



Faculty of Social Sciences and Humanities

**Facility Management and Customers' Perceptions Towards
Shopping Mall in Johor Bahru**

Yang Haziqah Binti Musa

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Facility Management and Customers' Perceptions Towards Shopping Mall in
Johor Bahru

Yang Haziqah Binti Musa

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DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Malaysia Sarawak. Except where due acknowledgements have been made, the work is that of the author alone. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.



Signature

Name: Yang Haziqah Binti Musa

Matric No.: 20020386

Faculty of Social Sciences and Humanities

Universiti Malaysia Sarawak

Date: 7 Ogos 2023

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ABSTRACT

Shopping malls are undeniably vital in the lives of modern society, especially for those who live in urban and suburban areas. It is a place to get various services and products such as clothing, food, school supplies, beauty products, groceries, entertainment, and more. In addition, it is a place to connect intimate relationships with family, friends, and loved ones by eating, shopping, and playing together. With an appropriate implementation of the facility management concept, a shopping mall will be able to fully exploit its function by providing adequate facilities, maximising profit, supporting the operation, and fulfilling customers' demands. The main objective of this study is to assess the level of satisfaction of the shopping mall customer based on the three maintenance aspects of facility management that include functional, technical and image. A survey is conducted with a total sample of 200 respondents from the population of shopping mall visitors, as well as an observation for the facilities and services provided. Paradigm Mall Johor Bahru was chosen as the setting for this study because it is a well-established shopping mall that has many visitors from all over Johor Bahru. The findings show that most customers are satisfied with all three of the maintenance aspects of the shopping mall. Several issues in the shopping mall and their solutions have been identified too.

Keywords: Facility management, shopping mall, customer, perception, Johor Bahru.

Pengurusan Fasiliti dan Persepsi Pelanggan Terhadap Pusat Beli Belah di Johor

Bahru

ABSTRAK

Pusat beli-belah tidak dapat dinafikan penting dalam kehidupan masyarakat moden, terutamanya bagi mereka yang tinggal di kawasan bandar dan pinggir bandar. Ia adalah tempat untuk mendapatkan pelbagai perkhidmatan dan produk seperti pakaian, makanan, peralatan sekolah, produk kecantikan, barangan runcit, hiburan, dan banyak lagi. Selain itu, ia adalah tempat untuk mengeratkan hubungan silaturahim bersama keluarga, rakan-rakan dan orang tersayang melalui aktiviti makan, membeli-belah dan bermain bersama. Dengan pelaksanaan konsep pengurusan fasiliti yang sesuai, pusat beli-belah akan dapat berfungsi sepenuhnya melalui penyediaan kemudahan yang mencukupi, memaksimumkan keuntungan, menyokong operasi dan memenuhi permintaan pelanggan. Objektif utama kajian ini adalah untuk menilai tahap kepuasan pelanggan pusat beli-belah berdasarkan tiga aspek penyelenggaraan pengurusan fasiliti yang merangkumi fungsi, teknikal dan imej. Satu survei telah dijalankan dengan mensasarkan sejumlah sampel seramai 200 orang responden daripada jumlah populasi pengunjung pusat beli belah, serta satu pemerhatian bagi fasiliti dan servis yang disediakan. Paradigm Mall Johor Bahru dipilih sebagai lokasi kajian ini kerana ia merupakan pusat beli-belah yang disegani dan mempunyai ramai pengunjung dari seluruh Johor Bahru. Dapatan kajian menunjukkan majoriti pelanggan berpuas hati untuk ketiga-tiga aspek penyelenggaraan pusat beli-belah. Beberapa isu di pusat beli-belah dan penyelesaiannya juga telah dikenal pasti.

Kata kunci: *Pengurusan fasiliti, pusat beli belah, pelanggan, persepsi, Johor Bahru.*

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LIST OF ABBREVIATIONS

3R	Reuse, Reduce, Recycle
ATM	Automated Teller Machine
BIFM	British Institute of Facilities Management
CCTV	Closed-Circuit Television
CP	Customer Perception
CSC	Cleaning Staff and Cleanliness
FM	Facility Management
FMA	Facility Management Association of Australia
GEFMA	German Facility Management Association
IFMA	International Facility Management Association
IOT	Internet of Things
JFMA	Japan Facility Management Association
MAFM	Malaysian Association of Facility Management
MBJB	Majlis Bandaraya Johor Bahru
MCA	Management of Common Areas
MMCF	Maintenance of Communal Facilities
NAFAM	National and Facility Management Convention
NAPIC	National Property Information Centre
NIOSH	National Institute for Occupational Safety and Health
PMO	Property Management Officers
PMS	Performance Measurement System
PMS	Property Management Services

PRO	Promotion
POE	Post-Occupancy Evaluation
SG	Security Guard
SS	Security Services
WR	Wash Room

CHAPTER 1

INTRODUCTION

1.1 Purpose of study

The main purpose of this study is to emphasize the idea of facility management and shopping mall which focuses on determining customer perception. The problems that prompted the author to conduct this study were the issues that still arise regarding facilities and services in shopping mall, as well as the lack of previous research on Post Occupancy Evaluation (POE) of the built environment in commercial facilities (shopping mall) by relating facility management components. Hence, this whole thesis will discuss and explain more to achieve the main purpose.

1.2 Introduction

An organization or institution sure needs an adequate and suitable environment to work with functional facilities such as an elevator, escalator, toilet, prayer room, powder room, pantry, canteen, stairs, and others. It is just not for the working environment but also crucial for retailers to attract more potential buyers. Today, the trend in shops and shopping have switched massive interest to shopping mall rather than local high streets or individual shops among people. This is because shopping malls used to have conducive conditions for nature's call, prayer, and seat when visitors are tired of shopping, and they are commonly air-conditioned. Hence, this reflects the importance of facilities management services particularly in a shopping mall because it operates daily to support the process of supply and demand between buyer and seller. This study is to explore more about how facilities management can help to operate a large retail centre like a shopping mall. However, before

that, there is also a need to evaluate customers' impression of the quality of facilities management activities which will discuss in the next part.

1.3 Background of Study

Retailing services today have become an increasingly competitive market that brings a contribution to the economy. Based on the Department of Statistics Malaysia (2020), the number of establishments for the wholesale and retail trade sector in Malaysia for 2018 is 469,024 as compared to 370,725 establishments in 2013 with a yearly growth of 4.8 percent. Hence, the significance of retailing services has become attention to put up for. Roozen and Katidis (2019) revealed in their research work that the service and shopping customer experience are relevant in a retail environment as customer satisfaction, loyalty, and intention to recommend are influenced by service and shopping experiences. To simplify, a negative retailing service experience in a store or shopping mall could affect the attraction to the premise. Not just that, it would cause damage to one's business image. A pragmatic step needs to be taken to conceal the possibility of such risk.

Before going any further, there is a necessity to explain about shopping malls. Generally, a shopping complex or shopping mall has become a big retailing centre and the best solution to make it easier for people to just visit one place with all services they could get. Most websites on the internet will list the Galleria Vittorio Emanuele II in Milan, Italy from the year 1877 as one of the world's oldest shopping malls. Meanwhile, Feinberg and Meoli (1991) mentioned in their study that shopping malls had their birth in the 1920s in California where supermarkets would anchor and serve as a magnet for a strip of small-scale stores. However, the pivotal part is the history of shopping mall indicates that shopping mall

was initially envisioned as a community center where people would congregate for shopping, cultural activity, and social interaction.

There are 1,064 existing business complex buildings registered which offer a total retail space of 17.51 million square meters in Malaysia (Jabatan Penilaian dan Perkhidamatan Harta, 2022). The stock comprised 554 shopping malls, 272 arcades, and 238 hypermarkets. Major cities often obtain attention to grow the number of shopping malls as the increasing demand from urban dwellers. It has become one of the tourism agendas too by the Ministry of Tourism, Arts and Culture of Malaysia which depicts the importance of them to the economy. As for Johor Bahru city, the established shopping malls are Paradigm Mall JB, Angsana Johor Bahru Mall, Galleria@Kotaraya, Toppen Shopping Center, Mid Valley Southkey, and Johor Bahru City Square. Johor Bahru also has been identified by the Tourism Malaysia as one of the country's top shopping destinations in 2015 (Azmi et al., 2019). Therefore, the shopping mall has become one of the service sectors that acquires customer satisfaction which was discussed earlier on how crucial to preserve the capability and aptitude of it to the potential customer.

Operation and management of a place influence the outcome in performance, comfortability, congeniality, and pleasantness in an organization or institution. Specifically, in relating the importance of adequate facilities for shopping malls, various studies have been conducted to connect it with facilities management. There have been a lot of changes in the way facilities management is regarded within the retail environment over the years. With suitable and relevant facilities, the operation would be functional as well as beneficial. This explains the step that needs to be employed in undertaking the possibility risk mentioned previously in the first paragraph, which by implementing the idea of facility management. In terms of the manufacturing sector, Kovacs, and Kot (2017) disclosed that

reducing the operational costs of companies and improving the performance of production lines could be done through effective facility planning significantly in their research. As for the context of retail, shopping mall helps to serve the customer with high satisfaction and to enhance core business through that indirectly (Noor & Pitt, 2010). To be exact, facilities management is the backbone to support every operation so that the shopping mall can fully perform its function efficiently.

According to Sari (2018), facility management includes a variety of multidisciplinary proficiency in architecture, civil engineering, behaviour, accounting, management, and so on. Thus, there are many stakeholders involved in the management of a shopping mall such as a landlord, retailers, managing agents, subcontractors, local authorities, and emergency services. In this case, the increase in the number of shopping malls would summon intensive competition among them, acquiring the mall management to thoughtfully consider approaches and schemes to step up their game in attracting more shoppers (Wong & Nair, 2018). By this, particular skills and systems that meet the necessities are required to deliver good facility services which mainly focus on cleaning, security, and maintenance.

Facilities management is not just about how to create a cohesive environment to carry out an organization's primary operations but also highlights issues, for example, faulty air conditioning, broken escalator, a leak in the ceiling, non-functioning elevators, and unclean areas, particularly the toilet. These are all some of the factors that pull in customers or shoppers to the shopping mall. To safeguard the interests of the shopping mall, the Malaysia Shopping Malls Association was formed in 1984 (MSMA). The main role of MSMA is to ensure that professionals in shopping and high-rise complex management maintain the highest degree of quality in the spectrum of:

- a) facility management
- b) security and safety
- c) car park and traffic management
- d) advertising, promotions, and event management
- e) public relation
- f) financial management
- g) human resource management
- h) visuals and merchandise displays
- i) legal and off administration

From the list, facility management has been outlined as the first crucial spectrum for shopping and high-rise complex management by the Malaysia Shopping Malls Association (MSMA). Thus, this significantly supports that facility management is a part and parcel of shopping mall operation and management. This statement can be strong evidence for the need for this study.

Even though there are many shopping malls in Malaysia which up to 700 by the end of 2019, they are more adaptable to economic swings, often creating moderate growth, although other types of properties such as offices and hotels may struggle (Ahmad, 2018). He took the statement from the Sunway Malls & Theme Parks chief executive, Chan Hoi Choy, which explains to the public question why developers persevere in building more despite the abundance. This shows how shopping malls would bring great profit to the developers. It is just about how to preserve and maintain the functionality to stay relevant to the customer. Apart from that, Noor and Pitt (2010) also mentioned that one of the first initiatives to solve existing and future challenges in the management of national assets and facilities, which mainly to increase awareness on facilities management, was at the first

National and Facility Management Convention (NAFAM). Hence, this study would also stress the vital role of facility management in an organization, business, or institution.

1.4 Problem Statement

This study argues that the level of customer satisfaction towards facility management in shopping malls is influenced by three factors which are functional, technical, and image. The three factors came from the maintenance aspect of facility management service which were utilised for assessing the satisfaction of customers. Facility management can be endorsed as a pivotal guideline for shopping malls because past studies have suggested it is a best practice to overcome management and operation issues. Moreover, there is a lack of previous studies about facility management and shopping mall which focuses on determining customer perception. Concerns or issues regarding facilities and services in shopping malls also continue to surface to this day. Thus, this study seeks to comprehend the potential approach to shopping mall management.

One of the goals of this study is to highlight the issues or common problems regarding the operation and management of shopping malls. For example, a mall in Florida once exploded before this, suspected due to a gas leak that causes up to 20 visitors injured ("*Pusat beli-belah meletup*", 2019). The explosion is reported due to the carelessness of the technician taking immediate action to dispatch to the place. This is a very concerning issue because it involves human life. Meanwhile in Malaysia, one of the common problems that customers have to deal with is being trapped in the elevator. According to a piece of online news, Astro Awani, there was a case of 15 visitors trapped for almost 15 minutes when the elevator broke down in a shopping mall at Alor Setar, Kedah ("*Pengunjung pusat beli-belah terperangkap dalam lif*", 2019). Consequently, this causes panic in them and may lead to

trauma. The accident was reported to have been caused by a technical problem with the lift itself as that was the first time the shopping mall encountered such a case.

Another typical case in a shopping mall is an accident in the escalator. Poor maintenance care of escalators would lead to a higher risk of danger. Some cases cause broken arms, legs, or even death. A 49-year-old Chinese man trapped his leg in an escalator at a shopping complex along with Jalan Tuanku Abdul Rahman which causes him to suffer a broken leg ("Man suffers fracture after leg gets stuck in escalator", 2019). These unfortunate cases have received attention from the authorities, but they cannot do much. The Chairman of the National Institute for Occupational Safety and Health (NIOSH), Tan Sri Lee Lam Thye said that the management of the shopping complex has the responsibility to ensure that the maintenance of the escalator is carried out periodically (Zainuddin, 2016). Perhaps the same cases keep repeating because of the ignorance of the shopping mall management.

Not just that, concerns regarding shopping malls have been in a variety of journals and studies too. For example, Overstreet and Clodfelter (1995) researched on safety and security concerns of the shopping mall. The results revealed that shopping mall customers are likely concerned about their security outside the mall where the concern level is related to high precautionary behaviours, especially about parking lot security. Moreover, issues of servicescape (a concept to emphasize the implication of the physical environment in which a service process take place) in shopping mall such as dysfunctional closed-circuit (CCTV), fewer parking spaces, unattractive layout, lack of proper signage, and lack of ambience will eventually lessen the number of customers of shopping mall based on Juhari, Mohd. Ali, and Khair (2012). The study also depicts that the problems can affect customer satisfaction

because the internal and external environments of a shopping mall are very much significant to attract them.

On the other side, Gupta, Mishra, and Tandon (2020) disclosed that the determinants such as customer value orientation, employees, tenant mix, and facilities management are crucial benchmarking measures for customer experience assessment. Simplifying these, issues in shopping malls will affect the level of satisfaction in a person. They also could change the perception and preference of a shopping mall. Meanwhile, research done by Kuruvilla and Ganguli (2008) revealed the major problems of mall management which include lack of planning, improper control over the tenant mix, high rentals or maintenance charges, and the inability to understand customer behaviour. Conjugating all these elements will bring back to the main core of facility management which are people, process, place, and technology. They need to have an effective interrelationship as to complete each other and increase the building's performance.

People nowadays can see the ratings or reviews on websites about a place if they plan to go there such as Google Review, TripAdvisor, Facebook, and Amazon. In this way, it is more convenient and easier for them to make any decision regarding a place. As for this study, the problems encountered by the visitors of shopping malls can be determined too via the related websites. For example, there are concerns from Google Review regarding Paradigm Mall JB that were outlined by the shopping mall visitors as Table 1.1 (surfing on 19 March 2021). This shopping mall is highlighted in the problem statement because it is chosen as the main venue to conduct the study.

Table 1.1: Concerns from Google Review of Paradigm JB Mall

No.	Concerns	Comments from Google Review
1.	Uncomfortable prayer room	"Can well organize the prayer room better... not so clean..."
		"As of 19 March 2021, the air-conditioner of a prayer room in level 3 (near the skating rink) is broken or something... Please fix this issue..."
2.	Dull/Unsafe environment	"The environment was not lively... even the management aren't doing much about it, no decorations or music to bring things up."
		"Don't come here anymore!! So many pickpockets!! Security was awfully bad!! I believe many victims like me!!"
3.	Problematic parking issues	"Shops are good but parking is hell. The architect has no clue how to make a parking area. Cannot believe the traffic jam of 10 minutes inside the mall parking area."
		"Motorcycle parking is very hard to find, poorly indicated, very freaking small and cramp parking, not suggest coming."
		"It is hard to get a Grab or e-hailing service. The taxi charge is too high. When I asked the Grab driver, he said that they (Grab drivers) have no waiting area, unlike the taxi drivers. So, the Grab drivers would always choose another mall like Angsana and Jusco because it is easier to wait for the customers. I hope the management will solve this case. Tq."

Based on Table 1.1, visitors who have been to the shopping mall often complain about the unhygienic prayer room and the faulty function of the air conditional. This causes inconvenience for the Muslims to set their prayer to a proper focus or '*khusyuk*' in prayer which is demanded in the Islamic religion. Another complaint is regarding the parking

design. To park at the higher level, visitors must go through high and twisted slopes without an area to stop. It has only one way to get there. This is quite a concern because if there is a broken car, there will be a jam, or it can cause an accident. As for the motorcyclist, the parking provided is very limited and the place has a smelly odour. It is unfair for them as they also want comfortable parking like car users. Some of the visitors also complain about the poor management service such as no space for e-hailing drivers to pick up customers, the pickpocket issue which relates to the poor safety and security, as well as the dull environment with not many decorations or music. There are also comments which suggest to others not to come to the shopping mall. That is why providing adequate and proper for both facilities and services is very crucial to attract more visitors to the shopping mall.

On the other note, customers are now increasingly conscious of their rights and demand higher quality service. Klaus and Maklan (2013) mentioned that it is a growing priority to identify and improve the customer experience for market research purposes because experience has surpassed quality as the competitive battleground for marketing. That is why customer satisfaction or perception is very significant to be measured and explored in this study. It acts as an indicator to compute the performance of a building as well as the facility management services offered. It has a crucial role in evaluating the performance of facility management simply. Hence, a proper understanding of facilities management plays a significant role in shopping mall operations.

To address the deficiencies and strengths of a shopping mall, many programs of mall management should be implemented such as focusing on mall access, mall atmosphere, price or promotion, cross-category assortment, within-category assortment, mall patronage, mall attitude, and word of mouth communication (Chebat et al., 2010). The study suggests working firmly with town authorities regarding the problems with shopping mall access.

Directional signboards can be used to avoid congestion and traffic while parking issues need to be improved to intensify access and convenience. If the issues are related to the shopping mall atmosphere, the shopping mall management needs to make a change of decorations and conduct entertainment events to stimulate the atmosphere more entertaining and cheerful. Then again, they should contact the shopping mall stores to organize regular sales and promotional events if there are price and promotions issues.

Also, shopping mall management should identify the stores that are lacking in the area of cross-category assortment and offer them incentives to expand their offerings. Anselmsson (2006) also proposed a better strategy for presenting customers of shopping malls and their needs by focusing on the atmosphere, refreshments, convenience, and performance of the store personnel. To conclude, more recommendations need to explore for the sake and benefit of every stakeholder of the shopping mall such as the local authorities, customers, shopkeepers, mall developers, and investors.

According to Noor and Pitt (2010), Malaysia is not like other advanced and developed countries such as Singapore, Hong Kong, Australia, and Japan, as this facility management discipline is still in its beginnings, and its associated obligations are fragmented due to a lack of understanding on the subject. There is no specific organization to set guidelines, maintain quality control, and performance of facilities management practices is the reason why is it difficult to analyse (Nur & Musa, 2017). The common concept of facility management practice in Malaysia is more about the repair procedure that is carried out after something has been harmed (Zakaria, Arifin & Aiyub, 2020). This strengthens the reason for needing the implementation of facilities management for shopping mall which brings various advantages.

1.5 Research Questions

This section depicts the research questions to drive this study on the right track. A lot of thoughts need to be put into consideration to find the appropriate research question which includes research components such as exploratory, descriptive, and explanatory. Below are the research questions:

- i. What are the issues encountered by customers on the management and operation of the shopping mall?
- ii. Are the customers satisfied with the performance of the shopping mall?
- iii. What are the recommendations for improvement to overcome the issues?

1.6 Research Objectives

The primary goal of this research is to investigate how generally customer quality impression is affected by the significant role of FM, particularly in management and operation standards regarding the shopping mall in Johor Bahru. The specific objectives of the study are to:

- i. Determine the issues on management and operation of the shopping mall.
- ii. Evaluate the customers' satisfaction level on functional, technical, and image of the shopping mall.
- iii. Identify appropriate recommendations to overcome the issues.

1.7 Scope of Research

Based on the three research objectives, the study will be focusing on the facilities management services at the shopping mall in Johor Bahru. The study is divided into three aspects of perception which are satisfaction level, issues, and recommendations. Firstly, the issues regarding the management and operation of the shopping mall need to be identified. Any inconvenient feeling and experience about the shopping mall can be put as an issue. By this then, the satisfaction level of the customers towards the shopping mall's performance can be determined using the Likert Scale. Three important components need to be evaluated for the satisfaction level which are functional, technical, and image. Functional here indicates to the management service delivery such as the presence of directions signs, parking availability, store opening timings, number retail services, lost and found service, and more. Technical relates to the maintenance service like thermal comfort, lighting, noise level, air quality, and other things. Meanwhile, the image here means the decoration, interior design, exterior design, internal finishes, and external finishes. For example, flooring, wall, and building design. The last part is the recommendations to overcome the issues. People can also propose any additional suggestions for the improvement of the shopping mall.

1.8 Significance of Research

This part is to discuss more the good value of the study regarding customer's level of satisfaction at a shopping mall in Johor Bahru. It also stresses how important it is to implement facilities management in its operation.

First, this study could be a reference to any agency, especially to those who are project managers, leading and handling the operation of a shopping complex or shopping mall. Three aspects will be focused on the maintenance aspect of facility management which

is functional, technical, and image to evaluate the level of satisfaction. Thus, any deficiency pointed out by customers could be a guide to improve more on facility services.

The outcome of this study will contribute greatly to the benefit of society. This is because the frequent issues that the customer encounter will be identified to be fixed by the person who is in charge. Consequently, there will be fewer problems that could affect customers' comfort and help them to earn a better quality of life. Moreover, it could also be a medium for people to voice out their dissatisfaction and point of view about the facility services in a shopping mall.

Finally, the ideas furnished may enable future researchers to take this study as reference data in conducting new research or related topic. It may be a big help to them as this study has not much be done yet, particularly for the shopping mall at Johor Bahru. Facilities management implementation in Malaysia is also not very popular. Thus, this study could create public awareness regarding facilities management in this country hopefully.

1.9 Conclusion

The importance of relating facility management and shopping mall is undeniable. This study determines to achieve all the three outlined research objectives. The following chapter will discuss further details to relate the primary aim and the objectives. Understanding the literature review can help generate more ideas for this study.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Chapter 2 explores more understanding of this study by collecting past research, related model, and concepts. It embodied various topics such as facility management, shopping mall, customer satisfaction, perception, Post Occupancy Evaluation (POE), and more. Plus, it helps the reader to comprehend the importance of facility management in shopping malls.

2.2 Facility Management

The existence of facility management is yet still questioned to this day as there has been a lot of debate about its origin. In different circumstances, it is believed to have been progressively gaining a foothold in the property and construction industries from the late 1980s, with the creation of professional facility management around the world attesting to its growing relevance (Linda & Joseph as cited in Mohamat Nor, Mohammed & Alias, 2014). For instance, IFMA in the USA, BIFM in the UK, FMA in Australia, GEFMA in German, JFMA in Japan, and more.

Its significance is becoming clearer as the built environment gets more immanent in how nowadays modern society conducts business, entertainment, and lifestyles. According to Milala, Ariffin, and Kasim (2022), facility management has a range of roles to perform, and that facility management business potential is expanding in tandem with the global technology advancement. The examples are the development of the "Internet of Things" (IoT), building automation or monitoring, employee engagement, health, wellness, and well-

being, evolving IT infrastructure, evolving real estate models as well as sustainability and environmental implications.

