

ANALYZING THE DETERMINANTS OF
SHARE UNIT COMPUTATION FOR WATERFRONT
STRATA-TITLED RESIDENTIAL BUILDING

ADZHAM BIN MAHMUD

MASTER OF REAL ESTATE MANAGEMENT

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF ACCOUNTANCY AND MANAGEMENT

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Adzham Bin Mahmud

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By

Adzham Bin Mahmud

This research project is supervised by:

Sr Dr. Elia Syarafina Binti Abdul Shakur

Lecturer

Faculty of Accountancy and Management

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Name of Student: Adzham Bin Mahmud

Student ID: 2006338

Signature :



Date : 7th December 2023

DEDICATION

I dedicate this to my beloved wife, Irdawati binti Ramli, daughters Nur Annisah and Nur Hidayah, and son Ahmad Azim for their sacrifices and understanding.

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LIST OF ABBREVIATIONS

BRDB	Bandaraya Development Berhad.
CEO	Chief Executive Officer.
CoB	Commissioner of Buildings.
COO	Chief Operation Officer.
CPSP	Certificate of Proposed Strata Plan.
HBA	Home Buyers Association.
JKPTG	Director General of the Department of Land and Mines.
JMB	Joint Management Body.
JUPEM	Department of Survey and Mapping Malaysia.
LS	Land Surveyor Licensed Under Act 458 (Revised 1991).
KPKT	Ministry of Local Government Development, Malaysia
MA	Management Agent.
NRECC	Ministry of Natural Resources, Environment and Climate Change.
PTG	Department of Land and Mines (Strata).
REHDA	Real Estate and Housing Developers Association.
SiFUS	Certificate of Share Units.
SPSS	Statistical Package for Social Science.
SSS	So Sun Sing.
WHB	Worldwide Holding Berhad.

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ABSTRACT

This study explores the weightage that affects the Certificate of Share Unit Formula (SiFUS), what suitable and standard weightage shall be used, and the appropriate framework for weightage calculation for the Waterfront Strata-Titled Residential. Specifically, this study focuses on the consideration of maintenance charges in the context of Malaysia. The weightage allocation to the determinant is a matter of concern that can potentially give rise to maintenance fees in Strata development. Hence, it is imperative to implement precautionary measures to effectively mitigate the risk of introducing prejudice, which may result in unfair practices. The abovementioned practices can misguide individuals who have acquired properties, including additional waterfront parcels containing exclusive yacht berths within their boundaries. The selected research case study is situated in Iskandar Puteri, Johor. This study employed a combination of qualitative and quantitative methods to gather data and analyze the research question present. Specifically, the researchers utilized the purposive sampling method to select suitable respondents. The 12 respondents involved in this research were government (eight respondents), licensed surveyors (three respondents), developers (one respondent), and management agents (one respondent). These individuals are actively designing and developing waterfront buildings, specifically in the context of Strata. As part of their role, they are required to propose the inclusion of a fair and reasonable weightage factor in Tables 1 and 2 of the Strata Act 2015.

Furthermore, the government must comprehensively evaluate the weightage system before granting the SiFUS certificate to the developer. Data obtained was then analyzed using the SPSS software, employing content analysis and the Mann-Whitney test. In particular, the Mann-Whitney test yielded significant findings. These findings were further supported by descriptive analysis and context analysis. It is important to note that the circular JKPTG/4/214, which has been implemented in Malaysia, was found to be relevant within this context. The research findings have resulted in the creation of the Certificate Share Unit Computation (SiFUS) as part of the Waterfront Strata-Titled Residential Framework. In a nutshell, the research findings have the potential to bring about a significant and profound effect by

materializing a revolutionary resort-style environment that seamlessly integrates with a residential community, complemented by the inclusion of a luxurious marina facility. The distinctive setting strives to create a perception of selectiveness while promoting social integration and sustainable durability.

CHAPTER 1

RESEARCH OVERVIEW

1.1 Introduction

The urbanization process in Malaysia encountered an essential increase during the 1980s, primarily driven by an impressive increase in the urban population. This phenomenon was particularly evident in three prominent metropolitan regions of the nation, namely Kuala Lumpur, Johor, and Penang. Considering the current factors, the researcher will likely witness a stratification of residential property in Malaysia in the coming years. The increase in popularity of strata developments in the early 21st century can be attributed to their cost-effectiveness and convenience, rendering them an appealing choice for numerous individuals seeking housing alternatives. An illustrative instance of a highly liked category of property is waterfront real estate, which attracts considerable interest owing to its advantageous attributes, such as convenient accessibility, reasonable cost, and harmonious alignment with the prevailing desire towards a luxurious resort-style residential lifestyle.

Researcher have recently observed an essential rise in the populace's preference for regenerating Malaysia's waterfronts. In response to the growing demand for localized recreational options, particularly those centred around water-based activities and scenic views, numerous private and public developers started a series of initiatives to establish new projects close to waterfront areas. Ongoing development initiatives can be observed along Malaysia's waterfronts, particularly relative to river regions. In urban development, it is essential to acknowledge the diverse outcomes that may arise from a given situation. As researcher delve into the topic it was observed specific individual or entities will progress to the subsequent phase of their endeavours. These individuals have successfully laid the groundwork and are now poised to move forward with their plans, building upon their previous achievements.

On the other hand, also to recognize those who will engage in redevelopment efforts. These individuals or entities have recognized the need for revitalization and are committed to breathing new life into existing structures or areas. Through their dedication and strategic planning, they aim to transform these spaces into vibrant and happy environments. Lastly, researcher must not overlook those embarking on brand-new waterfront construction projects.

These individuals or entities possess a vision for the future. They are eager to contribute to waterfront development. The residential complexes, namely Glennmarie Cove in Klang Valley and Kingfisher Cove in Likas, are known waterfront developments in Malaysia (Eves, Azlina, and McDonagh, 2009). Recently, researchers have witnessed an exciting development among private developers who have wisely recognized the potential for exploiting the transformative potential of the waterfront atmosphere. These creative people have embarked upon a journey to acquire knowledge and expertise in converting water into gold, thereby positioning themselves favourably in property marketing. By effectively transforming water into a highly coveted and valuable commodity, these developers have seized a unique opportunity to enhance the desirability and attraction of their properties. In Malaysia, customers are presented with diverse housing options, including bungalows, terrace houses, apartments, and condominiums. Providing a secure and reasonably priced abode is a fundamental necessity for individuals, as highlighted by Hashim et al. (2012). In the Malaysian real estate market, it is worth noting that detached, semi-detached, and terraced landed properties continue to hold a position of utmost desirability among potential buyers and investors alike. According to a study conducted by Putri Nabila and Raha (2019), it has been observed that despite the increasing number of high-density and high-rise residential structures such as affordable flats, apartments, and condominiums in urban areas, homebuyers in Malaysia keep showing a preference for landed homes. A terraced house, also known as a row house, demonstrates a form of mass housing that private developers carefully design to meet the general population's housing demands. As Mohit et al. (2010) highlighted, the terraced house is a highly desired land property within the Malaysian context.

Yassin, Ramlan, and Mohd Razali (2017) explained that it has been established that a waterfront possesses unique features that make it a valuable and exceptional asset. Throughout human culture, it has been observed that the presence of attractive water features, such as waterfronts, holds significant importance. These areas serve as exciting regions where townships engage and interact with their surrounding waterways. In light of the distinct attributes of the sites and towns, it is interesting to note that waterfront projects can be subject to different interpretations and possess different levels of expressive potential (Dong, 2004). Following urbanization and modernization, it is noteworthy to observe that Malaysia's current

trajectory of waterfront development has undergone a notable transformation. Specifically, there has been a discernible shift towards prioritizing the creation of mixed-use spaces and recreational areas within these waterfront developments. Currently, projections are indicating the ongoing growth of waterfront development in Malaysia. Given these locations' significant value as valuable assets for a country, the government's continued challenges in rehabilitating and upgrading waterfront areas are a matter of concern.

Furthermore, it is worth noting that the private developer has identified a unique opportunity to potentially transform water into a precious resource through their ongoing initiatives in waterfront housing development projects. In light of a comprehensive analysis of multiple factors, it is imperative that researchers actively advocate for the advancement of waterfront areas while simultaneously upholding the conservation of our precious natural resources (Eves et al., 2009). Nevertheless, it is essential to note that land development in waterfront areas has occurred, even without comprehensive planning guidance from federal, state, or local governments.

1.2 Research Background

It is widely accepted in modern society that stratified neighbourhoods are a prevailing norm, particularly in urban regions. Consequently, the urban landscape has experienced significant expansion to meet the growing need for land, leading to a continuous price rise. Over the duration, a strata title has been duly established and enshrined in legislation to effectively address all the pertinent issues about the strata title, thereby facilitating the development and organization of strata properties in Peninsular Malaysia. Therefore, it is imperative to acknowledge the implementation and subsequent enactment of the strata title, which has been devised and implemented over time to effectively address the myriad issues inherent within the strata title system (Choon et al., 2015).

During the initial stages of implementing the Strata Titles Act, many concerns and disagreements appeared around various aspects such as legislation, rules and regulations, implementation strategies, management practices, and maintenance procedures. One key concern in this context is establishing and implementing an incorporated unit formula for strata buildings with waterfront features. In the past few years, the esteemed government of Malaysia has formulated and subsequently approved a new Act within the Strata Management Act of

2013. This act has been subject to a series of amendments, carefully crafted to strengthen and enhance the existing practices. Furthermore, these amendments aim to introduce a fresh and innovative perspective into strata-building development (Rubiah et al., 2018). Despite undergoing four amendments on different dates (23 February 1990, 2 August 1996, 1 December 2001, and 12 April 2007), the act does not include any specific provisions on the waterfront strata. The absence of relevant provisions within the act may present considerable challenges for individuals within society, including professionals and developers, whose work is actively seeking guidance. The recent revisions have included the introduction of subdivisions, a system that categorizes land into various classifications, including land lots, accessory parcels, and common property. The changes that have been made enhance the implementation of a distinctive housing development concept known as the Gated Gated Community Scheme exclusively.

Therefore, it can be observed that there exists a significant absence of all-encompassing data about waterfront structures that possess strata and fall outside the scope of the recently enacted legislation. More specifically, this absence of information precisely determines the suitable size attributed to the SiFUS factor. Hence, it is observed that the practitioners diligently follow the established conventional formula or the antiquated act when dealing with both landed and high-rise properties. They rely significantly on the weightage assigned to Sifus for landed strata properties that offer gorgeous waterfront views. The approach, as presented, demonstrates an essential absence of fairness and equitability. One potential consequence is the potential for misunderstandings among residents regarding their responsibility to cover maintenance and shared expenses after obtaining Vacant Possession.

In the context of a stratified community, it is observed that individuals tend to form clusters or groups naturally. Therefore, the proprietors or residents of strata must collaborate harmoniously to equally distribute the financial burden associated with utilities and shared areas. In the process described, the developer must submit the Certificate Share Unit Formula (SiFUS) to the Department of Lands and Mines (JKPTG) for approval. This submission is facilitated through a licensed Surveyor. This submission seeks approval for the maintenance budget based on the shared unit defined in the Certificate of Share Unit Formula (SiFUS). This budget outlines the money collected from residents as maintenance and sinking funds.

1.3 Problem Statement

The Strata Titles (Amended) 2013 Act, implemented in June 2015, does not incorporate the Certificate of Share Unit Formula (SiFUS) weightage in calculating shared unit parcel waterfront residential properties. As a result, it is merit noting that developers continued to exhibit a persistent inclination toward employing their preferred variable when assessing Share Units within the framework of the SiFUS. This behaviour can be seen as a reflection of the established practice observed under the previous legislation. Potential homeowners may be apprehensive about the overall maintenance fees, primarily because of the uncertainty surrounding the calculation process and the reliance on conventional weightage when waterfront elements are not considered.

According to the Strata Management Act, collecting contributions on maintenance and management charges is required. These contributions are to be determined based on the distribution of share units, mentioned explicitly in sections 8(1)(a) and 23(2) of the act. According to the stipulations outlined in the act, the assignment of shared units to specific properties is determined by the licensed land surveyor whom the developer engages. This determination is made by consulting Tables 1 and 2 as the Strata Management Act specifies. In Malaysia, it is essential to note that the term "Share Units' allocation" may not immediately agree with everyone. This is primarily due to the prevailing practice in the country, which involves individuals contributing to shared funds and costs. These costs typically encompass maintenance charges, sinking funds, insurance premiums, and quit rent, as highlighted by IProperty in 2007. According to the Department of Survey and Mapping Malaysia (JUPEM) (2018), it has been highlighted that there is a requirement to implement appropriate legislation to ensure specific outcomes.

- a) Design specification conforms to the Strata Titles Act.
- b) Parcels, accessory parcels, and common properties are clearly defined.
- c) Allocation share units are equitable.
- d) Certification by consultants.
- e) The effect of the strata legislation is to ensure strata titles are qualified for buyers upon vacant possession, encourage confidence in the distribution of shared units, and provide more significant guidance to developers (Choon et al., 2015).

The existing Strata Act does not provide provisions for including a waterfront weightage factor in conducting a Certificate of SiFUS. Despite undergoing multiple revisions, the current Act has not yet provided a precise definition or specification regarding the waterfront or mixed development weightage factor. Hence, it is imperative to acknowledge that the technical experts rely on the existing weightage. This factor may not necessarily ensure fairness in waterfront strata building development. A research gap is evident within the domain of waterfront strata, as no prior studies or research endeavors have adequately addressed the associated question, problem, or inquiry. Therefore, upon the conclusion of this comprehensive investigation, the researcher suggests formulating a carefully developed framework for a residential strata scheme situated along the waterfront. This framework is intended to serve as a set of guidelines specifically designed for industrial practitioners and experts operating within this industry, primarily offering academic reference and discussion.

1.4 Research Questions

According to the extensive analysis of the issue, it has been determined that three (3) research questions have been created for this study. These research questions have been systematically crafted by the individuals listed below:

- a) What factors infect the Certificate of Share Unit Formula (SiFUS) in the Waterfront Strata-Titled Residential Building?
- b) What suitable and standard weightage shall be used for the Certificate of Share Unit Formula (SIFUS) for the Waterfront Strata-Titled Residential Building?
- c) What is a suitable framework for weightage calculation in the Certificate of Share Unit Formula (SIFUS) for a Waterfront Strata-Titled Residential Building?

1.5 Research Objectives

This study analyses the procedure-related elements of the Certificate of Share Unit Formula (SiFUS) process concerning waterfront residential properties. Specifically, the examination will be conducted within the Land and Mines Department regulations and the Commissioner of Building (CoB), as highlighted by Gunaprasath (2018). In the context of a waterfront residential strata scheme, it is worth considering that the standard formula used might not be the most suitable option if it has the potential to cause damage or destruction.

Researching strata designs becomes more complicated as disruptive components happen in many circumstances. It can be concluded that the conventional formula cannot generate an equitable distribution of units in strata schemes of this nature. Under the circumstances, engaging in diligent research to ascertain and identify the subsequent matters is paramount. As a result, it is essential to examine and determine the following issues:

- a) To determine the existing factors infecting the Certificate of Share Unit Formula (SiFUS) in Waterfront Strata-Titled Residential.
- b) To analyze the suitable and standard weightage used for the Certificate of Share Unit Formula (SiFUS) for Waterfront Strata-Titled Residential Building
- c) To develop a Certificate of Share Unit Formula (SiFUS) for the Waterfront Strata-Titled Residential Building Framework.

1.6 Significance Of A Study

The Strata Act of 1985, which was delayed and revised in 2013, along with the Strata Management (Management & Maintenance) Regulation of 2015, grants the government the power to evaluate and modify the allocation of shared units in waterfront residential developments for SiFUS within mixed development projects. This authority is exercised to ensure these units' fair and just distribution. Therefore, it is reasonable and appropriate for the government to reevaluate the provisions within the Strata Management Act about the calculation of share units. More specifically, this re-evaluation should focus on the weightage factors, designated as F1, F2, and F3, as outlined in the First Schedule Section 8, Table 1, and Table 2 of the Strata Management Act (PTG, 2010).

As elucidated by Khadijah (2006), the fundamental practical objective behind the implementation of shared units with equitable weightage is based on determining a proprietor's contribution towards the upkeep and administrative expenditures of the management corporation. Furthermore, it determines the individual's responsibility for the financial obligations of the management corporation, including rent, rates, insurance premiums, and any other necessary duties that must be fulfilled.

It is imperative for those involved in the development of strata waterfront residential properties, as well as academics conducting research in this area of study, to actively engage

with the government or relevant ministries such as the Department of Director General of Lands and Mines (JKPTG) and the Ministry of Local Government Development, Malaysia (KPKT). By doing so, it can effectively review and enhance the existing rules and requirements outlined in the Strata Title Act. This collaborative effort will significantly benefit practitioners in the business sector and contribute to further advancements in this field of study.

1.7 Chapter Layout

The goals and methodology of this research are outlined below.

Chapter 1 Introduction: In this chapter, we will be delving into a concise overview of the strata system in Malaysia. The emphasis will be on highlighting the importance of accurate and fair weightage allocation for SiFUS, which stands for Certificate of Share Unit Formula. This discussion relates to mixed-development strata buildings located next to waterfront areas. The primary aim of this endeavour is to optimize the advantages experienced by homeowners and the management team through the efficient administration of maintenance and sinking funds. Hence, employing this particular methodology will effectively mitigate any potential misinterpretation of the fees imposed upon the residents.

Chapter 2 Literature Review: This chapter explains why various academic publications, including books, journals, and studies done by experts, are essential for understanding the Strata Act. It concentrates on the Strata Act's references to the Subdivision of land parcels, the strata title system, the value of these elements to homeowners, the Certificate of Share Units (SiFUS), and the allotment of these units. A thorough investigation of the relevant literature has led to this hypothesis.

Chapter 3 Research Methodology: The chapter analyzes the research methodology employed by the questionnaire. In the forthcoming chapter, the author will delve into the intricacies of data collection from the designated participants, commonly referred to as respondents. The present study aims to employ both primary and secondary data sources and survey questionnaires to gather responses from individuals interested in the regions of Johor and Selangor. The objective is to ascertain the weightage of SiFUS through this research endeavour.

Chapter 4 Results and Findings: The data collected from the targeted respondents will be analyzed using the Statistical Package for the Social Sciences (SPSS) software. This analytical process will translate the data into meaningful insights regarding the relationship between the need for weighting and equity in SiFUS computation for waterfront strata-titled residential buildings.

Chapter 5 Conclusion: Once the data collected from the participants has been completed and the hypothesis has been evaluated and interpreted using the SPSS software, the subsequent section will examine the findings of the research objective. This chapter will explore the research's limitations and offer recommendations for further consideration. The primary aim of this chapter is to indicate the advantages that future academics and readers can derive from engaging with this research.

1.8 Chapter's Conclusion

The clarification provided by the officer at Director General of the Department of Land and Mines (JKPTG) under the Ministry of Natural Resources, Environment and Climate Change (NRECC) highlights that the absence of strata titles in specific properties can be attributed to legal deficiencies that occurred in the past. It is imperative to establish a weightage calculation to ensure a comprehensive evaluation of mixed-development projects, such as Strata buildings with Waterfront features. This calculation will enable us to assign appropriate significance to various aspects of these projects, thereby facilitating a more nuanced analysis. By implementing a weightage calculation, we can effectively prioritize and assess the different components of these mixed-development projects, ensuring a thorough and systematic evaluation process. Complying with the applicable regulations and obtaining approval from the Department of Director General of Lands and Mines (JKPTG), these measures must be fulfilled with the SiFUS submission process. The JKPTG collaborates proactively with various parties, including state officials, industry stakeholders, and Non-Governmental Organizations (NGOs), to tackle relevant issues and challenges. The collaborative effort is extended and enhanced by creating a committee composed of JKPTG.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

In property development, we encounter a fascinating concept known as a Strata scheme. This scheme divides buildings or land into distinct entities, thereby facilitating the creation of various residential structures. These structures may encompass a diverse range of abodes, including but not limited to flats, apartments, condominiums, townhouses, and even landed houses. The development and allocation of these residential units are made possible by implementing a Strata scheme, offering individuals a plethora of housing options within a single property development (JKPTG, 2009).

In real estate, it is not uncommon for landed properties, such as bungalows, terrace homes, and semi-detached houses, to be bestowed with what is known as Individual Titles. When one discovers themselves as the exclusive proprietor of an entire plot of land, it can be said that owners have obtained what is commonly known as "ownership." To facilitate the sale of an owner unit, getting and completing Form 14A as stipulated by the Malaysian National Land Code is imperative. The suitable document for the proprietor's legal encumbrance to their financier regarding the property with an Individual Title is known as Form 16A.

The respected land office will handle the transfer and charge, and they must receive the tools to register them. This differs from homes that include land, which is usually linked to giving out individual Titles. Understanding the idea of unit shares in the strata title setting is essential if buyers want to own property. When land or a building is split up among several owners, each person's share is called a unit share. Considering the built-up space of each unit, this unit share is calculated. As a result, giving out unit shares ensures that each owner has a clear and measurable stake in the property.

The Director General of the Department of Land and Mines (JKPTG) under the Ministry of Natural Resources, Environment and Climate Change (NRECC) made it clear that some sites don't have their strata titles because of legal issues that happened in the past. To

ensure that calculations are correct and follow the rules, we need to develop an exact method that gives mixed-development projects, especially those with strata buildings and waterfront features, an equal amount of weight. Following the steps in the SiFUS submission process is necessary for these actions to be legal and get approval from the JKPTG.

