Malaysian public universities to advise the core business on all levels of real estate issues. This study aims to identify the recognition of CREM departments in an institution. The recognition theoretically reflects roles in real estate decision-making and the corporate view of the department. This study focuses on public-funded universities only. Therefore, the study includes all twenty (20) public universities in Malaysia.

When a study is likely to be more qualitative than quantitative or vice versa, mixed-methods research offers the best. Mixed-methods research collects, analyses, and mixes quantitative and qualitative data in a single study or series of studies (Sekaran & Bougie, 2016). This sequential mixed-method study comprising two-stage data collection works in tandem. The study used qualitative content analysis to identify CREM-related departments in Malaysian public universities. This secondary data collection is derived from the university's official websites and reports. Meanwhile, the primary data collection adopted an online survey method due to limitations imposed by the COVID-19 outbreak during the study period. The secondary data provides the necessary input for distributing the online survey using purposive sampling.

The justification for choosing purposive sampling is that the targeted group of respondents has been predetermined beforehand. A purposive sampling method is used where the collection of "specialised informed inputs" on the topic area researched is vital, and using any other sampling method would not provide opportunities to obtain the specialised information (Cresswell & Creswell, 2018; Sekaran & Bougie, 2016; Yin, 2016). The study focuses on CREM-related departments as the value lies in choosing information-rich representatives to understand the situation better. Staffing from non-related departments is not the best respondent. The study can extract much information because the targeted respondents are presumed to possess appropriate knowledge and understand the subject well. Hence, the study deliberately selects only top-level executives involved in real estate decision-making or managers from real estate, facilities, assets or development departments. Their job designations encompass various occupational titles such as director, department head, facilities manager, engineer, architect and project manager.

The validation process entails conducting interviews with professionals. The first expert is a senior professor with extensive experience managing infrastructure projects and property development. This person is now serving as a Deputy Vice-Chancellor at a public university. This individual oversees all aspects of university infrastructure development and income generation initiatives. The second expert is a highly experienced engineer with over 15 years of expertise in providing facilities management services and handling project development in a public institution. This person holds the position of Departmental Head at a CREM-related department at another public university.

4.0 RESULT AND DISCUSSION

Van Rijnsoever (2017) suggested a minimum of 20 information sources for purposive sampling. In total, 36 respondents participated in the online survey using the Survey Monkey platform. Figure 1 displays the distribution of respondents according to their respective universities, with the highest number of respondents coming from four universities, each having three respondents. Eight remaining universities had two respondents each, while the other eight had one respondent each. Responses from the same university were then combined to represent the university as the unit of analysis (Sekaran & Bougie, 2016). Aggregating all the individual data into the university-level data allows for more accurate comparisons between universities regarding their CREM portfolio direction.



Figure 1. Distribution of respondents.

Table 2 provides conclusive proof that the respondents accurately represent the intended group. The responses included strategic-level individuals – Top management (Director, Assistant Director, Deputy Director, Head of Department) and tactical-level – Middle management (senior engineer, senior architect, senior quantity surveyor). Hence, the data are reliable and significant since it indicates that the sample size accurately represents the intended population.

University	Respondent	Question 23: Job Title / Department					
U1	1	Jabatan Pembangunan dan Pengurusan Aset – Senior Architect					
U2	3	Senior Civil Engineer					
U3	5	Senior Executive/ Development & Infrastructure					
U4	7	Senior Architect					
U6	13	Senior Engineer / Development Division					
U7	15	Deputy Director/ Jabatan Pengurusan dan Pelaburan Hartanah					
U8	17	Timbalan Ketua Jurutera					
U9	18	Senior Assistant Director					
U10	19	Senior Quantity Surveyor					
U14	24	Mechanical Engineer/3PI					
U17	29	Head of Planning & Architecture(Development)					
U18	30	Jurutera Kanan (Awam), Jabatan Pembangunan					
U19	33	Director, Development Management Office					
U20	35	Senior Engineer					

Table 2. Designation of respondents.

4.1. Analysis of the CREM Department

There are two steps to investigating CREM portfolios in Malaysian public universities. The data collected in this study consists of secondary and primary data acquired from questionnaire surveys. Two sets of data, extracted from official websites and responses from the online survey, were analysed concurrently to examine the roles of the CREM portfolio in each Malaysian public university.

First, an analysis of the roles of CREM-related departments is reviewed based on the organisation chart from the official websites. The results of the structural organisation of CREM-related departments are summarised in Table 3 to highlight and compare their job functions. It is clear that the CREM roles encompass the departmental job functions of development, property management, asset management and facility management. Results showed that all CREM-related departments are responsible for development and facility management matters. However, they do not have complete control over properties and asset management portfolios.