There are also varieties of definitions of facility management with different types of contexts. Facility management is a discipline that emphasizes the efficiency and effectiveness to deliver support services to an organization generally. According to International Facility Management Association [IFMA] (2005), the most recent definition of facility management is a profession that involves many disciplines to ensure the functioning, comfort, safety, and efficiency of the physical environment by combining people, place, process, and technology. These four components would be brought together as whole guidance for the process of facility management and to be integrated effectively with various skill bases as well as vast knowledge in long-term operations.

Alternatively, facility management can be defined as the organizational operation which integrates people, place, process, and technology within the built environment intending to boost the life of people and the productivity of the core business (Institute of Workplace and Facility Management; Global Facility Management). Coenen, Alexander, and Kok (2013) summarized that facility management is a network of strong relationships that produce perceived value amongst intra-organizational stakeholders through the co-creation of services, integration of resources, and genuine communication. Kincaid (1994) came up with the integration of three core strands of activity including property management (real estate), property operations, and maintenance besides office administration which have a common in supporting the main activities of an organization.

In relating to the core strands, the IFMA model of *a triangle of 'Ps'* initially consists of three primary scopes: people, process, and place which have an interdependent

relationship to each other as in Figure 2.1. They are the primary factors of organization in finding management solutions for facility management. As the world has evolved, technology has become increasingly crucial in all aspects of life since it makes our daily lives easier. IFMA also updated its model to include technology as a part of it. The term '*facility management*' now refers to a profession that integrates people, place, process, and technology so that the physical environment can fulfil its purpose (IFMA, 2005). Effective facility management guides workplaces to a better flow of productive processes while increasing value and decreasing costs. Some of the advantages include proactive maintenance, improve health and safety, as well as provide a clean and pleasant environment. Facilities management strategies contribute to the upkeep and improvement of facilities because of these advantages (Fadahunsi et al., 2019).

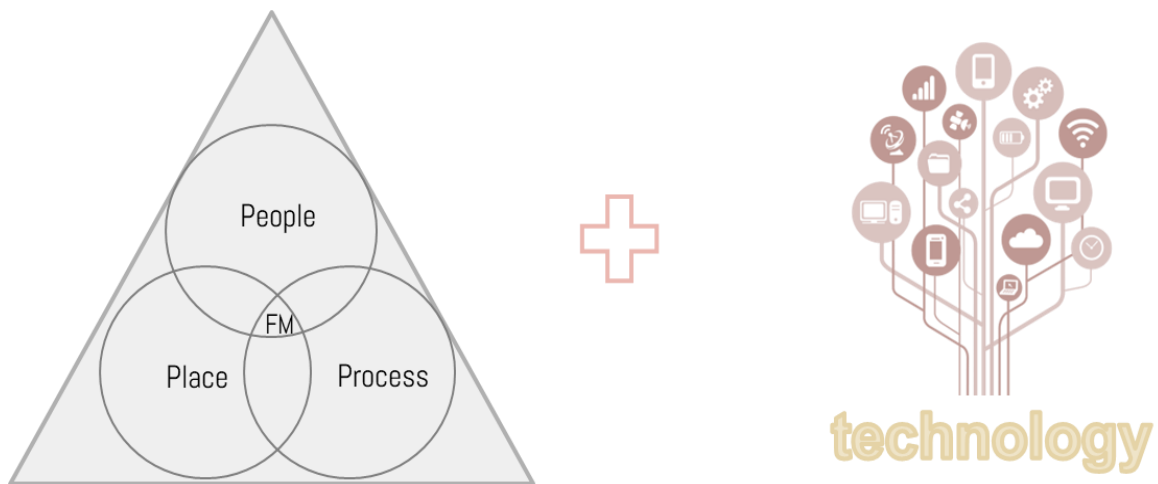


Figure 2.1: The Integration of the Triangle of 'Ps', FM, and Technology

On the other hand, Patanapiradej (2012) mentioned in his study regarding the two categories in facility management and they are:

a) Operational or Implementation functions

To keep up the good condition and provide a safe environment for the organization's primary activities, daily operational activities are vital to support functions that involve general workers. Usually, it takes a short-term simple process such as fixing, cleaning, substituting, refurbishing, and more.

b) Management functions

It can be distinguished by tactical and strategic levels. At the tactical level, it focuses more on operational management which largely regards the action plans to support responsible behaviour in the workplace such as safety procedures and maintenance care. Under other conditions, the strategic level concentrates on consultation and non-routine planning aimed at deciding the best with commonly involves a long-term process.

These two categories include strategic, tactical, and operational levels as shown in Figure 2.2. All are needed to complete the organization for facility management from the higher job level such as the board of directors to the lower job level like the contractors. Each of them has its responsibilities and roles. People (employees) are one of the keys to the success of an organization. This is because they create impacts in work by generating ideas, solving problems, making decisions, designing innovative features, and providing both goods and services that the company offers.

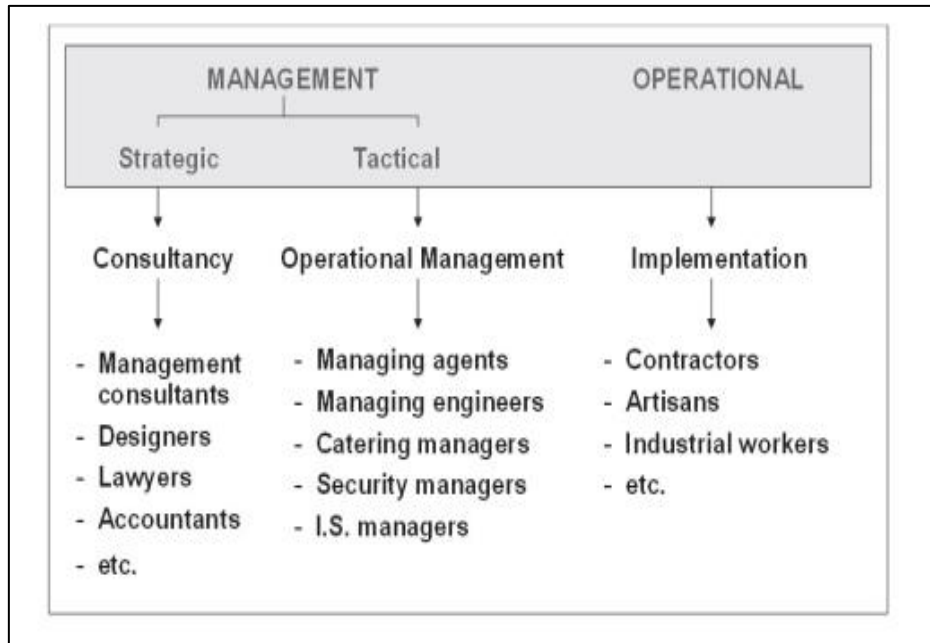


Figure 2.2: Process Implementation of FM

A study done by Myeda (2013) explained more regarding the management functions and operational functions. She mentioned that the management functions contain the functional performance measure, while the operational functions include technical and image performance measures concentrating on operational elements specifically hard FM and soft FM. Figure 2.3 depicts a simple mind map for a better understanding.

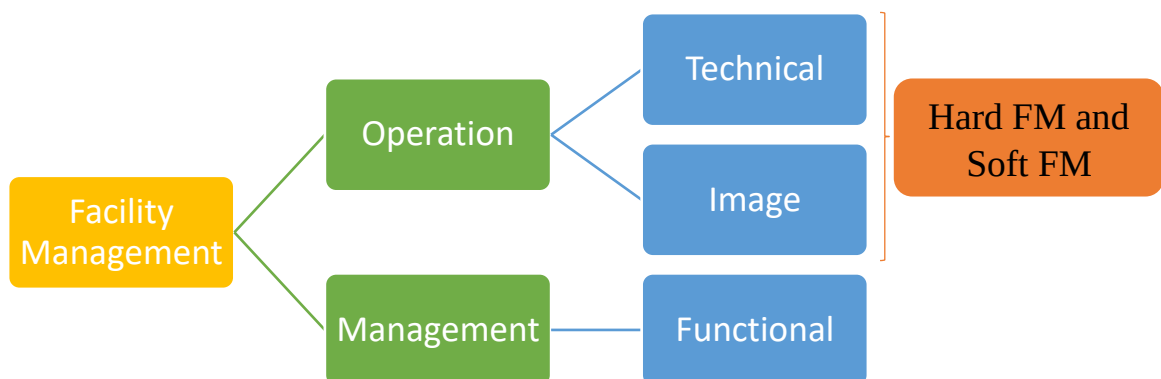


Figure 2.3: Aspects of Facility Management

Therefore, she also summarised two categories of facility management which are hard facility management (hard FM) and soft facility management (soft FM). The scope of services for hard FM are Building Services, Specialist System, Asset Management, General Maintenance, Building Fabrics & Assets, and Energy Management. On the other hand, soft FM consists of Waste Management, Pest Control, Grounds Maintenance/Landscaping, Internal Planting & Decorations, Cleaning, Security, Space Planning, Parking Management, Traffic Control, Management Information, Helpdesk, Portering, Mail, Printing, and Catering.

Based on Arampatzi and Burger (2020), hard FM refers to services that are unable to be removed from the premises and are related to the fabric of the building (physical structure), whereas soft FM usually associates with the direct consumption services by the individuals (elements managed by people). The building would function effectively with both of these combined. To stress the importance of facility management services, both hard and soft measures need to be identified by an organization in such a way that a balanced view of necessities is established as a foundation for assessing the options for service delivery (Atkin & Brooks, 2015). Concurrently, the issues of hard FM and soft FM must be expeditiously controlled for facility management to be able to harmonise and create a safe and productive working environment (Nik-Mat et al., 2011).

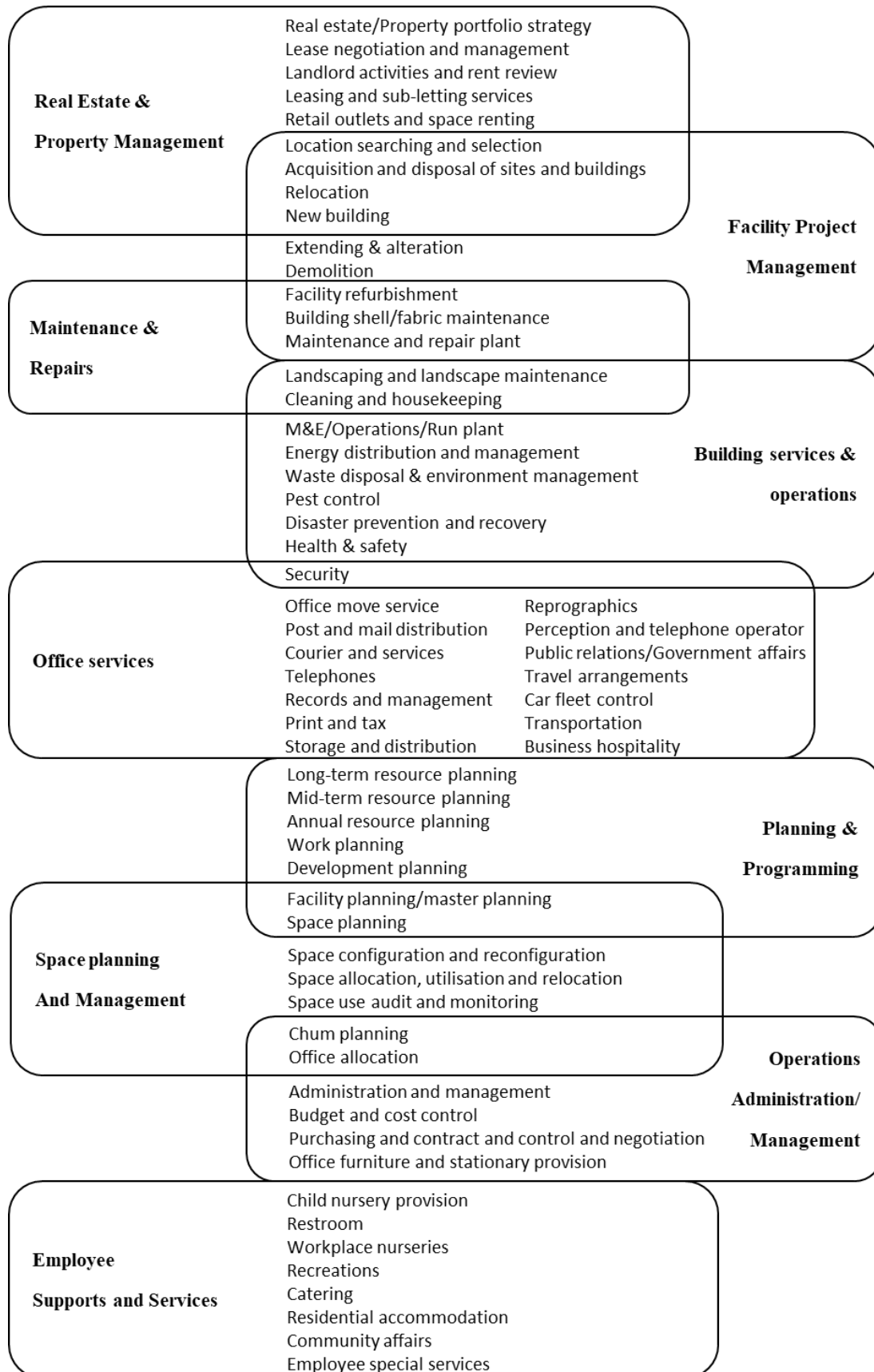


Figure 2.4: Facility Management Services

The activities, roles, and functions of facility management may be different for every organization which depends on the business and the needs. Based on a study done by Chotipanich (2004), he explained more on the diversity of facility management services as in Figure 2.4. Surely, a wise and thoughtful choice of facility management services should be derived appropriately to ensure that the organization can adapt to any circumstances as the world is evolving and changing for the better day by day.

The main goal of facility management at the national level is to provide better infrastructure and logistic support to all types of business and public endeavours across all sectors, whereas the goal at the local level is to provide shells to support us all; operations of organisations, their working groups, project teams, and individuals (Nutt, 2000). Hence, it depicts that facility management has been seen as an economic activity within the support services sector and as service management which includes the activities that sustain the physical infrastructure as well as the support services (McLennan, 2004). According to the research done by Potkany, Vetrakova, and Babiakova (2015), facility management is also important in the analysis of the building life cycle, where the influence of a facility manager on the investment and operating expenses of buildings in terms of the environmental management principle is considered. This shows it plays a significant role in keeping up with the concept of sustainable development.

In the context of Malaysia, facility management has begun in the early 1990s which is not too late and is commonly known as integrated property management and maintenance services (Zawawi, Ismail, Kamaruddin & Kurdi, 2014). However, Malaysia is still in the beginning and still lacks knowledge in the subject (Noor & Pitt, 2010). Kamaruzzaman and Ahmad Zawawi (2010) also stipulated that the roles of facility management in Malaysia have a lack of understanding and some disagreements among experts' fields about who should be

accredited as a legal proprietor. Zawawi et al. (2014) revealed that facility management in Malaysia is forging more on hypothetical rather than practical, yet the participation of the majority on government contracts shows constructive development areas of facilities management. Having to say that the subsistence of the Malaysian Association of Facility Management (MAFM), established in 2005, aided in strengthening all aspects of facility management with its substantial agendas (Asbollah et al., 2016). The use of management systems that have been introduced in Malaysia and around the world such as Quality Management Systems (MS ISO 9001:2015), Environmental Management Systems (MS ISO 14001:2004), and Occupational Health and Safety Management Systems (OHSAS 18001:2011 and ISO 45001) can solve the problem of the lack of procedures, operational guidelines, and standards by facility management organizations. But the problem that exists is that the number of facility management organizations in Malaysia that have successfully acquired the said management systems is low due to a lack of finance, expertise, equipment, and manpower (Zakaria et al., 2020).

2.3 Shopping Mall

According to the Cambridge Dictionary, a shopping mall is a very massive building or building containing a large number of stores and restaurants, commonly with parking available outside. It is no longer limited as a place to go buy something, but it can be regarded as a community and entertainment centre too now. Meanwhile, Pitt and Musa (2009) explained the meaning of a shopping complex as a building containing multiple retail outlets that is administered as a single property.

One of the latest concepts of a shopping mall or shopping centre, Szymanska and Plaziak (2017) stipulated that large shopping centres have garnished a vital component of the urban landscape and major competitor of retail sales that offer a broad variety of products

and services, special offers and tasting campaigns, massive car parks, own-brand fuel stations as well as various services points. Whilst shopping malls in Malaysia have surpassed their early function in the economy as the community centre for social and recreational activities (Arif, Yusof & Abdullah, 2012).

Regarding its profuse names, DeLisle (2005) mentioned that there are other ways to address shopping centres such descriptors as centres, commons, crossings, hybrids, lifestyle centres, malls, markets, marts, mega-malls, mixed-use, outlets, parkways, places, plazas, promenades, shops, strips, squares, supercentres, town centres, urban retail, vertical and villages over the year. The use of each name simply symbolizes the functionality of the building and because of the maturity of the industry. He added that there are three basic physical configurations which are mall, open-air centre, and hybrid centre. Within these three, there are eight more core types; neighbourhood centres, community centres, regional centres, super-regional centres, fashion/specialty centres, power centres, themes/festival centres, and outlet centres.

Ibrahim, Nawawi, and Mohd Safian (2019) mentioned in their study that there are five major issues in the definition of the shopping centre which have been outlined by practitioners in the government and private sector. Figure 2.5 shows the differentiation definitions by trading activities, management, parking lots, safety, and health, as well as anchor tenants.

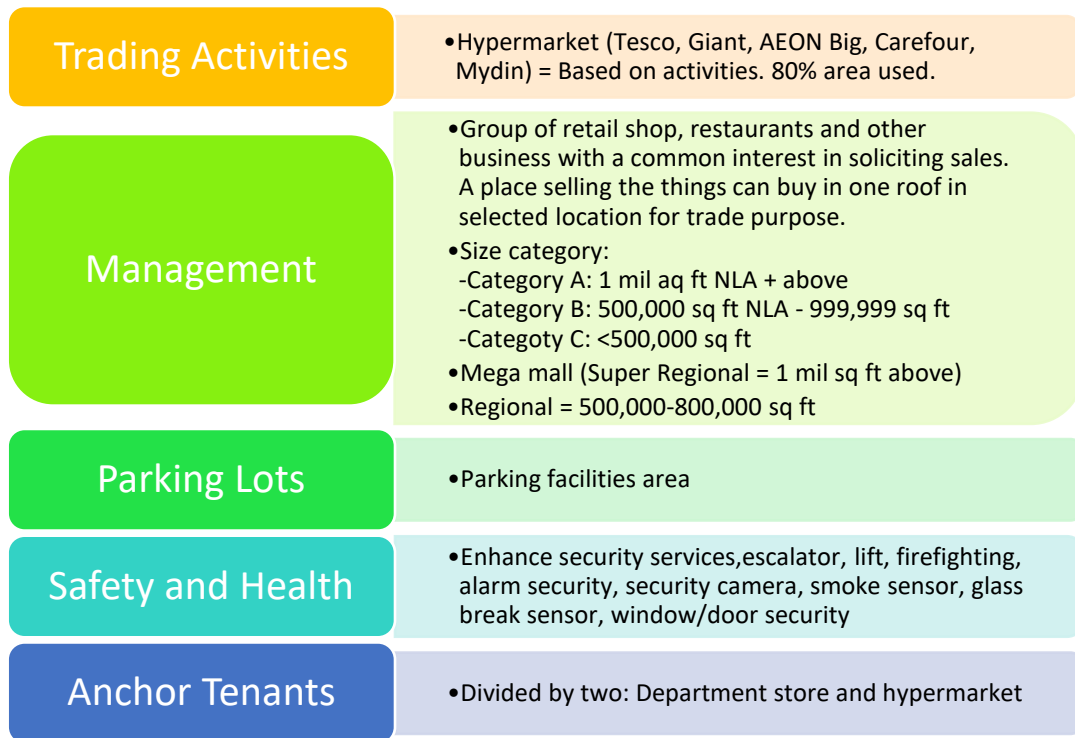


Figure 2.5: Different Definitions of Shopping Mall

Shopping malls come in a vast range around the world. Each of them has different characteristics based on the customers' needs. Ibrahim et al. (2019) have outlined the common criteria of shopping mall in Malaysia. They are size, anchor tenants, types of products, location, concept, configuration/presentation/design, leisure/entertainment, structural, customer facilities, physical presentation, maintenance, communications, building centre security, infrastructure/facilities, prayer room (*surau*), sustainability, banking facilities, and marketing. On the other note, National Property Information Centre [NAPIC] (2015) has disseminated three types of shopping complexes which include shopping centres, shopping arcades, and hypermarkets (stand-alone). This study, which regarding shopping mall, it can be defined as a purpose-built dominant retail establishment planned, developed, and operated as several outlets within a centre of trade by NAPIC. The characteristics of a shopping centre or shopping mall are as follows:

- Outlets within an enclosed climate-controlled and spacious walkway
- Retail and service tenants selected for merchandise balance
- One or more anchor tenants
- Central air-conditioning
- Central security service
- Central firefighting services
- Common lifts and escalators
- Common lighting, signage, and landscaping
- Unified management policies
- Complimentary secondary uses like banking and other services, which are less than 25% of the net floor area

2.4 Relating Facility Management and Shopping Mall

A vast of studies regarding facility management and building have been conducted particularly in the healthcare sector (Shohet & Lavy, 2004; Ciarapica at al., 2008; Abd Rani et al., 2015; Pitt et al., 2016; Iadanza & Luschi, 2019) but not about relating facility management and shopping mall. That is why there is an urge to also relate facility management and shopping mall as this industry has evolved towards becoming a better place to support potential consumers or customers. A shopping mall is known as a commercial building in the category of property, and it involves the discipline of property management commonly to enhance its operation of it. In this case, property management is one of the crucial components in the management system to sustain the business which focuses more on the space. It does add value, particularly to older and sleazier properties (Li & Monkkonen, 2014). On contrary, facility management is centralised more in the context of the people using the space which is needed also for the operation of a building.

A study by Turley and Chebat (2002) focused on the managerial features of store atmosphere by connecting retail strategies and atmospheric design with consumer behaviour and issues. They added that this is because each generation of consumers may have a different supposition regarding how a store should provide the shopping experience. As the operational costs in retail shopping malls continue to rise, it is critical to reconsider how centre infrastructure is handled and space is delivered (Raphael, 2016). Thereupon, there are various studies about shopping malls to upgrade the current facilities and services, particularly relating to the discipline of facility management and shopping mall.

Based on the research by Hui, Zhang, and Zheng (2013), the result suggests that the quality of facility management service is significant in the whole service performance of shopping malls. There are nine satisfaction dimensions the research concerns which are Property Management Officers (PMO), Management and Maintenance of Communal Facilities (MMCF), Cleaning Staff and Cleanliness (CSC), Wash Room (WR), Promotion (PRO), Property Management Services (PMS), Security Guard (SG), Security Services (SS) and Management of Common Areas (MCA). Whilst Ahmed and Hassanain (2020) also did an evaluation on the key performance of a university shopping mall facility with two core aspects which are technical performance requirement and functional performance requirement.

Maintenance management is a part and parcel of the discipline of facility management, and it has to be aligned with the corporate aims to contribute to improving performance in the long term (Chong et al., 2018). In this study, maintenance management also refers to the functional, technical, and image as in the research objectives stated before. These three main components are needed to conserve their significant role in building performance, particularly in a shopping mall. Whilst research done by Bieser and Menzel

(2019) mentioned that maintenance management is an essential part of facilities management as the rising significance of securing and operating efficiently the facilities. That is why Awang, Mohammad, Sapri, and Rahman (2014) stated that facility managers should understand their company's core business and contribute to the root crux.

