

Enhancing the Value of Library through Facilities Management Understanding

Noorsidi Aizuddin Mat Noor*^{1,2}, Nurbaizah Mohamed², Fitriyah Razali^{1,2}, Nurul Syakima Mohd Yusoff², Siti Zaleha Daud², Wan Ibrisam Fikry Wan Ismail², Farhana Diana Deris³, Chin Swee Lee², Mustafa Omar⁴

¹Centre for Real Estate Studies (UTM CRES), Institute for Smart Infrastructure and Innovative Construction (ISIIC), Universiti Teknologi Malaysia, 81310, Johor Bahru, Malaysia

²Mass Appraisal, Housing and Planning Research Group, Real Estate Department, Faculty of Built Environment and Surveying, Universiti Teknologi Malaysia, Johor, Malaysia

³Faculty of Social Sciences and Humanities, Universiti Teknologi Malaysia, Malaysia

⁴Real Asset Research Group, Real Estate Department, Faculty of Built Environment and Surveying, Universiti Teknologi Malaysia, Johor, Malaysia

*Corresponding Author

DOI: <https://doi.org/10.51244/IJRSI.2024.1104071>

Received: 06 April 2024; Revised: 23 April 2024; Accepted: 26 April 2024; Published: 23 May 2024

ABSTRACT

Leading libraries been impacted by a number of significant technological developments and trends, as well as by the difficulties presented by outside forces like the COVID-19 pandemic. The Ministry of Higher Education Malaysia has received less money from the government since 2016. Fund allocation for libraries has also decreased concurrently. The reduction on government's funding allocation has made it difficult for the libraries in Universiti Teknologi Malaysia particularly to manage its operations and facilities, placing restrictions on book purchases and reducing its online database. In managing every facility in the libraries such Perpustakaan Sultanah Zanariah (PSZ), Universiti Teknologi Malaysia and Perpustakaan Raja Zarith Sofea (PRZS), Universiti Teknologi Malaysia, the facility manager must use the available financial resources wisely. The goal of this study is to identify libraries facilities management expenses that the library's management team can reduce. Content analysis and thematic analysis applied in this study in analysing the data gathered from interviews with 5 library staff. According to the findings of this study, both libraries provide a variety of facilities, including a lobby, room, discussion room, showroom, seminar room, meeting room, foyer, 24-hour study room, information search laboratory, database reference room, exhibition space, and audio visual room. Both libraries management expenses, which include library system maintenance, book repair, reference book purchases, database subscriptions, and expenses for purchasing and repairing computers and printers, have been identified and can be reduced accordingly by the management team. Overall, both libraries have to adapt to changing technological, social, and economic conditions while remaining committed to their mission of providing access to information, promoting lifelong learning, and fostering a sense of community.

Keywords: Facilities Management, Cost Optimization, Library, Optimum Space, Asset, Malaysia

INTRODUCTION

Facilities management is critical to the effective management of library assets because it ensures that physical spaces and infrastructure support the library's mission and operations. Facility management is the process of assuring buildings, systems, and services to support operational processes. Effective facility management must consider both the activities to be carried out and the resources that will be used.

The duties of a facility manager are wide-ranging. According to the International Facility Management Association (IFMA), a facility manager's responsibilities include financial planning for an organisation's annual operating and capital budgets [22]. In addition to overseeing finances, facility managers are to divide and manage space within buildings [16]. According to [21] facility management entails the internal management of the building itself, which is the space where it will generate input for the organisation. Space management in the context of facility management entails optimising the use of available space in an organisation as well as planning for future requirements.

The facility manager is to manage the financial resources provided by any institution in order to optimise the use of available facilities. Managing this facility also includes the responsibility of maintaining it to ensure the smooth operation of the organisation's processes [4]. Streamlined facility management can ensure that the facility is utilised optimally while also providing return benefits to any institution and minimizing costs.

The Higher Education Strategic Plan 2007 has been implemented in recent years to position Malaysia as a regional centre for higher education studies, resulting in a 17 % increase in total demand for higher education studies in 2007, with as many as 694,898 students compared to 571,782 students in 2006 [7]. Concurrently, not only has the demand for higher education increased, but so has the demand for academic libraries [10]. In addition, management costs for providing reference materials such as scientific books and journals are rising.

These libraries are a valuable resource centre, especially for students at a higher education institution. The library is committed to the students, the staff of the institute of higher learning, and those who are conducting specific studies. According to [24], library's primary function is to provide various services such as borrowing and returning books, as well as to serve as a forum for discussions.