The Ministry of Housing and Local Government (KPKT) collaborates proactively with various entities such as state officials, industry stakeholders, and non-governmental organizations (NGOs) to tackle relevant issues and challenges. The collaborative endeavor is further fortified by establishing a committee under the astute leadership of the Department of Director General of Lands and Mines (JKPTG). The JKPTG demonstrates a commendable willingness to enhance the legislation regularly. This proactive approach aims to safeguard the interests of strata owners and buyers, thereby ensuring the perpetual applicability and significance of the legislation (Kay, 2018). JKPTG also mentioned five reasons why having strata titles for owners is essential.

- i. Verification of ownership.
- ii. Facilitation of the exchange of financial instruments, specifically focusing on interest charges imposed by banks for loans.
- iii. To implement measures that streamline the process to optimize property disposal or sale process without incurring consent fees from the developer.
- iv. It is establishing a partnership with a reputable management corporation. This strategic move guarantees the property's continuous maintenance and efficient management.
- v. The process involves verifying the developed area and allocating shares in the collective units.

2.2 Strata Title Act 1985

The Strata Titles Act of 1985 was enacted to address the limitations and inadequacies found within the provisions of the National Land Code about the Subdivision of buildings. Additionally, the resource offers supplementary materials related to the Subdivision and management of buildings in diverse regions, encompassing chapters and schedules within the National Land Code. In analyzing the content in conjunction, it is essential to note that the Strata Titles Act includes most of the provisions within the National Land Code on constructing a subdivision. In addition to the topics above, the researcher will delve into the particulars of

the Strata Titles process, procedure, and management of buildings related to SiFUS Weightage for the waterfront.

Tan (2020) explained that it is essential to note that strata titles refer to distinct individual titles that are granted to individual units within a development, be they houses, apartments, or offices. These units are characterized by their shared utilization of common amenities, including but not limited to gated guarded communities, security provisions, car parks, and various facilities that a joint owner collectively governs. Strata Titles, as the name suggests, refer to distinct Individual Titles that are granted to individual units within a development. These units can include houses, apartments, or offices. The critical characteristic of Strata Titles is that they are accompanied by shared facilities, which may encompass gated and guarded communities, security measures, car parks, and various amenities. The joint owners of the development collectively manage these shared facilities. According to the provisions outlined in the Strata Titles Act of 1985, developers are authorized to submit applications for Strata Titles on behalf of the purchasers. In property transactions, it is imperative to recognize the significance of a deed of assignment. This legal instrument assumes a pivotal role in various scenarios, such as when one intends to procure a property, seek collateral for a loan, engage in a sub-sale arrangement, or safeguard the interests associated with a loan. By comprehending the multifaceted nature of a deed of assignment, individuals can navigate the intricacies of these transactions with prudence and diligence.

2.2.1 Single-use development

Distributing unit allocation by categorizing floor space may give rise to instances of inequity. Let us now examine a construction consisting of two residences, each with its distinct size. The first living occupies an area of 110 square meters, while the second dwelling provides a larger area of 200 square meters. The reason behind the amalgamation of the two lots into a single 4-share unit is the cumulative floor space that they possess. The focal point of concern revolves around how these separate parcels, characterized by varying sizes, can be equitably assigned an equal number of share units. In this scenario, it is interesting that the developer preferred allocating shared units based on floor area arrangement. However, it is essential to acknowledge that such a method may result in unequal distribution of units among the strata owners. In the context of shared units, it is necessary to note that a side parcel does not possess

any right to such units. In determining the total number of share units for a given parcel, it is important to consider including share units associated with the accessory parcel. Selecting units for the accessory parcel must be conducted utilizing the identical technique employed for the standard parcel. Considering the total number of share units allocated to the main parcel is imperative before incorporating the additional accessory parcels.

2.2.2 Multiple-use development

In the context of a mixed-use development, it is imperative to consider the distribution of benefits, which is closely related to the project's difficulty level. In mixed-use development, employing the total square footage of a parcel remains typical as the primary determinant for distributing the shared units. Additional weighting factors are assigned to address the issue of similar parcels having shared units. These factors compensate for the shared units and their impact on the analysis.

As a result, the number of available gathering spots is limited, and the range of facilities and services is quite limited. In the context of a primary mixed-use building, it is essential to note that the allocation of factors varies depending on the specific floor level and the purpose of the parcel. Specifically, when considering the base floor, where commercial activities are typically situated, a factor of 1.5 is assigned. On the other end of the spectrum, when researcher shift our attention to the upper floor, which is mainly designated for residential purposes, a factor of 1 is assigned. In distributing shares in projects of this nature, a formula is employed to consider the total floor space and multiply it by the relevant elements. In urban planning and land development, it is essential to identify the distinct formulas that govern the determination of floor area for commercial and residential parcels.

For commercial parcels, the formula for calculating the floor area involves multiplying the given area by a factor of 1.5. This factor, greater than one, accounts for the additional space required to accommodate the various activities and amenities typically associated with commercial establishments. Therefore, the resulting floor area encompasses the necessary provisions for business businesses to thrive and cater to the needs of their clients.

On the other hand, the formula for determining the floor area of residential parcels follows a slightly different approach. In this context, the floor area is obtained by simply multiplying the given floor area by a factor of one. This factor, equivalent to unity, indicates that the floor area remains unaltered and directly corresponds to the living spaces and amenities intended for residential purposes. Consequently, this formula ensures that the floor area of residential parcels is optimized to meet the needs and preferences of the residents, encouraging comfortable and functional living environments. To summarize, thoroughly examining the share units associated with additional parcels is imperative when determining share quantities.

By multiplying the gross floor area of the use by the weight factor, one can derive the quantification of share units that correspond to each use category. The figure represents the comprehensive square footage measurement officially submitted to the municipality to obtain building permits. Therefore, one must take into consideration the total area of the floor. To maintain consistency and coherence within a given context, the shared units of an accessory parcel must align with those of the main parcel. By the weight assigned to individual users, parcels of similar sizes can be distributed into varying quantities of shares. To calculate the number of shared units for each parcel, it is imperative first to estimate the total number of units for the building. In these types of developments, it is customary to employ various weight factors to address the absence of shared amenities among other prospective home buyers.

In the realm of complex projects, such as a hotel complex boasting multiple hotels, stores, offices, and potentially even residential flats available for rent, it is imperative to consider incorporating additional variances. These variances accommodate the intricacies and diverse elements inherent in such a development, including integrating a housing scheme within a strata development. In this instance, it is worth noting that water served as a prevalent location for docking the proprietor's yacht at their designated pontoon, as shown in Figure 2.1. One of the challenges in this particular form of development pertains to determining the appropriate condition that should be employed to differentiate between parcels that serve distinct purposes.



Figure 2.1 Emerald Bay elevation view.
(Source: Emerald Bay official website)

For the developer's submission to be deemed satisfactory, they must comprehensively explain the criteria they employed. In addition, they must provide a complete representation of the diverse range of users present within the shared space, along with a detailed account of their respective activities and behaviours. The clarity regarding the provision of berthing equipment for the owner's yacht in each unit is a matter that should be effectively communicated by the developer, who is the original proprietor. To ensure clarity and adherence to the prescribed guidelines, it is imperative that the precise locations of the pontoon, as well as its classification as either a joint property, an additional parcel, or an integral part of a lot, be prominently showcased on the accompanying drawing that is furnished alongside the Schedule.

The regulations in question aim to tackle a pertinent concern encountered by proprietors of strata buildings: the equitable allocation of communal units among the various available lots. Suppose developers and technical experts should adopt the proposed rules. In that case, it is essential to note that a proprietor's contribution to the management fund, voting power, and share of the common property would be critical indicators of their financial and social interest in the plan. Considering the dynamics of common land and its shared transfer-out, it becomes

apparent that a direct correlation exists between the influence and control applied and the share value of a particular portion.

To facilitate the separation of a building into strata parcels, the Director of the Lands and Mines must consult the schedule of the strata plan. This schedule provides a comprehensive listing of the shared units assigned to each lot within the building. The Director must engage in appropriate research to ensure equality and fairness in allocating shared units. Without any contrary evidence, it is generally accepted that shared unit specifications are to be regarded as accurate.

2.3 Significance of the allocation of shared units

According to the Strata Titles Act of 1985, it is imperative to understand the significance of shared units within a parcel, as they play a crucial role in determining several vital aspects. First and foremost, an essential step in this process involves the determination of the value assigned to each owner's vote. Next, it is imperative to determine the magnitude of every proprietor's indivisible portion in the communal asset. Finally, the individuals ascertain the precise amount that each proprietor is obligated to contribute to cover the expenses incurred by the management corporation for the maintenance and administration of the group. In corporate governance, it is incumbent upon the proprietor to assume the onus of indemnifying the financial liabilities that the management corporation has lawfully accrued while fulfilling its prescribed duties and obligations. The sum must be paid by proprietors who have received advantages from repairs or works carried out by the management corporation on their parcels by notifications or directives from any competent public or statutory authorities. If the suttee is terminated, owners who have obtained benefits from repairs or other services rendered by the management corporation must remunerate accordingly. In the event of the dissolution of a strata title scheme, it is essential to note that the share units assigned to each parcel owner represent their entitlement to acquire a specific portion of land or monetary value. Additionally, this provision determines the portion of compensation that a proprietor is entitled to receive from an expropriating authority. It also encompasses the insurance funds disbursed in the event of building destruction and any remaining funds from the management corporation upon the plan's conclusion.

Therefore, the feasibility of having equal weightage in the Act for SiFUS, particularly for waterfront strata residential development, is for the government to consider revising the existing act to establish a fair weightage for the share unit formula, specifically in the context of waterfront development, a form of mixed development prevalent in Malaysia.

2.4 Strata Title Scheme

The Strata Title (Amendment) Act of 2013, as elucidated by the Real Estate Developer Housing Association (REDHA) in 2016, necessitates that the developer satisfies specific requirements before selling any strata property. These prerequisites primarily involve obtaining the Strata Individual Certificate of Share Unit Formula (SiFUS) and submitting the Parcels Schedule. SiFUS, a short form for Certificate of Share Unit Formula, refers to a document that must be obtained from the Land and Mines Office (PTG) before selling strata properties.

Hence, it is imperative to note that the Strata Title application holds the potential to be executed in a highly efficient manner, thereby facilitating the attainment of vacant possession through the simultaneous delivery of Strata Title. To ensure transparency in the sale of strata property, it is imperative for a developer to not only file the Schedule of Parcels with the Commissioner of Building (COB) but also prominently display a copy of the schedule at the office where the sale of such property is conducted.

This practice promotes openness and accessibility for potential buyers, as they can readily access and review the relevant information regarding the parcels being sold. Under the latest regulation, it is now mandatory for the developer to undergo the application process and successfully obtain a Certificate of Proposed Strata Plan (CPSP) from the esteemed Director of Survey in the Department of Survey and Mapping Malaysia (JUPEM). It is imperative for the developer to promptly employ Strata Titles within a period of one month after the issuance of the Certificate of Practical Completion and Strata Plan (CPSP). Upon the completion of vacant possession, it is essential to note that the Strata Titles will be delivered to the purchaser concurrently.

The Strata Titles Act of 1985 is a comprehensive legislative framework that governs the application process and registration of strata titles. The government updated the Strata Titles (Amendment) Act 2013 (Act A1450) to create the Strata Titles Act 2013. The

amendments in question include implementing a new housing development concept called the Gated Community Scheme. The housing scheme encompasses a variety of residential units, including bungalows, terrace houses, and semi-detached houses, all situated within a single lot. A range of shared amenities accompany these dwellings, including a clubhouse, swimming pools, and open fields. The community above can be described as a closed residential area characterized by a physical barrier, such as a wall or gate, that restricts access to the premises. This arrangement effectively limits the number of entry points into the community, ensuring a controlled and regulated flow of individuals into and out of the area (JKPTG, 2015).

2.5 Manner of calculation under the Strata Titles Act

Under the provisions outlined in the Malaysian Strata Titles Act, each parcel within a strata building is required to possess a shared unit. As approved by the Director, this share unit is expressed solely in whole numbers and is commonly referred to as share units. In every provisional block, note that the allotted share units shall be referred to as provisional share units and must be represented in whole numbers. In its provision, the act defines shared units on a specific parcel. These share units are determined for said parcel and are displayed in the schedule of share units. To proceed with the Subdivision of a strata building, any application submitted must contain a comprehensive list of the allocation of shared units to the respective parcels. This schedule is a crucial component of the application process, providing essential information regarding the distribution of shared units among the different parcels involved.

It is essential to acknowledge that upon its initial enactment in 1985, the act did not establish any specific criteria for the developer, the original land proprietor, to determine the allocation of share units to each parcel. Indirectly, the requirement was established wherein the Director of Land and Mines or the Land Executive Committee must attain a state of satisfaction regarding the equitable assignment of proposed share units to the parcels by the proprietor of the lot before approving the Subdivision application. Furthermore, it is vital to consider the floor area of the parcel or the designated use for which the parcel is intended when determining the placement of shared units. Alternatively, modifying the parcel's floor area based on its intended use or uses is possible. This could include determining whether a single or multiple users will utilize the parcel. The criteria employed, in turn, would ascertain the subsequent determination of the sale price of the parcel. Section 9 of the Strata Act stipulates that the approval of a subdivision of a strata building is contingent upon the equitable nature of the

proposed share units or any provisional share units assigned to the parcels or provisional blocks. In parcel allocation within a strata scheme, it is essential to note that the share units assigned to each parcel do not necessarily have to be equal. This is because specific units may possess larger dimensions and hold more excellent value than others, even within the same strata scheme. The issuance of guidelines on the acceptable formulae for the allocation of share units by the original proprietor occurred in 1993. The Guidelines for allocating Share Units to parcels and provisional blocks are formulated to incorporate an elegant numerical equation, combining relative size with various additional relevant variables. The procedures employed in this context are guided by two fundamental principles: the user's classification and the parcel's total floor area.

2.6 Importance of Strata Title to Individual Homeowners

In the context of land titles in Malaysia, it is essential to understand the three primary forms of titles utilized. These titles include the strata title, the master title, and the individual title. Among these, the focus will be on the strata title. Strata Titles refer to distinct Individual Titles granted to individual units within a development, encompassing houses, apartments, or offices. These units are part of a larger complex that offers shared amenities, including but not limited to gated and guarded communities, security measures, parking spaces, and various facilities. A collective owner oversees the management and regulation of these common resources (Tan, 2020). The ownership of individual units within stratified properties grants owners a significant degree of control. Contrary to the specific classification utilized, the concept of strata title pertains to the allocation of legal ownership to individual units within a property that encompasses communal amenities, including but not limited to swimming pools, car parks, and their private berth, as shown in figure 2.2 and clubhouses, which are collectively utilized by the entirety of the residents. Lai and Fatt (2020) explained that it is imperative to note that a property developer bears the responsibility, as mandated by the Strata Title Act, to duly present a strata title application on behalf of the purchasers. Once the construction has completed the superstructure stage, the commencement of the application process for the strata title could be initiated. Developing and submitting the proposed strata plans by the Licensed Land Surveyor is a crucial step in the process. These plans must be presented to the esteemed Director of Survey (JUPEM) within three months following the completion of the building superstructure. This timely submission is necessary to initiate the application for a Certificate of Proposed Strata Plan (CPSP). To ensure compliance with the essential legal requirements,

it is imperative for the developer to promptly apply for strata titles within a period of one month after the receipt of the Certificate of Practical Completion (CPC).



Figure 2.2 Private berth at development, 18.10.23 site picture.

2.7 Certificate of Share Unit Formula (SiFUS)

The government of Malaysia has recently devised and officially sanctioned a novel legislative enactment known as the Strata Management Act 2013. In the realm of strata building development, it is noteworthy to mention that several amendments have been implemented to fortify and enhance the exercise. These amendments have been implemented to infuse renewed vitality into the strata-building development process (Rubiah et al., 2018). The establishment of the Formula Unit Syer (SiFUS) has been mandated for utilization in applications about strata titles. This requirement applies before the sale of any parcel or applying for a Certificate of Strata Plan (CPSP) by a Licensed Surveyor, as stated by Azura (2016). In the context of developers seeking to make amendments to the previous SiFUS (Submission for Strata Management (Maintenance & Management) Regulation 2015), a significant challenge arises in the form of Clause 6(3) of the regulation mentioned above. This clause poses an issue as it does not provide options within the act for submitting alterations to building plans. Hence, a potential concern arises when developers fail to secure CoB approval and submit a revised SiFUS. In urban governance, it is within the purview of the regarded City Council Commissioner of Building (CoB) to interpret Clause 6(3) from a potentially different standpoint. This unique perspective may lead the CoB to impose a mandatory obligation upon

developers, requiring them to adhere to the prescribed options. Henceforth, developers must exercise precaution in their development activities, particularly concerning the potential expansion and advancement within the parameters of the pre-approved master title for SiFUS.

The Strata Management Act 2013, a recently enacted legislation, has been meticulously crafted and officially endorsed by the esteemed government of Malaysia. Several adjustments have been implemented to fortify and enhance the forthcoming activity and stimulate the process of strata-building development, as outlined by Rubiah et al. (2018). The Formula Unit System for Strata (SiFUS) has been meticulously developed and is currently mandated for utilization in various applications related to strata titles. According to Azura (2016), homeowners must acquire SiFUS, also known as Strata Interest for Unregistered Subdivision, before engaging in the sale of any property or initiating the process of obtaining a Certificate of Strata Plan (CPSP). This requirement is to be fulfilled under the guidance and supervision of a Licensed Surveyor. In the context of developers seeking to submit an amendment to the previous SiFUS, it is essential to note that they may encounter a challenge due to the provisions outlined in the Strata Management (Maintenance & Management) Regulation 2015, specifically Clause 6(3).

The act in question fails to clarify the permissibility of any modifications made to building plans before submission. Therefore, a potential situation may arise if the developers present a modified SiFUS that lacks the necessary endorsement from the CoB. It is possible that the City Council Commissioner of Building (CoB) may adopt a divergent perspective when interpreting Clause 6(3) and subsequently decide to impose an obligatory requirement for developers to adhere to the alternative options and have to consider duration to obtain the SiFUS are almost one year as shown in table 2.1. To get SiFUS, developers must ensure that the subsequent concerns and documentation are duly established as follows.

1. All problems with the land have been resolved; Letter from the applicant for a qualified title, signed by the land office (if there isn't already a final title); Proof of payment for the land premium, if there is one, and If there isn't a proper title.
2. The current year's quit rent payment, a letter from a licensed land surveyor appointment, payment for surveying fees from the Land Surveyor Board, the share unit formula, a list of parcels signed by a licensed land surveyor and an architect or engineer, and valid building plans.

Table 2.1 Sample SiFUS timeline from Licensed Surveyor dated 30.8.2017.

Timeline to obtain SiFUS certificate Update: 30 Aug 17

Item	Description	Duration / nos of day	Date submitted	Confirmation Received	Notes
1	SBKS Endorsed by PTG	115days*	5-Jul-16	30-Oct-16	Info
2	BP Submission P8,P9,P11 & P12 submitted to MBJBT	145days*	18-Oct-16	13-Mar-17	1st to 4th revision
2.1	BP Approval-Phase 8, P9 & P11	64days*	9-Jan-17	13-Mar-17	4th submission/revision
2.2	BP Approval-Phase 12	85days*	13-Dec-16	8-Mar-17	3rd submission/revision
3	Plan 1800pcs sent for printing/binding	30days*	14-Mar-17	14-Apr-17	3sets for each phase
4	SiFUS docs submitted to PTG*	1 day*	18-Apr-17	-	
5	Meeting with PTG, SSS and HPSB on submission KMP	1 day*	-	17-May-17	PTG requested add area to carve in JP & to resubmit KMP
6	1st Meeting with MBJBT Planning on draft submission related to Pontoon Plan (KMP)	1 day*	-	22-May-17	
7	Meeting with JUPEM KL, an officer was sent down to Johor to resolve this matter due to its unique submission	1 day*	-	29-May-17	At IRDA, attended by MBJBT Planning, Building, PTG and JUPEM KL
8	2nd Meeting with MBJBT Planning on draft submission KMP Pontoon	1 day*	-	30-May-17	
9	3rd Meeting with MBJBT Planning on submission KMP Pontoon	1 day*	-	1-Jun-17	Approved and proceed with submission revised KMP
10	Submitted revised KMP to MBJBT Planning	13days*	5-Jun-17	18-Jun-17	Endorsed
11	Submitted revised KMP to PTG	1 day*	19-Jun-17	-	-
12	Re-submission SiFUS Application involved changes in Jadual Petak with 3sets Building Plan in Strata 1 (1800pcs)	1 day*	10-Jul-17	10-Jul-17	PTG download in system
13	Meeting with PTG -follow up on submission	1 day*		24-Jul-17	
14	Sent PTG letter to COB & JUPEM	7 days*	7-Aug-17	-	-
15	Received Confirmation "TANPA HALANGAN" from COB & JUPEM	7 days*	-	14-Aug-17	Collected letter from COB & JUPEM. Sent by Hand to PTG
16	PTG issued letter-comments	10 days*	-	27-Aug-17	
17	Meeting with PTG Assistant Director (En Hisham)	1 day*		28-Aug-17	Explained to PTG EB apartments located in one strata (Surveyor, Adzham, Sam Cheong)
18	Sent explanation letter to PTG	1 day*	29-Aug-17		Met up En Hisham and letter sent to Pengarah on the same day
19	Pengarah to sign letter approval & SBKS processing to key into system	5days		4-Sep-17	<= Pengarah, out for meeting on 30 Aug and expected to receive letter on 4 Sept 2017 (Monday)
20	SiFUS Certificate to issue together with 1800pcs plans signed by Pengarah	14days	17-Sep-17		<= Target date to receive from PTG
21	Docs send to COB for record and filing	1day	18-Sep-17		<= Target date to COB

*: Actual Date

Considering the abovementioned circumstances, developers must exercise utmost prudence in their projects, particularly regarding any subsequent advancements within the boundaries of an already sanctioned master title for Share Unit Formula (SiFUS). The SiFUS

is a distribution mechanism administered by the Land Office (PTG). This additional provision aligns with the purpose of the Strata Acts: to streamline the process of transferring strata titles in conjunction with the delivery of vacant possession of the property.