Maintenance is not only entitled to be liable for the safety and the unwavering quality of the building assets and equipment, but as well as to become a vital part of the strategic operational planning process of an organization (De Marco & Mangano, 2012). Hence, shopping malls have always needed to sustain their maintenance, and this shows how vital maintenance aspect to it. A performance measurement system (PMS) can be a tool to help assess the maintenance aspects of a shopping mall building. It can be defined as a system that includes capabilities for measuring the precision and performance of organisational activities or things (Choong, 2014). PMS is developed focusing on the maintenance aspect of facility management services (Nik-Mat, Kamaruzzaman & Pitt, 2011). It is also a numerical result of an analysis that shows how successfully an organisation is meeting its goals. The building's maintenance managers are able to appreciate the building's tangible and intangible qualities as well as its strengths, limitations, and the significance of the service provided through PMS (Maluana et al., 2021).

Table 2.1: The Performance Measurement System Design

Maintenance Aspects	Performance Dimensions	Focus Groups	Performance Key Metrics
Functional (<i>Management Service Delivery</i>)	Delivery Characteristics • Assurance • Reliability • Responsiveness • Relevance • Timeliness • Validity	• Maintenance Managers • End Users	• Time/Use • Quality
Technical (<i>Maintenance Service</i>)	Maintenance Services • Cleaning & Landscaping • General Maintenance • Lightings • Air-Conditionings • Lifts/Escalators • Mechanical & Electrical • Sanitary & Washing Facilities • Access, Signage & Parking • Safety & Security		
Image (<i>Building Image</i>)	• External Finishes • Internal Finishes		

A research study by Nik-Mat, Kamruzzaman, and Pitt (2011) focused on assessing the maintenance aspect of facilities management of five high-rise buildings as in Table 2.1. Three main maintenance aspects which are functional, technical, and image are the performance building indicators. This type of research is very useful for the current study, and it can be a great example for future reference. Functional covers the management service

delivery attributes that the management holds while technical concentrates on the daily and scheduled maintenance services offered to the end users of building. Image is dedicated to analyse the internal and external finishes. Several examples of variables on both functional and technical from other studies are adapted too to evaluate the satisfaction. Table 2.2 below are the past studies that emphasize on image as the indicator for PMS:

Table 2.2: Past Studies on The Components for Image Indicator

Reference	Components for Image Indicator
Maulana et al. (2021)	• External images • Internal images
Ruslan and Mohamad (2019)	• External images • Internal images
Mydea (2013)	• Building fabric • External assets
Nik-Mat, Kamruzzaman, and Pitt (2011)	• Internal finishes • External finishes
Baharum (2009)	• Inside the four walls and excluding the design of the building.

In this study, the image aspect emphasizes on four satisfaction variables which are the decoration (overall aesthetic value), interior design of building, exterior design of building, internal finishes of building and external finishes of building. Interior design is associated with producing visually beautiful and useful living spaces, whereas exterior design is related with the outside appearance of a building. For internal finishes, they can serve as a decoration element and functional purpose such as protecting walls from damage, providing insulation or soundproofing, and more. External finishes provide a protective coating to the surface that preserves and protects the building's components from weather effects such as rain water, wind, and heat from the sun.

2.5 Customer Satisfaction and Perception

In general, customer satisfaction is determining the actual perception of the customer towards the products or services earned whether he or she is pleased with it. Based on research by Westbrook and Oliver (1981), consumer satisfaction indicates an evaluation response concerning the apprehended outcomes of experiences in the consumer domain, comprising accession, consumption, and disposition activity. Alternatively, satisfaction can be put in as a state variable in the specific sense that a consumer can be whether in the state of “hell” (very dissatisfied) or “nirvana” (very satisfied) (Tse et al., 1990). Based on Giese and Cote (2000), some elements should be enclosed in any context-specific definition of consumer satisfaction which:

“Consumer satisfaction is:

A summary affective response of varying intensity. The exact type of affective response and the level of intensity likely to be experienced must be explicitly defined by a researcher depending on the context of interest. With a time-specific point of determination and limited duration. The researcher should select the point of determination most relevant for the research questions and identify the likely duration of the summary response. It is reasonable to expect that consumers may consciously determine their satisfaction response when asked by a researcher; therefore, timing is most critical to ascertain the most accurate, well-formed response. Directed toward focal aspects of product acquisition and/or consumption. The researcher should identify the focus of interest-based on the managerial or research question they face. This may include a broad or narrow range of acquisition or consumption activities/issues.” (Giese & Cote, 2000, p. 15).

Satisfaction with a product or a service has been seen as a pacemaker to the provider to enhance their business until maximum. It also has been reliant on the contentment a consumer may undergo during the use of a product or service (Radu & Dobrescu, 2014). Particularly with the shopping mall, it needs constant keep up of operation and management to support the changing pattern of customer demands. Thus, many studies on satisfaction towards shopping malls have been regulated (Krishna & Giri, 2018; Syzmanska & Plaziak,

2017; Kesari & Altukar, 2016; Kim et al., 2015 and Nik-Mat et al., 2011). As an instance, Krishna and Giri (2018) used a five-point Likert Scale (1 – strongly disagree to 5 – strongly agree) to see the agreement among the retailers' satisfaction towards mall management. This method can be used for this study.

As the satisfaction level will reciprocate the dissatisfaction part too, if a customer does not feel-good experience, complaining is a way to channel the unpleasant feeling about a product or service. With that, Healsted and Page (1992) mentioned that the original outcome satisfaction level and the part on the complainers' satisfaction with the complaint handling will affect the repurchase of complainers. Meanwhile, research done by Nam, Ekinci, and Whyatt (2011), found that physical quality, staff behaviour, ideal self-congruence, brand identification, and lifestyle congruence have a positive relationship with consumer satisfaction. This depicts how important customer satisfaction is to sustain brand loyalty.

Despite that, Cambridge Dictionary portrays perception as a belief or opinion based on how things seem which is often held by many people. The process through which an individual picks, organises, and interprets information inputs to build an accurate representation is known as customer perception (William et al., 2016). Customer Perception (CP) is a crucial factor in marketing analysis when determining customer satisfaction (Ahmed, ElKorani & ElSayed, 2023). In order to establish more precise and effective plans for product development and marketing, commercial entities need to be aware of the existing customer perceptions. Customers are gradually transitioning themselves from conventional to modern retail to have a better buying experience (Malik & Aishwarya, 2018). That is why most shopping malls will provide a complaint box for the customer's critics and concerns. The shopping mall management can recognize problems and improve them by this. Thus,

this indicates that knowing the perception of customers is a very pivotal component. For an instance, Zakaria et al. (2020) were looking at the existing practices from the aspect of facility management for government building which focusing the current issues and organizational readiness for the formation of facility management index in occupational safety and health practices.

Kushwaha, Ubeja, and Chatterjee (2017) stated that the primary studies on customer mall purchasing behaviour were based on a retail gravitational explanation in which customer choice, preference, or patronage decisions are influenced by the size and distance of the shopping mall. However, as time pass by, shopping mall perception has grown beyond that. One of the latest research projects done by Kushwaha et al. (2017) found out that the factors affecting the decision of shopping malls are service experience, internal environment, convenience, utilitarian factors, acoustics, proximity, and demonstration. While generally, Malaysian shoppers perceive the malls favourably according to the style, variety, and quality of their products and services (Kok & Fon, 2014).

2.6 Post-Occupancy Evaluation (POE)

To evaluate customer satisfaction for this research, Post-occupancy Evaluation (POE), which is a performance assessment methodology can be implemented to discover the satisfaction level. According to Preiser, White, and Rabinowitz (2015), POE is a process of assessing buildings in a systematic and challenging manner after they have been built and occupied for some time. To simplify, it is an activity to evaluate building performance by measuring the satisfaction value of customers as the indicator. Meanwhile, Zimmerman and Martin (2001) concluded that the advantages of POE encompass serving as a feedback loop to improve continuous improvement processes, improving occupant fit with their buildings, optimising services to suit occupants, reducing energy and space waste, validating

occupants' actual needs, lowering ownership and operational costs, and improving competitive advantage in the marketplace.

POE has been proposed as an examination of the effectiveness for people who consume occupied designed environments where "effectiveness" refers to the various ways that physical and organizational factors enhance the achievement of personnel and institutional goals (Zimrig & Reizenstein, 1980). The concept plays a significant role in this study. POE is implemented as a tool to operationalise in understanding the real requirements and perceptions of customers. One of the studies conducted on the POE is by Ahmed and Hassanain (2020). They did the POE on a university shopping mall facility. The findings showed the mean responses of both technical and functional performance categories, which, the shopping mall users are satisfied with the performance of the facility. Below are the key performance requirements used to evaluate:

a) Technical performance requirements

i. Building performance

- Thermal comfort (temperature)
- Visual comfort (through artificial lighting)
- Visual comfort (through artificial lighting)
- Acoustical comfort (noise level)
- Indoor air quality

ii. Safety and security

- General safety precautions
- Fire safety precautions
- Security

b) Functional performance requirements

i. Proximity and accessibility

- Location from student housing
- Location from academic buildings
- Location from parking
- Availability of parking
- Store opening timings

ii. Space planning and layout

- Circulation (ease of movement)
- Wayfinding (finding the shops)
- Presence of direction signs
- Location of washrooms
- Location of shops/restaurants
- Number seating areas
- Location of the court relative to restaurants

iii. Mall services

- Number of retail services
- Quality of retail services
- Number of restaurants
- Quality of restaurants
- Number of entertainment areas
- Quality of entertainment areas
- Cleanliness of the mall
- Lost and found service
- Number of automatic teller machines

Technical performance requirements usually refer to quantitative measures. The focus is primarily on the regular and scheduled maintenance services assigned to the end-users of the building. Thus, building performance, as well as safety and security, is employed as the key performance requirements. Simultaneously, functional performance requirements indicate management services delivery. It consists of three main components as the key performance requirements which are proximity and accessibility, space planning and layout, and mall services. Another example on POE and shopping mall is from Rasheed, Akande, and Oke (2022). Specifically, they focus on assessing the physical characteristics of shopping mall and its environment. The final result reveals that the shoppers were satisfied with the facilities and services. When it comes to the built environment, POE is essential for filling the missing piece of the whole process. Knowing user's preference by doing POE helps to improve in decision making.

2.7 Conclusion

This part helps to enhance some key points that the study tries to stress. Previous studies have indicated the significance of facility management to an institution, especially to the built environment. Many advantages can be obtained from the practice of facility management to enhance and improve the operation of a shopping mall building. In summary, shopping malls will have better building performance with the effective implementation of facility management. The next chapter includes information on how to conduct this research.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, the methodology of the thesis is explained in detail. The subsections consist of the location of the study, research design, population and sample for the survey, procedure, and instrument for data collection as well as data analysis. A mixed method of survey and observation is implemented to determine the research objectives.

3.2 Selection of Shopping Mall Building

There are several crucial reasons on why the shopping mall building is selected for this study instead other types of buildings. Firstly, studies on the POE of the built environment in commercial facilities are very limited in the literature (Ahmad & Hassanain, 2020). POE is a concept and a tool that was implemented in this study for assessing the shopping mall building performance. This is to achieve the second research objective which is the satisfaction evaluation. Furthermore, shopping malls are essential to the functioning of contemporary society as they offer a variety of goods and services. Going to the shopping mall has become one of the relevant and enjoyable activities to spend time on. It also serves as a hub for local businesses, creating jobs and supporting the local economy.

3.2.1 Comparison of Shopping Malls

Figure 3.4 and Table 3.1 indicates the details of four well-established and popular shopping malls in Johor Bahru. The information about year establishment, size, and the time difference to do the POE assessment are included in Figure 3.4. Paradigm Mall JB is chosen because it fits all the three categories that this study looks up to which are the popularity, the

size, and the time difference for POE assessment from the initial year the mall opened to the public. It has a size of 1.3 million square feet, while the time difference for POE assessment is four years. As for Mid Valley Southkey and Toppen JB, both were newly operational buildings at the time, when the pandemic COVID-19 hit in the year 2020. Shopping malls were closed to the public and the movement control order (MCO) was encompassed. The respondents from Paradigm Mall JB have more reliable experience for the data of this study since they have been open to the public 3 years before. Hence, there is a requirement to evaluate how the complex is operated and managed.



Figure 3.4: Comparisons of Shopping Malls

Table 3.1: Details of Shopping Malls Comparisons

Shopping Mall	Paradigm Mall JB	Mid Valley Southkey	Toppen JB	Angsana JB Mall
Popularity	/	/	/	/
Size	/	/	/	X
POE time assessment (from the established year to February 2022)	/	X	X	X
Explanation	• Fit all categories. • Operated since before the pandemic COVID-19.	• Considering pandemic COVID-19. • Newly operated building. • Numerous unoccupied shops for rent during those 2 years. • Does not receive many visitors.		• Size is not above 1 million square feet. • Old shopping mall - does not offer established brands.

3.3 Location of Study

Paradigm Mall Johor Bahru is chosen as the prime setting for the location of study as in Figure 3.3. It is located in Johor Bahru, the capital city of Johor State which is also known as a rapid urbanization city with various big shopping malls such as Angsana Johor Bahru Mall, Toppen Shopping Center, Mid Valley Southkey, and Johor Bahru City Square. It can be classified as one of the largest shopping mall buildings that is usually frequented by the public. Even though there are other shopping malls in Johor Bahru, it still retains its appeal reported in Mediacorp News ("*Megamall di JB tumbuh bak cendawan, tapi... boleh*").

bertahan?”, 2019). Strategically, Paradigm Mall JB is located at Jalan Bertingkat Skudai, Taman Bukit Mewah, Johor Bahru – near the residential area such as Taman Bukit Mewah, Taman Sutera Utama, Taman Munsyi Ibrahim, Bandar Baru Uda, Taman Damansara Aliff, Taman Tampoi Indah and more which is why it has become a place that everyone would go to find needs and goods. Plus, a lot of people love to come to Paradigm Mall JB as it is very popular among the locals as well as the tourists. Singaporeans often choose Paradigm Mall JB as one of the stops if they enter Johor Bahru for shopping or entertainment. Figure 3.1 and Figure 3.2 depict the map of Johor Bahru, which is next to Singapore, and the map of Paradigm Mall JB respectively. Meanwhile, Figure 3.3 portrays the image of the Paradigm Mall JB building.

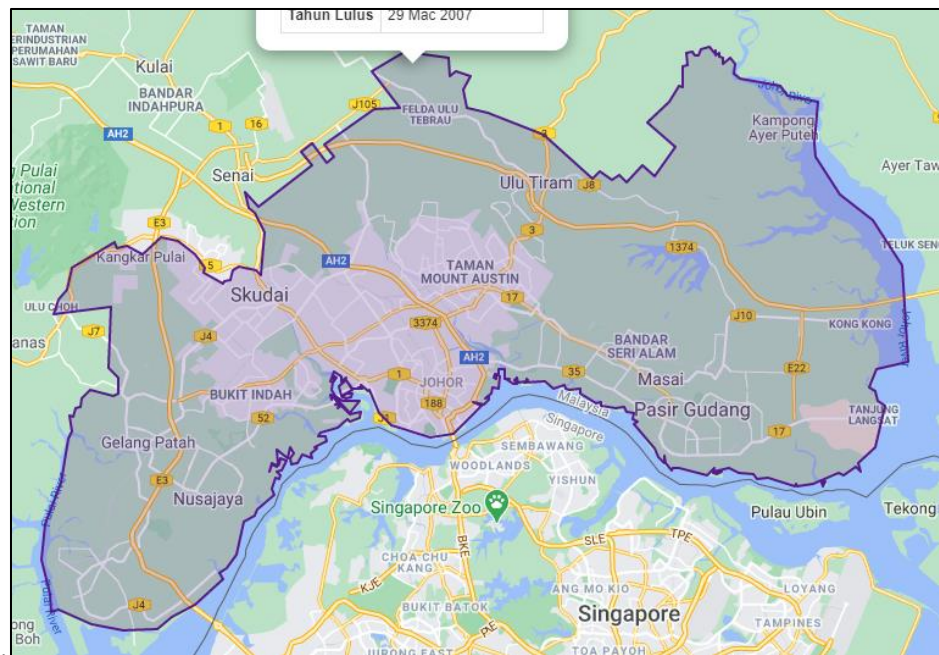


Figure 3.1: Map of Johor Bahru

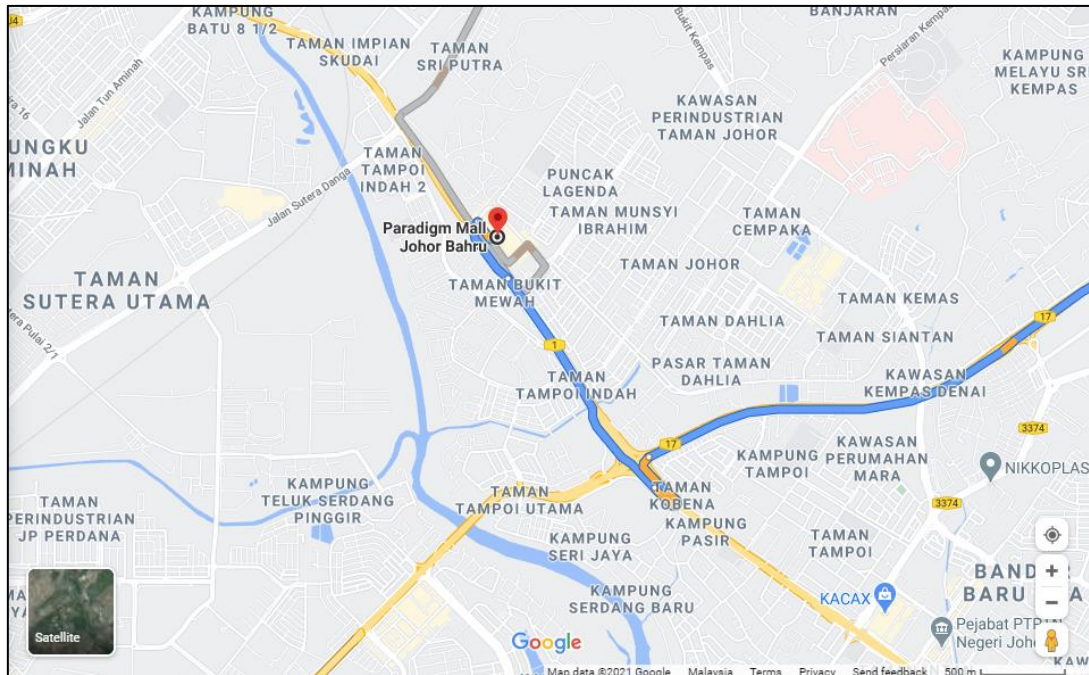


Figure 3.2: Map of Paradigm Mall JB Area

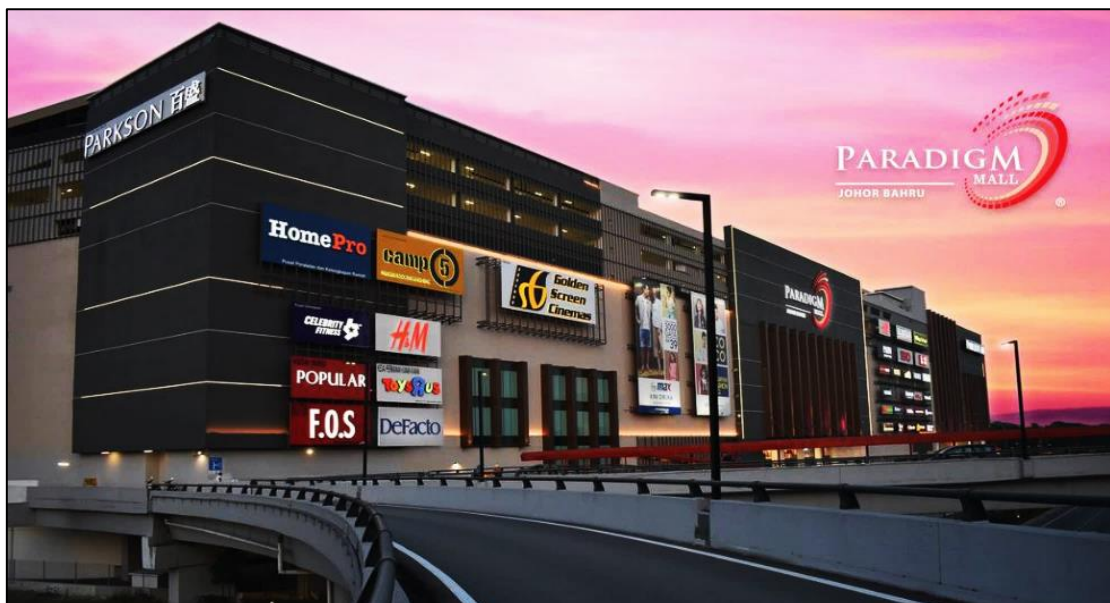


Figure 3.3: Paradigm Mall JB

3.4 Research Design

During this study, a lot of steps need to be taken from identifying the problem statement to the conclusion part as shown in Figure 3.5. There are predominantly two types of research in this study which are quantitative research and qualitative research, also known as mixed method. For quantitative research, a survey method is carried out to highlight the facility management and customers by looking at the issues and satisfaction level, simply say that – the service quality. This is because the issues may affect the satisfaction level of customers. Not just that, suggestions to overcome the issues from the respondents are outlined too. Meanwhile, for qualitative research, the observation method is conducted to focus more on the facilities and services provided. This is to support the data obtained in the survey method for achieving the first research objective. Then, both results from the mixed method are merged and interpreted to see any differences for identifying the issues in shopping mall. Section 3.5 will explain the method used in more detail.

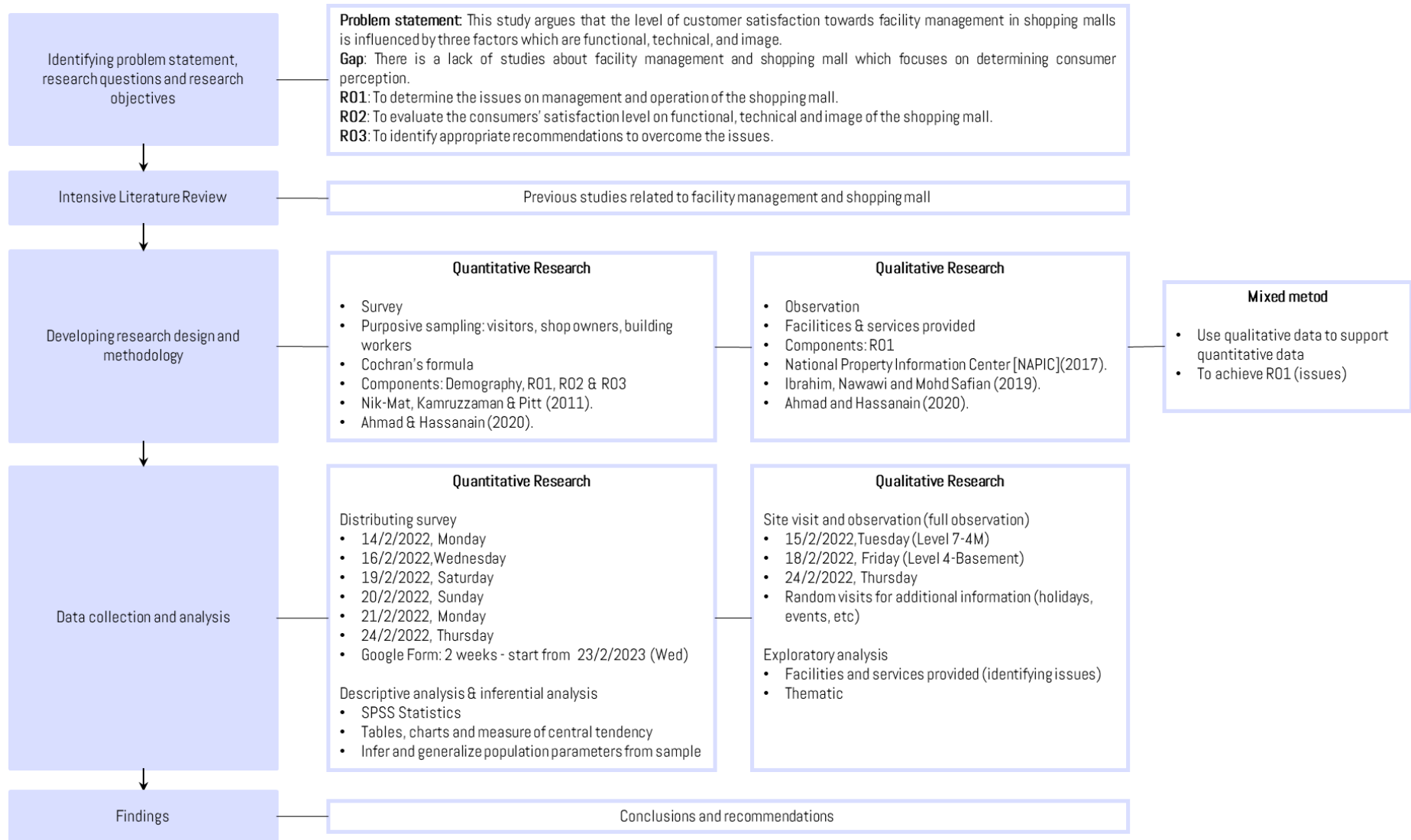


Figure 3.5: Research Design Details

3.5 Population – Survey

A population is a whole group of people in a place. This study is focusing on the population of the customers of Paradigm Mall JB. There is a higher probability that the people in the circle in Johor Bahru would go to the shopping mall chosen than people who live outside the Johor Bahru district. People tend to go shopping at the nearest place to them. However, this study accepts all potential respondents as long as they are the customers of Paradigm Mall JB. The assistant manager of Paradigm Mall who has been contacted is unable to disclose the number of visitors unfortunately due to the confidentiality issue. Therefore, this study took some examples of over 1,000,000 visitors from other established and big shopping malls in Malaysia (Che Mat, 2022; Rahman 2017). Cochran's formula is implemented in this survey because it is most appropriate for a large population which over a million visitors (Nanjundeswaraswamy & Divakar, 2021).