According to the Universiti Teknologi Malaysia (UTM) Library Handbook, other services available in the library include self-service lending machines, access to online databases, inter-library loans, carrel rooms, computer systems, meeting rooms, and screening rooms. These facility are required to improve the efficiency of the library's primary function [9]. Facility management in the library is critical to ensuring that all the facilities provided can perform the functions they are designated for and in futherance to aiding the library's primary operations.

This scenario and situation showed the criticality of facilities management in managing library assets by preserving collections, optimizing space utilisation, ensuring safety and accessibility, maintaining infrastructure, integrating technology, promoting sustainability, enhancing user experiences, and meeting the evolving needs of libraries and their communities.

PROBLEM STATEMENT

Both libraries are facing challenges in managing the escalating costs of operation, including facilities management [27]. Libraries are being confronted with the problem of allocation of resources in order to make the process of asset and facility management successful, and to guarantee unobstructed availability of services to their users [14]. During the preliminary research interview, Pn. Khairulbahiyah, the Assistant

Librarian of the Resource Development Division, stated that the concept of these libraries are more about not generating profit, but to manage and handle the facilities management of the libraries facilities.

As of now, government funding for research universities has decreased [11]. Based on a preliminary study conducted at the Perpustakaan Sultanah Zanariah (PSZ), the library's allocation funds from the Treasurer's Department are decreasing. The Malaysia Ministry of Higher Education's reduction in allocation in 2016 resulted in the library receiving allocation funds in 2017 that were reduced by over 60% compared to 2016. The current funds are insufficient to cover all maintenance expenses, including those for services at the UTM library. If these limited financial resources are managed inefficiently, it will cause disruption in the operations of the library, as maintenance work will be completed inefficiently and the delivery of services to library users will suffer [20].

According to [19], space management will provide input to the organisation. These spaces are the second most expensive resource in an organisation [5]. However, according to observations and information from UTM's library, seminar rooms and information search laboratories, particularly in the Perpustakaan Raja Zarith Sofea (PRZS), are underutilised. Unused spaces waste the library's resources. While maximising the facility allows the library to benefit from returns.

THE STATE OF LIBRARY FINANCING BUDGET IN MALAYSIA

The library is a non-profit organisation in the local universities. Managing the operating expenses of the library relies on the financial funds provided by the institution, which are allocated yearly. One of the financial resources for the institution is through the allocation from the government that is stated through the annual budget and annually presented by the Prime Minister of Malaysia in year 2017, Dato' Sri Mohd. Najib bin Tun Haji Abdul Razak. In the past 2016 budget presentation, the Prime Minister has announced a decline in allocation for the Ministry of Higher Education that is declined by RM13.37 billion for 2016 from RM15.78 billion in 2015 [15].

Inadequate allocation made the services offered in the library limited as there has been a reduction in online referral resources such as journals and articles and reductions in the purchase of new books. The library provides reference sources to users, whether as books or online materials [21]. Other than that, the lack of funding will affect maintenance work. However, maintenance is a technical and administrative work that aims to maintain the structure of the building, system, and equipment which must operate according to their predetermined functions [1]. Effective facilities maintenance management is crucial for ensuring uninterrupted facility use [12].

OPTIMAL USE OF SPACE

In an institution of higher education, space is a valuable asset and space management is important in the scope of facility management [26]. However, these available spaces often remain empty and underutilised. The UTM libraries offer a variety of available spaces, including seminar rooms, 24-hour rooms, meeting rooms, and more. However, from the observations conducted in the pre-study stage, people rarely use the available facilities. According to [8], effective facility management drive goal achievement and economic growth, even under resource constraints.

The level of space usage is low during semester breaks, at night, and on holidays. The spaces in the library are used by more than just UTM students and staff. External organisations and local communities use the available space for research, teaching, and social interaction purposes [8]. Therefore, at the preliminary stage of a company, space audit becomes more effective in bringing use more efficient. This is why, the facility audit consider the current use of the space and identifies any problem areas, as well as undertilized

places in which nothing is done. This leads to increased efficiency and more smoothly functioning systems. As a result, companies gradually come to realize that spatial constraints are critical in decision-making when it refers to office location, how resources are scattered about relocate. It is a preventive measure to ensure space is aligned with the organizational direction and goals that support its agenda. This space audit exercise evaluates the amount of space available, thus creating a list of the whole space available.

COST MANAGEMENT OPTIMIZATION

Cost management encompasses tasks such as planning, estimating, budgeting, and controlling costs. The purpose of cost management is to ensure that the cost of expenditure is not more than and not less than the funds or provisions available [18]. By optimizing cost, one can adopt the approach of controlling costs. According to [3], optimum cost plays two roles, i.e., to optimise the function and approach the targeted costs simultaneously. Increasing profits is the aim of this cost optimisation strategy [17, 25].