2.8 Formula Computation Share Units of Parcel

In the realm of parcel analysis, according to Rubiah et al. (2018), it is crucial to understand the concept of shared units. These share units are derived by dividing the area of a given parcel by the weightage factor specific to that parcel. The weightage factor for the entire floor parcel is also considered in this calculation. Considering these factors, one can accurately determine the shared units associated with a given parcel. If an additional parcel exists, it is imperative to note that the accessory parcel's area shall be subject to multiplication by a weightage factor designated explicitly to evaluate. In the scenario where multiple accessory parcels are present, it is imperative to apply the calculation formula to each parcel and subsequently aggregate the results. To ascertain the overall share units, it is important to ascertain the valuation of both the primary parcel and the accompanying accessory.

In calculating share units, researcher also encounter two fundamental formulas: the parcel's share unit and the land parcel's share unit. These formulas play an essential part in the complex process of determining share units. Rubiah et al. (2018) mentioned the difference between these two formulas involves using the share unit of a parcel to ascertain the share unit for conventional high-rise structures. The strata landed property, characterized by its utilization of a gated and guarded residential model, differs from other types of properties in its utilization of a shared unit of land parcel. To proceed, the land office and JUPEM must grant their approval for the shared unit computation, thus ensuring its precision and accuracy. For the development process to progress, it is imperative to acquire a SiFUS certificate, as it serves as a prerequisite for the subsequent stages that must be fulfilled.

To determine the share units of a given parcel, it must perform a calculation involving the multiplication of several factors. These factors include the area of the parcel itself, the weighting factor specific to the type of parcel, and the weighting factor associated with the entire floor parcel. In the context of accessory parcels, it is essential to note that the area of each parcel undergoes a multiplication process. If such a factor exists, this multiplication is carried out by applying a weighting factor.

When presented with many accessory parcels, applying the calculation procedure before their equality is imperative. Determining the total share units will be accomplished by adding the value of the accessory parcel to that of the parcel itself. In the realm of property evaluation, it is imperative to understand the complexity of the share unit computation. This process involves the utilization of two different formulas, namely, the share unit of the parcel and the share unit of the land parcel. These formulas are essential in determining the share unit as shown in table 2.2, which is a fundamental aspect of property. The variation between these two formulas arises because the parcel's share unit determines the share unit for typical high-rise structures. The strata landed property, characterized by its utilization of a gated and guarded residential model, differs from other types of properties in its utilization of a shared unit of land parcel.

Table 2.2 Calculation Weightage Formula.

Share units of Parcel	$(A \times F1 \times F2) + (B \times F3)$
Share units of Land Parcel	$(A \times 0.8) + (B \times F3)$
<p>(a) A is the area of the parcel;</p> <p>(b) B is the area of the accessory parcel;</p> <p>(c) F1 is the weightage for the type of parcel as specified in Schedule A (apartment, shops, retail, complex, shop houses, and land parcel);</p> <p>(d) F2 is the weightage for the overall floor parcel as specified in Schedule B (vertical or whole floor and high rise) and</p> <p>(e) F3 is the weightage for the accessory parcel specified in Schedule C (outside or within the building).</p>	

Source: Strata Management Act 2013.

2.9 Allocated Share Units Within A Strata Title Scheme

The Strata Titles Act 1985 uses "share units" to divide these interests. One of the most critical aspects of the act is the assignment of responsibilities and benefits. Establishing a fair method to distribute these interests could make or fail a strata system. The future operation of the scheme and the cooperation of prospective strata proprietors will be heavily dependent upon the equitable allocation of share units. When individuals decide to acquire an apartment, it is crucial to understand that the strata proprietors, or owners, anticipate receiving a

proportional allocation of shares in the common property. This allocation is based on their respective economic investments and social interests within the scheme.

Additionally, strata proprietors are entitled to certain voting rights and are responsible for contributing towards expected expenses. These expectations are crucial to consider when engaging in the purchase of an apartment within a strata scheme. In light of the intricate nature of the subject matter, it is worth noting that the allocation of four share units to each strata parcel has the potential to emerge as a central catalyst for conflict among the proprietors of said parcels. Therefore, it is imperative for potential buyers to carefully evaluate the allocated share unit associated with the specific parcel they intend to purchase before making any investment decisions in each strata title scheme.

The Department of Land and Mines Office (KPTG) needs to have the capability to approve a comprehensive formula and weighting factors that are more "equitable" in nature. This would enable the calculation of shared units for the diverse components of mixed development in a more balanced and fair manner. The Real Estate & Housing Developers' Association Malaysia (REHDA) has expressed its strong recommendation to the government regarding the need for amendments to be made to the proper Acts and Regulations. Furthermore, it was emphasized that the weightings should consider the variations in property values, shared facilities, utility utilization, and waterfront development. REHDA argues that imposing a single maintenance fee rate in mixed-use developments is unfair.

Such a uniform rate fails to consider the variations in maintenance consumption and expenses across different components, even when multiple integrated development categories and specifics are assigned. Under Section 60(3) of the Strata Management Act, the Management Corporation (MC) is granted the authority to ascertain the quantum of funds to be raised periodically and subsequently endorse the diverse rates applicable to the distinct components. The developer is responsible for providing a comprehensive explanation regarding their selection of formulas. The Sectional Titles clause, which grants developers the authority to modify a strata proprietor's share expenses, deserves appreciation. In considering the matter at hand, it is imperative to acknowledge that including appropriate information regarding the utilization of either a singular criterion or multiple criteria for allocating common expenses would have been advantageous. Unfortunately, the recommendations do not provide any alternative for implementing diverse criteria regarding additional expenditures. In order to

attain a state of equitable distribution, alternative approaches must be implemented. Hence, it is essential to acknowledge that the Joint Management Body (JMB) should be granted the authority to establish varying charge rates parallel to the fundamental character; the business shares a similar perspective.

In considering the issue of fairness in the formula for calculating share units, it is imperative to explore potential avenues for addressing this concern. A possible solution is to grant the Joint Management Body (JMB) the discretionary power to establish distinct charge rates to be borne by different components. By empowering the JMB with such authority, it would be possible to tailor the charge rates to reflect each component's unique circumstances and characteristics. This approach would allow for a more nuanced and equitable distribution of financial obligations among the various stakeholders. Hence, the government should review or revise the relevant Acts and Regulations to execute this recommendation effectively (Poh, 2019). Moreover, as stated by the Home Buyers Association (HBA) in 2013, the Strata Management Act, specifically section 13, highlights the significance of ensuring equitable and fair distributions of weightage. Hence, it will ensure that homeowners and prospective buyers are provided with accurate and appropriate information: -

- a) Number of charges payable by a purchaser.
- b) Time and manner of payment of the number of charges.
- c) The amount, if any, to which the charges have been charged.
- d) The amount, if any, is then recoverable by the JMB with respect to the parcel.

Acknowledging the significance of the details above in the context of strata buildings that boast waterfront marinas is imperative. These structures cater to a specific clientele, namely local and international individuals of considerable financial means. It is worth noting that these discerning purchasers hail from various regions, including but not limited to Singapore, Indonesia, Hong Kong, China, and the Middle East.

2.10 The Foundations of Distribution Share Units

In the realm of strata schemes, it is imperative to acknowledge that various methodologies can be employed to determine the distribution of shared units on a particular parcel. It is recommended that an approach characterized by simplicity and directness be used to deal with the matter effectively. The approach discussed here involves the fair treatment of

all strata proprietors while also considering the assignment of different weights during the submission of the SiFUS. Furthermore, every individual who owns a parcel of land should be assigned an equal share unit, irrespective of various factors, including the respective parcels' size, location, use, and value. Implementing the proposed approach can establish a fair and uniform system, benefiting all stakeholders.

Under the principles of fairness and equity, everyone who holds an ownership stake in the common property will be entitled to an equal distribution of the project's profits. Furthermore, these individuals will bear a similar burden of the associated expenses. When we employ allocations based on equality, we establish a framework that fosters comparable interests in shared rights and obligations. The formula appears to be satisfactory, but it is important to note that its applicability is limited to situations where the parcels exhibit significant similarity in size, value, and use. It is crucial to emphasize that the formula may not yield accurate results without including fair weightage, particularly in cases of mixed development lacking additional attributes like waterfront access to the strata building. Adopting this formula would indisputably result in an essential reduction of the calculations required to be performed within a strata title scheme.

The second formula, commonly known as the relative size of a parcel, has been widely embraced by various apartment statutes, including the statute in Malaysia. This formula has proven effective in fostering a sense of certainty within strata-title relationships. In the subject of property ownership, the determination of share units is a crucial aspect that warrants attention. Specifically, allocating a share value to each parcel proprietor hinges upon considering floor area. The utilization of parcel size to distribute interest can be justified as a more equitable approach than a strict principle of equality. However, it is essential to note that the fairness of this method is contingent upon the correlation between the parcel size and the extent to which the occupants of said parcel utilize the common property.

Nevertheless, it is essential to acknowledge that the formula above may not accurately account for the appropriate weightage or equitable allocation for SiFUS on landed strata properties featuring waterfront buildings. Specifically, the Act fails to clearly define homeowners and pontoon users who use the waterway to berth their yachts. Consequently, this lack of clarity poses a significant challenge for the management team in determining the appropriate cost allocation for maintenance charges imposed on the property owners.

The third basis for allocating interests pertains to evaluating a parcel's value concerning the overall value of all the parcels within a given scheme. There are three distinct methods by which one can calculate relative importance. These methods include considering each parcel's cost, selling, or market value. Determining the initial cost price for each parcel can present considerable complexity due to the variations in geographical location, internal configuration, fixtures, amenities such as balconies, and the duration of completion. Determining a parcel's selling price or initial value becomes increasingly challenging due to the inclusion of additional variables, as previously mentioned. Several factors can potentially complicate the issue at hand. These factors include, but are not limited to, the date and circumstances surrounding the sale, any price adjustments made by the developer in response to inflationary pressures, and the overall market response to the project. It is essential to consider these factors as they can significantly impact the situation and contribute to its complexity. Hence, the sole feasible model can be employed in calculating the proportional market value of parcels. The only challenge in this area is that the value would be the only constant when the system was established.

In an alternative approach, it would be necessary to periodically compute new values and assign these updated share values to each unit. Furthermore, it is essential to note that specific legislation grants the developer a certain degree of autonomy in determining a distinctive methodology for allocating shares. Typically, the developer shall employ either one or a combination of the following factors, quality, relative size, and relative value, to ascertain the value of shares. In certain jurisdictions, it is common practice to allocate the developer liable upon the approval of an independent valuer. This valuer can either be a registry official or a real estate valuer.

2.11 Review of Relevant Theoretical Models Theoretical (TPB)

The Theory of Planned Behaviour (TPB) predicts an individual's intention to engage in a behaviour at a specific time and place. It posits that individual behaviour is driven by behaviour intentions, which are a function of three determinants: an individual's attitude toward behaviour, subjective norms, and perceived behavioural control. Developing a measure utilizing the Theory of Planned Behaviour depends highly on the topic being considered. Measures should assess all main components of the theory: attitude toward behaviour,

subjective norms, perceived behavioural control, and intention. Typical measures follow a Likert-style format and can range from a few succinct questions to much longer and more comprehensive surveys (Ajzen, 1991).

2.11.1 Theory of Planned Behaviour (TPB)

This research has relied on the theory of planned behavior as a framework. The article "Organizational Behavior and Human Decision Processes," published in 1991 (Ajzen, 1991), and the "Handbook of Theories of Social Psychology," published in 2012 (Ajzen, 2012), are widely recognized as applied to predicting various behaviors.

- i. The distinction between the Theory of Planned Behavior (TPB) and the Theory of Reasoned Action.
- ii. Comparison of perceived behavioral control and self-efficacy.
- iii. The distinction between perceived behavioral control and locus of control.
- iv. The potential for incorporating supplementary predictors into the Theory of Planned Behavior (TPB).
- v. The absence of a standardized TPB questionnaire.
- vi. Anticipating conduct in a decision-making scenario.
- vii. The text discusses the intention-behavior gap and compares the technological adoption model to the theory of planned behavior (TPB).

Therefore, the researcher has employed said theory to examine the attitudes and behavior of the respondents within their respective character profiles before embarking upon the administration of questionnaires and conducting interviews for this study.

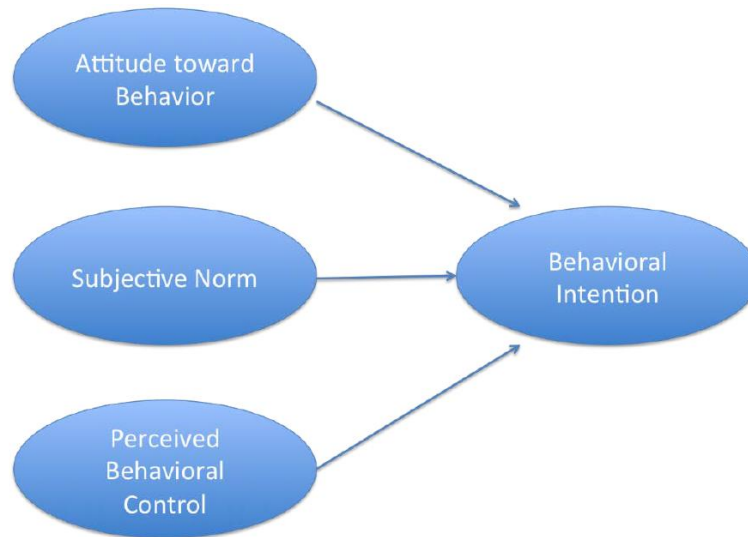


Figure 2.3 Adapted from Ajzen (1991)

2.12 Proposed Conceptual Framework

This study's proposed conceptual framework (see Figure 2.3) will be implemented to address the problems in the strata waterfront based on received feedback. This study is to identify the fair and equitable requirements that should be implemented in the future strata Act. This will serve as a reference for technical individuals involved in establishing and implementing the accuracy of weightage factors for the certificate of SiFUS and the needs specific to Malaysia, as represented in Figure 1 through the processing of questionnaires. To begin with, the researcher aims to comprehend the necessity of having equitable weightage from respondents for the development of Waterfront Strata. This understanding will contribute to the first impact: the maintenance of the existing Act for utilization by developers, Licensed Surveyors, Management Agents, and homebuyers. This Act will be applicable once it encompasses the maintenance fees and sinking fund cash flow to the residents. Lastly, technical experts recommend concluding the research by investigating whether any other factors will be involved in SiFUS in future waterfront developments with residential strata buildings.

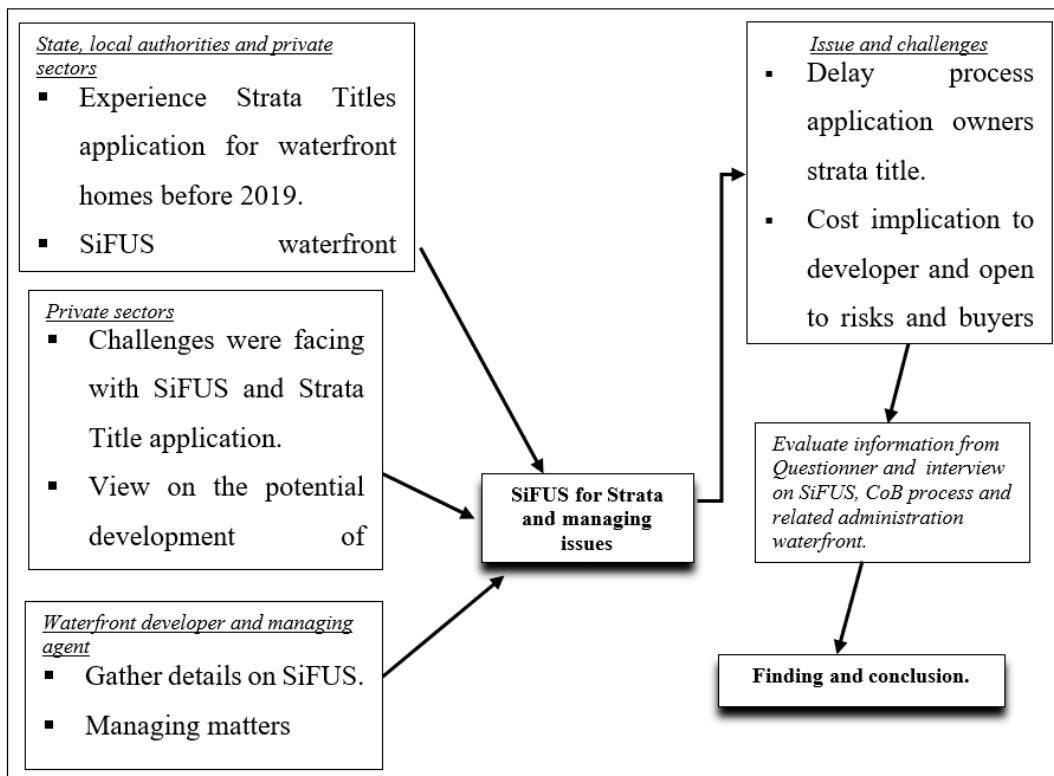


Figure 2.4 Proposed conceptual framework for analyzing the Determinants of Share Unit Computation (SiFUS) for Waterfront Strata-Titled Residential.

2.13 Hypotheses Development

The implementation of the Certificate of Shared Units (SiFUS) can be observed in several strata buildings across Malaysia. The researcher does not employ hypothesis analysis; instead, it will utilize a descriptive approach. In considering equitable factors for home buyers, it is essential to acknowledge the presence of multiple factors that come into moves. These factors play a crucial role in determining the level of equity that can be achieved in the process. The research on the strata concept waterfront in Iskandar Puteri Johor as a case study seeks to evaluate various factors that could potentially influence the fair and equitable distribution of fees associated with the Strata Individual and Common Property based on the SiFUS approved by the state land office. This evaluation encompasses the perspectives of both the government and private sectors and those responsible for paying monthly maintenance fees for home buyers. The maintenance cost of the Waterfront development with Strata building can be significantly influenced by various factors not adequately defined in the Act. One perspective contributed forward by specific home buyers suggests that the SiFUS assumes a prominent role in the development of Waterfront Strata, as it encompasses various crucial elements such as

technical considerations, cost implications, technological advancements, and market demand. In development, developers must exercise a high degree of control over the budget allocated to each project. This is primarily driven by a concern that the outcome may not meet the expectations and standards set by customers.

In the context of the Waterfront Strata concept, it is essential to consider the influence of external factors on the benefits derived from this concept and the fair maintenance fees associated with owning property in such a building. To substantiate the assertions put forth by both arguments, it becomes necessary to formulate a hypothesis that explores the potential relationship between the various factors involved.

2.14 Chapter's Conclusion

In this chapter, we shall outline the research framework and present an overview of the inquiry. The framework consists of several components: the research background, problem statement, research purpose, and research question. The conceptual framework of questionnaires and interview sessions is of utmost importance as it provides a structured approach to gathering data and understanding the underlying concepts and theories that guide the research process. The conceptual framework serves as a theoretical lens through which researchers can analyze and interpret the data collected from questionnaires and interview sessions. It helps to establish the relationships. Several factors have been identified and set in the comprehensive analysis of existing research. The researcher shall use the factors to construct the questionnaire, determine the appropriate data collection method, conduct data analysis, and determine the optimal sample size.

CHAPTER 3

RESEARCH METHODOLOGY

Compliance with strata management regulations was one of the essential obstacles encountered in the waterfront development. In the realm of land development, it is within an experienced developer's responsibility to subdivide a given tract of land into smaller parcels. This process entails the creation of distinct strata titles, thereby enabling the subsequent development of a conventional township. Regarding the waterfront featuring the Strata building, it is essential to note that this development is intricately linked to or encompassed by the canal, which serves as a gathering place for the community. Henceforth, we shall explore how the waters may be effectively created into different parcels.

The primary focus of this paper revolves around the compelling case study of the prestigious Emerald Bay Waterfront, with a particular emphasis on the regarded Emerald Bay geographical area. The address in question holds immense potential for representing an individual's social standing within the region of Nusajaya, strategically situated in the famous state of Johor. Iskandar Puteri, Nusajaya Emerald Bay represents a remarkable collaboration between Haute Property Sdn Bhd, a subsidiary of BRDB, and UEM Sunrise Berhad. The Emerald Bay waterfront concept and a gated community scheme represent a pioneering and incomparable resort home design within Iskandar, Malaysia. This distinctive feature makes it particularly attractive to individuals of considerable financial means seeking a unique and unusual lifestyle.

In the strata titles scheme context, it is imperative to understand that this scheme comprises a collection of distinct and separate parcels. These parcels encompass a variety of elements, including but not limited to pontoons, common property areas such as parks, timber walkways, and even manmade beaches. According to the JKPTG (1985), it is asserted that joint property encompasses all structures situated on the alienated land, except for separate parcels and accessory parcels, which may include roofs, staircases, and gardens. In this case study, thoroughly examining the weightage factor in the SiFUS is imperative. This analytical endeavor holds significant importance as it has the potential to yield substantial benefits for both the residents and professionals who are intricately involved in the realm of waterfront strata and society.

