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BUILDING MAINTENANCE PROBLEMS FACED BY THE RESIDENTS OF APARTMENTS IN KUALA LUMPUR, MALAYSIA

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ABSTRACT

This research aims to identify the building maintenance problems faced by the residents of apartments in Kuala Lumpur, Malaysia. Previous researchers highlighted several issues faced by the residents of the highrise strata buildings, including the maintenance budget and cost, maintenance design, management teams of buildings, quality of building, technique and tools, and maintenance routine. A questionnaire survey was distributed to Ampang, Pandan and Gombak, Kuala Lumpur residents. In total, 162 respondents have participated in this research. The data were then analysed and ranked to examine the criticality of the building maintenance problems faced by the residents. Based on the findings, the most common problem is the lift condition in the residential apartment, categorised under maintenance routine problem. Most respondents responded that most complaints are related to maintenance problems in the residential area. These findings can be used as a guideline to improve the quality of building maintenance services in Kuala Lumpur.

Keywords: building problems, residents, maintenance

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INTRODUCTION

The city's rapid urbanization and population growth have led to numerous challenges in maintaining the structural integrity, safety, and aesthetic appeal of these buildings. Building maintenance is the operations required to sustain a facility in its original operating condition and productive potential. Building maintenance must be undertaken regularly to ensure that the structures are kept in good condition and that the structure's capital worth is preserved. The act of the maintenance of properties and buildings is handled by property experts such as Property management, who are required to the properties and building management also has been hired by the residents or developer to manage the building, not only the maintenance but also accounts, insurance, and management. Residents of the property are legally owned and have exclusive rights and control of the property, including assets, do the maintenance and management of their property and have their benefits of their property. Studies show that there are many problems and challenges in terms of maintenance that arise and must be dealt with by residents in Kuala Lumpur, Malaysia.

LITERATURE REVIEW

Based on the literature review, six (6) building maintenance problems were faced by the residents of apartments in Kuala Lumpur, as highlighted by the previous researchers.

Shortage of Maintenance Budget and Cost

According to researchers Dzulkifli et al. (2021), cost and budget of maintenance is one of the important things that need to be prioritise for the maintenance of buildings such as apartment buildings. They also added that during this timeframe, certain regular maintenance is put on hold, which causes building components to deteriorate and residents to become increasingly dissatisfied. This factor also has been agreed by other studies by Hauashdh et al. (2020) stated that oftentimes, the specified budget is depleted well before the end of the period. For example, it is common for a yearly budget to run out by the end of the third quarter due to careless spending on maintenance activities. Given the state of the economy, management teams in charge of maintenance have had to prioritise the highest priority tasks over those maintenances that can wait.

The Complexity of Maintenance Design

Design is one of the building factors that can be included in the default in maintenance when the age of the building is more than 10 to 20 years (Hauashdh et al., 2020).

The efficiency of a building depends on many factors, including its design and maintenance. For instance, maintenance employees may encounter challenges in accessing building elements and components for regular maintenance and repairing buildings due to inappropriate design of maintenance accessibility during the building design stage.

Lack of Management Team Expertise in Buildings

Building maintenance can be included in two sectors maintenance, such as from in house which the management team that has been appointed manage the maintenance of the buildings and for the outsource, the management team has appointed maintenance team from outside company that more skilful in maintenance area. For the management that using in house has their weakness which are that due to a lack of experience and insufficient maintenance employees, maintenance activity was limited to housekeeping and basic maintenance. In addition, the lack of maintenance expertise led to an inaccurate assessment report and an overrun budget, which in turn led to a substantial backlog in maintenance work (Dzulkifli et al., 2021).

Low Quality of Building

Loss of defect kinds that require rebuilding, such as improper installations and missing tasks, was shown to be quite common in all shared/exclusive regions. These flaws are easily detectable by sight. The researcher also agreed for a building to be cost-effective, durable, and easy to maintain, mistakes during construction must be kept to a minimum. Most influential people ignored the long-term value of regular building maintenance that stated by Khalid et al. (2019).

Lack of Use Technique and Tools in Maintenance

There were few tools and technique that can help in measuring the quality of maintenance of certain buildings. Researchers, Husin et al. (2018) have stated the best method for evaluating the effectiveness of safety measures in affordable housing is a post-occupancy evaluation (POE). For analysing how well a structure functions once it has been handed over to its users, POE has emerged as a useful strategic performance monitoring tool. The POE process involves an in-depth analysis of the building's technical efficiency, user satisfaction, project delivery method, and suggested next steps.

Lack of Maintenance Routine

Every maintenance programme has the routine such as preventive maintenance, corrective maintenance, and condition-based maintenance. It remains important for each management to do maintenance based on the needed of buildings, as Musa et al. (2020) has stated that a building's ability to support an organisation's performance is not directly correlated with the maintenance plan based on the building's condition. The physical condition of a structure is merely a secondary consequence of the faults, degradation, or decay or their combination. Existing approaches to building maintenance fail to recognise maintenance as a production aspect, which in turn leads to a breakdown in the building management process. However, the models were still defined by the same limitations that had been present in earlier methods. Derelict and decaying structures pose threats to public health and safety when managed poorly.