To reduce maintenance costs and ensure proper facilities equipment functioning, it is important to have the optimum maintenance duration [19; 23]. Managing space closely relates to managing operation and maintenance costs [8]. The total cost of operation and maintenance is contingent upon utilising space. Therefore, more space leads to higher cost. This statement is supported by [6], where space is one of the factor that affect the total operating costs such as electricity, cleaning and repair costs.

METHODOLOGY

Observations were conducted to identify the facilities provided by libraries. In the next step, we interviewed 5 library staffs who managed the libraries. In order to get information about the management of operations at the library, including the expenses associated with management and the management of service provision. It is crucial to identify the methods library staff used to maximise costs during budget cuts.

In this study, the researchers employed the observation method as well. This method determines whether the library can earn income through the provision of facilities. As a next step, we performed a content analysis, which analyses secondary data gathered from the library's annual report to obtain additional information as well as improve the list of library's services and facilities. Thematic analysis is also used to analyze information obtained from library staff interviews.

FINDINGS AND DISCUSSION

This finding from this study discussed as follows.

I. Facilities Provided in the Library

PSZ and PRZS libraries in terms of facility provision, specifically for the foyer. The foyer at PRZS does not accommodate learning activities for users; instead, it serves as an exhibition space, while audio-visual rooms and database reference rooms are not available at PSZ and available at PRZS. List of facilities provided in PSZ and PRZS as stated in Table 1.

Table 1: Facilities provided in PSZ and PRZS

Facilities	PSZ	PRZS
Lobby	✓	✓
Carrel Room	✓	✓
Discussion Room	✓	✓

Showroom	✓	✓
Seminar Room 1	✓	✓
Seminar Room 2	✓	✓
Seminar Room 3	✓	✓
Meeting Room	✓	✓
Foyer	✓	
24 Hours Study Room	✓	✓
Research Lab 1	✓	✓
Research Lab 2	✓	
Database Reference Room		✓
Exhibition Space	✓	✓
Audio Visual Room		✓

II. Management Expenses that can be Reduced by the Library

Institutions receive financial allocations from the ministries of higher education set by the annual budget presented by the Malaysian prime minister. In 2016, funds received by the library amounted to RM3.5 million. Funds received in 2015 are RM25 million [9]. The total allocation received was to cater the whole expenditure divided into 3 parts: supply and services, assets, and salaries and emoluments. The total allocation for obtaining the libraries materials in 2017 was RM500,000 for book purchases and RM3 million for journal subscription. Whereas the allowance received for revenue activity in 2015, before the allocation by the Ministry of Higher Education reduced, RM13 million for journal subscription and RM1.5 million for book purchase.

In addition, the library also receives additional funds from the Trust Fund and the Research University Fund [9]. Other sources are from their operating activities such as International Organization for Standardization (ISO) courses, space rentals, late returns fine, and membership fees.

III. UTM Libraries (PSZ & PRZS) Management Expenses

The library incurs management expenses such as library system maintenance, book repairs, reference book purchases, database subscriptions, and computer and printer purchases and repairs. The Maintenance Office of Universiti Teknologi Malaysia is accountable for building maintenance, including floor and ceiling damage, as well as cleaning tasks like washing and dumping. They must collaborate with PSZ and PRZS UTM.

IV. Library System

The developers under the management of PSZ dan PRZS UTM have developed the Library Service System to make the library management process more accessible in parallel with technology changes and to meet the needs of consumers by making purchasing, acquisition, and cataloging systems easier. The library will focus on other priorities instead of system renewal. The purpose of performing the renewal of this system is to improve its features. Without renewal of the systems, the function will be the same as the subscribed version of the supplier, adding no new features. Irrespective of this, users are able to use this system for their everyday activities.

V. Prioritise the Interlibrary Loan Service

The interlibrary loan service is a service that allows borrowers from one library to borrow a reference

material owned by another library. Users without access to specific reference materials from UTM library databases can request interlibrary loans.

VI. Filter the Purchases of New Books

The reference book is an essential tool that aids educational activities. According to [2], the cost of spending 10,050 books costing RM8.72 million. However, of the total purchase of this book, only 48.4% or RM4.5 million used or borrowed. This is a waste to the library because the cost of purchasing new books is expensive. The library should reduce buying new books regarding the decline in book purchase funds [2]. Therefore, the library should reduce the number of new books being purchased in parallel with the total allocation available.

The appropriate approach for determining the books involves seeking input from the teachers themselves. The necessity of a reference book varies depending on the courses offered by the institution. According to [2], there are ten primary categories for book acquisitions, which include industry, science, education, language, technology, medicine, sociology, finance, family, commercial, and miscellaneous.