Acquiring the desired information from a particular target group is imperative to conduct this research. Hence, the researcher opted to utilize the purposive sampling method as the chosen sampling technique. It encounters two prominent categories in purposive sampling: judgment sampling and quota sampling. The judgment sampling design is employed when the researcher can obtain valuable data or information from a restricted number of categories or individuals. Researchers encounter quota sampling in sampling techniques, which entails deliberately selecting individuals from various groups (Bougie & Sekaran, 2020). In the organizational setting, the selection process involved including perspectives from esteemed leaders and individuals occupying specific job positions who possess a profound understanding of the matter being examined.

This chapter describes the methodology of the study. This chapter provides research design, population and sample, instrumentation, data collection, data analysis technique, and the protection of human rights. This chapter provides a research design description. The second portion describes the study method. Description of the survey questions and thought process behind curation follow. It also explains the pilot study and summarizes its findings in chapter four. This chapter explains this study's research methods. Also presented are the sampling frame, size, and justification for the sample. This chapter describes the data-gathering method and concludes with a summary.

3.1 Research Design

Research designs encompass numerous inquiries conducted within qualitative, quantitative, or mixed methods approaches. The research design employed in this study was a mixed method. These inquiries serve the purpose of offering explicit guidance for the implementation of procedures, thereby facilitating the achievement of research objectives and the provision of answers to research questions (Creswell, 2014). The concept of research design encompasses a comprehensive blueprint that enables a researcher to effectively execute designated methodologies and protocols to gather and scrutinize pertinent data of a chosen population. The ultimate objective of this endeavour is to derive a resolution that is directly aligned with the problem statement at hand, as expounded upon by Bougie and Sekaran in 2020. To put it another way, research design is a structural framework that facilitates the completion of a research endeavour, as demonstrated by Bryman and Bell (2011).

Bougie and Sekaran (2020) mentioned it is essential to acknowledge that studies can serve various purposes. These purposes include exploratory research, which aims to delve into a particular phenomenon and gain a deeper understanding. Additionally, some descriptive studies seek to provide a comprehensive portrayal of a specific situation or context. Lastly, explanatory studies are conducted to test hypotheses and establish causal relationships between variables. In scientific inquiry, experimental research emerges as a formidable approach aimed at unravelling the intricacies of a given problem. This methodology becomes particularly relevant when the knowledge surrounding the problem is limited in scope and depth. By employing experimental research, researchers strive to shed light on the very essence of the problem, seeking to expand our understanding and illuminate the path toward potential solutions.

In contrast, descriptive research, as its name suggests, is concerned with the task of describing and narrating the various characteristics that are present within the context of the study. Its primary objective is to provide a comprehensive account of the events or subjects being examined, utilizing statistical measures such as frequencies and percentages to aid in this endeavour. Finally, it is essential to note that explanatory research is primarily concerned with elucidating the representative characteristics of the relationship within the given social context. In the context of this study, it is essential to note that it falls under the category of exploratory research. Therefore, this research will gather information from individuals with technical expertise regarding the concept of strata weightage for the waterfront. It is worth mentioning that there is an absence of comprehensive information on this subject matter, thus necessitating further investigation. The current study falls under the category of exploratory research as it seeks to examine the perspective of technical individuals regarding strata weight. This choice is made due to limited knowledge of this matter.

To understand the current issue comprehensively, we must engage in exploratory research. This type of research is characterized by its open-ended nature, allowing us to gain insight into the subject matter without any presumptions or hypotheses. By conducting exploratory research, we may discover new insights, identify potential patterns or trends, and subsequently shed light on the details of the existing issue. Experimental research needs to be performed to understand the current issue. A cross-sectional survey design was employed to conduct this study. The survey instrument is a self-administered questionnaire, the most common method to gather data in survey research (Bougie & Sekaran, 2020; Bryman & Bell,

2011). After preparing the questionnaire, the data is collected once during the entire period of research (Bougie & Sekaran, 2020). The chosen research design for this study is survey research. This design has been deemed appropriate due to its ability to effectively demonstrate employee/technical person engagement in strata weight. The study intends to collect the general opinions and perceptions of respondents employed in various organizations, government agencies, and private companies in Johor, including a few in Selangor.

Hence, in this chapter, the researcher shall delve into the intricate details of the research methodology used in this investigation. The commencement of the chapter involves a comprehensive examination and analysis of the research design. After the initial data collection phase, the subsequent step involves a thorough method of deliberation and identification of the study population and sample. In this chapter, researcher was provided with an explanation of the data collection procedure and the study instrument. Finally, the researcher proceeded to explain the data analysis process more comprehensively.

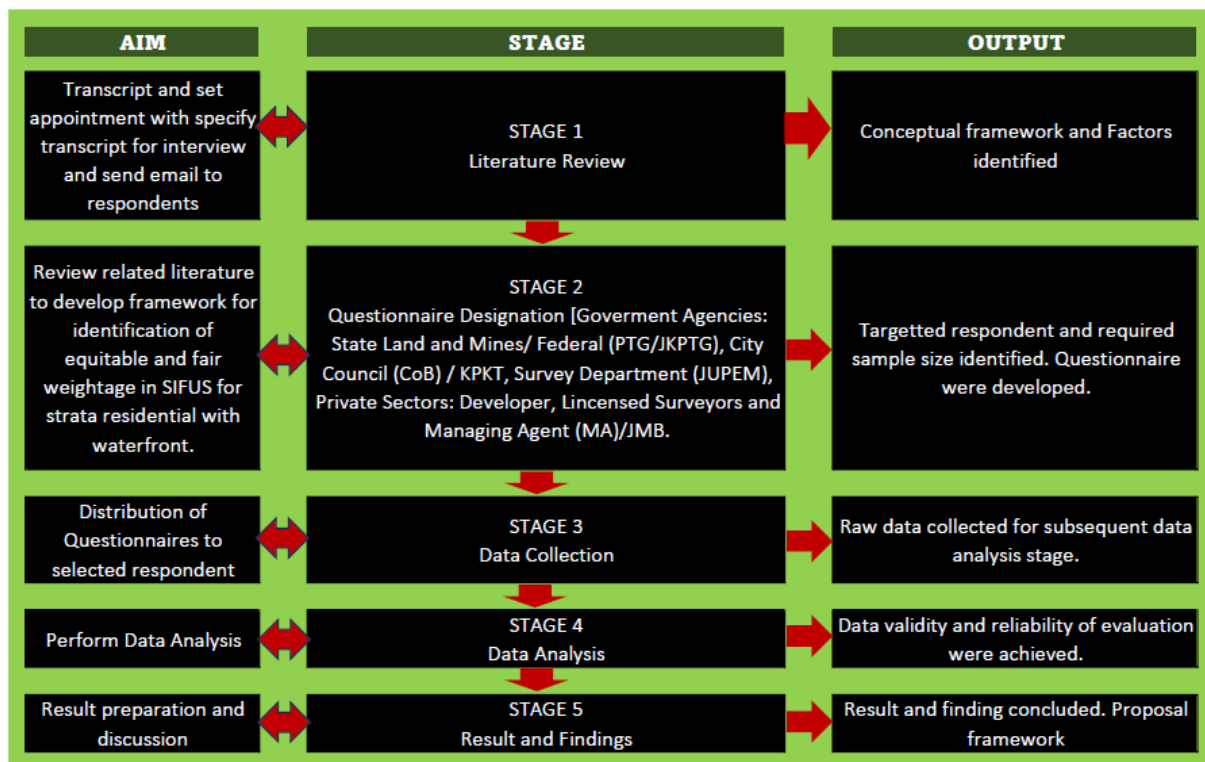


Figure 3.1 Research flow chart analyzing determinants of share unit computation for Waterfront Strata-Titled Residential Building.

Source: Developed for the research (2023).

3.1.1 Stage 1 Literature Review

This study aims to conduct a comprehensive literature review to examine the idea of relatedness and the strata theory. Arrangements for the transcription of an interview and schedule an appointment with the technical experts. Additionally, send email notifications to the interview participants. This study examines establishing the certificate of shared units in Waterfront Strata-Titled Residential and the various elements that influence the development of waterfront properties. The culmination of the literature review is formulating the proposed conceptual framework and identifying factors gleaned from various researchers' sources such as articles, journals, books, and other relevant literature.

3.1.2 Stage 2 Questionnaire Design

This section serves the purpose of providing a rationale for the selected methodology, thereby establishing the systematic and comprehensive approach that has been employed in the execution of the research. The forthcoming investigation will undertake an analysis of the primary data that has been acquired via a research instrument. This data will be expounded upon in a subsequent section. Questionnaires were distributed to State Land and Mines/ Federal (PTG/JKPTG), City Council (CoB) / KPKT, Survey Department (JUPEM), Private Sectors: Developer, Licensed Surveyors and Managing Agent (MA)/JMB). The distribution of questionnaires will continue until the desired sample size is achieved, as stated in the subsequent section. The distribution of the questionnaire survey will be limited to individuals who are engaged and possess technical expertise in strata and its associated aspects on the development of SiFUS. The provisions that have been identified serve as valuable guidelines that aim to aid practitioners in their forthcoming endeavours concerning waterfront project design. Meanwhile, review related literature to establish a framework for identifying equitable and fair weightage in SIFUS for strata residential with waterfront.

3.1.3 Stage 3 Data Collection

During this phase, the collection of raw data will be facilitated by distributing questionnaires to a carefully chosen group of respondents. The raw data that has been gathered will need additional processing and preparation for the subsequent step of data analysis.

3.1.4 Stage 4 Data Analysis

The compounded data will be analyzed in this stage based on respondents' feedback. This analysis is intended to evaluate various factors, including the acquisition of a Shared Units certificate, the influence of SiFUS on home buyers, the impact of maintenance charges on home buyers as identified by developers, and the implementation of proposals for waterfront strata. Therefore, the evaluation successfully attained data validity and dependability.

3.1.5 Stage 5 Result and Findings

Based on a comprehensive examination, analysis, and interpretation of the data gathered from the group of participants, a collection of recommended approaches for promoting Waterfront Strata development in Malaysia has been set. Result preparation and discussion and proceed with the proposal to develop a suitable framework for the weightage calculation in the Certificate of Share Unit Formula (SiFUS) for Waterfront Strata-Titled Residential. Finally, the result and findings concluded with the proposal framework.

3.2 Data collection

The researcher decided to employ survey research as the chosen method for data collection. According to Ponto (2015), a survey involves collecting information or viewpoints on matters from various groups of individuals. In research methodology, survey research is a quantitative approach that necessitates acquiring standardized information on the subjects under investigation. The potential subjects encompass a wide range, including individuals, groups, organizations, or communities. Surveys, as a means of data collection, are implemented through a range of diverse methodologies. These methodologies encompass the utilization of mail, telephone, and personal interviews, all contingent upon several key factors. These factors include the specific content of the questionnaire, the number of subjects involved, the allocated budget, the time constraints at hand, and the desired target response rates (Zikmund et al.,2010). The methodology employed in this study involved the utilization of self-administered, structured questionnaires that encompass closed-ended and solitary open-ended questions. A

series of measures were implemented to ensure that the appropriate respondents provided answers to this survey questionnaire.

- i. Creating an Excel sheet that encompasses the names, emails, and telephone numbers of esteemed individuals such as top managers, senior executives, and government high officers is imperative. These individuals are not only potential respondents themselves but also possess the ability to connect us with other qualified respondents through the valuable technique of information linking.
- ii. In the initial phase of the research process, preliminary telephone communication was deemed necessary. This served the purpose of acquainting the potential respondents with the nature and objectives of the research endeavour. Additionally, during these calls, consent was sought from the individuals to ascertain their willingness to participate in the survey.
- iii. After engaging in telephone conversations, it was decided that an email containing an attached questionnaire in PDF format will be sent.
- iv. The responders were asked to confirm receipt of the survey by email.
- v. Respondents could have received up to three phone calls or emails as a follow-up to their initial survey invitation.

It is essential to highlight that establishing effective communication channels, primarily through phone calls and contacts, facilitated important meetings with prominent organizations like the Department of Survey and Mapping Malaysia (JUPEM) and the Ministry of Natural Resources, Environment and Climate Change (NCREE). These meetings developed valuable networks that would contribute to the comprehensive data collection. The participants in this study primarily consist of individuals holding high-level managerial positions, such as the Director, Principal, Chief Operation Officer (COO), and General Manager. The underlying premise guiding our selection is the belief that these individuals should possess the requisite knowledge and experience of the investigated matter.

3.3 Primary Data

In this study, the data and findings obtained from the respondents will be carefully analyzed utilizing quantitative information for research purposes. The questionnaires provided to the respondents have undergone a pilot test to ensure their effectiveness and reliability. This

analysis evaluates unstructured strings, including text, emails, audio, video, and visual illustrations. Additionally, it seeks to assess structured and semi-structured data, such as interview surveys, social media content, and journal articles. In the context of research, it is imperative for researchers to cautiously organize and establish the necessary arrangements for the participation of various entities. These entities may encompass individuals, groups, or even a panel of individuals interested in the subject matter under investigation. The present investigation aims to gather primary data through a survey questionnaire, explicitly targeting individuals employed in the field of strata development. The survey inquiries that will be conducted to manage the preliminary data for this study are intended for individuals used by the Developer, Licensed Surveyors, and Government officers in the states of Johor and Selangor.

3.4 Secondary Data

In contrast, secondary data encompasses various sources such as journals, research papers, newsletters, industry analyses, government publications, and documents from the public sector (Johnston, 2017). The secondary input for this study will be the secondary input, encompassing a wide range of scholarly journals, reputable publications, authoritative government websites, and relevant government documents, which will be used as the primary source of the citation.

3.5 Sampling Design

Sampling design is a method of picking an element from a population by examining the sample group's answer to understand the group's characteristics and then generalizing the properties and features from several populations. Researchers must define their samples precisely to collect the most representative data possible for statistical analysis. Taherdoost (2016) stated that four steps are involved in selecting the optimal sample size for this research. The first step is to identify the population of interest; the second is to design a sampling framework; the third is to select an acceptable sampling method, such as probability or convenience sampling; and the fourth is to calculate a sufficient sample size for reliable statistical inference. When everything is ready, the researcher can begin collecting data and analyzing the results. Dhivyadeepa (2015) explained that the methodology employed in this study involves selecting an element from the population. The determination of the number of

populations are accomplished through the utilization of a formula that is grounded in the principles of the static sample technique. This technique encompasses the utilization of either probability or non-probability sampling methods. Consequently, the researcher will employ a probability sampling method in this study to furnish statistical evidence that substantiates the conclusion. The data that has been collected pertains to a survey questionnaire. As Ziegel (2005) suggests, to identify any issues with the questionnaire effectively, it is advisable to conduct a careful pilot test with interviewers who possess a high level of sensitivity before distributing the survey questionnaire. Instead of employing a standardized questionnaire that assumes universal applicability, the Theory of Planned Behaviour (TPB) proposed by Ajzen (1991) emphasizes the necessity for questionnaire items to align with the specific concerns and considerations about the behaviour under investigation as perceived by the respondents. The questionnaire method is frequently employed in social sciences research because it can gather valuable information from the target respondents.

3.5.1 Target Population

The concept of the target population pertains to categorizing individuals selected to comprise the sample. The research in question focuses on the specific population of the strata waterfront residences in Iskander Putri, Johor. The most appropriate individuals to be considered as target respondents are those directly engaged in the waterfront strata residential. This selection is crucial to obtain an accurate representation of Iskandar Putri that aligns with our hypothesis, which focuses explicitly on the residential strata with a waterfront. The sample size for the purposive sampling method is calculated from the total number of people in the target demographic.

In the scope of this research, the focus will be directed toward individuals actively engaged in strata development within the SiFUS property in Johor. Specifically, the target population encompasses a range of recognized technical experts in Strata, including developers, licensed surveyors, and government officers. The rationale behind selecting individuals involved in the property related SiFUS waterfront in Iskandar Putri, Johor, arises from their familiarity and expertise in strata development. These parties possess a unique perspective on the significance of the SIFUS certificate and recognize the importance of establishing a fair and equitable weightage for prospective home buyers. The entities involved

in this project apply to a range of stakeholders. These include the municipal councils, specifically the Majlis Iskandar Puteri Johor, the developer Haute Property Sdn Bhd, various professionals such as the management agent represented by Knight Frank Sdn Bhd, governmental bodies such as the Ministry of Local Government Development (KPKT), the Department of Lands and Mines with its Strata section JKPTG Nusajaya, the Department of Survey and Mapping Johor (JUPEM), as well as a select number of Licensed Surveyors.

The Population is defined as those people, events, or records that the researcher desires to investigate and can provide the information needed to answer the measurement question research (Bougie & Sekaran, 2020). The current investigation is to explore the perspective of Individuals with technical expertise regarding the weightage of strata. It is important to note that the study exclusively encompasses individuals employed full-time and actively engaged in developmental activities within the Johor Bharu region. Based on findings, many employees within the organization have been involved in the concept of strata weightage. In this study researcher analysis determined that 21 individuals are employed full-time within various organizations in Johor Bharu region and Selangor. Henceforth, it is imperative to acknowledge that the Population under investigation encompasses 12 individuals engaged in full-time employment. Table 3.2 provides a comprehensive overview of the employee count and organizational presence in Johor Bharu City and Selangor.

Table 3.1 Number of employees and organizations.

No.	Organization	Estimate Number of employees (Technical Strata Section)
1	JKPTG, Putrajaya	3
2	PTG, Johor (Land and Mines Office)	3
3	JUPEM (Survey Department)	3
4	Ministry of Energy and Natural Resources (NRECC)	2
5	Developer Bandaraya Development Berhad	2
6	Licensed Land Surveyor - Geospatial	1
7	Licensed Land Surveyor – So Sun Sing	1
8	Licensed Land Surveyor – So Ben Kiat	1
9	Commissioner of Buildings, Iskandar Puteri, Johor	2

10	Iskandar Malaysia (IRDA)	1
11	Management Agent/ Joint Management Body Waterfront	2
	Total	24

3.5.2 Sampling Frame and Sampling Location

A sample is a subset of a population that comprises some selected members from a particular population (Bougie & Sekaran, 2020). In this study, the sample are technical employees working in development. The present investigation carefully chose a group comprising 12 esteemed individual experts actively engaged in the development field within Johor Bharu and Selangor.

3.5.2.1 Case Study – Emerald Bay Development by Haute Property Sdn Bhd (Bandaraya Development Berhad)

Johor has a prominent presence of consultants and numerous examples of high-end resort-style waterfront properties such as Senibong Cove, Danga Bay, Forest City, and Puteri Harbour Iskandar Putri. This abundance presents a variety of prospects for collaboration with industry stakeholders. Such collaborations can potentially enhance the research findings and improve their practical applications within the real estate industries. This is mainly due to Iskandar Putri’s unique perspective that allows for a comprehensive examination of the impacts and implications of property activities on various aspects such as the environment, economy, and society. Hui (2015) determined that Emerald Bay in Iskandar Putri holds a significant position as the inaugural concept resort featuring a waterfront marina with strata, making it a highly populated area in Malaysia.

The presence of numerous ongoing and planned properties and the concentration of real estate in the southern region further solidify the selection of Emerald Bay. Therefore, the study has chosen the luxury waterfront development as the designated sampling location. The development encompasses a vast expanse of land measuring 111 acres. Its opulent nature characterizes it, offering luxurious waterfront living with the benefit of a freehold strata title. This development provides various housing options, including Canal housing, waterfront

villas, and 82 homes. These homes are further categorized into different types, namely 16 units of 3-story Terrace Homes, 26 units of 4-story Terrace Homes, 24 units of Semi-D, and 16 units of Bungalow. The central focus of the development concept pertains to the intricate interplay between the realm of real estate, the domain of boats, and the aqueous element of water. The amalgamation of these factors has resulted in a known surge in property values, rendering it an appealing prospect for investors on a global scale. The completion of a development joint venture between UEM Sunrise Group and Haute Property Sdn Bhd occurred in 2017 with a specific range of selling prices per unit from RM3,390,000 to RM4,380,000.

Emerald Bay development focuses on the intricate interplay between real estate, the captivating marina lifestyle, and the allure of living close to bodies of water. Emerald Bay encompasses a beautifully constructed and thoughtfully crafted master-planned community boasting magnificent residential options catering to diverse preferences and lifestyles. Within this captivating enclave, an impressive selection of waterfront houses nestled along the pristine shores, offering unparalleled views and a serene ambiance. Additionally, the community features charming hillside homes strategically positioned to take advantage of the natural topography, providing a harmonious blend of tranquillity and scenic beauty. The low-rise apartments complement these housing options, providing a more compact and convenient living experience while maintaining high comfort and quality.