3.6 Sample – Survey

On the contrary, a sample is a small group chosen to represent the entire population. It is more convenient to use a sample because it also helps with the issue of time constraints. In this study, 196 respondents are needed to achieve the three objectives by using purposive sampling. This study targeted the prime customers of Paradigm Mall JB which are the visitors, the shop owners or shop workers, as well as the building workers. The selected respondents happened to be from people who were visiting the shopping mall on the day of survey distribution. Whereas Google Forms has been distributed to public who were the visitors and willing to answer the online survey. Several days have been taken to obtain the appropriate data as in Figure 3.5. The explanation of how the sample size was obtained will be explained in the next part (item 3.8.1).

3.7 Procedure and Instrument for Data Collection

In this part, procedures on the instrument used for data collection are explained for better understanding as subsections below:

3.7.1 Survey – Questionnaire

A self-administrated questionnaire is executed as one of the survey instruments to obtain the raw data which focuses on the three objectives of this study. By this, a sample is used to spare more time and to let the respondents feel genuinely comfortable during answer the questionnaire. The components of the questionnaire are consisting of demography, the Likert Scale for evaluating customers' level of satisfaction (which covers technical, functional, and image), issues of facilities management services confronted, and their recommendation for improvement.

A study by Krishna and Giri (2018), have used a five-point of Likert Scale to measure satisfaction with mall management. On the other hand, Ahmad and Hassanain (2020) apply it too in their study of evaluating satisfaction with university shopping mall facilities. The Likert Scale is an essential element to assess satisfaction level in this study because previous studies have utilised the same methodology. Meanwhile, the questions in the survey are based on past research from Nik-Mat, Kamruzzaman, and Pitt (2011), as well as Ahmad and Hassanain (2020). They both depict the same focus on functional and technical performance. However, this study is concentrated on three components; functional, technical, and image which emerge from both past research mentioned before because they are suitable to be employed in this study.

The examples regarding the number of 1,000,000 visitors to the shopping mall as mentioned in item 3.3 are taken to account for the population of this study. Hence, a sample

is determined by using Cochran's formula is determined due to a large population. The formula is:

$$n_o = \frac{Z^2 pq}{e^2} \quad \text{Equation 3.1}$$

Where:

- e is the margin of error
- p is the estimated proportion of the population
- q is $1-p$
- Z -value is found in the Z table

Assuming that the half population is the customers of Paradigm Mall JB where $p=0.5$. Then, 95% of confidence is applied for precision which gives us a Z -value of 1.96. The amount of error that can be tolerated is 7%. Therefore, the complete calculation is:

$$\begin{aligned} n_o &= \frac{Z^2 pq}{e^2} \\ n_o &= \frac{(1.96)^2 (0.5)(1 - 0.5)}{(0.07)^2} \\ n_o &= 196 \end{aligned}$$

A total of 196 customers is needed to answer the survey by using purposive sampling, targeting respondents in Johor Bahru who visit the shopping mall such as customers and shop owners. This is because they are the ones experiencing facility management services at the shopping mall. A total of 250 surveys is obtained. However, only 200 of them can be utilized for this study because the balance of 50 questionnaires is incomplete and have some missing data.

3.7.2 Observation

By doing proper a naturalistic observation or site visit at the location of study, a real scenario of facilities management services could be experienced. Due to this, any difficulties,

and issues that the customer faces will comply with personal experience to standardize and do benchmarking for the use of a checklist. The checklist for observation method is adapted and improvised to this study based on the characteristics of a shopping mall outlined by the National Property Information Centre [NAPIC] (2015); Ibrahim, Nawawi, and Mohd Safian (2019), and Ahmad and Hassanain (2020). Thus, the checklist as the main component through this observation method can determine whether the facilities are present, in good shape or not. In addition, the outcome of the observation helps to explore the list of facilities and services provided in the shopping mall.

3.8 Data Analysis

Mainly, three types of data analyses are applied in this study. The first one is a descriptive analysis which focuses on evaluating the survey and engulfing the quantitative data where data are presented in the form of tables, charts, or summarization by the measure of central tendency. Secondly, inferential analysis is implemented to infer and generalise population parameters from the sample data. IBM SPSS Statistics is used to determine the frequency distribution, the measure of central tendency, cross-tabulation, and the Chi-square test. Another one is observation analysis. A site visit to the fieldwork is conducted and all the observation data are collected in a table of facilities and services provided in Paradigm Mall JB where the actual experience is elaborated in next Chapter 4.

3.8.1 Descriptive Analysis

A few days are needed to distribute the survey as mentioned in Figure 3.5. An online survey is carried out too via Google Forms so that the process of gaining data is faster and more efficient. Initially, the targeted respondents for the survey are 196 from the Cohran's formula. 250 questionnaires are acquired, however, only 200 of them can be used for this

study. In this part, it depicts the survey data obtained through a questionnaire. There are a total of four sections, and they are Section A for ‘Demography’, Section B for ‘Issues faced in the shopping mall’, Section C for ‘Perception of the shopping mall’, and Section D for ‘Suggestions for overcoming issues in the shopping mall’.

Section A consists of gender, race, religion, age group, occupation, frequency to shopping mall, living area, respondent category, purpose to shopping mall, and average time spent in shopping mall. Meanwhile, Section B presents the frequent issues that confronted by the customers. Four significant issues have been identified from toilet, prayer room, building of shopping mall, and parking. However, more details are discovered and determined for the issues by the customers. In Section C, it reveals the perception of shopping mall on three aspects of functional, technical, and image by using five points of the Likert Scale. A few open-ended questions are also implored in this section. Lastly, Section D divulges the suggestions for overcoming hygiene and comfort issues as well as safety and well-being issues.

3.8.2 Inferential Analysis

The analyses included in this part are cross-tabulation and Chi-square test. The hypotheses made are for the survey data to test the relationships as below:

- a) Gender and occupation
- b) Gender and average time spent
- c) Age group and average time spent
- d) Occupation and average time spent
- e) Respondent category and average time spent
- f) Facility management and overall shopping mall satisfaction

- g) Facility management and feel-good in the shopping mall
- h) Gender and feel-good in the shopping mall

Some words are summarised and shortened in this part because the author needs to simplify the words in SPSS software for analysis. The word '*feel-good*' means to feel safe, secure, and enjoy based on the questionnaire. Meanwhile, '*facility management*' means the importance of facility management.

3.8.3 Observation analysis

Observation activity has been fully done on February 2022 which covers the whole building of Paradigm Mall JB by using observation analysis. It also took some other random days, particularly during festive seasons or special events like Hari Raya, Chinese New Year, Deepavali, and Christmas Eve. The facilities and services provided are organised in a thematic table with the side notes. It consists of store opening or closing time, retail shop, small shop, air conditioner, toilet, baby's room, food court, security guard, ATMs, escalator, lift, parking, resting area, lost, and found service, prayer room, entertainment area, directory information, fire hose, exit door and signboard.

3.9 Conclusion

Chapter 3 covers the whole research design which includes the explanations on how this study is conducted. Both quantitative research and qualitative research have been successfully done to accomplish the research objectives. After gaining all the data required, it is time to analyse and discuss them in the next chapter.

CHAPTER 4

FINDING AND DISCUSSION

4.1 Introduction

Mainly, there are three main sections that explain the findings for descriptive analysis, inferential analysis, and observation analysis in this chapter. It also comprised of comprehensive discussions in every finding. In the issue part (item 4.2.2), there are four main issues covered – toilet issues, prayer room issues, building issues, and parking issues. On another hand, item 4.2.3 includes the satisfaction evaluation on functional, technical, and image. The suggestion part in item 4.2.4 covers two aspects which are hygiene and comfort issues as well as safety and well-being issues.

4.2 Descriptive Analysis

This part is to depict the survey data obtained through a questionnaire. It reveals all sections from demography, issues, perception, and to suggestions. The explanations are based on tables and figures which are provided to look presentable as well as readable to the readers.

4.2.1 Demography

a) Gender

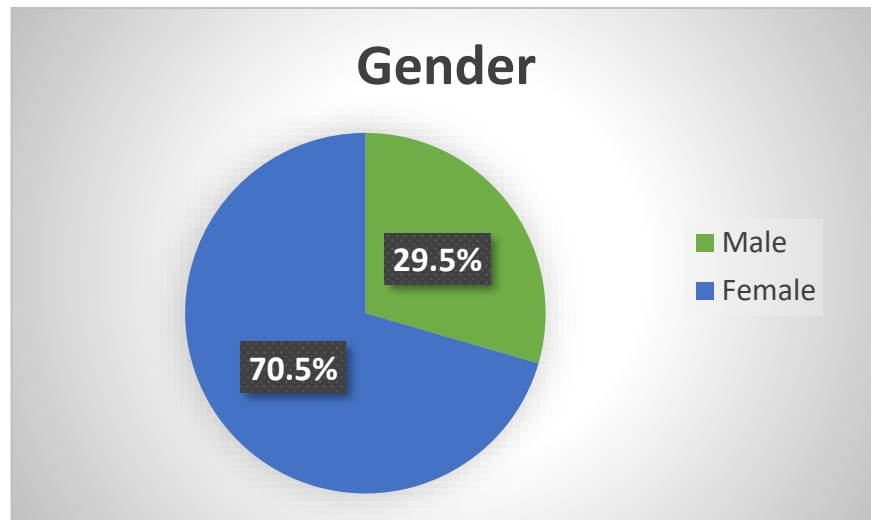


Figure 4.1: Pie chart for Gender

As Figure 4.1 above, it shows that many of the respondents are female 70.5% which is 141 respondents. On the other hand, the male respondents are 29.5% with a total number of 59 respondents. Generally, female is well-known as the type that loves shopping more than male. This may affect the percentage of gender besides that they are highly responsive than males during the collection of the survey.

b) Race

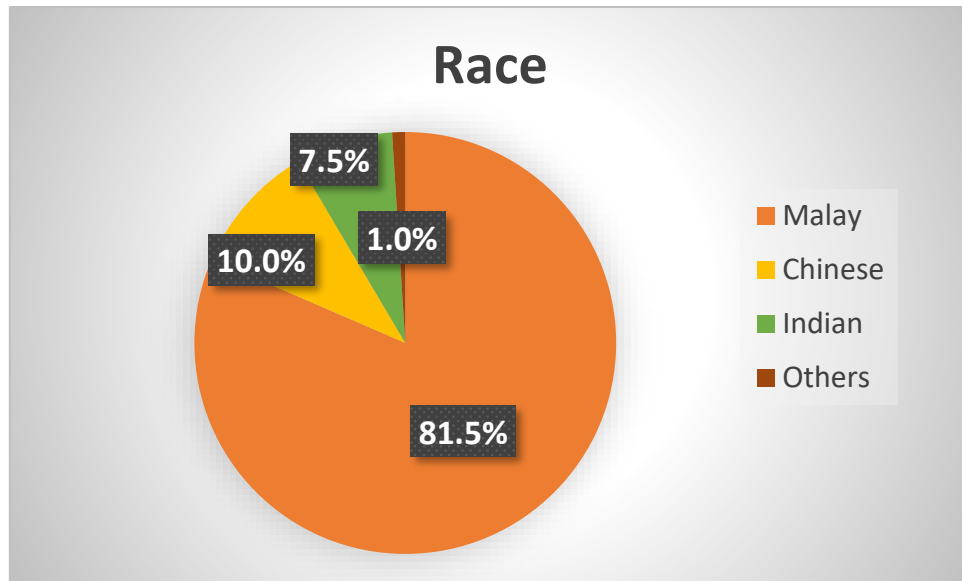


Figure 4.2: Pie Chart for Race

Figure 4.2 displays the percentage of the race where most of the respondents are Malay which is 81.5% with 163 respondents. This is probably because most of the residential areas around Paradigm Mall JB are the Malay communities. The second highest percentage is the Chinese with the percentage of 10.0% (20 respondents). Meanwhile, 1.0% (2 respondents) of 'Others' are from Arabian and Nepalese. The Nepalis is a security guard that works for the shopping mall.

c) Religion

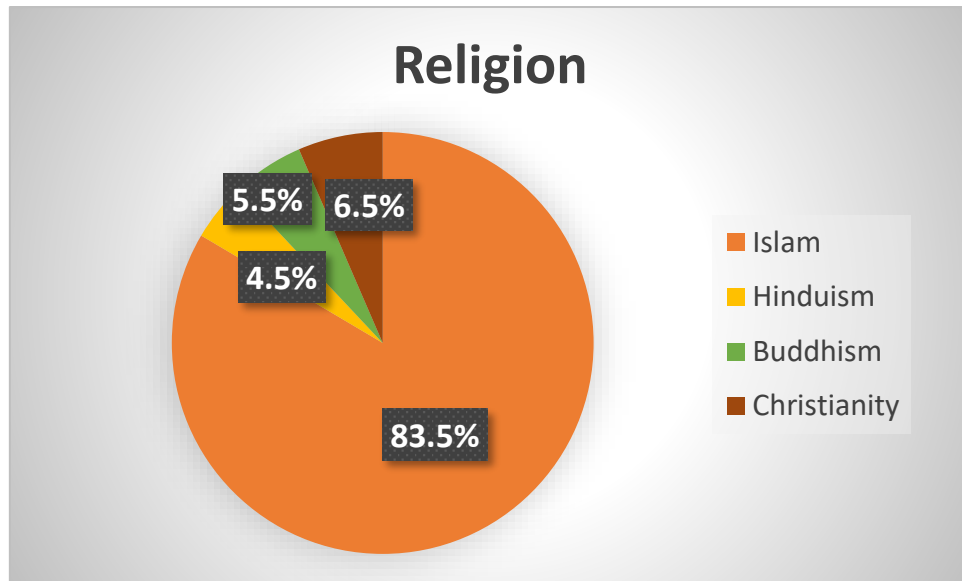


Figure 4.3: Pie Chart for Religion

Figure 4.3 shows the percentage of religion where the biggest percentage is 83.5% for Islam with a total of 167 respondents. In the meantime, Hinduism and Buddhism are 4.5% and 5.5% respectively. The total number of non-Muslims acquired is small. Hence, they are the ones who skipped prayer room questions in the survey method.

d) Age group

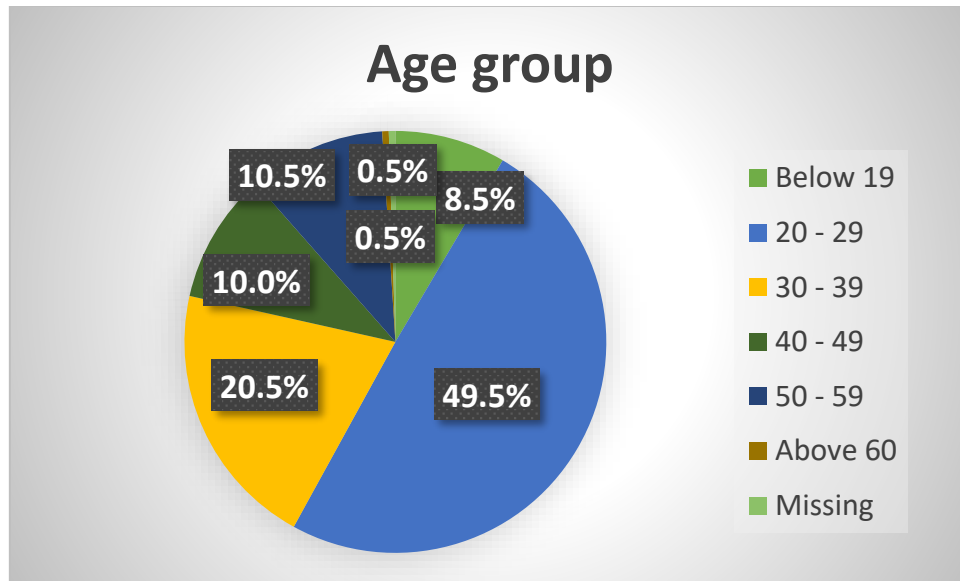


Figure 4.4: Pie Chart for Age Group

According to Figure 4.4, the majority of the respondents are from the age group of 20 until 29 with the percentage of nearly half of the respondents (49.5%). This appears to be the case since some of them are students from UITM, UTM, and UNIKL which contribute to a bigger percentage than other age groups. Students usually come from this range of age groups. The age group from 30 to 39 ranked second with 20.5% (41 respondents) while 40 to 49 has a percentage of 10.0% (20 respondents).

e) Occupation

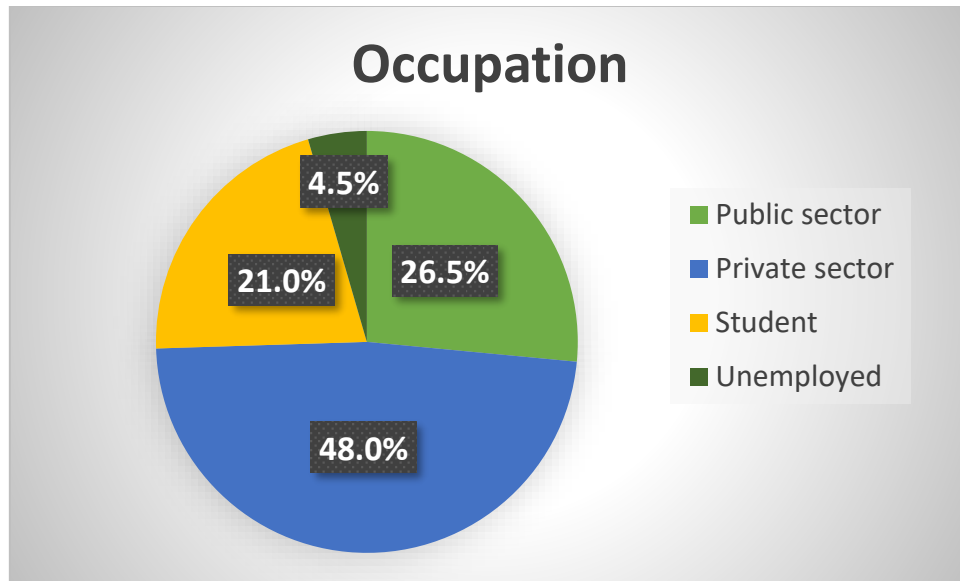


Figure 4.5: Pie Chart for Occupation

For Figure 4.5, the pie chart indicates the percentage for an occupation where most of the respondents are from the private sector with 48.0% (96 respondents). The public sector has the second highest percentage with 26.5% (53 respondents). Nevertheless, unemployed people have the lowest percentage with only 4.5%. This is suggesting that the economic issues for Malaysia are tolerable even though we hit the pandemic era (COVID-19). People still have the power to buy goods, particularly in this case, in the shopping mall.

f) Frequency to shopping mall

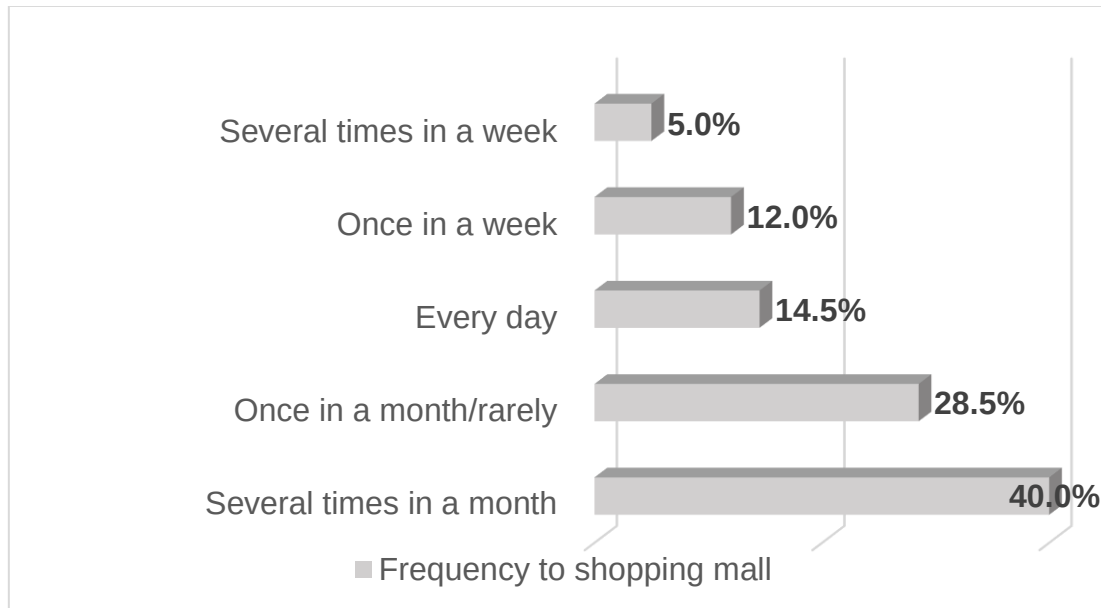


Figure 4.6: Bar Chart for Frequency to Shopping Mall

Based on Figure 4.6, the bar chart stipulates the frequency to shopping mall where the highest percentage is 40.0% (80 respondents) for several times in a month. On the contrary, every day has a percentage of 14.5% (29 respondents) which is slightly higher than once in a week with 12.0% (24 respondents). People that go to the shopping mall every day usually are those who work there as shop owners, shop workers, or building workers.