VII. Sponsor Library's Space for Any Program

Libraries sponsored program is an initiative by the library to encourage user to visit UTM library. The library sponsors this program by providing facilities such as seminar rooms, meeting rooms, and others for visitors. The visitor may come from a private organisation or from the UTM itself. Other than that, this program will not charge any fee for the facilities.

VIII. Provide Cafe

Space in the academic library is organised with a combination of space for reader and also for other activities. Due to the disparate interior designs of these libraries, the interior space had to be redesigned to accommodate patron needs. To redesign the space, it will be based on user acceptance. If a café is provided for library users, the library can attract more visitors and utilize the space more effectively [13].

IX. Drive through Book Exhibition

According to [9], the number of books loaned at the UTM library decreased by 31.81 % compared to 2014. To boost lending transactions, drive-through book exhibitions can be introduced, like in UKM, where this initiative successfully increased lending transactions.

In order to maintain the library's ability to meet user needs, facility management is crucial. The researchers found that facilities management plays a critical role in managing library assets because:

1. Preservation and protection

Preservation and protection of library assets, such as books, archival materials, and multimedia collections, are achieved through facilities management's implementation of appropriate environmental conditions, encompassing temperature, humidity, and lighting. Environmental damage, pest infestation, and theft can be prevented with proper HVAC systems, lighting controls, and security measures.

2. Optimisation of space utilisation

Libraries often face spatial constraints and must optimise the utilization of available space to accommodate collections, study areas, technological resources, and various services. Space planning, layout design, and furniture arrangement are integral components of facilities management, which seeks to optimise space

utilisation and create a comfortable and functional environment for both customers and employees.

3. Safety and accessibility

A library's facilities manager ensures they follow safety regulations and accessibility standards to protect patrons and staff. It also involves maintaining fire safety systems, emergency exits, accessible entrances, and disabled facilities so that the library remains safe and welcoming to all users.

4. Infrastructure maintenance

The responsibility of facilities management includes the upkeep and repair of building infrastructure, encompassing plumbing, electrical systems, roofing, and the building envelope. Implementing routine maintenance practices helps in averting equipment failures, prolongs the lifespan of building systems, and reduces the probability of service disruptions in the library caused by facility-related problems.

5. Technology integration

Libraries are becoming more dependent on technology for service provision, collection management, and patron interaction. Facilities management incorporates technology infrastructure like Wi-Fi networks, computer labs, digital displays, and self-checkout kiosks to improve library spaces and support digital initiatives.

6. Energy efficiency and sustainability

Besides implementing energy-efficient practices, green building technologies, and sustainable maintenance practices, facilities management helps to ensure the longevity of library operations. Energy-efficient lighting, HVAC upgrades, renewable energy systems, and waste reduction initiatives will reduce environmental impact and operating costs.

7. Enhancing user experience

The physical environment of the library influences the user experience. The aim of facilities management is to establish an environment that fosters learning, collaboration, and exploration while also being welcoming, comfortable, and functional. The overall ambiance and usability of the library are determined by factors such as lighting, acoustics, furniture ergonomics, and signage.

8. Supporting evolving needs

Libraries continuously adapt to meet evolving user needs, technological advancements, and public expectations. In response to these changes, facilities management adapts by reconfiguring spaces, renovating facilities, and integrating new amenities and services, in order to align with the evolving role of libraries as community hubs and digital learning centres.

CONCLUSION

The present circumstances have influenced the findings of this study. In conclusion, the university must show a willingness to invest in library services to tackle the problem of insufficient funding. Librarians are required to assume new responsibilities as facilities managers and relinquish outdated practices in order to effectively serve within an evolving environment. In order to enhance the value of the library, modifications must be implemented regarding the management of reference materials and the existing facilities.

It is imperative for librarians to comprehend the scope of facilities management practices and to prioritise

the enhancement of the library's value through the optimisation of space utilisation, technological upgrades, and implementing sustainable practices. Through the cultivation of an inclusive atmosphere, the provision of accessible services, and the provision of a wide range of resources, they can enhance the library's importance, enhance community involvement, and support lifelong learning for all visitors. The library's perceived and actual value can be significantly increased by prioritising sustainability and user satisfaction.

ACKNOWLEDGEMENT

We would also like to show our gratitude to the UTM Mass Appraisal, Housing and Planning Research Group members for sharing their pearls of wisdom with us during the course of this research, and we thank to our anonymous reviewers for their so-called insights although any errors are our own and should not tarnish the reputations of these esteemed persons.

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