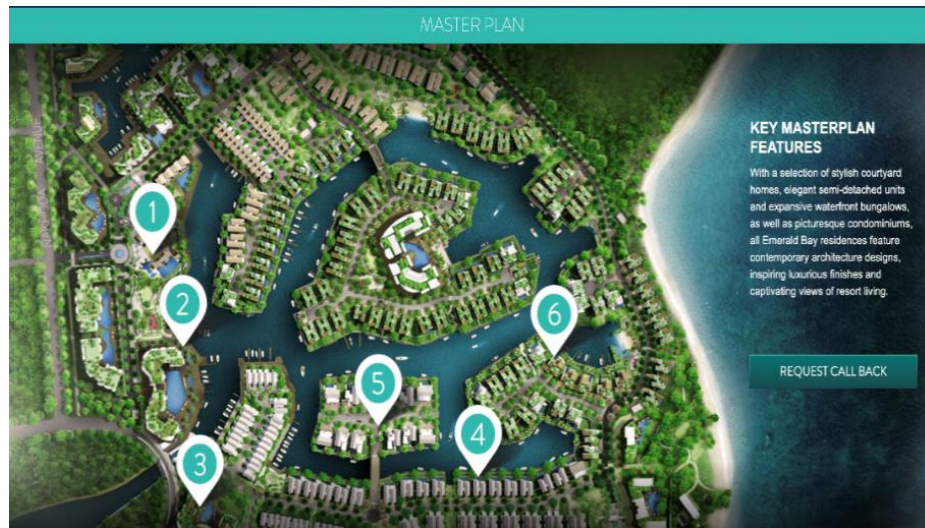


Figure 3.2 Emerald Bay development layout for the case study.
(Source from Emerald Bay official website)



Figure 3.3 Panoramic view taken on 18.10.2023 showing private pontoon as an accessory parcel to each unit.

The property offers a remarkable ambiance of privacy and serenity, characterized by private waterways that intricately navigate its premises. Furthermore, the property boasts round-the-clock security measures, ensuring only residents and their authorized visitors can access its facilities. The waterfront offering encompasses various notable features, such as a marina village/clubhouse, a distinguished yacht club, and not one but two marinas. Furthermore, this exceptional development is enhanced by the presence of expansive small-scale parks and thoughtfully landscaped streetscapes.

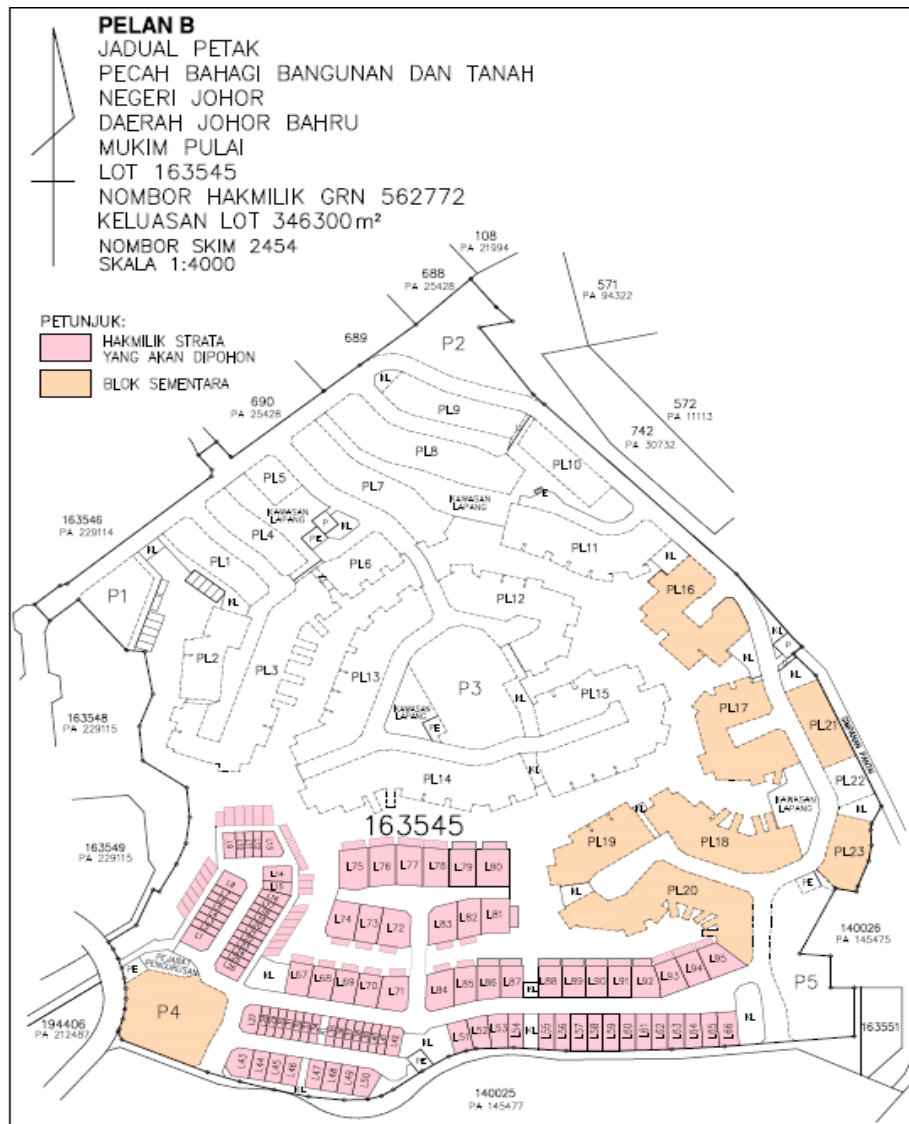


Figure 3.4 Waterfront strata layout with a private berth in Emerald Bay Nusajaya.
 (Souce from Licensed Surveyor in 2017).

3.5.2.2 Determination of SiFUS by Developer

The developer has advised PTG to obtain their approval before implementing any resident maintenance charges. The foundation upon which the case study in Nusajaya, Johor, shall be constructed follows "Jadual IV Kaedah Hakmilik Strata Negeri Johor 2015." Figure 3.5 shows a sample "Jadual Petak" proposed to PTG Nusajaya to obtain the SIFUS certificate for the waterfront.

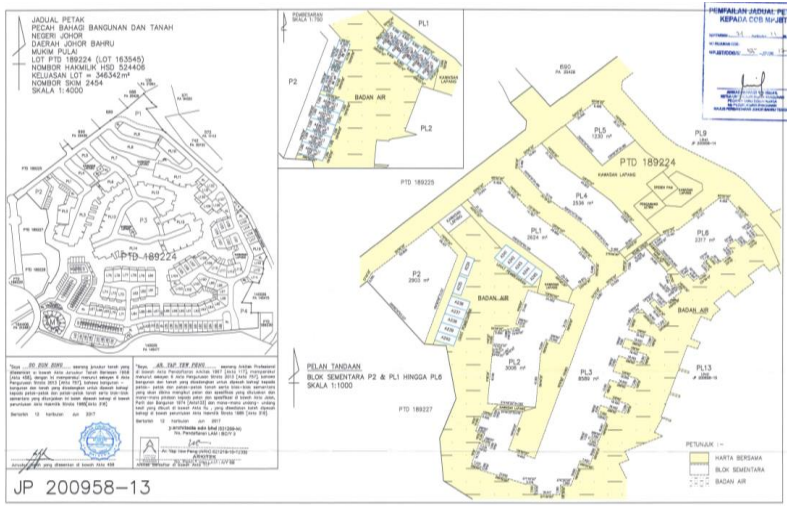


Figure 3.5 Sample "Jadual Petak" proposed to PTG Nusajaya, Johor. (Source from Licensed Surveyor 2017).



Figure 3.6 Sample Sifus obtained for waterfront Emerald Bay schemes. (Source from Developer, 2017).

In Table 3.1, a sample calculation was observed and presented by the appointed licensed surveyor on behalf of the developer to the JKPTG (Jabatan Ketua Pengarah Tanah dan Galian). The calculation is based on the concept of landed strata, considering the waterfront as an accessory parcel as determined by the developer. It is important to note that the weightage assigned to the waterfront in this calculation is based on assumptions, as no specific guidance

is provided in the Act regarding the allocation of weightage for waterfront parcels. The following are standard calculations as outlined in the Act (PTG, 2010):

$$\text{Share units of parcel} = (A \times F1 \times F2) + (B \times F3)$$

$$\text{Share units of land parcel} = (A \times 0.8) + (B \times F3)$$

Table 3.2 Sample different weightage assumptions. It is essential to note that the Act does not say the berth factor for this figure.

Petak	Keluasan (m ²)	Bilangan Tingkat	Kegunaan	F1	F2	A	Petak Aksesori	Keluasan Petak Aksesori	F3	A+ΣB	UNIT SYER
L224	376		Rumah Berbandung	0.65	1.0	244.4	A144	86	21.5	265.9	266
L223	456		Rumah Berbandung	0.65	1.0	296.4	A143	85	21.3	317.7	318
L222	496		Rumah Berbandung	0.65	1.0	322.4	A142	89	22.3	344.7	345
L221	376		Rumah Berbandung	0.65	1.0	244.4	A141	86	21.5	265.9	266
L220	376		Rumah Berbandung	0.65	1.0	244.4	A140	86	21.5	265.9	266
L219	376		Rumah Berbandung	0.65	1.0	244.4	A139	86	21.5	265.9	266
Petak	Keluasan (m ²)	Bilangan Tingkat	Kegunaan	F1	F2	A	Petak Aksesori	Keluasan Petak Aksesori	B1 "Berth" Faktor 0.25	A+ΣB	UNIT SYER
L218	578		Rumah Sesebuah	0.95	1.0	549.1	A138	89	22.3	571.4	571
L217	708		Rumah Sesebuah	0.95	1.0	672.6	A137	115	28.8	701.4	701
L216	739		Rumah Sesebuah	0.95	1.0	702.1	A136	133	33.3	735.3	735
L215	604		Rumah Sesebuah	0.95	1.0	573.8	A135	133	33.3	607.1	607
L214	604		Rumah Sesebuah	0.95	1.0	573.8	A134	133	33.3	607.1	607
L213	604		Rumah Sesebuah	0.95	1.0	573.8	A133	131	32.8	606.6	607

Source: Licensed Surveyor, (2017)

3.5.3 Sampling Elements

An element is selected from a population through a deliberate sampling approach. This strategy involves posing questions to a representative subset of the population to gain insights into the characteristics of that subset. Dhivyadeepa (2015) explained that these findings are generalized and applied to the entire population. This process allows researchers to make inferences about the larger population based on the information gathered from the selected subset. As per the findings of the Department of Statistics Malaysia in 2020, it was determined that the working age population in Malaysia encompassed individuals falling within the age bracket of 20 to 50 years above. The inclusion criteria for this study were explicitly intended to focus solely on individuals with high technical proficiency in Strata. Moreover, these people needed to maintain consistent employment. Participants' ages were restricted to between 20 and 50 years old to avoid prejudice caused by a wide variety of prior experience levels.

The interview sessions with three (3) principals from various licensed surveyor firms have been successfully identified. The research study has interviewed a few surveying firms, namely the Soo San Sing in Johor Bahru and Jurukur Geospatial in Kuala Lumpur, which are directly involved in strata submission. The primary rationale behind their company's selection lies in their active engagement in strata applications, SiFUS, and the assessment of the appropriate equitable weightage to be applied in SiFUS to various governmental entities such as the Land and Mines Department, Land Office, COB, and JUPEM, until they can successfully acquire strata applications for individual home titles. In addition, the research study involved interviews with various key stakeholders, including the City Council Commissioner of Building (CoB) in Iskandar Malaysia, the Department of Survey and Mapping Malaysia (JUPEM), Department of Director General of Lands & Mines Federal, Putrajaya (JKPTG) and the Land and Mines Office (PTG) in Iskandar Puteri, Johor, Management Agent (JMB) and the developer. All the respondents selected are directors, principals, heads of departments, managers, senior executives, and the minimum executive level with experiences more than three years of experience with a technical background involving SiFUS and strata residential development.

3.5.4 Sampling Technique

Taherdoost (2016) explained that it is imperative to delineate a suitable sampling technique to ensure the acquisition of precise data that accurately represents the entire population. Non-probability sampling frequently interacts with qualitative and case study research design. The process of non-probability sampling includes the researcher making deliberate choices before data collection, which are deemed necessary to achieve a higher level of accuracy in the resulting data. Purposive or judgmental sampling holds significance in the field of research and warrants a comprehensive understanding.

In this research, the purposive sampling method was applied. The purposive sampling method is suitable for this study since, in a License Surveyor and Developer organizational setting, only those knowledgeable about the issue under study were selected as respondents (Bougie & Sekaran, 2020).

This sampling technique has been chosen due to its ability to involve individuals possessing specialized knowledge in the SiFUS field, particularly those actively engaged in the property industry. By utilizing this sampling approach, the researcher will obtain responses from a diverse range of technical experts, ensuring that all relevant criteria within the targeted population are equally likely to be selected. To effectively analyze and understand the respondents in the study, it is imperative to carefully consider the selection of their characteristics. These characteristics include age, gender, ethnicity, highest education level, occupation, working experiences, position, experiences, and involvement in strata development and waterfront strata. Considering these various factors, the researcher can comprehensively understand the individuals participating in our research. The population chosen to participate comes from different real estate professional settings. As a result, the respondents' perspectives and suggestions in the specified questionnaire may vary concerning the obstacles in implementing the Strata weightage waterfront in Johor. The purposive sampling method will be employed in this research to determine the optimal sample size for the identified group. The results sampling collected, thus, will be used for this research to recognize the importance of fair weightage before the SiFUS certificate is issued to the developer and for charging maintenance and sinking funds to the residents.

3.5.5 Sampling Size

The target population concept refers to individuals from which the desired sample size is determined. It represents the total number of potential respondents with characteristics that align with the research objectives and criteria. The determination of the sample size for this study will focus on targeting 12 experts (see Figure 3.7) involved with SiFUS as respondents.

- i. Department of Director General of Lands and Mines (JKPTG) Putrajaya.
 - a) The Department of Survey and Mapping Malaysia (JUPEM).
 - b) Johor Land and Mines Office (PTG).
 - c) Licensed Surveyor Firms.
 - d) Waterfront Management Agent/Joint Management Body (JMB).
 - e) Ministry of Housing and Local Government (KPKT)
 - f) Commissioner Of Building (COB).
 - g) Waterfront Developer (BRDB/HPSB).
 - h) Ministry of Energy and Natural Resources (NRECC).



Figure 3.7 List of Experts

Source: Developed for the research (2023).

3.6 Research Instrument

The researcher deliberately employed a survey instrument to optimize the data collection process. This instrument takes the form of distributing questionnaires to gather primary data. In social science, it is essential to understand the various data types that researchers commonly encounter. These data can be classified into three distinct categories: Primary, secondary, and tertiary. Preliminary data refers to the raw and original data gathered directly from the source to conduct a particular research endeavour. The questionnaire has been carefully constructed in the English language, as the populace of Malaysia widely comprehends it. Boyer et al. (2002) indicate that when considering a broader point of view, the response rates, scale/construct means, and inter-item reliability were statistically comparable between email and physical interview methods. The researcher has additionally discovered that there were no significant differences in the capacity to implement identical measurement models between the two methodologies. Therefore, the researcher can conclude that integrating both methods does not impact the accuracy of the data. Conversely, it facilitates data collection from samples that may not be easily accessible to the researcher.

Burns et al. (2008) explained that it has been determined that the format of the questionnaire will bear similarities to that of a self-administered questionnaire. The respondent has the option to provide answers to questions that are either open-ended or closed-ended. However, it is the researcher's responsibility to pose and present questions of either type. The distribution of the questionnaire for the survey will be conducted both electronically and in hardcopy format, specifically through email, to enhance the efficiency and effectiveness of the data collection process. The participants will be allocated a specific duration to contemplate the question carefully, deliberate upon the options available, and subsequently communicate their chosen responses via electronic mail to the designated researcher. During the process, it is essential to note that the targeted respondents will maintain a state of privacy concerning one another. By employing the method mentioned above, there will be a significant increase in the reliability that can be anticipated from the outcomes.

This study used a survey questionnaire to collect data from the respondents. A questionnaire is the most frequently used methodological tool for gathering information about almost any topic (Bryman & Bell, 2011). Bougie and Sekaran (2020), questionnaires are an

efficient data collection mechanism when the researcher knows exactly what is required and how to measure the variables of interest. A questionnaire also provides a numeric or quantitative depiction of the sample population's attitudes, trends, or personal views (Creswell, 2014).

The questionnaire for this study is a close-ended question that probes respondents. The questionnaire consists of 22 questions and is divided into three sections. The questionnaire is measured using two scales, namely a nominal scale and an ordinal scale. Section A, on a nominal scale, was used to measure the personal data such as working agency, age, gender, ethnicity, educational level, occupation, working experience, job position, company involvement in strata development, and company involvement in waterfront strata development. The ordinal scale is another type used by applying a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5) for Section B to evaluate respondents' agreement or disagreement with the statements on legislation maintenance in the Strata Act. A five-point Likert-type scale has been widely used to capture responses about attitudes, beliefs, and perceptions (Bougie & Sekaran, 2020; Bryman & Bell, 2011). Finally, Section C is an Open-ended question that intends to capture respondents' feedback on the understudy issue. The full version of the questionnaire is attached in Appendix A.

3.7 Measurement Scales

The questionnaire will encompass a cover page that will effectively guide the individual by providing clear direction regarding the purpose of the survey. Additionally, this cover page will serve as a comprehensive introduction to the survey, ensuring that participants are well-informed and prepared to engage in the subsequent sections. The utilization of the Likert five-point scale was also observed in the questionnaires, encompassing a range from (1) Strongly Disagree to (5) Strongly Agree. This approach, suggested by Cooper and Schindler in 2003, was employed to mitigate the potential central tendency error. According to McIver and Carmines (1981), the Likert scale is a collection of items with an approximately equal number of favourable and unfavourable statements about the attitude object. These items are then administered to a group of subjects. The individuals in question are tasked with responding to each statement, expressing their agreement or disagreement. They must choose from strongly agree, agree, uncertain, disagree, or strongly disagree. The individual responses to the items are gathered in a manner that assigns higher scores to individuals who possess more favourable

views. On the other hand, it is essential to note that individuals with the least optimistic or somewhat unfavourable views are bound to find themselves at the lower end of the scoring range.

Table 3.3 Five-Point Likert Scale

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

1) Waterfront living Residential is a trend that has started in Malaysia.

- 1 2 3 4 5

3.7.1 Constructs Measurement - Questionnaire Design

The questionnaire will be categorized into three distinct sections. The first section, labelled as Section A, will focus on gathering demographic information from the participants. This section will encompass nine items to understand the respondents' backgrounds comprehensively. Moving on to Section B, this part of the questionnaire will delve into the determinants of share unit computation specifically for strata development in the context of a waterfront strata residential building. It will consist of eleven items carefully designed to explore various factors influencing the computation process. Lastly, Section C will be dedicated to gathering suggestions for implementing an equitable formula or weightage suitable for use in a waterfront strata residential building. Participants will be encouraged to provide their insights and recommendations on this matter. In summary, the questionnaire will be divided into three sections: Demographics (Section A), Determinants of Share Unit Computation for Strata Development – Waterfront Strata Residential Building (Section B), and Suggestion for Implementing an Equitable Formula or Weightage that is Suitable to use in Waterfront Strata Residential Building (Section C). In Section B, we will employ a 1 to 5 Likert scale for data collection.

Table 3.4 Questionnaire Structure.

Section	Description	No of Items
A	Demographic	9
B	Determinants of Share Unit Computation for Strata Development – Waterfront Strata Residential Building	11

C	Suggestion for implementing equitable formula OR weightage that is suitable to use in waterfront Strata Residential Building	1
---	--	---

3.8 Data Processing

The final data obtained, and interview results will provide valuable insights regarding the Strata Titles issue. Specifically, we will delve into the SiFUS weightage formula, which incorporates add-in factors for waterfront properties as stipulated in the Strata Management Act 2013 (Act 757). Lastly, we will explore the perspective of the Joint Management Body (JMB) management agent concerning a case study centred around managing residential housing in Emerald Bay, focusing on its strata waterfront aspects. The results of the data processing will be displayed in the results of the processing.

3.8.1 Establishment of the Study

The study's formation to gain the element involved in SiFUS is illustrated in Figure 3.8. The study's findings reveal that individuals with technical expertise prefer to demonstrate a variety of perspectives. This proposition is following the instructions outlined in Circular KPTG Bil 4/2014. During the interview, the officers stated they were strongly cautioned against linking any potential changes to Strata Act with the situation above. It would be highly advantageous for the government to embark upon a comprehensive evaluation of the Strata Management Act to align it more effectively with the specific requirements of Strata involving mixed development, particularly those on waterfront development. It is essential to note that the level of satisfaction experienced by luxury property buyers is closely related to the management fee they are required to pay. In parallel, the research postulates that the demographic characteristics of technical specialists significantly impact their perspectives regarding the present legislation. Hence, it is essential to acknowledge that the current research examines the profound influence exerted by demographic variables, encompassing, yet not confined to, gender, nationality, age, educational attainment, and respondents' socioeconomic backgrounds on individuals' holistic perceptions.

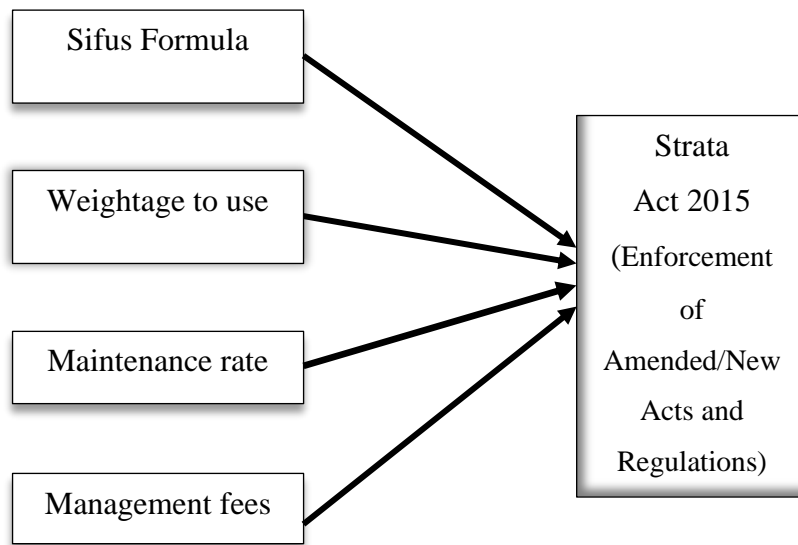


Figure 3.8 Share Unit Computation (SiFUS) for Waterfront Strata-Titled Residential.
Source: Developed for the research (2023).