g) Living area

Table 4.1: Residential Area of Respondent

No.	Residential Area	
	<i>Inside Johor Bahru</i>	<i>Outside Johor Bahru</i>
1.	Bandar Baru Uda,	Pekan Nenas, Pontian
2.	Taman Nusa Damai, Pasir Gudang	Pontian
3.	Taman Johor Jaya,	Batu Pahat
4.	Taman Teratai, Skudai	Kuala Lumpur
5.	Tampoi	Terengganu
6.	Larkin	Melaka
7.	Kangkar Pulai	-
8.	Taman Perling	-
9.	Taman Sri Skudai	-
10.	Taman Dahlia, Pasir Gudang	-
11.	Bandar Dato' Onn	-
12.	Nusabayu, Iskandar Puteri	-
13.	Kampung Sungai Perling	-
14.	Taman Uda Utama	-
15.	Kampung Melayu	-
16.	Skudai	-
17.	Skudai Kanan	-
18.	Skudai Kiri	-
19.	Taman Rinting, Masai	-
20.	Taman Bukit Mewah	-
21.	Taman Pulai Hijauan	-
22.	Taman Pulai Indah	-
23.	Taman Universiti	-
24.	Taman Bukit Indah	-
25.	Kempas	-
26.	Kempas Baru	-
27.	Kempas Lama	-
28.	Taman Kempas Utama	-
29.	Larkin Perdana	-
30.	Taman Desa Harmoni	-
31.	Taman Puteri Wangsa, Ulu Tiram	-
32.	Taman Mutiara Rini	-
33.	Kampung Pasir	-
34.	Taman Suria Muafakat	-
35.	Taman Desa Skudai	-
36.	Taman Scientex, Pasir Gudang	-
37.	Taman Kenanga, Tampoi	-
38.	Kampung Melayu Majidee	-
39.	Taman Bukit Alif	-
40.	Kampung Nong Chik	-
41.	Taman Daya 1	-

Table 4.1 continued

No.	Residential Area	
	<i>Inside Johor Bahru</i>	<i>Outside Johor Bahru</i>
42.	Taman Kobena	-
43.	Taman Setia Tropika	-
44.	Taman Permas Jaya 1	-
45.	Taman Desa Jaya	-
46.	Taman Pulai Utama	-
47.	Taman Angkasa, Senai	-
48.	Taman Kempas Indah	-
49.	Taman Desa Rahmat	-
50.	Taman Pelangi	-
51.	Taman Impian Emas	-
52.	Taman Sutera	-
53.	Taman Bukit Dahlia, Pasir Gudang	-
54.	Johor Bahru	-
55.	Pasir Gudang	-
56.	Plentong	-
57.	Tebrau	-
58.	Senai	-
59.	Gelang Petang	-
60.	Universiti Teknologi Malaysia (UTM)	-
61.	UiTM Pasir Gudang	-
62.	UNIKL Pasir Gudang	-

Table 4.1 stipulates the residential area of the respondents. They mainly come from the Johor Bahru area as shown in the table. Some of them come from Universiti Teknologi Malaysia (UTM), Universiti Teknologi Mara Pasir Gudang (UiTM), and Universiti Kuala Lumpur Pasir Gudang (UNIKL) are all students. Adversely, the rest are from outside of Johor Bahru. Kuala Lumpur, Melaka, and Terengganu are in another state and apparently, most of them are tourists whereas places such as Batu Pahat and Pontian are still in Johor state.

h) Category of respondent

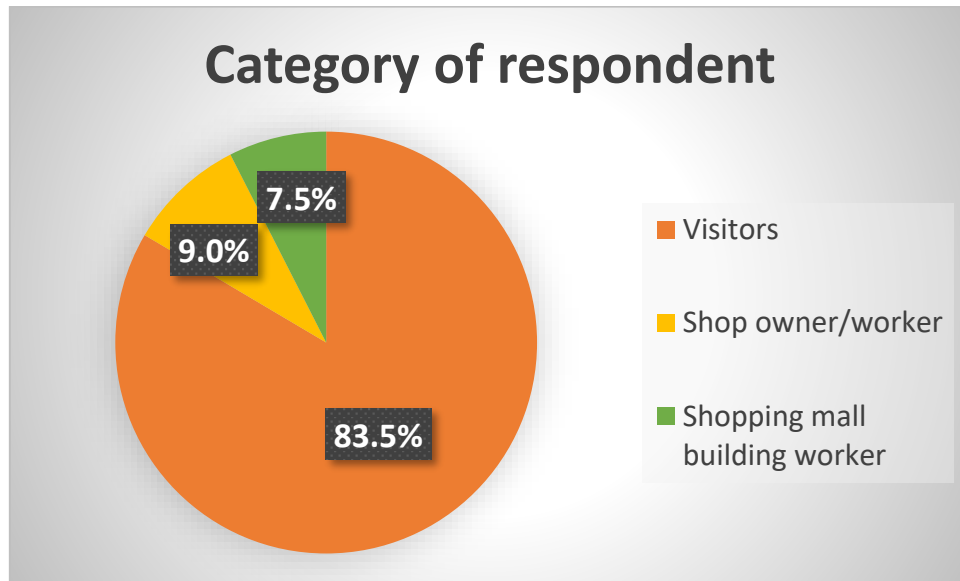


Figure 4.7: Pie Chart for Category of Respondent

Figure 4.7 depicts the percentage for the category of the respondent in the shopping mall. The biggest percentage is the visitors who come to the shopping mall with 83.5% (167 respondents). Some of the visitors are from the Google Form distributed on social media. The online survey did help to gain more numbers of respondents. However, most of the questionnaires are answered during the face-to-face survey at the shopping mall. Both shop owners and shop workers have a total of 9.0% (18 respondents) which is slightly higher than the shopping mall building worker with only 7.5% (15 respondents).

i) Average time spent

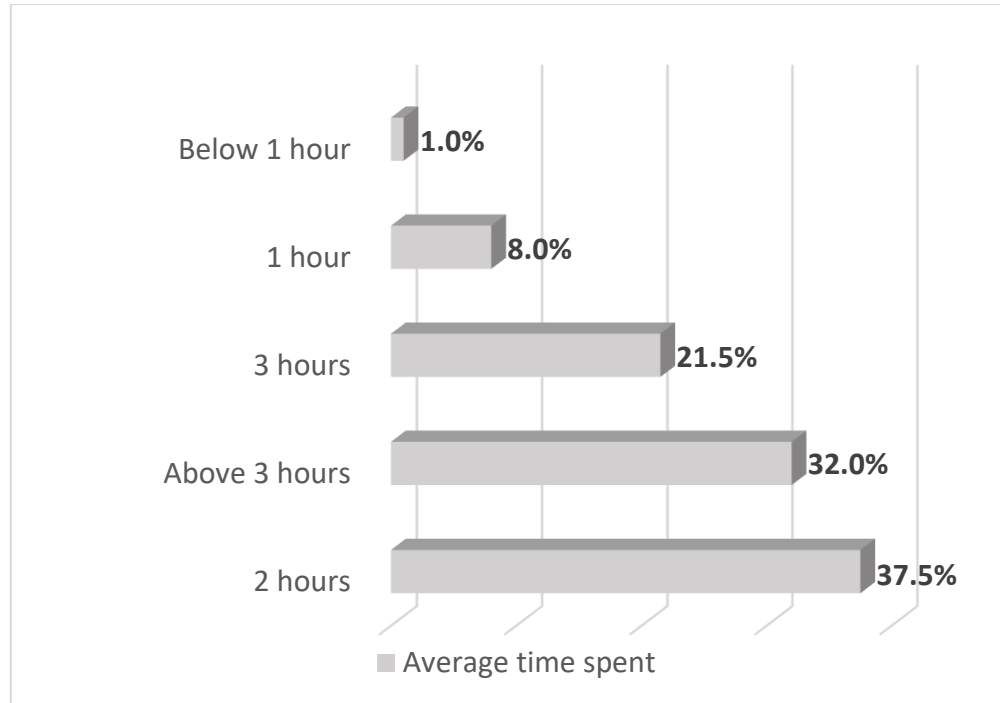


Figure 4.8: Bar Chart for Average Time Spent

As shown in the bar chart of Figure 4.8, it shows that the average time spent by the majority of the respondents is 2 hours with 37.5% (75 respondents). The average time spent above 3 hours is slightly lower which is 32.0% (64 respondents). This means more than half of the respondents spent 2 hours or more at the shopping mall for shopping, eating, entertainment, and working. The respondents enjoy spending their ample time doing these activities. Shopping may help to release some stress which we called '*retail therapy*'. Many people believe that by going shopping, they are rewarding themselves for the difficult times in their lives that they have already experienced or are presently going through (Rahardjo et al., 2023).

j) Purpose to shopping mall

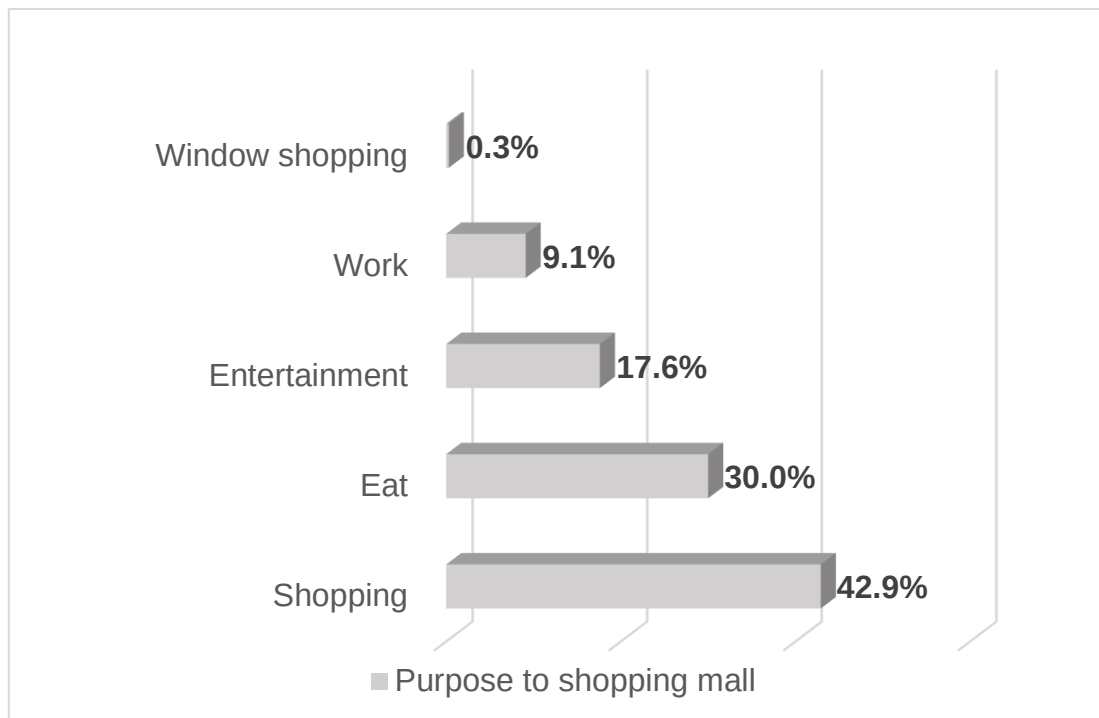


Figure 4.9: Bar Chart for Purpose to Shopping Mall

Figure 4.9 shows that the highest percentage for the purpose to shopping mall is shopping with 42.9% (146 respondents). This is the main function of a shopping mall where people go to purchase goods or services generally. Many established restaurants, cafes, and even food courts are provided for customers' selection. About 17.6% (60 respondents) of them go there for entertainment such as cinema, wall-climbing sport, arcade, and ice rink sport. In fact, Paradigm Mall is the only shopping mall that offered iced rink sport in the Southern region, of Johor.

4.2.2 Issues Faced in the Shopping Mall

a) Toilet issues

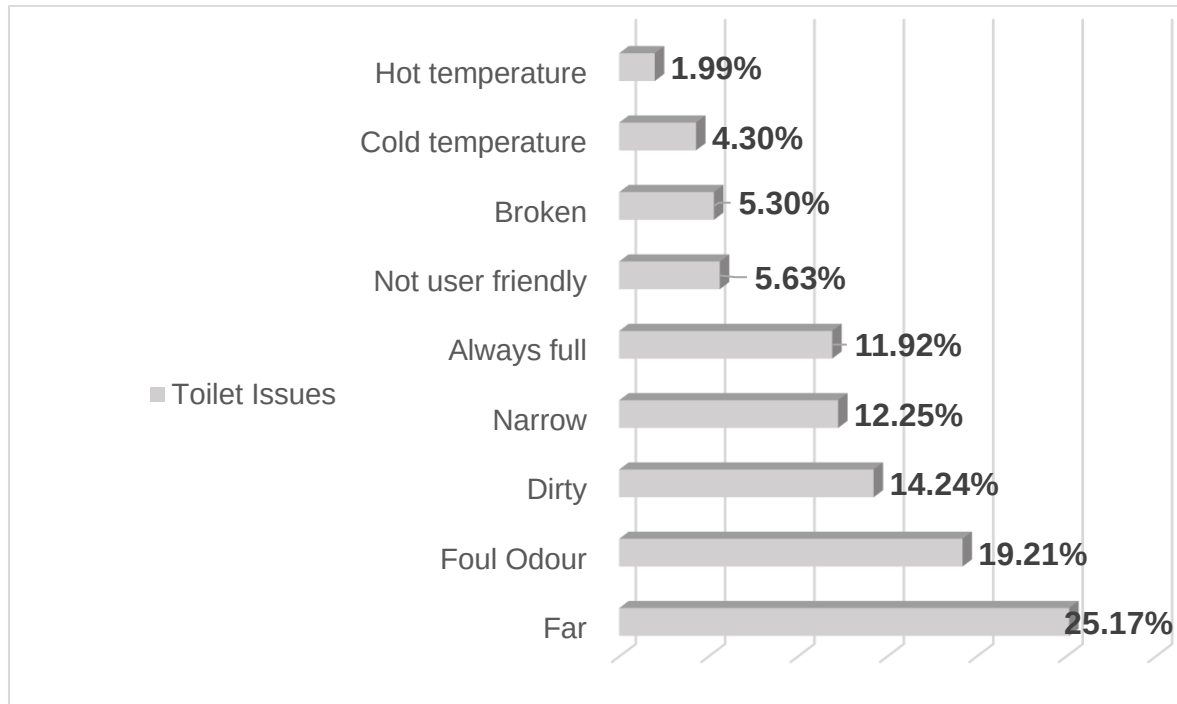


Figure 4.10: Bar Chart for Percentage of Toilet Issues

Based on Figure 4.10, the bar chart indicates that the common issue for the toilet where many of the respondents complain it is located far or distant from them with a percentage of 25.17%. Manually, the layout for toilet locations is divided into three parts – Zone A, Zone B, and Zone C (can refer to Figure 4.17 in observation analysis, page 95), so that people can reach the toilet easily. However, the shopping mall building itself is enormous with a total of seven levels, including the ground floor and upper ground. This may influence the opinion of the respondents. Foul odour and dirty are placed in second and third of the highest percentage with 19.21% and 14.24% each.

There are cleaning schedules displayed in the toilet and some of the toilets are rated as ‘Very Clean with 5 Stars’ by the local Majlis Bandaraya Johor Bahru but respondents still

vote for foul odour and dirty due to the peak hour they visit the toilet. When many people use the toilet simultaneously, it will affect its cleanliness. People also complain about the toilet being too narrow or small with a percentage of 12.25%. It relates to another issue which is the toilet is always occupied. Respondents said there are too many people using the toilet, especially during peak times such as festive seasons or weekends. This will make them feel uncomfortable. The phrase '*not user-friendly*' toilet here means the provision of special toilets for disabled people, the elderly, and kids. Nonetheless, the shopping mall did provide a toilet for disabled people and a kid's toilet bowl as well as a baby's room for diaper changing and milking.

b) Prayer room issues

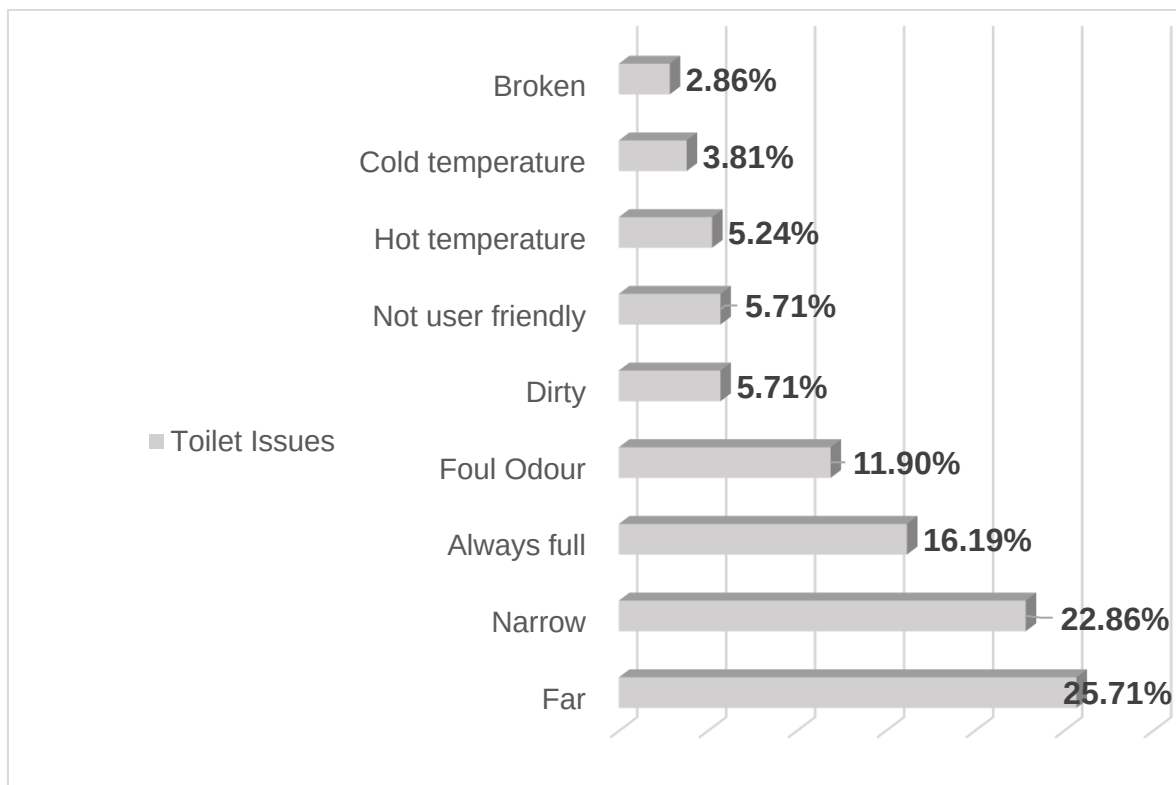


Figure 4.11: Bar Chart Percentage of Prayer Room Issues

As shown in Figure 4.11, there are some issues in the prayer room that affect the satisfaction of the customer. The highest percentage is 25.7% for the far or distant location of the prayer room which is located in the corner of the shopping mall. Respondents are not happy with it because they need to walk more to go to the prayer room and in fact, the shopping mall building is too big. Only some levels offered the prayer room, which is at Level 1, Level 2, and Level 3. In addition, the second highest percentage is 22.86% for the small and narrow prayer room.

With COVID-19 hitting the world, there are some standard operational procedures (SOP) the management of the shopping mall needs to follow particularly for the prayer room. One of them is to pray at a one-meter distance for each other. This takes more space for the visitors, and they need to wait for more time to take up their turn to perform prayer. Always full or occupied has a percentage of 16.19% which relates to the space volume as mentioned before. Upon observation, the prayer room did furnish with chairs for elderly and disabled people but there is no safety grab bar for them. Regarding the complaint about the dirty prayer room, there are some moulds or mildew near the ablution area, and it does need some cleaning on the floor. In Chapter 1, visitors did express their dissatisfaction with the condition of the prayer room via Google Review and the findings of this study also depict the exact opinions regarding the bad condition of the prayer room.

c) Building of shopping mall issues

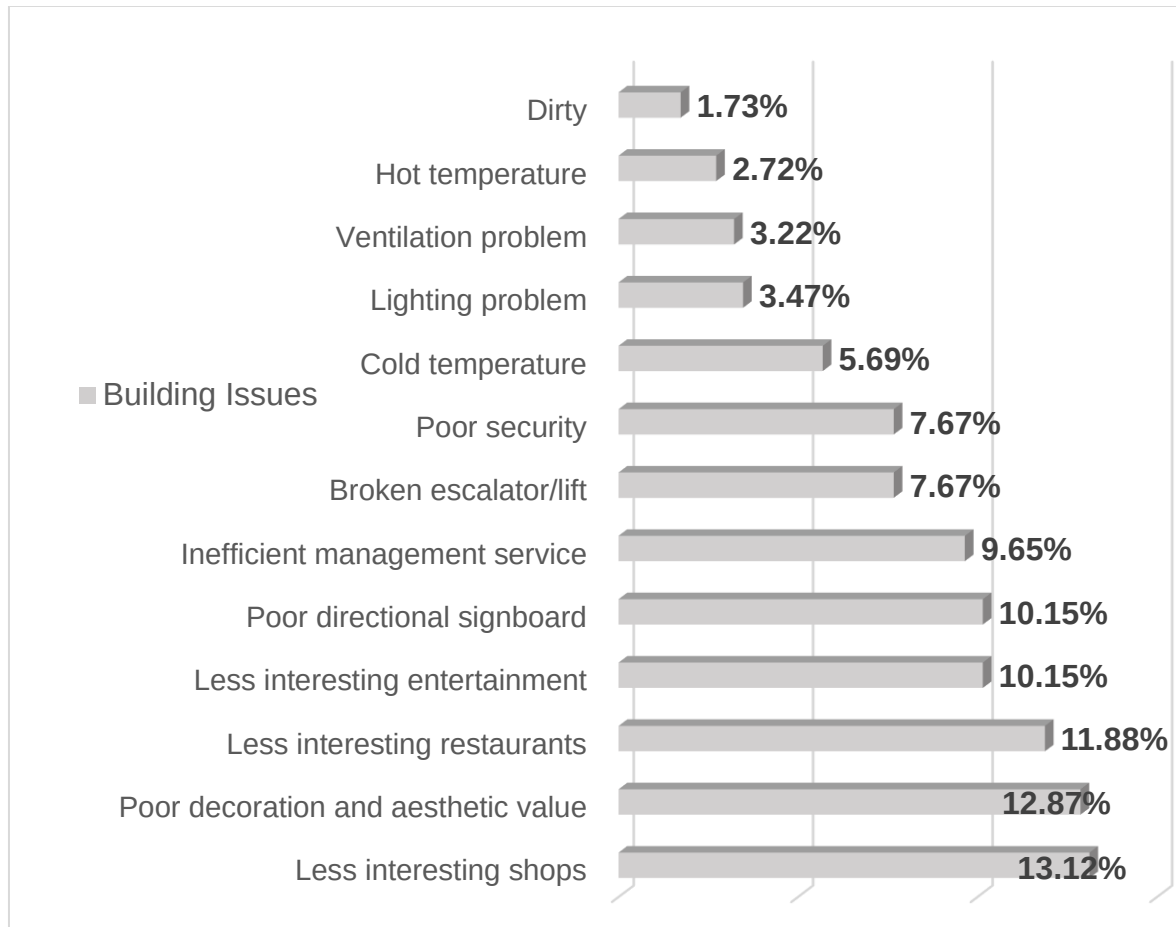


Figure 4.12: Bar Chart for Percentage of Building Issues

According to Figure 4.12, fewer interesting shops is identified as the biggest percentage for the building of shopping mall issues with a percentage of 13.12%. On the other hand, poor decoration and aesthetic values has the second biggest percentage which is slightly lower than the first one with 12.87%. This finding can be supported by the Google Review comments by the visitors in Chapter 1. The dull environment in the shopping mall should be one of the focuses to upgrade the shopping mall's image. For the lift, some of them are in maintenance and not functioning. Only the main three lifts in Zone A are setting good for users. Escalators are in Zone A, Zone B, and Zone C (can refer to Figures 4.17 in observation analysis, page 95) so that people are accessible to them.