Code	Development	Properties	Facilities Management	Asset Management	Contract Management	ICT	Vehicle Maintenance	Building Services
U1	Х		х	Х	Х		х	х
U2	Х	х	х	Х	Х	х	х	х
U3	Х	Х	Х	Х	Х	х	Х	х
U4	Х	х	х	Х	Х	х	х	х
U5	Х	х	х	Х	Х		х	х
U6	Х	х	х	Х	Х		х	х
U7	Х	Х	Х	Х	Х	х	х	х
U8	Х		х	Х	Х		х	х
U9	Х		х	Х	Х		х	х
U10	Х	х	х	Х	Х		х	х
U11	Х		Х	Х	Х		х	х
U12	Х		Х	Х	Х		х	х
U13	Х		Х	Х	Х		х	х
U14	Х		Х	Х	Х		х	х
U15	Х		х	Х	Х		х	х
U16	Х		х	Х	Х	х	х	х
U17	Х	х	х	Х	Х	х	х	х
U18	Х		х	Х	Х		х	х
U19	Х		Х	Х	Х		Х	х
U20	Х	х	х	Х	Х		х	х

Table 3. Roles of CREM-related departments based on the organisation chart.

In regard to asset management, some universities have a separate division responsible for overall asset management as per the Standard Operating Procedure for Total Asset Management, which regulates all government properties. Most CREM-related departments only look after "high-value assets" such as lands and buildings, leaving behind other assets to another department. It is also important to note that the roles and responsibilities of the CREM-related departments may differ from one university to another, depending on their respective CREM-related departments are instrumental in helping to understand the job functions and responsibilities of each department. It is clear that CREM-related departments play an essential role in managing university assets. However, it is also important to acknowledge the differences in roles and responsibilities between universities in handling asset management.

The findings agree with concerns highlighted in past studies. Despite being the second-highest expense for most organisations, CREM deals with situations and individuals who consistently reject it because of misunderstandings about its role (Omar & Heywood, 2014). Failing to understand the value, organisations often view CREM as a cost burden for themselves and address it as an isolated issue. Moreover, this negative perception influences CREM's visibility within organisations, jeopardising resources and impacting an organisation's long-term planning.

In addition, the findings that most universities have separate departments responsible for technical infrastructure (infostructure) issues are pretty significant. Six of the 20 universities had IT-related functions solely under the CREM department. Of these six, only four had a clearly defined organisational structure for the said infostructure, while the other two simply indicated they were responsible for IT-related functions without providing a visual representation of this on the organisational chart. This suggests that although most universities have a designated IT-related department, they may not have the necessary communication with the CREM department to grasp the actual demand and supply within the university. Moreover, it could be beneficial to compare the structure of these departments across universities to identify any common patterns in terms of their organisation and management. In doing so, universities could fine-tune their infostructure departments and ensure they can effectively meet the needs of their students and staff.

The ICT Division is responsible for the digital transformation of the university while supporting the university's strategic goals of cost reduction and income growth. Yet, it does not report to the same administration. As in the building industry sector, new building techniques, products, materials, and ICT technologies continuously diversify. These advancements can be complex for CREM departments to keep up with, especially when managing reduced staffing. Therefore, the CREM department must be able to foresee cutting-edge technological advancements and new business opportunities. For this reason, the ICT Division should be a part of the CREM Department to help bridge the gap between the advancements in the industry and the university's goals. This will ensure that the CREM Department is equipped with the necessary knowledge and skills to meet the needs of the university while also allowing them to remain competitive in the everchanging industry.

The second analysis examined responses from the online survey that were collected and tabulated in the same manner for easier comparison. Respondents were asked to select relevant real estate activities associated with their department. Table 4 shows the involvement of the CREM Department in real estate activities based on the online survey. The top 4 activities mentioned are "Facilities Management," "New Development," "Refurbishmen,t" and "Property Management." The least mentioned real-estate activities are "real estate disposal," "real estate capital lease negotiation," and "real estate acquisition." It also gave the impression that CREM is mainly used for operational tasks, not tactical or strategic ones.