3.9 Data analysis

The data from the questionnaire was then transferred to the Statistical Package for Social Science (SPSS) software version 27. Before proceeding with the data analysis, ensuring that the gathered data experienced a thorough cleaning process was imperative. The process of data cleaning involves three distinct stages: screening, diagnosing, and editing. These procedures were conducted to identify any outliers, missing data, errors, or inaccuracies within the dataset. The examination encompassed several analyses aimed at addressing the research objectives that involve both reliability and descriptive analyses.

Upon receipt of the data, it becomes imperative to establish a comprehensive plan for the subsequent data analysis. This entails formulating a well-defined data analytic process to address the objectives at hand effectively. Once the data has been gathered, it will be necessary to summarize and organize the collected information systematically. This process is crucial as it enables us to derive a comprehensive and meaningful conclusion from the data. The next step in the data analysis involves importing the collected data into the widely used SPSS software. This powerful tool will aid in transforming the raw data into a more comprehensible and user-friendly format. To enhance the representation of the data collected and the analysis generated, we will employ various visual aids such as charts, tables, and graphs. These visual

tools will effectively convey the essential findings and provide a comprehensive overview of the information.

3.9.1 Descriptive analysis

Using descriptive analysis will enable us to present the complex characteristics of our sample effectively. According to Fisher and Marshall (2009), descriptive statistics aim to describe the midpoint of a spread of scores, usually referred to as the measure of central tendency, and the spread of scores known as the dispersion or variance.

In descriptive statistics, it is customary to incorporate demographic variables to examine these factors' potential impact on various variables. These demographic variables encompass a range of characteristics, including but not limited to age, nationality, gender, race, education level, and marital status. Considering these demographic factors, we can better understand how they may influence the investigated variables. Descriptive statistics collects numerical and graphical methods for organizing, presenting, and analyzing data. According to Fisher et al. (2009), in the context of quantitative research, where mean, median, and mode are used to describe data, it helps to report data. The "Median" shows the middle value after being sorted ascending or decreasing in value, while the "Mode" is the value that occurs with the highest frequency. The "Mean" produces the average value in the sample (by summing all values and dividing it by the number of samples). The mean, median, and mode will be equal if the variable is distributed as usual.

Descriptive statistical analysis is the fundamental part of data. According to Zikmund et al. (2013), descriptive statistics provide simple sample summaries and measures. In this study, descriptive statistics is used to describe the characteristics of the sample regarding their demographic background and the items for latent construct. Furthermore, descriptive statistics were utilized to analyze the sample characteristics, including the mean, standard deviation, frequencies, and percentages. Using descriptive analysis will serve as a valuable tool in effectively presenting the intricate details of our sample. Descriptive Statistics, as defined by Fisher and Marshall (2009), serve the purpose of elucidating the midpoint of a distribution of scores, commonly known as the measure of central tendency, as well as the extent of variability in the scores, often referred to as the dispersion or variance. In the discipline of descriptive statistics, it is usual to incorporate demographic variables to ascertain the potential influence

of said demographics on various factors. These demographics may encompass age, gender, ethnicity, academic level, occupation, working experience, and position. Fisher et al. (2009) defines descriptive statistics as a range of numerical and graphical techniques employed to effectively arrange, illustrate, and examine data. The researcher used descriptive statistical analysis techniques to explore the participants' background and the data collected from the questionnaire's 5-point Likert scale. These techniques, namely frequency and percentage analysis, were used to understand the data comprehensively.

3.9.2 Reliability test - Scale Measurement

Testing reliability allows the researcher to gain valuable insights regarding the quality of a scale and assess its usefulness. This assessment is based on the consistencies observed among the respondents, both at the individual level and concerning the scale itself. As elucidated by Omwenga (2016), reliability encompasses the extent to which a measurement remains unanswered by inaccuracies, yielding consistently reproducible outcomes. In the context of data analysis, it is essential to consider the stability of the data when evaluating the reliability of a test's score. When the data remains constant, it can enhance the trustworthiness of the test's score. The assessment of reliability can be accomplished through the application of various methodologies. According to Sakaran (2003), the most prevalent approach employed in this study is Cronbach's Alpha method. The Cronbach's Alpha method is used to assess the consistency of a scale, specifically concerning multiple arguments. It allows us to evaluate the acceptability of the obtained value in terms of accuracy.

Knowing the respondents' backgrounds should help generate confidence in the credibility of the data collected. Therefore, it was necessary to first illustrate the samples' characteristics before performing the leading data analysis. The survey gathered technical experts' information through a set of items comprised of multiple statements concerning their strata waterfront residential building and amendments to the current Act. Cronbach's Alpha values interpretations.:

- i. The instrument can be trusted and used if the value is 0.70-0.95. (Tavakol and Dennick, 2011).
- ii. The instrument is simple if the value is between 0.50 and 0.70 and excellent if the value is more than 0.70. (Nunally, 1978; Altman, 1991; Streiner and Norman, 2008).

- iii. Values below 0.60 are problematic, below 0.70 are low, between 0.80 - 0.90 is modest, and over 0.90 is high. (Murphy and Davidsholder, 1988).
- iv. Values between 0.50-0.70 are acceptable. (Perry et al., 2004).

The Alpha coefficients were more significant than 0.8. Field (2009) suggested that this value is considered a good value. It is also necessary to note that the reliabilities for the scale used in this study are within the acceptable range of construction performance measurement studies of innovation factors in high institutions. The value of Cronbach's Alpha for the overall dimension is 0.954. A value closer to 1 is considered excellent. More than .8 is good. The scale has perfect internal consistency for reliability.

3.9.2.1 Pilot test

A pilot study is an initial detailed investigation done on a smaller scale to see if a research project is possible and to find out what problems might arise before the whole project is started and finished. For the study to begin, a pilot test must be completed. A pilot test was conducted as a preliminary interview before collecting data for a real case study. A small group expert will be asked to participate in this pilot test. Researcher must follow strict testing procedures to get a more complete confirmation exam (Lowe, 2019). Isaac and Michael (1995) mentioned that 10 to 30 people are suitable for a specific task or situation. The rate at which accuracy improves is not linear, meaning it does not progress constantly. Before the pilot test, a preliminary interview for the field study is usually conducted. This approach allows for collecting valuable feedback and identifying potential flaws within the system at an early stage. By addressing these issues promptly, the research can be refined and improved before proceeding with the full-scale implementation. The pilot test is a crucial tool in assessing the overall viability and feasibility of the entire research endeavour. This tool enables the researcher to effectively modify their methodology by adopting a more practical approach or enhancing the testing process within a real-world context.

Moreover, it facilitates improved allocation of resources and expedites the decision-making process. The pilot test in this research shall encompass the initial 24 participants and be related to technical questions. These individuals shall be tasked with responding to inquiries of utmost significance, such as "To what extent did you find the questionnaire

comprehensible?" and "Are there any potential enhancements that you would propose?" Whether the questionnaire was a valuable investment of respondent time and effort.

3.9.3 Inferential Analysis

The subsequent phase in this investigation will involve putting hypotheses to the test, and according to Ho. (2006), this is done through empirical examination to see whether or not the researcher's suspicions are confirmed. According to Blaike (2003), researchers should acknowledge the following common misconceptions:

- i. Tests can identify relevant data.
- ii. These tests can be used to identify and account for chance variables that could negatively impact data collection.
- iii. The examinations show how closely two attributes (variables) are related and;
- iv. Tests should be run on all results, regardless of whether the data came from a population, a random sample, or a non-random sample.

In statistical analysis, inferential statistics is an effective instrument for generating meaningful inferences from a sample to the entire population (Zikmund et al., 2013). The present investigation employed the non-parametric statistical analysis known as the Mann-Whitney U test to explain the relationship between categorical and ordinal variables of interest.

The question test is usually used when the sample size is small, precisely less than 30. It is beneficial when the examined dependent variable does not follow a normal distribution, displaying a skewed distribution instead. Furthermore, this test is applicable when the variable of interest is measured at the ordinal level, as described by Cohen et al. in 2018. When dealing with two independent samples, the Mann-Whitney U test is a non-parametric alternative to the T-test. It is specifically designed for situations where one variable is categorical and the other is ordinal (Cohen et al., 2018).

3.9.3.1 Content Analysis

Concisely, content analysis refers to systematically examining and interpreting textual data from reliable sources. The purpose of this analysis is to identify and extract information that is pertinent and applicable for further utilization. Krippendorff (2012) stated that content analysis is a research technique that allows for the extraction of valid inferences from text or other meaningful material, which can then be applied to the context in which they are used. It is essential to note that the "other meaningful matter" is enclosed in parentheses to emphasize that content analysis does not limit the extraction of relevant information solely from the text. Instead, it encompasses various other mediums, such as Art, Images, maps, sounds, and more, which can also be considered valuable data. Therefore, employing this particular approach proves to be an exemplary means of achieving our initial goal, namely determining the appropriate weightage for waterfront strata residential properties. The study opted for the more efficient approach of utilizing past data rather than relying on a questionnaire to ensure accuracy and minimize redundant efforts. According to Stemler (2015), it is possible to conduct a content analysis without initially having a specific theory in mind. As the analysis progresses and evidence is examined, a theory can be developed based on the findings. As mentioned earlier, the theory is then employed in analyzing the evidence.

3.9.3.2 Mann-Whitney test

The non-parametric statistical test known as the Mann-Whitney U test from SPs was employed in this study to gain insights into the association between categorical and ordinal variables of interest. The test under consideration is typically used when the sample size is relatively small, precisely less than 30. Furthermore, it is beneficial when the dependent variable of interest does not follow a normal distribution, displaying a skewed distribution instead. Lastly, it is essential to note that the examined variable is measured on an ordinal scale, as indicated by Cohen et al. in 2018. As Cohen et al. (2018) described, the Mann-Whitney U test is a non-parametric substitute for the t-test when dealing with two independent samples. This test is specifically designed for situations where one variable is categorical, and the other is ordinal.

In contrast to the t-test, which focuses on comparing the means of different groups, the Mann-Whitney test directs its attention toward comparing medians. The process involves the conversion of scores into ranks, followed by assessing the extent to which the ranks of the two groups exhibit significant differences (Pallant, 2016). As per the findings of Cohen et al. (2018), the tests in question have been designed to tackle the issue of low cell frequencies encountered in Chi-square statistics effectively. Therefore, the Mann-Whitney tests are appropriate for assessing the variations in the degree of concurrence for each element of the underlying construct concerning the chosen demographic factors.

3.10 Chapter's Conclusion

In this chapter, we explained a comprehensive literature review that focuses on the various factors that influence the implementation of SiFUS for waterfront development. The primary objective of this study is to examine the importance of incorporating fair and equitable weightage criteria within the specific framework of SiFUS. However, practitioners advise one to consider the concerns and emphasize the government's involvement as a supplementary point of reference. These arguments are significant for mixed development in the strata sector within Malaysia, particularly in the context of the waterfront strata development. To enhance the comprehension of purchasers and yield advantages for all parties involved, bridging the divide between industry stakeholders and governmental entities is crucial. The Strata Management Act states that it can be examined by obtaining reliable information. The appearance and progression of waterfront concepts in the forthcoming era shall be readily apparent to all observers. Considering the recent emergence of the waterfront strata concept within our country, it is essential to observe that the progress in developing strata properties with waterfront features has not kept growing with that of other advanced economies, particularly Australia. The survey questionnaire was distributed to the participants to enhance our comprehension of the previously formulated hypothesis. In the forthcoming chapter, we shall elaborate on the methodology employed in the present study and discuss the analysis.

CHAPTER 4

RESULTS AND FINDINGS

4.1 Introduction

This chapter describes the results and findings of the study. This chapter provides research design, population and sample, instrumentation, data collection, data analysis, and the protection of human rights. In this chapter, the researcher will delve into the intricate details of the findings employed in the present study. The chapter mentioned above will delve into various aspects of the research process. We shall begin by examining the research design and then by exploring the Population and sample under study. Subsequently, the researcher will discuss the instrumentation employed in the research and the methods used for data collection. The researcher will explore the data analysis techniques to derive meaningful insights from the collected data. Lastly, it will touch upon the crucial topic of protecting human rights within the research being conducted.

In the previous chapter, the researcher extensively discussed the methodology employed in this study. Next, we will present the findings derived from the method above. The collected data underwent a series of statistical analyses to extract and consolidate information from the survey responses. The commencement of the statistical analysis entails a comprehensive examination of the created data, wherein the response rate is duly elaborated. The researcher shall shift our attention toward the demographic characteristics of the respondents. Subsequently, the researcher will engage in an exchange regarding the reliability and dependability of the instrument in question. The subsequent section will examine the latent construct via descriptive analysis. Next, proceed with the statistical analysis, employing a nonparametric test to ascertain the disparities between the demographic factors and the latent construct items. In the concluding section, we shall examine the responses obtained from the open-ended questions included in the questionnaire. The final section of this chapter culminated in a comprehensive recapitulation.

This chapter reports on the data collection from respondents who completed and returned the emailed questionnaire. This chapter starts with a description of the demographic profile of the respondents.

4.2 Result Feedback

The data collection procedure is an essential part of a research design. There are various ways to collect data, such as interviews, telephone calls, internet, mail, etc., and each has advantages and disadvantages (Ponto, 2015). The present study distributes questionnaires to the employees of selected organizations through email with a cover letter explaining the study's purpose. The cover letter attached to the questionnaire clarifies to individual employees that the survey would be considered confidential and used for academic purposes. This is treated as the ethical guiding principle while collecting the data. During the time of distribution of the questionnaire, the researcher prepares a list of potential organizations and employees' contact information, specifically their names, mobile phone numbers, email addresses, and job positions.

Preliminary telephone calls were made to introduce the nature and purpose of the research and ask for the potential respondent's approval to be included in the survey. Following telephone conversations, if agreed, an email was sent to respondents with an enclosed self-administered survey questionnaire, cover letter, and expected date of returning the questionnaire. An acknowledgment email was requested to make sure the respondents received the questionnaire. Hence, after two weeks, the researcher called and emailed respondents to remind them to send the completed questionnaire. The respondent's completion and return of the questionnaire indicated voluntary consent to participate in the study. The major limitation of the questionnaire survey could be the study's response rate. The researcher established a credential relationship with the respondents, which may positively influence the response rate. The researcher also made several meetings with organizations such as JUPEM, NCREE etc., to build networking and to confirm that all participants belong to the defined Population; for instance, the participants possess the right amount of knowledge and experience about the issue. Another drawback could be the misinterpretation of questions by respondents. This study utilized simple language in the questionnaire to address this issue. The data collection process takes two months, from August to Sept 2023.

4.2.1 Feedback on the Questionnaire

This chapter reports on the data collection from respondents who completed and returned the emailed questionnaire. This chapter starts with a description of the demographic profile of the respondents. The survey conducted was to identify respondents' knowledge of the strata development through empirical observation in contexts;

- i. To ascertain the prevailing factors impacting the SiFUS in waterfront schemes employed by JKPTG (Department of Director General of Lands and Mines) and JUPEM (Department of Survey and Mapping Malaysia) when assessing the computation of waterfront strata titles.
- ii. To analyze the appropriate and established weightage employed in the Certificate of Share Unit Formula (SiFUS) for waterfront residential properties.
- iii. Framework for the weightage calculation in the Certificate of Share Unit Formula (SiFUS) tailored explicitly for waterfront residential strata and strategies industry players can adopt to incorporate equitable factors within SiFUS effectively to benefit home buyers and society.

4.3 Descriptive Analysis

The foundation of data is descriptive statistical analysis. Zikmund et al. (2013) say descriptive statistics summarize samples and measurements. This study uses descriptive statistics to describe the sample's demographics and latent construct items. Thus, demographic data and latent construct items were computed by mean, standard deviation, frequencies, and percentages.

4.3.1 Demographic Respondents' background profiles

The researcher has received a total of 12 completed responses. Table 4.1 provides an overview of the background profiles of the respondents. Most respondents fell within two age groups, namely individuals aged 20 to 29, constituting 33.3% of the sample, and those aged 50 years and above, also comprising 33.3%. The participants in the study were divided into two categories based on their gender. Most respondents, including 83.3% of the sample, identified as male. It is essential to note that just 16.7% of participants self-identified as female. In this study, it is vital that the most significant proportion of respondents, constituting approximately

66.7% of the total sample, identified themselves as Malays. Following this, we find that the Chinese demographic accounted for about 25.0% of the respondents, while the Indian population constituted a smaller yet significant proportion of approximately 8.3%. Regarding the educational qualifications of the respondents, it is noteworthy that a substantial proportion, precisely 50.0%, possess a bachelor's degree. This is the most prevalent level of education among the participants.

Table 4.1 Respondents' background profile (N=12)

Variable	Frequency	Percentage (%)
Age		
20-29	4	33.3
30-39	2	16.7
40-49	2	16.7
50 & above	4	33.3
Gender		
Male	10	83.3
Female	2	16.7
Ethnicity		
Malay	8	66.7
Chinese	3	25.0
Indian	1	8.3
Education level		
A-Level/STPM/Certificate/Diploma	5	41.7
Bachelor Degree	6	50.0
Master/PhD	1	8.3
Occupation		
Licensed Surveyor	3	25.0
Engineer	1	8.3
Government	7	58.3
Others	1	8.3
Working experience		
Less than 3 Years	1	8.3
3 to 6 Years	3	25.0
9 Years and above	8	66.7

Job position		
Director/Principal/Ceo/Coo	4	33.3
GM/SM	1	8.3
SM/Assist Mgr	1	8.3
Snr Exec/Exec	5	41.7
Others	1	8.3
Involved in strata		
Yes	9	75.0
No	3	25.0
Involved in waterfront		
Yes	7	58.3
No	5	41.7

Following closely behind, we observe that 41.7% of the respondents hold qualifications such as A-Level, STPM, Certificate, or Diploma. Lastly, a smaller fraction, specifically 8.3%, have attained a master's or PhD degree. Regarding occupation, it is noteworthy that a significant majority of the respondents, precisely 58.3%, are employed in the government sector, followed by licensed surveyors, 25.0% of the respondents, and engineers, accounting for 8.3% of the total. Many of the participants in the survey, amounting to 66.7%, possessed a professional background exceeding nine years of practical experience.

A notable proportion of the respondents, precisely 25.0%, reported having accumulated 3-6 years of work experience. A smaller subset, comprising 8.3% of the total respondents, indicated having less than three years of professional experience. Regarding the job position, it is worth noting that a significant proportion of the respondents, precisely 41.7%, hold the esteemed titles of Senior Executive or Executive. This is followed closely by individuals who are responsible for the positions of Director, Principal, Chief Executive Officer, or Chief Operation Officer, accounting for 33.3% of the respondents. Approximately 75.0% of the participants indicated that their organizations were actively involved in developing strata. Furthermore, 58.3% of respondents stated that their organizations were actively engaged in waterfront strata.

4.3.2 Respondents' Perceptions of The Weighted Strata

A total of 30 questionnaires were distributed personally to the potential respondents. However, only 12 sets of questionnaires succeeded in being returned to the researcher. Therefore, the response rate for this study was 40%. Table 4.2 shows that 41.7% of respondents strongly agree with the proposal that the act will create double chargers on the maintenance fees to development and have a separate weightage to have an equitable factor for preparing Certificate of Share Unit for waterfront strata. Meanwhile, 25% of respondents agreed that the developer proposed weightage unfairly and would create arguments; the government should review the weightage and discuss equitable benefits for residents' waterfront in parliament.

Table 4.2 Summarise the respondents' perceptions of the weighted strata (N=12)

Statement to review the current Act adding weightage for waterfront development	Totally disagreed	Disagreed	Neutral	Agree	Strongly agree	Total
Trend in Malaysia	0.0	16.7	33.3	41.7	8.3	100.0
Separate weighted in SIFUS	0.0	8.3	25.0	25.0	41.7	100.0
Developer proposed weightage	0.00	8.3	16.7	50.0	25.0	100.0
Weighted create arguments	0.0	16.7	8.3	50.0	25.0	100.0
Strata act to review benefit	0.0	25.0	0.0	33.3	41.7	100.0
Pontoon constant factor	0.0	16.7	33.3	33.3	33.3	100.0
Proposal equitable weightage at the pontoon	0.0	33.3	25.0	25.0	16.7	100.0
The government should review weightage	0.0	41.7	8.3	25.0	25.0	100.0
Government to discuss in parliament	0.0	16.7	16.7	41.7	25.0	100.0

Weightage to formulate avoid double charges	0.0	16.7	16.7	25.0	41.7	100.0
Weightage equitable benefits residents' waterfront	0.0	16.7	16.7	41.7	25.0	100.0

4.3.3 Descriptive Analysis of the items in Latent Constructs

This section deals with the descriptive statistics for the items in the latent construct employed in the current study. The level of agreement perception was measured through Section B of the instrument, with eleven items being tested. The choice of agreement based on the Likert scale ranges from 1 to 5, where 1 strongly disagrees and 5 strongly agrees. The choice of agreement of the 12 respondents has been summarised in Table 4.3, and it shows that the highest mean score of agreement of the Strata Act is item “separate weighted in SIFUS,” which is 4.00.