In conclusion, most of the issues for the building of the shopping mall is not more than 20.0% where it is indicating that the building of shopping is still in good management rather than the other three significant issues (toilet, prayer room, and parking). A good building must be judged on how well it fulfils its primary function: providing a space and location for people (Hay et al., 2017). Hence, the new upcoming building should carefully consider the deficits of Paradigm Mall and make it an example for adequate planning in the future which not only concentrates on profit but the interests of customers too.

d) Parking issues

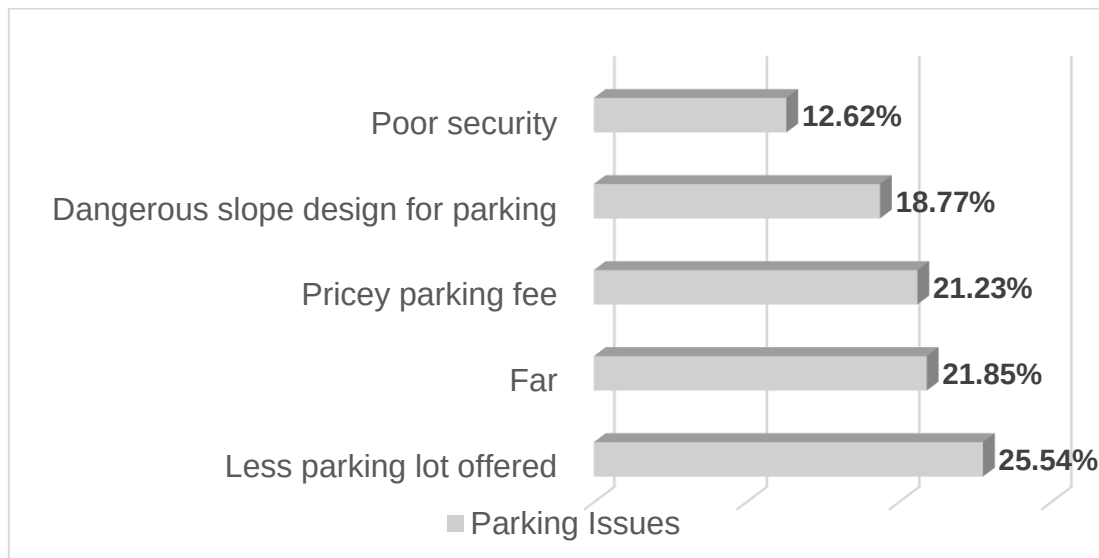


Figure 4.13: Bar Chart for Percentage of Respondents on Their Perceived Parking Issues

Figure 4.13, it displays the percentage of parking issues where most of the respondents have chosen fewer parking lot offered with a percentage of 25.54%. People who ride motorcycles often complain about insufficient parking. For sure, it will be harder to find parking for both cars and motorcycles during peak time. Not just that, 21.85% of the respondents agreed that the car park is quite far from the entrance door. Only certain entrance doors are opened for visitors. As a result, if the customers are unable to park near the

entrance, they will have to walk further. Next, the pricey parking fee has a percentage of 21.23% which is slightly lower than the insufficient parking. People are complaining due to the different fee ranges during the weekend (Friday, Saturday, and Sunday) or public holidays as well as on weekdays (Monday, Tuesday, Wednesday, and Thursday). The management of the shopping mall charges RM1 for the first 3 hours and another RM1 for the next hour (weekday). Meanwhile, weekends or public holidays are the same charges which are RM3 for the first 3 hours and another RM1 for the next hour.

Besides, 18.77% of the respondents have chosen a dangerous slope design of parking. The parking in the basement is adequate and safe for visitors. Despite that, the parking there is a limit to a few numbers. More parking is located at Level 5 and above. This is when people need to get over through dangerous slope design for parking. As mentioned before in Chapter 1, people may get into an accident if they are unable to control their car. Poor security has the lowest percentage for parking issues with a percentage of 12.62%. Considering all of the facts, parking has the most issues agreed by customers of all other issues including toilet, prayer room and building. Most of the sub-issues are more than 20.0%. In Chapter 1, visitors of Paradigm Mall that left comments on Google Review also mentioned a lot about parking issues. This has become a concern to many people.

Finally, some respondents add more personal complaints in the open-ended question part about the shopping mall such as less resting area provided, fewer public facilities, the lease and rent being excessively costly, lack of number of ATMs, the confusing layout of the shopping mall, the lift is too slow and only a few can be used, lack of cleaner staff, insufficient parking for motorcycle, entrance door difficult to find, no signboard for the broken escalator, unfriendly management staff, crowded main entrance door and unsanitary food court. Several issues relate to the observation method in a further section because some

of them have been experienced during the site visit. These additional issues suggested allowing various opinions from a different perspective. This is very healthy for the shopping mall management because they can obtain more details regarding the issues.

4.2.3 Perception of the Shopping Mall

a) Satisfaction level – Likert Scale

Table 4.2: Satisfaction on Shopping Mall

Shopping mall satisfaction variables		Evaluation terms (%)					
		Very Not Satisfied	Not Satisfied	Less Satisfied	Satisfied	Very Satisfied	Median/Mode
Functional							
1.	Distance of the facility	0.0	2.5	26.5	55.0	16.0	4
2.	Sufficient parking	1.5	4.0	29.0	49.0	16.5	4
3.	Opening and closing time	0.0	3.0	18.0	59.5	19.5	4
4.	Space and layout planning	0.5	2.0	21.5	61.0	15.0	4
5.	Location of toilet	0.5	2.0	40.5	48.5	8.5	4
6.	Location of prayer room	0.6	8.4	42.8	39.8	8.4	3
7.	Location of shop/restaurant	1.0	2.5	25.0	55.5	16.0	4
8.	Number of resting areas	4.0	11.0	34.0	39.0	12.0	4
9.	Number and quality of shops	0.0	4.0	22.0	58.5	15.5	4
10.	Number and quality of restaurants	0.5	5.0	20.0	59.5	15.0	4
11.	Number and quality of entertainment	1.0	3.0	23.5	55.5	17.0	4
12.	Information service center	1.5	5.0	27.5	51.0	15.0	4
Technical							
1.	Adequate temperature (AC)	0.5	3.0	12.0	61.0	23.5	4
2.	Adequate lighting	0.0	2.5	8.5	66.5	22.5	4

Table 4.2 continued

3.	Acoustical comfort	1.0	1.5	16.0	63.5	18.0	4
4.	Adequate air ventilation	0.0	3.5	10.5	64.5	21.5	4
5.	Safety from hazardous/criminal acts	0.5	4.0	16.0	61.0	18.5	4
6.	Adequate emergency exits	1.5	5.0	18.5	56.5	18.5	4
7.	Adequate signage	0.0	2.0	22.5	56.5	19.0	4
8.	Building cleanliness	0.5	1.5	14.0	67.0	17.0	4
9.	Quality and cleanliness of toilet	1.0	3.5	24.0	58.5	13.0	4
10.	Quality and cleanliness of prayer room	0.0	3.6	23.5	61.4	11.4	4
11.	Lift	1.5	3.0	14.5	67.0	14.0	4
12.	Escalator/travelator	1.5	1.5	14.0	68.5	14.5	4
Image							
1.	Decoration/aesthetic value	0.5	1.0	19.5	52.0	27.0	4
2.	Interior design of building	0.0	1.0	18.5	54.5	26.0	4
3.	Exterior design of building	0.5	1.5	21.0	51.0	26.0	4
4.	Internal finishes of building	0.0	0.5	18.5	53.0	28.0	4
5.	External finishes of building	0.5	2.5	21.5	49.0	26.5	4

Table 4.2 depicts all the percentages of respondents for each five-point level of satisfaction. At a glance, the majority of the respondents are satisfied with all the small attributes for each main aspect – functional, technical and image. The percentages are all above 50.0% except for sufficient parking, location of toilet, location of prayer room, number of resting areas, and external finishes of building. These are all the regular complaints among the respondents. By analysing the median or mode, it stipulates 4, indicating that respondents are satisfied with the small attributes of each three main aspects. Merely, the median and mode for the location of the prayer room are 3, meaning that the majority of the respondents were less satisfied. As stated before, the prayer room is located only in Level 1, Level 2, and Level 3, at the corner of Zone A. In general, technical can be summarised as the best service delivered by the management of a shopping mall amidst the three main aspects because many of the small attributes are showing more than 60.0% satisfaction.

b) General opinion of customers

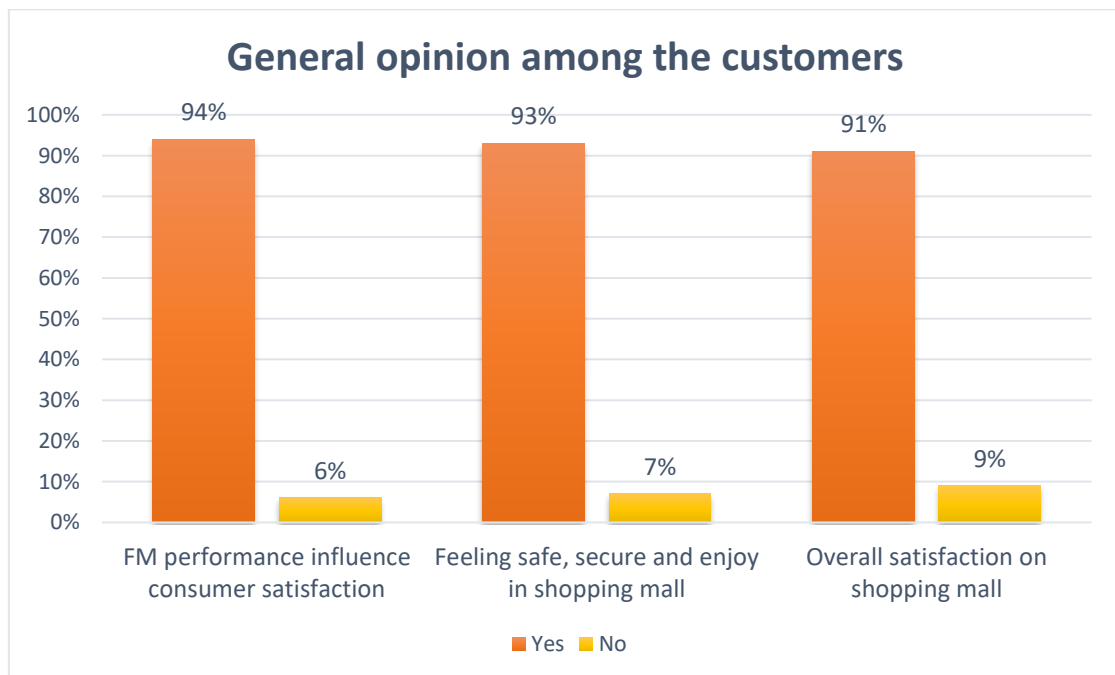


Figure 4.14: Bar Chart for Customers' General Opinion

Figure 4.14 displays the general opinion among the customers on three questions. First, most of the respondents select 'Yes' for facility management performance does influence customer satisfaction with a percentage of 94.0%. Of the balance, 6.0% of the respondents do not support the question. Next, most of the respondents (93.0%) also agreed that they are feeling safe, secure, and enjoy in the shopping mall which indicates that the shopping mall did sufficient work in making sure that the visitors have the best experience. On the contrary, only 91.0% of them are contented with their overall satisfaction with the shopping mall which is slightly lower than the second highest percentage.

This sums up that facility management does have relationships with overall satisfaction and feel-good. Amankwah, Choong, and Mohammed (2019) stipulated Facilities management (FM) experts claim that implementing FM will improve core service delivery and customer satisfaction. Their study about the influence of healthcare facilities management service quality on patients' satisfaction also revealed that patient satisfaction is mediated by FM service quality. It depicts how crucial it is to maintain positive output from the end user. People will genuinely love a place if it is conducive and comfortable to settle down which links back to what facility management is about. The triangle of 'Ps' (people, process, and place) could have been a successful framework if these three are functioning and supporting each other in their interdependent relationship.

Until this day, the significance of facility management cannot be denied because it provides numerous advantages to the end users. Some examples of them are maintaining cleanliness, producing the desired environment, lowering maintenance costs and liabilities, and improving the professional image. On the other hand, a study by Nidhi and Ali (2020) mentioned more advantages of facility management including ensuring the safety of the premises and tenants, maintaining top efficiency in property systems and services, lowering

the cost of operating space, streamlining responsibilities, and tailoring services to individual needs, and allowing property or business managers to concentrate on what matters most to them. They also outlined the impacts of the effective facility management system to prove that its role is very significant as in below:

- a) Machines and equipment are well-maintained and ready to use at all times.
- b) Occupants working in a firm can focus on their essential responsibilities.
- c) Specialized personnel is responsible for the safety and security of workers and machinery.
- d) Supporting services, particularly in the IT industry, are not considered fundamental business operations.
- e) By making better use of the facility, operational excellence can be realised.
- f) Energy bill reduction by better energy usage.
- g) A positive impact on the bottom line, especially for the company that operates out of the facility.
- h) Energy conservation can be included into FM activities to improve FM as a new business opportunity.
- i) Reduced energy use has a positive impact on the environment.

This section is about satisfaction evaluation and knowing the general opinions of the respondents. POE has been a significant tool to obtain the perceptions and requirements to them in this study. However, in such advance and developed countries like the United

Kingdom, there appears to be a reluctance among building professionals to adopt the use of POE in practise (Durosaiye et al., 2019). Despite the enormous number of POE studies that have been undertaken, the knowledge gathered can be difficult to generalise and then feedback to the entire building sector because POE outcomes are generally context-based (Li et al., 2018). Indirectly, this creates a question about the reality and the exact situation in Malaysia regarding the practice of FM and POE. Even though this study conducted both topics, there is a lot more to explore in the future beyond this current thesis.

4.2.4 Suggestions for Overcoming Issues in the Shopping Mall

a) Hygiene and comfort issues

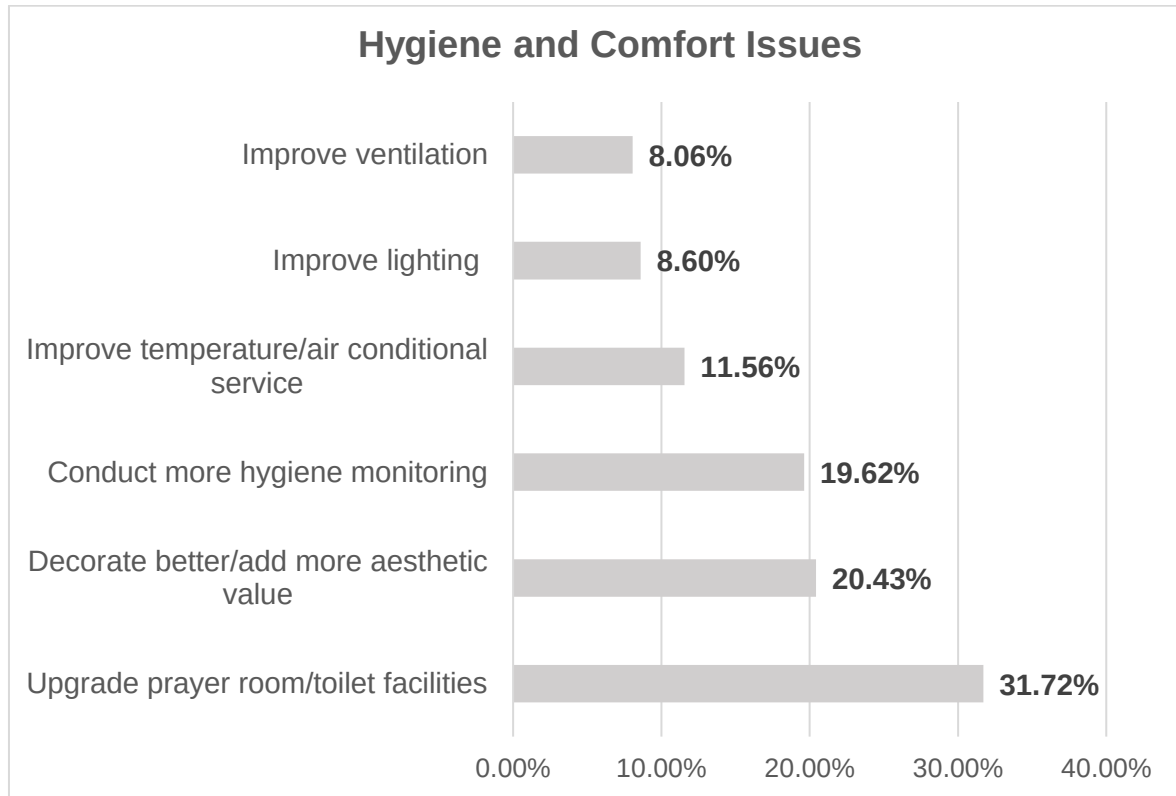


Figure 4.15: Bar Chart for Percentage of Suggestions on Hygiene and Comfort Issues

From the Figure 4.15 above, it stipulates that the highest percentage for suggestions on hygiene and comfort issues is to upgrade prayer room or toilet facilities with a percentage of 31.72%. People must feel very unpleasant about both conditions of the prayer room and toilet. Furthermore, the second highest percentage chosen by the respondents is 20.43% for decorating the shopping mall better. During the site visits, special decorations are put up during the festive season only for-example Hari Raya, Chinese New Year, Deepavali, and Christmas Eve. On random days without an event or festival season, the special decoration is taken off. People also recommended conducting more frequent hygiene monitoring

(19.52%) and improving temperature/air conditioning service (11.56%). These two are very important for customers' comfortable during their day in the shopping mall.

b) Safety and well-being issues

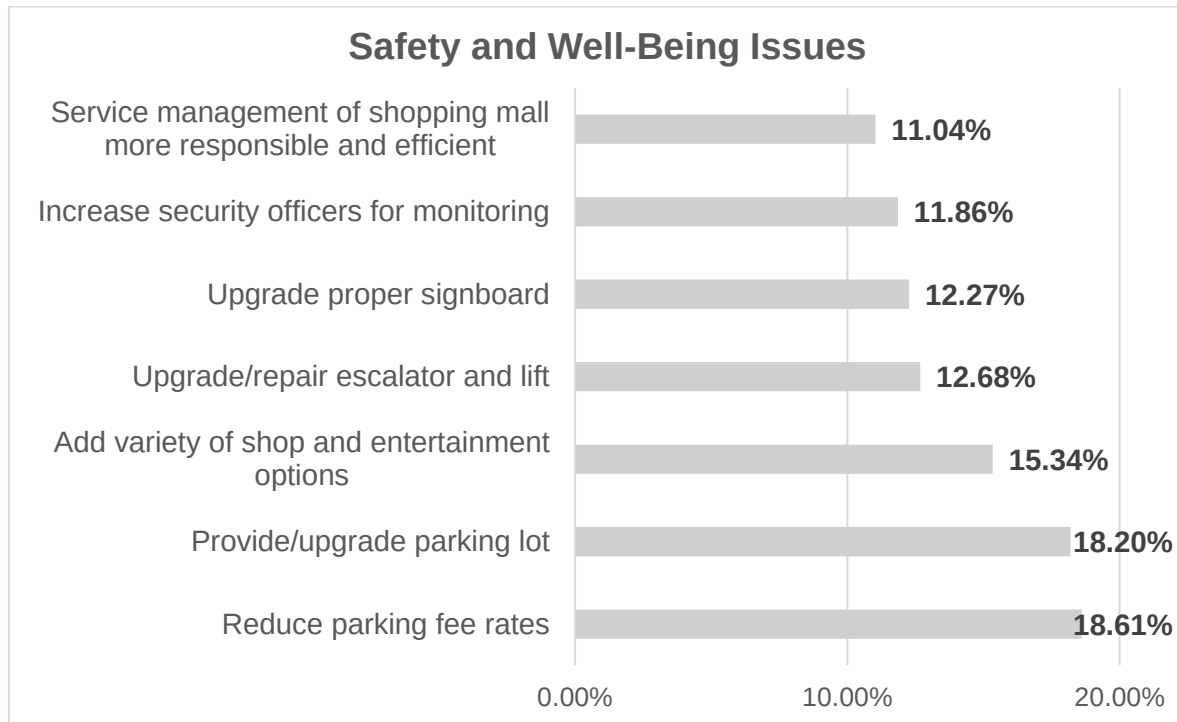


Figure 4.16: Bar Chart for Percentage of Suggestions on Safety and Well-being Issues

Based on Figure 4.16, it indicates the respondents who supported the idea to reduce parking rates have the highest percentage of 18.61% meanwhile, providing or upgrading parking lots is slightly lower with only 18.20%. Parking issues can be put as concerning because many of the respondents reported them in Section B. On the other hand, the lowest percentage for the suggestion is 11.04% which recommends the service management of shopping mall to be more responsible and efficient. Several academics have discussed the pull factors of a shopping mall (Thanaci-Boce et al., 2021; Amin et al., 2020; Calvo-Porrall & Levy-Mangun, 2018; Cortazar & Royo-Vela, 2017; and Wongkerd, 2017). This summarised how critical it is to safeguard the customers' demands and needs.

4.3 Inferential Analysis

There are a few inferential analyses developed in this part from the survey data obtained which are cross-tabulation and Chi-square to measure the differences and association between categorical variables. The next part consists of the complete relationship tests and their explanations.

a) Test between gender and occupation.

H_o : There is no association between gender and occupation

H_a : There is an association between gender and occupation

Table 4.3: Cross-tabulation between Gender and Occupation

Gender * Occupation Cross-tabulation							
			Occupation				
			Public sector	Private sector	Student	Unemployed	Total
Gender	Male	Count	16	31	9	3	59
		Expected Count	15.6	28.3	12.4	2.7	59.0
		% within Gender	27.1%	52.5%	15.3%	5.1%	100.0%
		% within Occupation	30.2%	32.3%	21.4%	33.3%	29.5%
	Female	Count	37	65	33	6	141
		Expected Count	37.4	67.7	29.6	6.3	141.0
		% within Gender	26.2%	46.1%	23.4%	4.3%	100.0%
		% within Occupation	69.8%	67.7%	78.6%	66.7%	70.5%
Total	Count	53	96	42	9	200	
	Expected Count	53.0	96.0	42.0	9.0	200.0	
	% within Gender	26.5%	48.0%	21.0%	4.5%	100.0%	
	% within Occupation	100.0%	100.0%	100.0%	100.0%	100.0%	

Table 4.4: Chi-square Test for Gender and Occupation

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.751 ^a	3	.626
Likelihood Ratio	1.828	3	.609
Linear-by-Linear Association	.344	1	.558
N of Valid Cases	200		
a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 2.66.			

As Table 4.4 shows above, the p-value is 0.626. Assuming the Asymptotic Significance (2-sided) value is 0.05, the p-value for this Chi-square is more than 0.05. It can be concluded that we fail to reject the null hypothesis (H_0). Thus, there is no significant association between gender and occupation. A study by Cortes and Pan (2017) listed factors that affect occupational segregation by gender which are gender preference for job attributes; attitudes towards risk and competition; social preferences; and preferences for workplace flexibility. The same elements that influence men and women to select various professions might also have a direct bearing on the gender wage difference. This concludes that gender and occupation are do not have a direct association.

b) Test between gender and average time spent.

H_o : There is no association between gender and average time spent

H_a : There is an association between gender and average time spent

Table 4.5: Cross-tabulation between Gender and Average Time Spent

Gender * Average time spent Cross-tabulation								
			Average time spent					
			Below one hour	1 hour	2 hours	3 hours	Above 3 hours	Total
Gender	Male	Count	0	7	28	9	15	59
		Expected Count	.6	4.7	22.1	12.7	18.9	59.0
		% within Gender	0.0%	11.9%	47.5%	15.3%	25.4%	100.0%
		% within Average time spent	0.0%	43.8%	37.3%	20.9%	23.4%	29.5%
	Female	Count	2	9	47	34	49	141
		Expected Count	1.4	11.3	52.9	30.3	45.1	141.0
		% within Gender	1.4%	6.4%	33.3%	24.1%	34.8%	100.0%
		% within Average time spent	100.0%	56.3%	62.7%	79.1%	76.6%	70.5%
Total		Count	2	16	75	43	64	200
		Expected Count	2.0	16.0	75.0	43.0	64.0	200.0
		% within Gender	1.0%	8.0%	37.5%	21.5%	32.0%	100.0%
		% within Average time spent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 4.6: Chi-square Test for Gender and Average Time Spent

Chi-Square Tests			
	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	7.261 ^a	4	.123
Likelihood Ratio	7.774	4	.100
Linear-by-Linear Association	3.603	1	.058
N of Valid Cases	200		
a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is .59.			