Code	Real estate acquisition	Real estate disposal	Real estate capital expenditure	Real estate lease negotiation	Property management	Facilities management	New Developm ent	Refurbish ment
U1			Х		Х	Х	Х	Х
U2		х	Х	Х	Х	Х	Х	Х
U3					Х	Х	Х	Х
U4	Х	х	Х	Х	Х	Х	Х	Х
U5						Х	Х	Х
U6						Х	Х	Х
U7	Х	х	Х	Х	Х	Х	Х	Х
U8	Х	х	Х	Х	Х	Х	Х	х
U9						х	Х	
U10						х	Х	
U11						X	х	Х
U12					х	х	х	Х
U13	Х	Х		X	Х	х	х	Х
U14					Х	Х	Х	х
U15						Х		х
U16					Х	х	х	Х
U17	Х	х		Х	Х	Х	Х	Х
U18					Х	Х	Х	Х
U19				Х		Х	Х	Х
U20					Х	Х	Х	Х

Table 4. CREM Department job function based on real estate activities

In addition, Table 5 also shows that most CREM departments only focus on faculty building and student accommodation. The findings supported the idea that the CREM department did not play a pivotal role in all real estate decision-making. It can be said that the CREM Department in Malaysian public universities is concerned with the tactical and day-to-day activities for the university to run efficiently, adequately maintain, and keep its employees and students safe and happy. Universities focus on achieving goals and objectives without considering CREM as an auxiliary function of the entire strategic plan. In other words, it is a barrier to CREM's satisfactory application as a strategic support function for the organisation.

Code	Faculty buildings	Hostel buildings	Land	Plant	Equipment	Commercial (office building)	Commercial (shophouses)
U1	Х	х	Х				
U2	Х	х	Х	х			
U3	Х	х	Х	х			
U4	Х	х	Х			Х	
U5	Х	х	Х				
U6	Х	х	Х				
U7	Х	х	Х	х	Х	Х	Х
U8	Х	х	Х				
U9	Х	х	Х				
U10	Х	х	Х	х	Х		
U11	Х	х	Х	х	Х		
U12	Х	х	Х				
U13	Х	х	Х				
U14	Х	х	Х	х		Х	
U15	Х	х	Х				
U16	Х	Х	Х				
U17	Х	х	Х	х	Х		
U18	Х	х	Х	х	Х	Х	Х
U19	Х	Х	Х	х	Х	Х	Х
U20	Х	х	х	х	х		

Table 5. CREM Department portfolio based on the type of assets

Furthermore, respondents were also requested to articulate their perceptions of the corporate view of their department to the higher-ups. Results showed that only six public universities (U2, U3, U4, U6, and U7) were viewed as "entrepreneurs/business strategies/visionaries." Strong CREM positioning within the institution usually acts like a business mind, thus focusing on long-term CRE towards overall operational excellence. The remaining fourteen (14) public universities are contemplated as "task makers/dealmakers/controllers". In other words, their department mainly acts in an advisory role in real estate matters, emphasising user-driven solutions and customer intimacy. In short, the CREM department's corporate view holds significant influence as it dramatically impacts real estate decision-making and is actively involved in real estate activities.

To sum up, the CREM Department must operate as a stand-alone business function. The foundation of the CREM department is integrating asset management with general management and facility management, including cost control. Nevertheless, most public universities only collect operational information rather than strategic information. They will only prepare the CREM information report and submit it to top management upon request. In addition, CREM's internal customers include personnel from various business units, management levels, and departments that require real estate support to run their businesses. They need CREM services to provide their output to their clients, whether products or services. Establishing a separate CREM Department guarantees that communication is consistent and uniform in order to be noticed, alter views, and reinforce attitudes that result in long-lasting connections with customers. It is essential to note that without full implementation of CREM, universities may be missing out on numerous opportunities to improve their services and performance. Ultimately, top management's recognition of the CREM department is crucial as it significantly impacts CREM positioning within the institution.

5.0 CONCLUSION AND FUTURE DIRECTION

CREM gradually shifted from cost-control management towards being more strategic and focused on contributing to organisational success and adding value to the organisation. Based on the literature, the CREM discipline encompasses asset, property, and facility management. Given the current administration in most Malaysian public universities, these job functions are split across multiple departments. However, the growing recognition of CREM has resulted in many universities undergoing restructuring to streamline their administration. The findings have verified the presence of a department dedicated to managing the CREM portfolio in Malaysian public universities. Nevertheless, the department does not need to be specifically referred to as "corporate real estate" as long as it fulfils the roles and obligations of an exemplary CREM department. The findings also demonstrate the recognition of CREM in effectively managing campus resources.

In addition, the CREM Department must be seen as indispensable to the institution and function as a standalone business unit that plays a pivotal role in real estate decision-making. Active participation in real estate activities and decision-making guarantees a solid institutional position. It underscores the significance of the CREM Department in maximising the institution's wealth by converting surplus properties into revenues and achieving cost efficiency with the available resources.

Further research is recommended to examine the participation of CRE (Corporate Real Estate) at every level of strategic, tactical, and operational management. Conducting various case studies at chosen Malaysian public universities with a nearly equivalent CREM department will provide comprehensive insights into campus real estate management. Subsequent studies should investigate the parallels and distinctions between PM/FM/CREM and general management frameworks and explore their integration into a novel model to enhance business performance while boosting the university's reputation.

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