Table 4.3 Descriptive statistics for each item.

No.	Statement	1	2	3	4	5	Mean	SD
1.	Trend in Malaysia	0.0	16.7	33.3	41.7	8.3	3.42	0.90
2.	Separate weighted in SIFUS	0.0	8.3	25.0	25.0	41.7	4.00	1.04
3.	Developer proposed weightage	0.0	8.3	16.7	50.0	25.0	3.92	0.90
4.	Weighted create arguments	0.0	16.7	8.3	50.0	25.0	3.83	1.03
5.	Strata act to review benefit	0.0	25.0	0.0	33.3	41.7	3.92	1.24
6.	Ponton constant factor	0.0	16.7	33.3	33.3	33.3	3.50	1.00
7.	Proposal equitable weightage at the pontoon	0.0	33.3	25.0	25.0	16.7	3.25	1.14
8.	The government should revied weightage	0.0	41.7	8.3	25.0	25.0	3.33	1.30
9.	Government to discuss in parliament	0.0	16.7	16.7	41.7	25.0	3.75	1.06

10.	Weightage to formulate avoid double charges	0.0	16.7	16.7	25.0	41.7	3.92	1.16
11.	Weightage equitable benefits resident's waterfront	0.0	16.7	16.7	41.7	25.0	3.75	10.6

Note: 1 – strongly disagree; 2 – disagree; 3 – neutral; 4 – agree; 5 – strongly agree; SD – standard deviation

4.4 Scale Measurement

Data analysis gives valuable information on this study and concludes based on the results. The collected data was analyzed using the SPSS version 27. Mann Whitney test also finds whether there “ is a statistically significant difference between the perception of gender on the variable of “TREND IN MALAYSIA,” and it was analyzed on the Cronbach Alpha value.

4.4.1 Content Analysis

Table 4.6 presents the research findings obtained from various professionals involved in the waterfront strata, including the Government, developer, Licensed Surveyor, and management agency.

Table 4.4 Content Analysis- comments by Experts

Respondent	Comment	Code Respondent
Government	The share unit formula is mentioned in the Pikeliling JKPTG Bil. 4/2014; therefore, if there is a need to amend, Act 318 should not be related. This is because the act only mentioned the entitlements of share units and the power of PTG to ensure that the proposed/provisional share units are equitable. The State Authority's power is to make rules, and there is no need to amend the act.	Res 1
	Justification for amendment of share unit is lacking, such as the basis to amend the formula, which is the current formula is unfair, the impact	

	of the existing formula on the cost maintenance and voting power of the residents, and comparison with other countries's legislations, etc.	
	Circular KPTG Bil. 4/2014 allows any suggestions from the applicant about the formula as long as they are justified. The Act and the circular are not rigid on this matter.	
	Nil	Res 2
Government	Nil	Res 3
	There is no equitable means in every aspect of the Strata scheme. Every person has a preference for equitability. The weightage in the Act can be used as a constant. Suppose one wants to differentiate the importance or usage of specific parcels in a strata scheme. In that case, he can always propose a different formula from the act, which is acceptable in the State's Strata Rules and subject to State Authority Approval.	Res 4
	Need to organize a workshop to see the legal and social impact.	Res 5
Developer	To evaluate strata Act for waterfront (mixed development)	Res 6
Licensed Surveyor	All key personnel, such as developers, government agencies, land surveyors, and architects related to strata development, sit together to discuss this matter before implementing a formula share unit to calculate unit share for each parcel.	Res 7
	Waterfront living is a lifestyle that differs from one scheme to another. Any developer who thinks that the weightage specified in the state laws are unsuitable should propose weightage for the	Res 8

	Director Land and Mines Consideration Strata Act to deal with strata titles and records issuance. Maintenance charges will come under the Strata Management Act and Regulations.	
	Nil	Res 9
Government	Nil	Res 10
Government	Nil	Res 11
Management Agent	Follow according to the Act.	Res 12

4.4.2 Mann-Whitney test analysis

This study examined the association between categorical and ordinal variables using the non-parametric Mann-Whitney U test. This test is employed when the sample size is fewer than 30, the dependent variable is skewed, and the measurement is ordinal (Cohen et al., 2018). Mann-Whitney U is a non-parametric alternative to the t-test for two independent samples with one categorical and one ordinal variable (Cohen et al., 2018).

4.4.2.1 The differences between job position and level of agreement that waterfront stratified residential properties are becoming the choice of developers.

The result of the Mann-Whitney test is shown in Table 4.7. Since the significance value ($p=0.683$) is greater than 0.05, there is no significant difference between the Principal/ CEO/COO and Non-Principal/ CEO/COO on the level of agreement that waterfront stratified residential properties is a trend in Malaysia. Hence, it failed to reject the null hypothesis.

Table 4.5 Mann-Whitney U test for the level of agreement that waterfront stratified residential properties are a trend in Malaysia.

		Job position	n	Mean rank	Rank Sum	U	Sig
waterfront residential properties are a trend in Malaysia	stratified properties	Non-Principal/ CEO/ COO	8	6.19	49.50	13.50	0.683
		Principal/ CEO/ COO	4	7.13	28.50		

4.4.2.2 The differences between job position and level of agreement that residential waterfront strata should have separate weightage in SIFUS.

The result of the Mann-Whitney test is shown in Table 4.8. Since the significance value (p=0.368) is greater than 0.05, there is no significant difference between Principal/ CEO/COO and Non-Principal/ CEO/COO on the level of agreement that residential waterfront strata should have separate weightage for SIFUS. Hence, it failed to reject the null hypothesis.

Table 4.6 Mann-Whitney U test for the level of agreement that residential waterfront strata should have separate weightage for SIFUS.

	Job position	n	Mean rank	Rank Sum	U	Sig
Residential waterfront strata should have separate weightage for SIFUS	Non-Principal/ CEO/ COO	8	7.25	58.00	10.00	0.368
	Principal/ CEO/ COO	4	5.00	20.00		

4.4.2.3 The differences between job position and level of agreement that the developer should propose weightage.

The result of the Mann-Whitney test is shown in Table 4.9. Since the significance value (p=0.461) is greater than 0.05, there is no significant difference between Principal/ CEO/COO and Non-Principal/ CEO/COO on the level of agreement that the developer should propose weightage. Hence, it failed to reject the null hypothesis.

Table 4.7 Mann-Whitney U test for the level of agreement that the developer should propose weightage.

	Job position	n	Mean rank	Rank Sum	U	Sig
The developer should propose weightage.	Non-Principal/ CEO/ COO	8	7.13	57.00	11.00	0.461
	Principal/ CEO/ COO	4	5.25	21.00		

4.4.2.4 The differences between job position and level of agreement that weightage creates argument.

The result of the Mann-Whitney test is shown in Table 4.10. Since the significance value ($p=0.368$) is greater than 0.05, there is no significant difference between Principal/ CEO/COO and Non-Principal/ CEO/COO on the level of agreement that the developer should propose weightage. Hence, it failed to reject the null hypothesis.

Table 4.8 Mann-Whitney U test for the level of agreement that weightage creates an argument.

Job position		n	Mean rank	Rank Sum	U	Sig
Weightages create argument	Non-Principal/ CEO/ COO	8	7.19	57.50	10.50	0.368
	Principal/ CEO/ COO	4	5.13	20.50		

4.4.2.5 The differences between job position and level of agreement that the Strata Act should be reviewed.

The result of the Mann-Whitney test is shown in Table 4.11. Since the significance value ($p=0.283$) is greater than 0.05, there is no significant difference between the Principal/ CEO/COO and Non-Principal/ CEO/COO on the level of agreement that the Strata Act should be reviewed. Hence, it failed to reject the null hypothesis.

Table 4.9 Mann-Whitney U test for the level of agreement that the Strata Act should be reviewed.

Job position		n	Mean rank	Rank Sum	U	Sig
The Strata Act should be reviewed	Non-Principal/ CEO/ COO	8	7.31	58.50	9.50	0.283
	Principal/ CEO/ COO	4	4.88	19.50		

4.4.2.6 The differences between job position and level of agreement that the accessory the parcel should be constant.

The result of the Mann-Whitney test is shown in Table 4.12. Since the significance value ($p=0.283$) is greater than 0.05, there is no significant difference between Principal/CEO/COO and Non-Principal/CEO/COO on the level of agreement that the accessory parcel should be constant. Hence, it failed to reject the null hypothesis.

Table 4.10 Mann-Whitney U test for the level of agreement that the accessory parcel should be constant.

Job position		n	Mean rank	Rank Sum	U	Sig
The accessory parcel should be constant	Non-Principal/ CEO/ COO	8	7.75	62.00	6.00	0.109
	Principal/ CEO/ COO	4	4.00	16.00		

4.4.2.7 The differences between job position and level of agreement that the proposal of an equitable weightage at the pontoon.

The result of the Mann-Whitney test is shown in Table 4.13. Since the significance value ($p=0.109$) is greater than 0.05, there is no significant difference between the Principal/CEO/COO and Non-Principal/CEO/COO on the level of agreement that the proposal has an equitable weightage at the pontoon. Hence, it failed to reject the null hypothesis.

Table 4.11 Mann-Whitney U test proposes an equitable weightage at the pontoon.

Job position		n	Mean rank	Rank Sum	U	Sig
The proposal for an equitable weightage at the pontoon	Non-Principal/ CEO/ COO	8	7.25	58.00	10.00	0.368
	Principal/ CEO/ COO	4	5.00	20.00		

4.4.2.8 The differences between job position and level of agreement that the government should review weightage F3 and F1.

The result of the Mann-Whitney test is shown in Table 4.14. Since the significance value ($p=0.109$) is greater than 0.05, there is no significant difference between Principal/CEO/COO and Non-Principal/CEO/COO on the level of agreement that the government should review weightage F3 and F1. Hence, it failed to reject the null hypothesis.

Table 4.12 Mann-Whitney U test for the level of agreement that the government should review weightage F3 and F1.

	Job position	n	Mean rank	Rank Sum	U	Sig
The government should review the weightage of F3 and F1	Non-Principal/ CEO/ COO	8	6.63	53.00	15.00	0.933
	Principal/ CEO/ COO	4	6.25	25.00		

4.4.2.9 The differences between job position and level of agreement that the government should discuss the review of the Strata Act in Parliament.

The result of the Mann-Whitney test is shown in Table 4.15. Since the significance value ($p=0.461$) is greater than 0.05, there is no significant difference between the Principal/CEO/COO and Non-Principal/CEO/COO on the level of agreement that the government should discuss the review of the Strata Act in Parliament. Hence, it failed to reject the null hypothesis.

Table 4.13 Mann-Whitney U test for the level the government should discuss reviewing the Strata Act in Parliament.

	Job position	n	Mean rank	Rank Sum	U	Sig
The government should discuss the review of the Strata Act in Parliament	Non-Principal/ CEO/ COO	8	7.13	57.00	11.00	0.461
	Principal/ CEO/ COO	4	5.25	21.00		

4.4.2.10 The differences between job position and level of agreement that the government should implement a weightage in the Strata Act for waterfront strata development to avoid double charging to the homeowner.

The result of the Mann-Whitney test is shown in Table 4.16. Since the significance value ($p=0.073$) is greater than 0.05, there is no significant difference between the Principal/CEO/COO and Non-Principal/ CEO/COO on the level of the agreement the government should implement a weightage in the Strata Act for waterfront strata development to avoid double charging to the homeowner. Hence, it failed to reject the null hypothesis.

Table 4.14 Mann-Whitney U test for the level that the government should implement a weightage in the Strata Act for waterfront strata development to avoid double charging to homeowners.

	Job position	n	Mean rank	Rank Sum	U	Sig
The government should implement a weightage in the Strata Act for waterfront strata development to avoid double charging homeowner	Non-Principal/ CEO/ COO	8	7.88	63.00	5.00	0.073
	Principal/ CEO/ COO	4	3.75	15.00		

4.4.2.11 The differences between job position and level of agreement to establish an equitable formula for waterfront strata development in the calculation in SIFUS.

The result of the Mann-Whitney test is shown in Table 4.17. Since the significance value ($p=0.073$) is greater than 0.05, there is no significant difference between Principal/CEO/COO and Non-Principal/ CEO/COO on the level of agreement to establish an equitable formula for waterfront strata development in the calculation in SIFUS. Hence, it failed to reject the null hypothesis.

Table 4.15 Mann-Whitney U test for the level of agreement to establish an equitable formula for waterfront strata development in the calculation in SIFUS.

	Job position	n	Mean rank	Rank Sum	U	Sig
To establish an equitable formula for waterfront strata development in the calculation in SIFUS	Non-Principal/ CEO/ COO	8	7.63	61.00	7.00	0.154
	Principal/ CEO/ COO	4	4.25	17.00		

4.4.3 Inferential analysis

For inferential analysis, the Mann-Whitney U test was conducted in this study to determine whether there are differences between demographic factors toward the respondents' level of agreement for each item in the latent construct. Mann-Whitney U test is used to test the difference between two groups of demographic factors, particularly the job position (CEO/COO and Non-CEO/COO), on the level of agreement of the items used in this study.

4.4.4 Cronbach's Alpha Analysis

The reliability of the questionnaire was established using Cronbach's alpha coefficient. The questionnaire consists of eleven items to which respondents answer based on a five-point Likert scale ranging from strongly disagree (1) to agree (5) strongly. Table 4.4 shows that Cronbach's alpha of all items in the construct is 0.954. Since the value is more than 0.7, the instrument was on a good scale, which means it was reliable in this study (Bougie & Sekaran, 2020).

Table 4.16 Cronbach's alpha value.

Cronbach's alpha	Number of items
0.954	13

Meanwhile, Table 4.5 demonstrates that the instrument-corrected item-total correlation varies from 0.385 to 0.938, indicating a good correlation of items with the construct (Bougie & Sekaran, 2020) in this research. Therefore, all items appeared worth retaining since deleting items from the construct lowered the respective Cronbach's alpha.

Table 4.17 Item-total statistics

Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Trend in Malaysia	37.17	89.788	.385	.962
Separate weighted in SIFUS	36.58	80.447	.835	.948
Developer proposed weightage	36.67	82.970	.817	.949
Weighted create arguments	36.75	82.205	.745	.951
Strata act to review benefit	36.67	76.606	.877	.947
Ponton constant factor	37.08	79.902	.910	.946
Proposal equitable weightage at the pontoon	37.33	80.606	.747	.951
The government should revied weightage	37.25	78.386	.741	.953
Government to discuss in parliament	36.83	78.515	.938	.945
Weightage to formulate and avoid double charges	36.67	78.970	.814	.949
Weightage equitable benefits resident's waterfront	36.83	79.061	.906	.946

4.5 Chapter's Conclusion

This study used purposive sampling. Purposive sampling, often termed judgment sampling, is used in research. Researchers use purposeful or assessment sampling to pick individuals who meet preset criteria. The results of this study show that this method works to collect reliable data from individuals. These studies have shown significant benefits, especially when adopting accurate and credible data sources (Etikan et al.,2016). Before recruiting people with the necessary traits, researchers determine the selection criteria. According to Bernard (2002), these persons must fit the requirements, be willing to engage in the study, and comprehend the topic well. Before interviewing the subjects, researchers usually check their qualifications.

This study uses a questionnaire-based survey approach. The study questionnaire was reliable. This study employs descriptive statistics to give a complete picture of the individuals. The renowned Mann-Whitney test is used to determine the significant differential in collaboration for each element in the underlying construct of the selected demographic variables. The researcher carefully picked strata development experts aged 20–65 who were

full-time employees. This strategy has successfully recruited non-working-class individuals in past empirical studies.

The survey targeted email and networking users. The decision was made following a thorough study with waterfront strata development experts. Skills and subject knowledge are needed for a job. Purposive sampling, or judgment sampling, is how researchers choose people who fit the criteria. This method determines the required characteristics. Bernard (2002) said researchers engage people who fulfil these characteristics and are willing and knowledgeable about the topic. This research targeted working-class people with suitable features for more reliable results. Researchers sought participants to improve data dependability (Etikan et al., 2016). These people must have the right skills and knowledge to conduct research.

CHAPTER 5

DISCUSSION AND CONCLUSION

5.1 Introduction

Waterfront strata homes have undergone a significant transformation, resulting in the establishment of a comprehensive ecosystem. This ecosystem necessitates the implementation of a carefully planned macrostructure and the efficient management of individual cells. The primary objective of these projects is to effectively cater to the increasing demand for high-quality living arrangements that homeowners are actively seeking within the contemporary market landscape (Chin, 2022). The individuals living within this building collectively engage in the utilization of various amenities and common areas. These encompass a wide array of facilities, including but not limited to a boat, a clubhouse, a playground, outdoor exercise facilities, a timber walkway, and a water canal. Therefore, it can be observed that waterfront houses have been carefully designed to represent the essence of a luxurious resort. According to Roslan (2007), it is essential to consider certain factors when determining the formula and weightage variables in SiFUS for waterfront residences with a pontoon for berthing yachts. These factors include property values, shared facilities usage, and utility consumption. The statement explains that it represents a modern or costly lifestyle for individuals who reside within the highest levels of society. Living in a strata building is characterized by its unique features: providing various services and shared spaces. The expanding demand for waterfront property has catalysed developers to embark upon the commencement of development projects near water bodies. The Waterfront area has emerged as the preeminent location. Considering the exceptional environmental conditions, there is anticipated to be a surge in the demand for waterfront properties despite the prices associated with such offerings being higher than those of other property types. Therefore, it is highly recommended that governmental entities and private organizations implement this development to achieve various objectives, provided that the outcomes are advantageous for all stakeholders while maintaining the principles of environmental conservation (Eves et al., 2009).

Real Estate and Housing Developers Association Malaysia (REDHA), in a press statement issued on 8 November 2019, pointed to the forefront the issue of the equitable method that the government uses to compute share units in mixed developments. The

government intends to amend the applicable Acts and Regulations to provide the Land and Mines Office (PTG) with the authority to adopt a more "equitable" methodology and weightage factors for calculating share units for the various components of mixed development.

As a result, the Ministry of Housing and Local Government could expeditiously examine the matter that confused industry stakeholders and strata owners related to waterfront homes. Evaluation of the various aspects of the Strata Titles Act, it emerged that there is room for improvement in virtually every aspect examined to keep up with the rapid development of the strata title schemes in Malaysia. Hence, Khatijah (2006) highlighted that authorities would consider the recommendation and introduce changes and legislative amendments to overcome the present difficulties and benefit those who purchase a strata-type property. Various aspects of the Strata Titles Act need modernization. It emerged that there is room for improvement in virtually every aspect examined to keep up with the rapid development of the strata title schemes waterfront in Malaysia. The relevant authorities would explore the possibility of making new adjustments and amending existing legislation to get beyond the current obstacles and provide even more safety and advantages to individuals who own strata waterfront-type property.

5.2 Summary of Statistical Analyses

In the survey, it was found that a significant proportion, specifically 41.7% of the participants, expressed strong agreement with the proposal. This proposal pertains to the introduction of double chargers on the maintenance fees for development, as well as the inclusion of a distinct weightage to ensure fairness and equitable factor in the preparation of the Certificate of Share Unit for waterfront strata. According to the survey results, a quarter (25%) of the participants expressed their agreement that the weightage proposed by the developer is unjust and could potentially lead to disputes. Consequently, it is suggested that the government undertake a thorough evaluation of the weightage system and engage in parliamentary discussions to ensure fair and equitable advantages for the residents in relation to the waterfront.

Moreover based on analysis results, it is important to note that there exists no substantial distinction between the Principal/ CEO/COO and Non-Principal/ CEO/COO with regards to the following aspects.

- a) The level of agreement regarding the emergence of waterfront stratified residential properties as a prevailing trend within the context of Malaysia.
- b) The level of agreement regarding the allocation of separate weightage for Special Infrastructure Funding Units (SIFUS) in residential waterfront strata developments.
- c) The level of agreement regarding the proposal of weightage by the developer is a topic of discussion.
- d) In considering the level of agreement regarding the proposal of weightage by the developer, it is important to assess the potential for argumentation.
- e) The level of agreement regarding the necessity of reviewing the Strata Act.
- f) The level of agreement regarding the constancy of the accessory parcel is a topic of interest.
- g) The level of agreement regarding the equitable weightage of the proposal at the pontoon is being discussed.
- h) The level of agreement regarding the necessity for the government to review the weightage of F3 and F1 is a topic of interest.
- i) The level of agreement regarding the government's engagement in parliamentary discussions concerning the review of the Strata Act.
- j) In considering the matter, it is imperative to discuss the level of agreement pertaining to the implementation of a weightage in the Strata Act for waterfront strata development, with the primary objective of mitigating the issue of double charging that may potentially burden homeowners.
- k) In order to establish an equitable formula for waterfront strata development in the calculation of the Strata Interest Factor for Unit Space (SIFUS), it is imperative to assess the level of agreement.

5.3 Discussions of Major Findings

5.3.1 Discussion Objective One: To determine the existing factors infecting the Certificate of Share Unit Formula (SiFUS) in Waterfront Strata-Titled Residential.