Table 4.5, it portrays the different percentages between males and females on average time spent in the shopping mall. To prove that female has a higher tendency to love shopping mall, Table 4.5 shares that about 58.9% of female has an average time spent of 3 hours and above in the complex rather than the male with only 40.7%. The p-value of the Chi-square in Table 4.6 is 0.123 which is higher than the significance level of 0.05. Hence, we do not reject the null hypothesis (H_o) where gender and average time spent have no significant association between them. Therefore, the average time spent in a shopping mall does not solely depend on a certain gender because other factors that determine one's behaviour pattern. Rukmani and Sreeya (2019) also found that there is no significant difference between preference of characteristics to shop in malls and gender.

c) Test between age group and average time spent.

H_o : There is no association between age group and average time spent

H_a : There is an association between age group and average time spent

Table 4.7: Chi-square Test for Age Group and Average Time Spent

Chi-Square Tests			
	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	12.247 ^a	20	.907
Likelihood Ratio	11.988	20	.916
Linear-by-Linear Association	.738	1	.390
N of Valid Cases	199		
a. 17 cells (56.7%) have expected count less than 5. The minimum expected count is .01.			

Table 4.7 shows the Pearson Chi-square of age group and average time spent where the p-value is 0.907. Considering the significance level is 0.05, the p-value is more than 0.05. This means we fail to reject the null hypothesis (H_o). Thus, it concludes that there is no relationship between age and average time spent in the shopping mall. People may spend their time suited to their needs whether for shopping, entertainment or eating. Nowadays, shopping malls offer a lot of entertainment, and people frequently spend more time there, regardless of their gender status. For example, some people love to spend hours shopping and eating, while others prefer to watch movies and eat.

d) Test between occupation and average time spent.

H_o : There is no association between occupation and average time spent

H_a : There is an association between occupation and average time spent

Table 4.8: Chi-square Test for Occupation and Average Time Spent

Chi-Square Tests			
	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	34.864 ^a	12	.000
Likelihood Ratio	35.237	12	.000
Linear-by-Linear Association	2.551	1	.110
N of Valid Cases	200		
a. 10 cells (50.0%) have expected count less than 5. The minimum expected count is .09.			

Based on Table 4.8, it indicates that the p-value is 0.000. Presuming the significance level is 0.05, the p-value is less than 0.05, indicating the association between the variables is significant. Therefore, the null hypothesis (H_o) should be rejected. This concludes that occupation and average time has a significant relationship between them. This relates to the power of buying. If a person earns a fair income, they may have more purchasing power to get entertainment, shop, and eat. A study by Lubis (2018) concluded that purchasing power would have been higher if the income had been sufficient to cover daily needs which supports the earlier statement. Indirectly, respondents will also spend more hours in the shopping mall, and this influence the average time spent by a person. This also implies that income level, rather than occupation may influence the length of time in the shopping mall.

e) Test between respondent category and average time spent.

H_0 : There is no association between respondent category and average time spent

H_a : There is an association between respondent category and average time spent

Table 4.9: Cross-tabulation between Respondent Category and Average Time Spent

Respondent category * Average time spent Cross-tabulation								
			Average time spent					
			Below one hour	1 hour	2 hours	3 hours	Above 3 hours	Total
Respondent category	Visitors	Count	2	16	72	43	34	167
		Expected Count	1.7	13.4	62.6	35.9	53.4	167.0
		% within Respondent category	1.2%	9.6%	43.1%	25.7%	20.4%	100.0%
		% within Average time spent	100.0%	100.0%	96.0%	100.0%	53.1%	83.5%
	Shop owner/worker	Count	0	0	1	0	17	18
		Expected Count	.2	1.4	6.8	3.9	5.8	18.0
		% within Respondent category	0.0%	0.0%	5.6%	0.0%	94.4%	100.0%
		% within Average time spent	0.0%	0.0%	1.3%	0.0%	26.6%	9.0%
	Shopping mall building worker	Count	0	0	2	0	13	15
		Expected Count	.2	1.2	5.6	3.2	4.8	15.0
		% within Respondent category	0.0%	0.0%	13.3%	0.0%	86.7%	100.0%
		% within Average time spent	0.0%	0.0%	2.7%	0.0%	20.3%	7.5%
	Total	Count	2	16	75	43	64	200
		Expected Count	2.0	16.0	75.0	43.0	64.0	200.0
		% within Respondent category	1.0%	8.0%	37.5%	21.5%	32.0%	100.0%
		% within Average time spent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 4.10: Chi-square Test for Respondent Category and Average Time Spent

Chi-Square Tests			
	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	63.705 ^a	8	.000
Likelihood Ratio	66.085	8	.000
Linear-by-Linear Association	35.464	1	.000
N of Valid Cases	200		
a. 8 cells (53.3%) have expected count less than 5. The minimum expected count is .15.			

From Table 4.10 the p-value for the relationship between respondent category and average time spent shown is 0.000. It is lower than the estimated significance level which is 0.05. Thus, both have a significant relationship with each other. To remind back, there are three main categories of respondents for this study. They are visitors, shop owners/workers, and shopping mall building workers. In general, working hour requires at least 8 hours in Malaysia for a full-time worker. This means both categories of shop owners/workers and shopping mall building workers will take more average time spent in the shopping mall rather than visitors which suits the percentage in cross-tabulation of Table 4.9.

- f) Test between the importance of facility management and overall shopping mall satisfaction.

H_o : There is no association between the importance of facility management and overall shopping mall satisfaction

H_a : There is an association between the importance of facility management and overall shopping mall satisfaction

Table 4.11: Cross-tabulation between Facility Management and Overall Shopping Mall Satisfaction

Facility management * Overall shopping mall satisfaction Cross-tabulation					
			Overall shopping mall satisfaction		Total
			Yes	No	
Facility management	Yes	Count	180	9	189
		Expected Count	172.9	16.1	189.0
		% within Facility management	95.2%	4.8%	100.0%
		% within Overall shopping mall satisfaction	98.4%	52.9%	94.5%
	No	Count	3	8	11
		Expected Count	10.1	.9	11.0
		% within Facility management	27.3%	72.7%	100.0%
		% within Overall shopping mall satisfaction	1.6%	47.1%	5.5%
Total	Count		183	17	200
	Expected Count		183.0	17.0	200.0
	% within Facility management		91.5%	8.5%	100.0%
	% within Overall shopping mall satisfaction		100.0%	100.0%	100.0%

Table 4.12: Chi-square Test for Facility Management and Overall Shopping Mall Satisfaction

Chi-Square Tests					
	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	61.739 ^a	1	.000		
Continuity Correction ^b	53.310	1	.000		
Likelihood Ratio	31.069	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	61.430	1	.000		
N of Valid Cases	200				
a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is .94.					
b. Computed only for a 2x2 table					

Table 4.12 indicates the p-value is 0.000 which is less than the significance level of 0.05. Therefore, the null hypothesis (H_o) can be rejected. This concludes that there is a significant relationship between the importance of facility management and overall shopping mall satisfaction. Based on a study by Hui, Zhang, and Zheng (2018) regarding facility management service and customer satisfaction in the shopping mall sector, they found that the most important factor affecting overall customer satisfaction is the management and maintenance of communal facilities. Thus, the study upholds the conclusion from the Chi-Square test. The original question about facility management is ‘*Does facility management influence customer satisfaction in the shopping mall?*’. It also can be interpreted as the importance of facility management in this case. Aside from that, it appears that the majority of respondents are aware of the significance of facility management in relation to shopping malls.

g) Test between the importance of facility management and feel-good in the shopping mall.

H_o : There is no association between the importance of facility management and feel-good in the shopping mall

H_a : There is an association between facility management and feel-good in the shopping mall

Table 4.13: Cross-tabulation Facility Management and Feel Good

Facility management * Feel safe, secure & enjoy Cross-tabulation					
			Feel safe, secure & enjoy		
			Yes	No	Total
Facility management	Yes	Count	181	8	189
		Expected Count	176.7	12.3	189.0
		% within Facility management	95.8%	4.2%	100.0%
		% within Feel safe, secure & enjoy	96.8%	61.5%	94.5%
	No	Count	6	5	11
		Expected Count	10.3	.7	11.0
		% within Facility management	54.5%	45.5%	100.0%
		% within Feel safe, secure & enjoy	3.2%	38.5%	5.5%
Total	Count	187	13	200	
	Expected Count	187.0	13.0	200.0	
	% within Facility management	93.5%	6.5%	100.0%	
	% within Feel safe, secure & enjoy	100.0%	100.0%	100.0%	

Table 4.14: Chi-square Test for Facility Management and Feel Good

Chi-Square Tests					
	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	29.064 ^a	1	.000		
Continuity Correction ^b	22.677	1	.000		
Likelihood Ratio	14.792	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	28.918	1	.000		
N of Valid Cases	200				
a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is .72.					
b. Computed only for a 2x2 table					

Based on Table 4.14, it depicts the p-value as 0.000. With the assumption of 0.05 for the significance level, the p-value is less than 0.05. Thus, the null hypothesis (H_0) can be rejected which concludes that the importance of facility management and feel-good have a significant relationship between them. Feel-good here covers the feeling of being safe, secure, and happy. This means the importance of facility management ensures the feeling of safety, security, and happiness towards the shopping mall among the respondents. People may not know the details idea of facility management. However, they do recognise that facility management should be a part of the shopping mall in order to properly utilize its function and provide users with a variety of benefits.

h) Test between gender and feel-good in the shopping mall.

H_o : There is no association between gender and feel-good in the shopping mall

H_a : There is an association between gender and feel-good in the shopping mall

Table 4.15: Cross-tabulation between Gender and Feel Good

Gender * Feel safe, secure & enjoy Cross-tabulation					
			Feel safe, secure & enjoy		
			Yes	No	Total
Gender	Male	Count	57	2	59
		Expected Count	55.2	3.8	59.0
		% within Gender	96.6%	3.4%	100.0%
		% within Fell safe, secure & enjoy i	30.5%	15.4%	29.5%
	Female	Count	130	11	141
		Expected Count	131.8	9.2	141.0
		% within Gender	92.2%	7.8%	100.0%
		% within Fell safe, secure & enjoy	69.5%	84.6%	70.5%
Total	Count	187	13	200	
	Expected Count	187.0	13.0	200.0	
	% within Gender	93.5%	6.5%	100.0%	
	% within Fell safe, secure & enjoy	100.0%	100.0%	100.0%	

Table 4.16: Chi-square Test for Gender and Feel Good

Chi-Square Tests					
	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	1.332 ^a	1	.248		
Continuity Correction ^b	.705	1	.401		
Likelihood Ratio	1.497	1	.221		
Fisher's Exact Test				.352	.205
Linear-by-Linear Association	1.325	1	.250		
N of Valid Cases	200				
a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3.84.					
b. Computed only for a 2x2 table					

As shown in Table 4.15, the percentage of saying ‘Yes’ to feel safe, secure and enjoy for the male is greater than the female with 96.6% and 92.2% respectively. This indicates that male feel the shopping mall is likely adequate for them rather than female. A dangerous place with the probability of crimes may affect the safety and pleasant feeling of a person especially females because they are known as physically weaker than males. In case anything bad happens, they may be unable to defend themselves. Nevertheless, Table 4.16 displays its p-value of 0.248 which is more than the presumption significance level (0.05). Besides that, the Fisher’s Exact test also has a value of more than 0.05. If the overall perception regarding the safety (feel-good) of the shopping mall is high, that should explain why there is no significant difference.

4.4 Observation analysis

This part comprises the facilities, infrastructure, or services offered in Paradigm Mall JB. Additional notes are included regarding the details of the facilities and services. Inclusive discussions on the observation method are covered in Table 4.17 below.

Table 4.17: Facilities and Services Provided in Paradigm Mall JB

Facilities/infrastructure /services	Presence	Amount	Notes
Store opening/closing	/	2 times	• Opening and closing • Closing for late-night movies
Retail shop	/		• Variety of shops – food/drinks/clothing/grocery/beauty/pet/chiropractic/games/IT/
Small shop	/		• Several shops on every level • Except level UG
Air conditioner	/		• Every level
Toilet	/	Every level got three parts for the toilet	• Every level functioning • A few toilets with issues – broken water hose/ no tissue/toilet flush pin/dirty toilet bowl/sink under maintenance/toilet room under maintenance/leaking water hose

Table 4.17 continued

Facilities/infrastructure /services	Presence	Amount	Notes
			• Toilets for disabled people- kids well function but there is under maintenance
Baby's room/diaper changing room	/		• Every level with the toilets
Food court	/	1	• Located in the whole level 4M
Security guard	/		• Entrance door • Sometimes in the parking area (basement) • Sometimes in front of the prayer room/toilet
ATM/Topup	/	2	• CIMB • MEPS
Escalator	/		• There are mainly three parts – Zone A/Zone B/Zone C • Special three escalators to the food arcade (Level 4M). • All escalators are functioning
Lift	/		• There are mainly three parts – Zone A/Zone B/Zone C • Some lifts are not functioning

Table 4.17 continued

Facilities/infrastructure /services	Presence	Amount	Notes
			• Main lift (THE THREE) functioning well.
Parking	/		• Basement parking • Level 5 till level 7
Seating/resting area	/		• Every level
Lost and found service	/		• Called as ‘Concierge counter’ • Level UG
Prayer room	/	3	• Only in level 1, level 2, and level 3. • Separately for male and female • The ablution area quite dirty with mould/mildew • Poor ventilation • Hot • Seats are offered • Hanger is offered • Rack is offered • No ‘telekung’/payer cloth offered • Applied SOP for COVID-19

Table 4.17 continued

Facilities/infrastructure /services	Presence	Amount	Notes
Entertainment area	/		• Cinema – GSC • Arcade • Climbing sport centre • Blue ice-skating rink – the ceiling is moulding/water dripping
Directory information	/		• Every level except the basement and level 7
Fire hose	/		• Every level has fire hoses
Exit door	/		• Exit door to the staircase • There is some malfunctioning exit door
Signboard/signage	/		• Proper signboard to toilet/baby's room/shops/ATM /prayer room/lifts • Advertisement TV screen • The cleaning 'WET FLOOR' board is displayed



Figure 4.17: Layout of Paradigm Mall by Zone

In this observation method, several days were taken to gather the data for the study where 15 February 2022 is the first official observation covering Level 7 to Level 4M. Meanwhile, the rest of Level 4M to the basement is on 18 February for the second observation. There are some other days that the observation method is carried out, particularly during festive seasons such as Hari Raya, Chinese New Year, Deepavali and Christmas Eve from December 2020 until April 2022 to observe the decoration and aesthetic value of the shopping mall. Not just that, random visits to the shopping mall help to add extra information that is unconsciously left behind.

Paradigm Mall JB is actually from an old-abandoned shopping mall building (also known as Kemayan City) which the company, WCT Malls, renovated and rebuilt to become a brand-new setting for people to shop, eat and entertain. It mainly consists of the Basement, Ground Floor, Upper Ground, Level 1, Level 2, Level 3, Level 4, Level 4M, Level 5, Level 6 Level 7, and Level 8 for the visitors. Firstly, Level 7 is where the significant entertainment

area such as the GSC cinema, Camp 5 climbing sports centre, arcade, and gaming shop. However, Level 6 also covers the climbing sports centre. Parking starts at Level 5 until Level 8 after the basement. Therefore, people are complaining about the dangerous slope to parking because they need to go through a few levels before arriving at Level 5. Specifically, Level 4M is only the food court floor where people go there to rest as well as to eat the hot plate, Thai food, Western food, Malay food, drinks, and more. Level 4, Level 3, Level 2, Level 1, Upper Ground, Ground Floor, and Basement offer more variety of retail shops. For instance, clothing, jewellery and timepieces, health and fitness, IT and digital gadget, food and beverages, groceries, beauty and personal care, optical and eye care, home décor and furnishing.

Table 4.17 displays the facilities and services provided by Paradigm Mall Johor Bahru such as retail shops, small shops, air conditioners, safety fire host, toilet, prayer room, baby's room, toilet for disabled people and kids, food court security guard, ATMs, escalator, travelator, lift, parking, seating area, concierge counter, cinema, ice skating rink, wall climbing sport, arcade, directory information, exit or emergency door, and signboard. Basically, the shopping mall has all the typical characteristics of a shopping mall according to National Property Information Centre (NAPIC) as divulged in Chapter 1. The facilities and services provided all are better than a certain ordinary shopping mall.

For this study, the Paradigm Mall is divided manually into Zone A, Zone B and Zone C to simply explain the details of data gained as in Figure 4.17. Zone A heads towards Skudai road while Zone C heads towards Johor Bahru. On the other side, Zone B is between them. The toilet room is always paired with the baby's room which is located in Zone A, Zone B and Zone C near the escalator. Whereas prayer rooms are located only in the corner of Level

1, Level 2, and Level 3 of Zone A. This is why people show a low level of satisfaction with the prayer room location.

The largest regional mall is spanning over 1.3 million square feet. Hence, Muslims need to make more walks to the prayer room especially when they are from the opposite of Zone B and Zone C. The condition of the toilet is rated 5 stars by the Majlis Bandaraya Johor Bahru (MBJB) but during the observation, the toilet is not very clean and sanitary. There are some small litters of plastic and tissue on the floor. The sanitary bin is broken and full of rubbish. Nevertheless, some toilets are very decent for the customers particularly located at the corner where rarely people use them. From this, the number of people who use the toilet may affect its cleanliness of it.

Next, the prayer room has a separate different room between male and female. This is in line with the demands of the Islamic religion regarding the limitations between male and female particularly in their '*awrah*' from each other. The issues of the prayer room have already been discussed before in Chapter 4.2.2 (b) but in addition to the previous discussion, the management of the shopping mall does not provide a proper safety bar or chairs for ablution. People with disabilities or the elderly will be having a hard time compromising the situation. However, they only provide a few stools for people who need a seat to do their prayer. Prayer rooms are located at a distance which is at the corner near the escalator and only available on Level 1, Level 2 as well as Level 3. They have inadequate space despite the enormous shopping mall and the hygiene is not in very good condition. For the lifts, only the main three lift in Zone A is functioning fully and well. Others are mostly still in maintenance until today (13 April 2022). While escalators are all in good shape and can be utilized by customers.

In addition, the Blue Ice-Skating Rink makes the ceiling grows mould, also known as mildew. This is quite concerning to people who have asthma and allergies. Not just that, it can cause other health problems such as nasal congestion, wheezing, chest tightness, coughing and throat irritation. For safety aspects, it was also observed that fire hoses, fire sprinklers, alarm bells, exit doors, and security guards are available in the shopping mall. Some of the emergency exit doors, however, are malfunctioning. This may lead to a higher risk of danger if any emergency happens. ATMs are on the Ground Floor near the Uniqlo clothing shop, while Mechantrade, the money exchanger, is in the basement which is quite far from the user's reach since the building is enormous. Another good thing about Paradigm Mall JB is the touchscreen directory information. They are located strategically and accessible. On the other side, the signboards are actually in good condition and readable.

4.5 Conclusion

Chapter 4 reveals the crucial parts of the findings and discussions for this study. All three research objectives have already been achieved by the methodology implied. Various topics on issues, satisfaction level, and suggestions are covered in this chapter. Most of the respondents are satisfied with the Paradigm Mall JB. Thus, the next chapter is going to be the conclusion and recommendations for this study.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

Chapter 5 presents the summary of major findings, conclusions, and recommendations. A concise description of the major findings is shared in order to make it easier for the reader to grasp the summary. On the other side, the conclusions recap back the whole study in a brief. It focuses on the impact on the community, mall management, developer, and authority, which are all related to this study. Several lacks and problems are discovered during the journey of this study. Recommendations are included to improve better research regarding facility management and shopping mall.

5.2 Summary of Major Findings

An enormous commercial building such as a shopping mall needs a huge amount of effort and consistency to deliver its services to customers. Proper planning and management can build a sturdy whole operation and organisation, especially with the idea of facility management for a building. This study has discovered the potential of facility management to the building performance, including operation and management. Several major findings also have been established through this study.

The first objective has been achieved by evaluating the satisfaction level of customers. From Chapter 4, it can be concluded that functional has a poor-quality performance in its smaller attributes among the three main aspects (functional, technical, and image). Respondents reveal their poor level of satisfaction mainly in parking sufficiency, the location of bathroom, and the location of prayer room. This can be confirmed with the

observation method carried out in this study because there is a correlation between the satisfaction evaluation and the exact situation. The management of shopping mall must take a big note to overcome them with good initiatives so that customers feel welcomed and pleasant.

Despite the low level of satisfaction in the aspect of functional, Paradigm Mall JB performed an excellent job in delivering its services, since the majority of respondents are delighted with the overall satisfaction. This evaluation of satisfaction came up from the ideology of Post Occupancy Evaluation (POE) which assesses the building performance criteria from the aspect of facility management. POE plays a key part in a building's life cycle as feedback to gain information from occupants. We can say that this tool is used efficiently and successfully to determine the perceptions of customers in Paradigm Mall JB.

Not just that, this study has identified the common issues confronted by respondents of Paradigm Mall JB as to answer the second research objective which also helps to identify the unpleasant experience of the customers. Predominantly, there are four major issues highlighted in this study, namely toilet issues, prayer room issues, shopping mall building issues, and parking issues. Toilets and prayer rooms can be segregated into male and female sections, as well as for people with disabilities and kids. Meanwhile, the prayer room is for the Muslims to perform their prayer which is divided for males and females only. Both have the same top three issues which are located distant, narrow, or always full and foul odour. Moreover, the top three issues for the building of the shopping mall are poor decoration, fewer interesting shops, and fewer interesting restaurants according to the survey. For parking issues, fewer parking lot offered, being far from the entrance door and pricey parking fees are all ranked as the highest inconvenient issues. These concerns can be verified through observations conducted at the mall because there is not much difference in issues detected

from the survey and observation method. More attention needs to be focused on these emphasized issues to preserve the trust and loyalty of customers towards Paradigm Mall JB.

Customers strongly supported a few good suggestions to resolve the problems such as upgrading toilet or prayer room facilities, decorating the shopping mall better, conduct more frequent hygiene monitoring on hygiene and comfort aspects. Equally important, they recommended reducing parking fees, providing, or upgrading parking lots and adding a variety of shops and entertainment options for the aspect of safety and well-being. Entertainment promotes the urge to stay at the shopping mall because it has always been about pleasure and fun (Elmashhara & Soares, 2020; and Mohammad Shafiee & Es-Haghi, 2017). The lists are for both aspects prior to the top three ranks. Suggesting solutions play a big role after detecting problems because unnecessary consequences can be avoided in the future. That is why suggestions can help in reducing more critical repercussions. This concludes the third research objective.

This study also reveals that satisfaction level can portray the success of facility management adoption in an organization or institution based on the triangle of 'Ps'. Apart from that, it suggests that people somehow are aware of the necessity of facility management, despite the fact that they have little exposure to the subject, as discussed in Chapter 1. They realise that facility management may assist in the fabrication of productive and efficient work which results in a wonderful output.

5.3 Limitation of Study

Throughout this whole journey of completing the study, one of the challenges is the shopping mall management is unable to agree to an interview session. It is such a big disappointment and a waste because the information from them could have added more details to this study. Most of the information for Paradigm Mall JB obtained are from Paradigm Mall JB's website, directory information in the shopping mall, and general building worker there. They are all still from a good source, but the management of the shopping mall may have a lot to share regarding the background of the shopping mall, its operation and management.

In addition, despite having a total of 250 respondents answered the questionnaire, about 50 questionnaires cannot be used for this study because the information that the respondents have given is incomplete. This may affect the end result and cause confusion and inaccuracy in the study. With the big number of populations, the sample implemented in this study only needs 196 respondents with a 7% margin of error. It is always best to go with a bigger sample because the better it is to represent the whole population.

Next, the survey should have more good questions to discover more about the respondents, especially for inferential analysis where it is used to make inferences and generalisations about population parameters based on sample data. For the observation method, personal surveillance of the male toilet and payer room is not possible since the researcher is a gender of female. As a result, a male friend helped assist in the observation of these two settings.