METHODOLOGY

To achieve the objectives, the data collection is used is questionnaire. The questionnaire was performed, and primary data will be obtained by distributing questionnaire to a resident of low and medium cost apartment in Kuala Lumpur. Questionnaire has been constructed with the objectives of the study and the problem to be solved. To design the question will be combined with the strategy to include all part that covered the research question based on the problem statement and followed by theoretical framework to achieve the research objectives. The method used is quantitative method. The questionnaire analysing used descriptive analysis. The function is to determine the factor of the respondent's issues. The sampling that been using is the taro Yamane formula and the respondent is 162 respondents. Distribution of the questionnaire by using the google form, and social media channels like Community group in Facebook and WhatsApp the data was disseminated to residents in Kuala Lumpur.

FINDING AND DISCUSSION

Section A: Demographic

Table 1: Demographic profile

	Item	F	%
Gender	Male	93	47.4
	Female	69	42.6
	Total	162	100.0
Age	20-30 years old	77	47.5
	31-40 years old	47	29.0
	41-50 years old	25	15.4
	51 and above	13	8.0
	Total	162	100.0
Marital Status	Single	69	42.6
	Married	87	53.7
	Widower/Widow	6	3.7
	Total	162	100.0
Academic Level	SPM/Pre University	64	39.5
	Diploma/Undergraduate/Post	98	60.5
	Graduate		
	Total	162	100.0
Occupation	Government Sector	42	25.9
	Private Sector	75	46.3
	Self-employed	45	27.8
	Total	162	100.0
House Ownership	Tenant	119	73.5
	Owner	43	26.5
	Total	162	100.0
Monthly Maintenance	Yes	124	76.5
Payment	No	38	23.5
	Total	162	100.0
Number of Household	1-5	124	75.9
	6-10	38	23.5
	11 and above	1	0.6
	Total	162	100.0

Section B: The Problems in Building Maintenance Services Provided by Property Management of the Apartment

In Part B, the building maintenance problems maintenance faced by residents of the apartments in Kuala Lumpur by using a Likert Scale that ranges from agree (1), neutral (3), and disagree (5). On top of that, the researcher has identified 15 indicators, which are services provided by the property management, management maintenance, unit house, the response from the property management, types of complaint that have been made, cleaning and services, facilities in the residential

apartment, unit building materials and quality, unit house design, fire safety equipment, lift condition, staircase condition, drainage system condition, corridor space condition and lastly management handle the apartment roof leakage problems.

Table 2: Result and Ranking

Problem Cluster/Category	Description/Indicators	Ranking	Mean
Lack of maintenance routine	Problems towards the lift condition in residential apartment	1	2.09
	Problems towards the management handle their residential apartment roof.	3	2.06
	Problems towards drainage system conditions in their residential apartment	4	2.05
	Problems towards the corridor space condition of residential apartment	7	2.01
	Problems towards cleaning services in residential apartments	13	1.93
The complexity of maintenance design	Problems towards unit house design after they bought the unit house	2	2.07
The lack of techniques and tools used in maintenance	Problems towards the facilities of residential apartment	5	2.04
The low quality of the building	Problems towards the unit house after they bought the unit house.	6	2.04
	Problems towards unit building materials and quality	8	2.01
The lack of expertise in the maintenance team	Problems towards the fire safety equipment of the residential apartment	9	1.99
	Problem towards the staircase condition equipment of the residential apartment	10	1.99
	Problems towards the services provided by Property Management of residential apartment	11	1.98

Shortage of maintenance budget and cost	Problems towards management maintenance provided by Property Management or residential apartment	12	1.96	
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Generally, the result of the maintenance problem faced by the residents showed an average below 2.0, with the problems towards lift conditions in residential apartments representing the highest with 2.09 of the mean. More respondents have problems with the lift condition in their residential low and medium apartments. Based on the ranking, from the first place until the fourth place is the cluster problems or category of the maintenance routine and at the fifth place is the technique and tools in maintenance. The problems towards unit house design follow the next ranking after they bought the unit house with the mean of 2.07, and the respondent has a problem with their unit house design. The ranking between 1 and 2 is very close to the respondent's satisfaction. The second lowest ranking is the problems towards management maintenance provided by Property Management of residential apartments, with a mean of 1.96. The respondents who responded to the questionnaire had no problem with their apartment management. The lowest ranking is the problems towards cleaning services in residential apartments, ranking as 13 among all the satisfaction factors, with a mean of 1.93. It shows that fewer respondents have problems with their apartment's cleaning services.

CONCLUSION AND RECOMMENDATION

In conclusion, all the problems the residents face need to be appropriately addressed by the management to ensure the effectiveness of the delivery of the building maintenance services. In the dynamic urban landscape of Kuala Lumpur, the maintenance of apartment buildings emerges as a critical facet of sustainable development.

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