According to the survey conducted with the technical experts, R1 has responded in alignment with the provisions outlined in circular KPTG 4/2014. In regards to R2, it has been identified that there is a need for additional workshops to be conducted to raise awareness. Moving on to R3, ensuring these workshops are consistently maintained over time is

imperative. Furthermore, it is recommended that R5 aligns with the existing practices and adheres to the current act that is in place. Lastly, it is interesting that the remaining respondents did not comment. Upon further examination, as elucidated by Winey Mann, it has been determined that the hypothesis test produces a null result. This indicates that there is no significant association between the variables of organization and experience and the outcome that has been obtained. Therefore, it is evident from the perspectives of the majority of the respondents that there exists a present opinion that the revision of the current Act to incorporate weightage for the waterfront is deemed unnecessary. Consequently, it is claimed that the current Circular remains valid and applicable within the industry.

5.3.2 Discussion Objective Two: To analyse the suitable and standard weightage used for the Certificate of Share Unit Formula (SiFUS) for Waterfront Strata-Titled Residential Building

As per the insights provided by respondent R4, it is evident that a comprehensive examination of the Strata scheme reveals a lack of equitable measures across various dimensions. In the realm of personal inclinations and professional pursuits, it is not uncommon for individuals, particularly those engaged in waterfront development, to prefer equitability. The weightage in the Strata Act and circular KPTG 4/2014 shall be explained and may be employed as a constant. In a strata scheme, an individual can determine the significance or utilization of particular parcels. R4 highlighted that this can be achieved by introducing an alternative weightage or factor distinct from the one mentioned in the relevant legislation. It is important to note that such a proposal must align with the State's Strata Rules and be subject to approval by the appropriate State Authority. The R4 component aligns itself with the input provided by the R1 component.

5.3.3 Discussion Objective Three: To develop a Certificate of Share Unit Formula (SiFUS) for the Waterfront Strata-Titled Residential Framework.

Share units determine the maintenance fees payable by each parcel owner figures assigned to each parcel by the developer's licensed land surveyor. Section 60(3) SMA 2013 allows a Management Corporation to determine different rates of maintenance fees to be charged, and it is only limited to situations where parcels are used for a '*significantly different purpose.*' Strata Management Act 2013, several amendments have been made to strengthen

and improve the current exercise and give a new breath to strata building development. House buyers and unit owners obtain many advantages due to the latest enforcement that promotes transparency and accountability in the housing development industry. Elements involved to be allowed on weightage in the certificate of share units shown in Figure 5.1 and Table 5.1 sample maintenance charges common property, as discussed with respondents R6 and R12 for waterfront strata-titled residential, that may impact the management fees that must be fair and equitable.

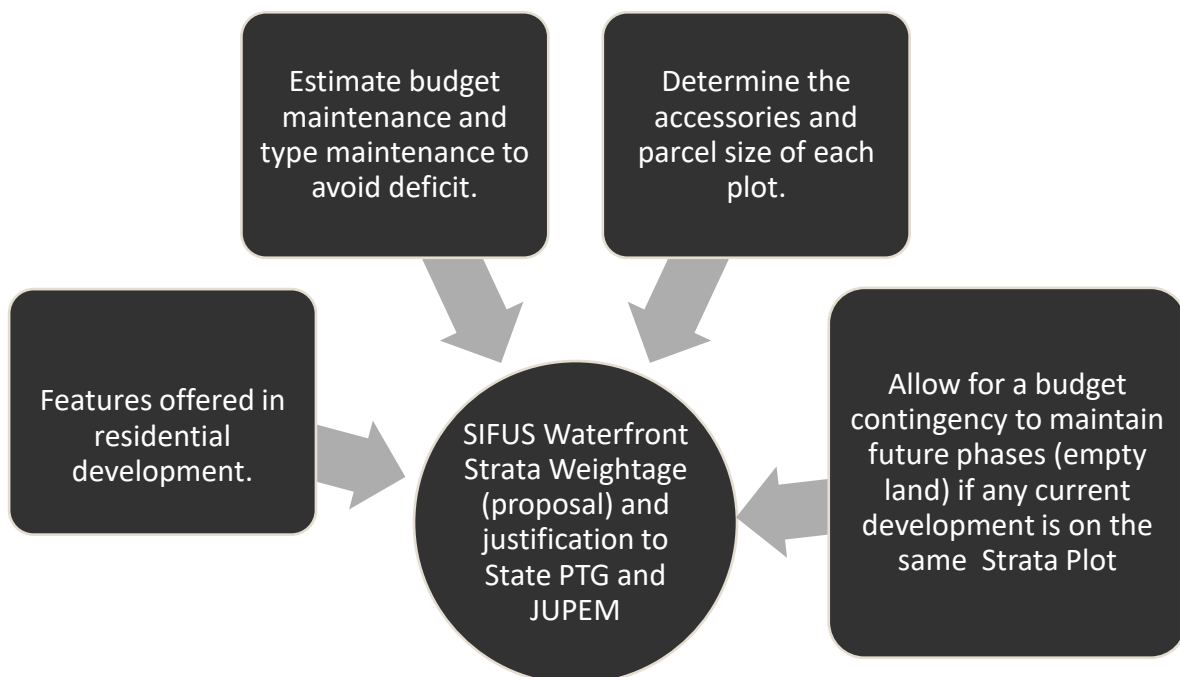


Figure 5.1 Certificate of Share Unit Formula (SiFUS) for Waterfront Strata-Titled Residential Building Framework.

Source: Developed for the research (2023).

Table 5.1 Sample maintenance charges common property.

No	Description	Estimated Monthly Expenses (RM)
1.	General repair/maintenance	
2.	Electricity supply	
3.	Electrical system maintenance	
4.	Firefighting system maintenance	

5.	Generator system maintenance	
6.	Lift/escalator system maintenance	
7.	Air conditioning system maintenance	
8.	Security system maintenance	
9.	Primary television reception equipment maintenance	
10.	Intercom repair and maintenance	
11.	Building automation system	
12.	Lock Gate and inlet sluice	
13.	Swimming pool maintenance	
14.	Sewerage maintenance	
15.	Refuse collection/disposal.	
16.	Car park maintenance	
17.	Pest control	
18.	Security services	
19.	Cleaning/cleansing services and water canal	
20.	Gardening and landscaping	
21.	Signage	
22.	Bank charges	
23.	Audit fee	
24.	Management fee	
25.	Management office expenses	
26.	Staff expenses	
	Total expenses	
	Amount per allocated share unit**	
	Number of allocated share units assigned to the said Parcel by the Vendor's licensed land surveyor	
	Amount of service charge	

Note of maintenance for waterfront.

Total expenses

Total number of allocated share units assigned by the developer's licensed land surveyor to all parcels comprised in the housing development

5.4 Implication of the Study

5.4.1 Practical Implications

The implications of this study are relevant to various stakeholders involved in the matter, such as policymakers and practitioners. The study highlights the significance of implementing a formula in SIFUS that is both equitable and fair. Hence, it is essential to mention that this discovery can significantly enhance the consciousness of esteemed government officials, particularly those from the JKPTG, KPKT, COB, JUPEM, and HDA. These reputable bodies are urged to actively investigate equitable considerations for waterfront housing developments, although Circular KPTG 4/2014 mentioned that the condition submission SIFUs will depend on the state PTG's approval. Furthermore, circular KPTG 2014 was nine years ago, and it will sound good to review it again. They must take proactive measures to promote the implementation of more accommodating and supportive policies, both within the public and private sectors. Such measures are crucial in preserving the interests and well-being of prospective home buyers. It is essential to recognize the significance of specific policies and acts on strata residential buildings situated along waterfronts, offering a luxurious lifestyle.

Hence, all of these variables could serve as an adequate basis for the government (policymakers and practitioners) to prompt an assessment of the existing allocation of weightage within the strata. The effectiveness of government initiatives is contingent upon the willingness of other parties to adhere to them. Hence, the suggested reassessment should include additional criteria, precisely considering the weightage given to waterfront properties. A Licensed Surveyor and developer should accompany this decision. The purpose of this revision is to ensure clarity and avoid any possible confusion regarding the significance placed on waterfront development concerning developers and buyers when submitting the Strata Individual Form of Unit Share (SiFUS) for approval by the Department of Lands and Mines (JKPTG) and Department of Survey and Mapping Malaysia (JUPEM) before filing with the Commissioner of Building (CoB).

5.5 Limitations of the Study

It is imperative to acknowledge that the realm of current research is not devoid of limitations in which the research findings cannot be projected to more people beyond the

specific respondents who were selected to receive our questionnaires, primarily through electronic mail due to questioners being related to technical. These individuals willingly agreed to participate in our research, but they may have other obligations or commitments that could potentially impact the generalizability of results. The limitations of this research are:

- a) Out of the total pool of respondents, which consisted of twenty-four individuals specifically chosen for their expertise and occupation, it is essential to mention that only half of them, precisely twelve individuals, provided valuable feedback, encompassing the pilot test as well.
- b) The comprehensive analysis encompasses certain limitations that warrant discussion. One such restriction pertains to the sample size employed in the stratification process,
- c) The research has acquired valuable feedback from the respondents with whom we had the opportunity to engage in face-to-face interactions. These individuals provided their unique perspectives and insights on the development of Strata in conjunction with a waterfront atmosphere; however, few respondents do not apply to waterfront strata building.
- d) The developers involved in creating waterfront development projects have explicitly emphasized to researchers the significance of shared information. It is crucial to understand that this information is intended exclusively for academic purposes or as a reference for educational institutions. In any case, it should not be disregarded by individuals.
- e) Not all individuals are actively involved in waterfront strata work. This lack of familiarity could lead to random answering, posing a potential challenge to the accuracy and reliability of the collected data in this research.

In this context, it is worth mentioning that this data collection process is specifically carried out within the geographical region of Johor Bahru and a few in Kuala Lumpur, including Selangor. Additionally, the research focused on technical experts and major players in the industry, which may not reflect the views of smaller construction firms that engage in smaller projects. Therefore, the results may not generalize to the industry as a whole. Future research could benefit from expanding the sample size by collaborating with industry associations, such as the Real Estate and Housing Developers' Association (REHDA) Institute. Future research may adopt a mixed-method approach that uses online tools and physical questionnaires, increasing the likelihood of reaching a more diverse group of respondents.

5.6 Recommendation Practice for Waterfront Development in Malaysia

In this section, the researcher shall present a comprehensive set of recommendations to enhance and optimize practices in waterfront development. The suggestions derived from the conclusions of this research activity are intended to optimize and elevate the waterfront development process in Malaysia. The suggestions that follow are arranged into five (5) categories:

- a) It is imperative to enhance the governance framework surrounding this process to address the challenges and concerns that arise from waterfront development. Hence, the Malaysian government needs to restructure the management and administration of waterfront resources comprehensively.
- b) If the government decides to reconstruct waterfront governance, a strong emphasis must be placed on promoting active participation and collaborative efforts among the various stakeholders involved. This approach has been demonstrated to yield favorable outcomes in previous instances of waterfront development. Implementing a comprehensive administration system that encompasses the entire development process is essential.
- c) Implementing an upgrade to enhance the caliber of the information agencies and departments tasked with waterfront development is vital. In the immediate timeframe, it is possible to consider the potential of retraining the current officers and offering them performance-based incentives to address the current situation. Over time, it has become increasingly evident that the government has been pressing to appoint more proficient technical officers with the necessary expertise in water resource management.
- d) The government must undertake a thorough revision, such as Pek KPTG Bil 4/2014 (9 years ago), of the current regulations of waterfront development in Malaysia. This revision should involve the adoption of the recommended guidelines specifically designed to manage and control waterfront development activities effectively. In this context, individuals must acknowledge and appreciate the significance of environmental considerations. Furthermore, it is crucial for them to actively engage in the equitable distribution of both costs and benefits among the various stakeholders involved in the waterfront development process. The proposition would serve as a means for the government to effectively streamline and regulate the waterfront development process within Malaysia's borders.

- e) The enforcement of guidelines for waterfront development in Malaysia, particularly by the government and policymakers, particularly Strata Act 318, is of utmost importance to attain successful waterfront outcomes, as observed in many other countries.

5.7 Conclusion

Upon the culmination of this comprehensive study, it is imperative to acknowledge the existence of several potential avenues for further investigation. The issues mentioned above are primarily associated with the previously deliberated matters. In the context of this investigation, it is essential to note that the number of cases identified was relatively limited.

It is advisable to conduct additional research to obtain a more extensive comprehension of the groups above, specifically government agencies, property developers, and waterfront communities. The factors that motivate individuals or organizations to engage in waterfront development and the strategies they employ to ensure its success are of utmost importance in determining the generalizability of the findings and the need for further investigation by academic researchers. The present study analyzed the transformations observed in the mixed-use and strata building waterfront strata projects in Iskandar Puteri, Johor. Researchers should explore and inquire into diverse aquatic environments to enhance knowledge and understanding. This includes directing our attention towards the outermost perimeters of water bodies and significant coastal regions susceptible to various forms of human development and activities. The current investigation offers a comprehensive analysis of strategies to enhance the operational efficiency of Malaysia's waterfront while simultaneously addressing the obstacles encountered during the implementation of prior policies. The research that is being presented in this context is designed to address the specific requirements and concerns of real estate development companies' policymakers and individuals who have a direct connection to waterfront areas. Moving forward, it is of utmost importance to recognize the proactive actions taken by government agencies in reevaluating a specific circular, specifically Circular KPTG Bill 4/2014, that was implemented approximately nine years ago. The necessity for this alteration arises from the imperative to maintain its practicality and efficacy in addressing the demands of coming waterfront expansion.

To move the field of study ahead, researchers should embrace an innovative approach to exploration in the forthcoming years. To comprehensively understand the subject matter, it

is imperative to delve into the detailed interrelationships among the variables on weightage factors. By doing so, we can gain a deeper insight into the complex dynamics and dependencies that govern this domain of study. A comprehensive examination must be conducted to establish the practicality and fairness of these considerations. Before presenting the Certificate of Share Units to the esteemed Land Office for approval, it is of utmost importance to carefully contemplate the diverse features provided within any given development. The comprehensive approach the user proposes will undoubtedly significantly contribute towards advancing knowledge in the specific field under consideration. Therefore, it is essential to consider that future research endeavours may provide insights into maintenance fees that are more appropriate for prospective homeowners.

Further investigation may be conducted to determine how the recommendations have been implemented, assess their effectiveness in waterfront development initiatives, and evaluate their impact on the individuals involved. Moreover, coming investigations must center their attention on the precise methodology employed to augment the understanding of prospective buyers of Strata waterfront homes regarding the intricate web of social interconnectedness and relationships. The facilitation of progress in Strata development within waterfront areas will be ultimately achieved.

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**APPENDIX A
SURVEY QUESTIONNAIRE**



FACULTY OF ACCOUNTANCY AND MANAGEMENT

ACADEMIC YEAR 2023/2024

**SURVEY ANALYZING THE DETERMINANTS OF SHARE UNIT COMPUTATION
FOR WATERFRONT STRATA-TITLED RESIDENTIAL BUILDING**

NAME: ADZHAM MAHMUD

PROGRAMME: MASTER REAL ESTATE DEVELOPMENT

OBJECTIVE: Analysis of the suitable and standard weightage shall be used for the Certificate of Share Unit Formula (SiFUS) for Waterfront Residential.

PRIVACY: This research is the result of my work. Information is not confidential and can be used for academic reference purposes.

Instruction: Please tick (/) in the box next to the answer of your choice or write in the space

SECTION A: DEMOGRAPHICS

1) Age:

20 – 29 30 – 39 40 – 49 50 and above

2) Gender:

Male Female

3) Ethnicity:

Malay Chinese Indian Others

4) Highest academic level:

O-Level/SPM A-Level/STPM/Certificate/Diploma

Bachelor's degree Master/Doctorate Others: _____

5) Occupation:

- Licensed Surveyor Developer Property Sales & Marketing
 Architect Engineer Quantity Surveyor Government Others: _____

6) Working experiences:

- Less than 3 years 3 to 6 years 6 to 9 years 9 years and above

7) Position:

- Director/Principal/CEO/COO General Manager/ Senior Manager
 Manager/Assistant Manager Senior Executive/Executive Others: _____

8) Did your company involved in strata development before?

- Yes No

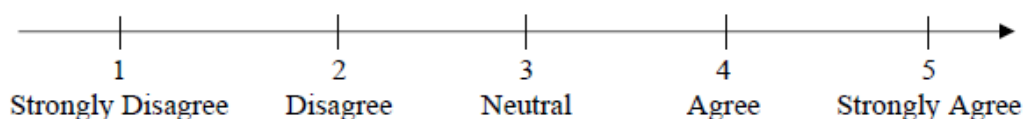
9) Was your company involved in waterfront strata development before?

- Yes No

SECTION B: DETERMINANTS WEIGHTAGE OF SHARE UNIT COMPUTATION FOR STRATA DEVELOPMENT – WATERFRONT STRATA RESIDENTIAL BUILDING

Stratified waterfront residential with new modern living concepts and extensive facilities and services are becoming the choice for development in urban areas. However, many issues and disputes have been raised regarding legislation maintenance in the Strata Act, including for Waterfront Residential's Strata. Therefore, this questionnaire will gain feedback/suggestions and analyze the suitable and standard weightage used for Waterfront Residential's Certificate of Share Unit Formula (SiFUS).

Answer all: Please tick (/) the following question as the scale listed in the following structure:



1) Waterfront Stratified residential properties are becoming the choice of developers that have started in Malaysia.

1 2 3 4 5

2) Residential Waterfront Strata should have separate weightage in the calculation in Strata for Sifus to determine maintenance charges and not to follow the standard weightage mentioned in the Act.

1 2 3 4 5

3) A developer that applied calculation based on the current weightage in the strata act should propose an element or weightage to calculate unit share for the waterfront unit for Sifus approval.

1 2 3 4 5

4) In calculation, the weightage will cause an argument with the residents who purchased the unit Waterfront Strata development from the developer.

1 2 3 4 5

5) The Strata Act should be reviewed to accommodate the trend and Waterfront Strata development to benefit home buyers and developers to determine the proper calculation before charging maintenance fees, including the common area.

1 2 3 4 5

6) F3 (refer to Appendix, Table 3) is weightage as specified in the Strata Management Act; the accessory parcel should be constant if related to the water area, such as the pontoon area.

1 2 3 4 5

7) Proposal, an equitable weightage for calculating unit Share Unit, will be appropriate in which must not depend on the current weightage F3 and F1 of share unit parcel for units that attach with Waterfront Strata, which connect with a pontoon for the boat/yacht berthing at the owner's house.

1 2 3 4 5

8) The Government should review weightage F3 and F1 (refer to Appendix, Table 1) currently for standard elements for landed residential in Malaysia, including those related to Waterfront Strata development.

1 2 3 4 5

9) The government agencies need to discuss the review of The Strata Act related to the weightage proposal further, including in Parliament and practitioners involved in Waterfront Strata development use as the basis for calculating SIFUS and maintenance charges for the common area.

- 1 2 3 4 5

10) The Government should implement a formula or weightage in the Strata Act for Waterfront Strata development for waterways and pontoons that share the same canal to avoid double charging to the homeowner.

- 1 2 3 4 5

11) Establish an equitable formula for Waterfront Strata development in the calculation in Sifus;-it will benefit correct management fees for the residents.

- 1 2 3 4 5

SECTION C: SUGGESTION FOR IMPLEMENTING EQUITABLE FORMULA OR WEIGHTAGE THAT IS SUITABLE TO USE IN WATERFRONT STRATA RESIDENTIAL BUILDING:

APPENDIX B ETHICAL CLEARANCE APPROVAL LETTER



UNIVERSITI TUNKU ABDUL RAHMAN DU012(A)
Wholly owned by UTAR Education Foundation Co. No. 578227-M

Re: U/SERC/281/2023

3 November 2023

Sr Dr Elia Syarafina Binti Abdul Shakur
Department of Building & Property Management
Faculty of Accountancy and Management
Universiti Tunku Abdul Rahman
Jalan Sungai Long
Bandar Sungai Long
43000 Kajang, Selangor

Dear Sr Dr Elia,

Ethical Approval For Research Project/Protocol

We refer to your application for ethical approval for your research project (Master student's project) and are pleased to inform you that your application has been approved under Expedited Review.

The details of your research project are as follows:

Research Title	Analyzing the Determinants of Share Unit Computation For Waterfront Strata-Titled Residential Building
Investigator(s)	Sr Dr Elia Syarafina Binti Abdul Shakur Adzham Bin Mahmud (UTAR Postgraduate Student)
Research Area	Social Science
Research Location	Nusajaya (Johor)
No of Participants	20 participants (Age: 20 - 70)
Research Costs	Self-funded
Approval Validity	3 November 2023 - 2 November 2024

The conduct of this research is subject to the following:

- (1) The participants' informed consent be obtained prior to the commencement of the research,
- (2) Confidentiality of participants' personal data must be maintained,
- (3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines; and
- (4) Written consent be obtained from the institution(s)/company(ies) in which the physical or/and online survey will be carried out, prior to the commencement of the research.

Kampar Campus : Jalan Universiti, Bandar Barat, 31900 Kampar, Perak Darul Ridzuan, Malaysia
Tel: (605) 468 8888 Fax: (605) 466 1313
Sungai Long Campus : Jalan Sungai Long, Bandar Sungai Long, Cheras, 43000 Kajang, Selangor Darul Ehsan, Malaysia
Tel: (603) 9086 0288 Fax: (603) 9019 8868
Website: www.utar.edu.my



Should you collect personal data of participants in your study, please have the participants sign the attached Personal Data Protection Statement for your records.

The University wishes you all the best in your research.

Thank you.

Yours sincerely,



Professor Ts Dr Faiz bin Abd Rahman
Chairman
UTAR Scientific and Ethical Review Committee

c.c Dean, Faculty of Accountancy and Management
 Director, Institute of Postgraduate Studies and Research