5.4 Recommendation

First of all, getting a comprehensive interview session from suitable sources is crucial. This is to gain more useful elaborative data for the study. Unfortunately, this study is unable to cover an interview session with the shopping mall management. Hence, it is recommended to have an interview session with the management and operation department of the shopping mall for this kind of study to include their opinions, perspectives, and facts. Make sure to choose a wise set of studies so that people will easily be able to cooperate and lend a hand in the process of data collection. Soft skill is very needed too during the data collection because of the importance to interact with people and surroundings.

Next, this study only exercises three main aspects which are functional, technical, and image for evaluating the satisfaction level. In the future, researchers may use more sub-attributes for each of the main aspects because shopping mall has profuse new characteristics and features nowadays. Some of them include a hotel, indoor park, gym, playground, corporate offices, apartments, and more. Besides that, the three aspects are evaluated based on the condition of Malaysian shopping malls. Different countries may have different attributes to be assessed according to their requirement. For example, attributes related to the functionality of a shopping mall's heater can be analysed. Not all places employ heaters in shopping malls especially a tropical region like Malaysia. Thus, researchers should explore and improvise more about the attributes according to the setting so it will help to contribute to this type of study.

Furthermore, the management of the shopping mall should concern about the complaints from the respondents. Making sure both facilities and services in the shopping mall are reaching customers' demands will be able to build a strong relationship and loyalty between the visitors and the shopping mall. This is because people like to go to comfortable

and attractive places for spending groceries, eat, shopping, and entertainment. Considering the suggestions from this study will help to improve the quality of facilities and services in the shopping mall.

Finally, the local authority, in this case, Majlis Bandaraya Johor Bahru (MBJB), should take more proactive steps in ensuring the shopping mall is able to deliver enormous benefits to the community, especially to the people who live in Johor Bahru. A one-stop centre such as Paradigm Mall JB can help promote informative and interesting competitions, events, or festivals. It can be turned into a public space which is very significant in the community presently. For example, MBJB can promote the Go Green campaign of reuse, reduce, and recycle (3R) by collecting used cooking oil, papers, and clothing. For sure, this will not only help the environment but will educate the community.

The local authority may also enhance more regulations so that the Paradigm Mall JB will keep relevant in many ways instead of becoming a dead building like how it used to be. As for today, MBJB did well in rating the cleanliness of the toilet in the shopping mall so that it complies with a certain standard. Indirectly, the management of the shopping mall will take the initiative to maintain the best quality and performance in cleanliness. Not just that, the issues that are discovered in this study supposedly draw the attention of the local authority to assist them in refining new quality standards and law enforcement for commercial property, especially shopping malls in the future.

5.5 Conclusion

This part is to stress how the findings and results may be important for future policy, practice, or further research. Identifying ways to maintain and improve the quality of service for a shopping mall is crucial to secure the interests of stakeholders, from the top management to the end-user. However, first, please determine the recurrent issues because it helps to detect the actual obstructions in delivering a wonderful service. Customers' affective responses and contentment are reduced when they are stressed (Lucia-Palacios et al., 2020). Recognizing the issues will help in finding out the factors that attract visitors and investors to the shopping mall. This study succeeded in determining customers' problems as in the results of Chapter 4. Therefore, the management of shopping mall may meticulously repair and upgrade their slackness so that customers feel welcome and enjoy their time there.

By applying the idea of Post Occupancy Evaluation (POE), the management of shopping mall can understand the quality performance of their facilities and services. This information can relate to their building performance and how they cope with facility management too. The findings are able to recognize the satisfaction level of the customers through the three main aspects which are functional, technical and image. With the data gathered, the shopping mall management can focus to fix the dissatisfactions one by one. Indeed, conducting a survey is a very good idea to gain information on various perceptions from the customers regarding their current needs, their dissatisfactions, their opinions and more. For example, a survey done by Sapie et al., (2014) has determined three clusters in visitor behaviour patterns. Cluster 1 emphasizes environmental motives, comfort, and reputation of the shopping mall; Cluster 2 prioritizes entertainment and social aspects, while Cluster 3 emphasizes the rational perspective like utilities. The information gathered can be utilized to provide the customers' needs.

The growth of shopping malls nowadays depicts the development in the shopping mall industry and its importance to the local community. Large-scale shopping malls also can help capture the commercial market in new metropolitan areas, as well as boost housing sales in the mall's immediate vicinity (Gao et al., 2019). However, too many shopping malls may be a risk of being abandoned if they do not guard the significance of all stakeholders, especially the visitors. This is because visitors are the main element in influencing the progress of a shopping mall. Shopping malls have devoted clients who not only have a positive perception of the malls but also remain loyal to them (Wei Khong & Sim Ong, 2014). Both developers and management should build dynamic and creative strategies to keep up with the customers' demands. The local authority also must play its role to ensure that developers and shopping malls are able to deliver their function to the community. Not just that, a better-managed shopping mall can enhance the aspect of the economy.

In a nutshell, this study has accomplished all the three objectives. Respondents' perspectives reveal a wide range of issues, suggestions, and satisfaction levels. It is pivotal to address the issues regarding the facilities and services of the shopping mall since it has become a part of the modern community. The fact that the shopping mall is open every day demonstrates how crucial it is for daily use. Facility management is one of the answers to accommodate an institution such as a shopping mall. Somehow respondents understand how important facility management is to shopping malls which can assist the institution in building performance. They believe that facility management may affect their satisfaction. Hence, this study strongly suggests that facility management can be useful to a building or an institution.

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APPENDICES

APPENDIX A

Paradigm Mall Johor Bahru



Front image of Paradigm Mall 1



Front image of Paradigm Mall 2



Front image of Paradigm Mall 3



Front image of Paradigm Mall 4



Lobby of Paradigm Mall



Security guard giving directions



Cars coming from upper level



Going up for upper-level 1



Going down through a dangerous slope 1



Going down through a dangerous slope 2



Going down through a dangerous slope 3



Going up for upper-level 2



Convention center 1



Convention center 2



Directory information machine



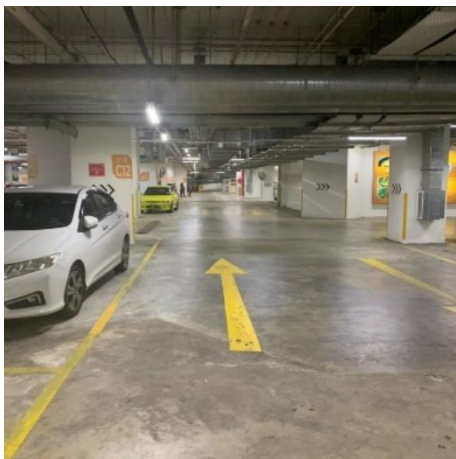
Lift buttons and operation are fine



Parking machine and display of parking fee



Parking sensor is not functioning (no green lights)



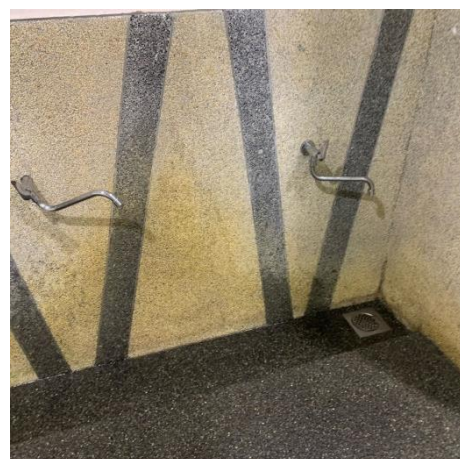
Basement parking condition



Prayer room Level 3



Prayer room Level 3 for women



Molded ablution area



Prayer area with SOP



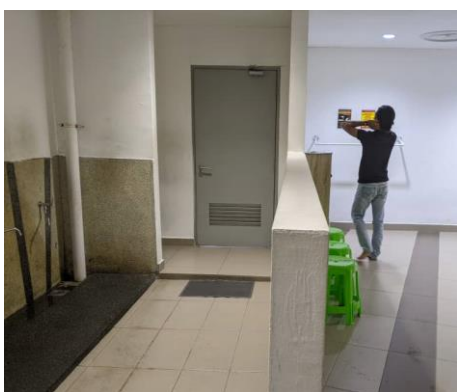
Qiblat certificate



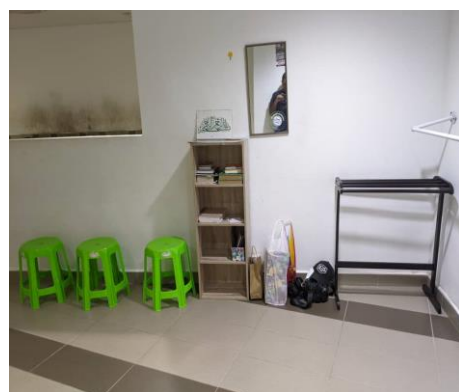
Women prayer room 1



Women prayer room 2



Men prayer room 1



Men prayer room 2



Ice rink



Mould/mildew on the ceiling of ice rink



Entertainment 1



ATMs



Escalator 1



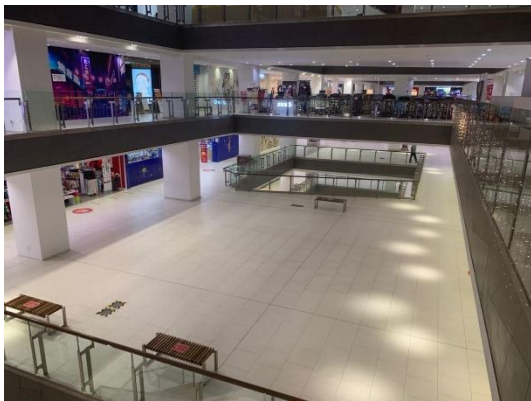
Small shops



Recycle bins



Seating area 1



Seating area 2



Concierge counter



Signboard



Malfunction lift in Level G



Fire sprinkler



Vending machine



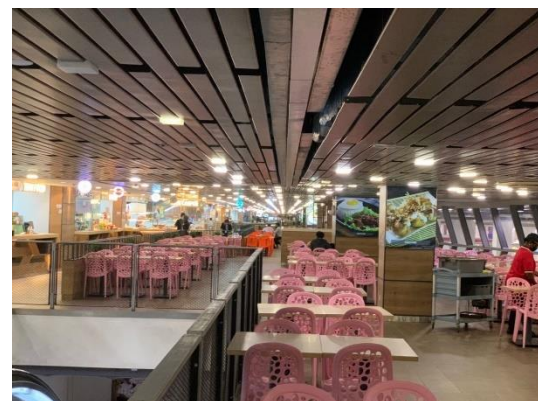
Closed exit doors



Fire hose



Food arcade 1



Food arcade 2



Food arcade 3



MBJB rating star for toilet



Toilet condition 1



Toilet condition 2



Toilet condition 3



Dirty toilet bowl



Malfunction sink



Toilet condition 4



Broken tissue holder



Broken water hose



Cleaning schedule



Broken toilet pump



Toilet for disabled people and children



Baby's room 1



Baby's room 2



Malfunction toilet for disabled people and children



Chinese New Year decoration 1



Chinese New Year decoration 2



Chinese New Year decoration 3



Chinese New Year decoration 4



Bazar Ramadhan 2022 organized by
Paradigm Mall



Ramdhan event 2022



Hari Raya decoration 1



Hari Raya decoration 2



Hari Raya decoration 3



Deepavali decoration



Christmas decoration 1



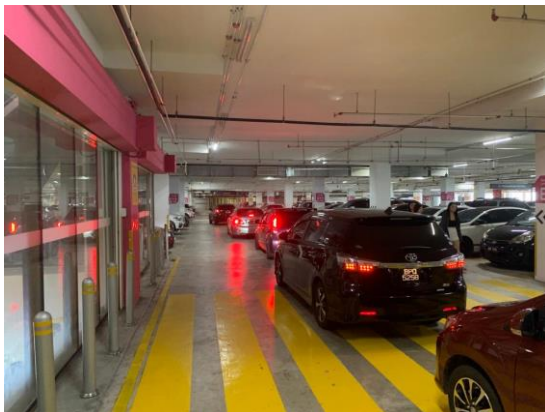
Christmas decoration 2



Motor parking area 1



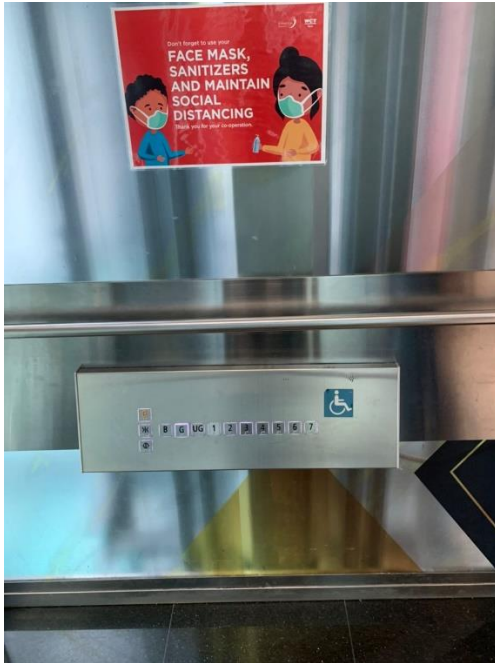
Motor parking area 2



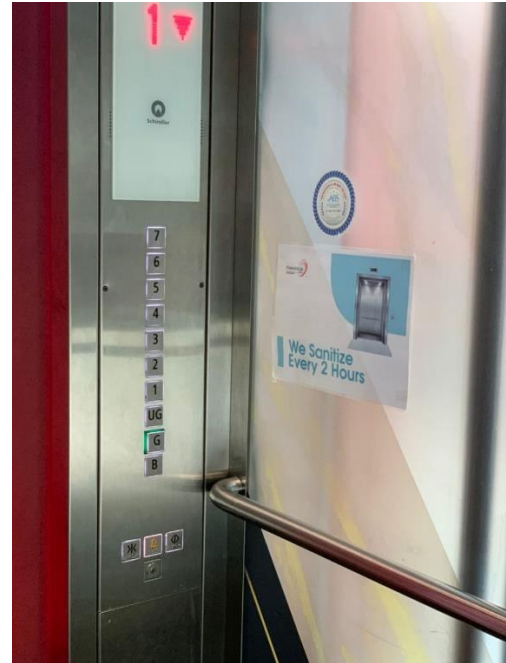
Jammed in parking lot



A guard in basement parking



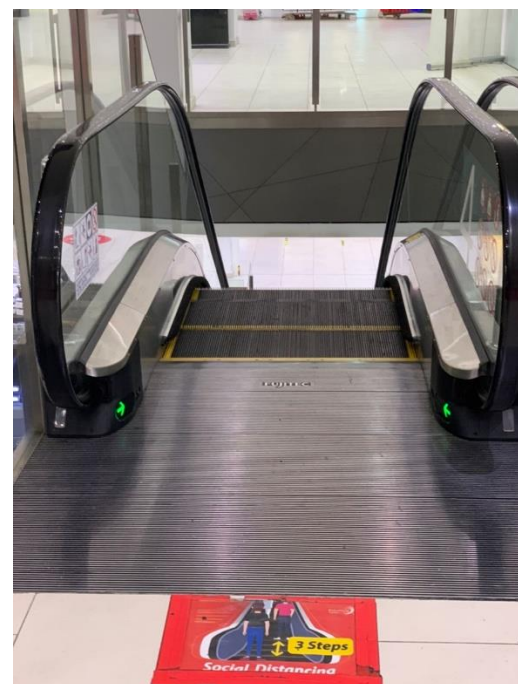
Button lift for PWD



Button lift and armpole



No-smoking signboard and a dustbin



Escalator

APPENDIX B
Questionnaire sample



FAKULTI SAINS SOSIAL DAN KEMANUSIAAN
UNIVERSITI MALAYSIA SARAWAK, KOTA SAMARAHAN, SARAWAK
SARJANA SAINS SOSIAL: KAJIAN PEMBANGUNAN - PERANCANGAN DAN PENGURUSAN

**Tajuk Kajian: Pengurusan Fasiliti dan Persepsi Pelanggan Terhadap Pusat
Beli Belah di Johor Bahru.**

Borang Kaji Selidik

Kajian ini adalah mengenai persepsi pelanggan terhadap pusat beli belah di Paradigm Mall JB (berkaitan dengan Pengurusan Fasiliti). Borang kaji selidik ini adalah untuk kegunaan akademik sahaja dan kerahsiaannya terpelihara. Terdapat 4 bahagian yang perlu diisi. Diharapkan tuan/puan dapat menjawab borang kaji selidik ini secara telus. Kerjasama daripada pihak tuan/puan amatlah dihargai dan terima kasih di atas penyertaan untuk kajian ini.

BAHAGIAN A: DEMOGRAFI

Arahan: Sila tandakan (✓) di ruangan kosong dan jawab soalan berkenaan.

1. Jantina:

Lelaki () 1

Perempuan () 2

2. Bangsa:

Melayu () 1

India () 3

Cina () 2

Lain-lain () 4: _____(nyatakan)

3. Agama:

Islam () 1
Hindu () 2
Buddha () 3
Kristian () 4
Lain-lain () 5: _____(nyatakan)

4. Umur: _____

5. Pekerjaan:

Sektor awam () 1
Sektor swasta () 2
Pelajar () 3
Tidak bekerja () 4

6. Kekerapan ke pusat beli belah:

Setiap hari () 1
Seminggu beberapa kali () 2
Seminggu sekali () 3
Sebulan beberapa kali () 4
Sebulan sekali () 5

7. Alamat/kawasan tempat tinggal:

8. Kategori responden:

Pengunjung () 1
Pengusaha/pekerja kedai () 2
Pekerja bangunan pusat beli belah () 3 — **(e.g: tukang cuci, pengawal keselamatan, pengurus, etc)**

9. Tujuan ke pusat beli belah:

Membeli belah () 1
Hiburan () 2
Bekerja () 3
Makan () 4
Lain-lain () 5: _____(nyatakan)

10. Purata masa dihabiskan di pusat beli belah:

- Kurang sejam () 1
 1 jam () 2
 2 jam () 3
 3 jam () 4
 Lebih 3 jam () 5

BAHAGIAN B: ISU YANG DIHADAPI DI PUSAT BELI BELAH

Arahan: Tandakan (√) mana-mana isu yang anda hadapi di pusat beli belah dan jawab soalan pendek berikut. ***Jika jawapan anda tidak berkaitan, sila tinggalkan soalan tersebut***

Isu		Tanda (√)
Tandas	Kotor	
	Sempit	
	Berbau	
	Rosak	
	Selalu penuh	
	Jauh	
	Suhu terlalu panas	
	Suhu terlalu sejuk	
	Tidak mesra pengguna – OKU/kanak-kanak	
Surau	Kotor	
	Sempit	
	Berbau	
	Rosak	
	Selalu penuh	
	Jauh	
	Suhu terlalu panas	
	Suhu terlalu sejuk	
	Tidak mesra pengguna – OKU/kanak-kanak	
Bangunan pusat beli belah	Kotor	
	Masalah pengudaraan	
	Masalah pencahayaan	
	Suhu terlalu panas	
	Suhu terlalu sejuk	
	Dekorasi/nilai estetik tidak menarik	
	Eskalator/lif rosak	
	Pengurusan servis tidak efisien	
	Keselamatan lemah	
	Papan tanda tidak membantu	
	Kurang kedai menarik	

	Kurang restoran menarik	
	Kurang hiburan menarik	
Tempat letak kenderaan	Jauh	
	Kurang tempat letak kenderaan	
	Reka bentuk ke tempat letak kenderaan melalui cerun yang membahayakan	
	Keselamatan lemah	
	Bayaran tempat letak kenderaan mahal	

- i. Nyatakan isu lain di pusat beli belah selain yang disenaraikan (jika ada):

BAHAGIAN C: PERSEPSI TERHADAP PUSAT BELI BELAH

Arahan: Tentukan dan bulatkan persepsi kepuasan pusat beli belah mengikut skala berikut. *** Jika jawapan anda tidak berkaitan, sila tinggalkan soalan tersebut ***

(1) *Sangat tidak berpuas hati*

(2) *Tidak berpuas hati*

(3) *Kurang berpuas hati*

(4) *Berpuas hati*

(5) *Sangat berpuas hati*

(a) Fungsi (<i>Functional</i>)		
1.	Jarak capaian antara fasiliti/kemudahan	1 2 3 4 5
2.	Kecukupan ruang parkir (tempat letak kenderaan)	1 2 3 4 5
3.	Operasi pembukaan/penutupan pusat beli belah	1 2 3 4 5
4.	Perancangan ruang dan susun atur	1 2 3 4 5
5.	Lokasi bilik air	1 2 3 4 5
6.	Lokasi surau	1 2 3 4 5
7.	Lokasi kedai/restoran	1 2 3 4 5
8.	Bilangan kawasan tempat duduk/rehat	1 2 3 4 5

9.	Bilangan dan kualiti kedai	1 2 3 4 5
10.	Bilangan dan kualiti restoran	1 2 3 4 5
11.	Bilangan dan kualiti hiburan (<i>e.g: panggung wayang, arked, etc</i>)	1 2 3 4 5
12.	Pusat perkhidmatan maklumat/ kaunter pertanyaan	1 2 3 4 5

(b) Teknikal (*Technical*)

1.	Keselesaan suhu/penyaman udara (AC)	1 2 3 4 5
2.	Keselesaan pencahayaan	1 2 3 4 5
3.	Tahap kebisingan/keselesaan akustik	1 2 3 4 5
4.	Pengudaraan dalam bangunan	1 2 3 4 5
5.	Keselamatan daripada bahaya/jenayah	1 2 3 4 5
6.	Laluan/pintu kecemasan	1 2 3 4 5
7.	Papan tanda keselamatan/tanda arah (<i>signboard</i>)	1 2 3 4 5
8.	Kebersihan bangunan	1 2 3 4 5
9.	Kebersihan dan kualiti bilik air	1 2 3 4 5
10.	Kebersihan dan kualiti surau	1 2 3 4 5
11.	Lif	1 2 3 4 5
12.	Eskalator/ <i>Travelator</i>	1 2 3 4 5

(c) Imej (*Image*)

1.	Dekorasi/nilai estetik	1 2 3 4 5
2.	Reka bentuk dalaman pusat beli belah	1 2 3 4 5
3.	Reka bentuk luaran pusat beli belah	1 2 3 4 5
4.	Kemasan dalaman bangunan	1 2 3 4 5
5.	Kemasan luaran bangunan	1 2 3 4 5

i. Adakah anda berasa selesa, selamat dan seronok sepanjang di pusat beli belah?

Ya () 1 Tidak () 2

ii. Pada pendapat anda, adakah prestasi Pengurusan Fasiliti mempengaruhi kepuasan pengguna?

Ya () 1 Tidak () 2

iii. Secara keseluruhan, adakah anda berpuas hati dengan kualiti pusat beli belah di Paradigm Mall JB?

Ya () 1 Tidak () 2

BAHAGIAN D: CADANGAN UNTUK ATASI ISU DI PUSAT BELI BELAH

Arahan: Tandakan (✓) mana-mana cadangan untuk mengatasi isu yang terdapat di pusat beli belah. *** Jika jawapan anda tidak berkaitan, sila tinggalkan soalan tersebut ***

Isu	Cadangan	Tanda (✓)
Isu kebersihan dan keselesaan	Menaik taraf kemudahan surau/tandas	
	Menjalankan pemantauan kebersihan lebih kerap	
	Memperbaiki pengudaraan di pusat beli belah	
	Memperbaiki pencahayaan di pusat beli belah	
	Memperbaiki servis suhu/penyaman udara (AC)	
	Menghias pusat beli belah dengan dekorasi/nilai estetik dengan lebih baik	
Isu keselamatan dan kesejahteraan	Menaik taraf/memperbaiki eskalator dan lif	
	Menambah baik papan tanda	
	Meningkatkan pegawai keselamatan untuk pemantauan keselamatan	
	Menyediakan/memperbaiki tempat letak kenderaan	
	Mengurangkan kadar bayaran tempat letak kenderaan	
	Pengurusan servis pusat beli belah lebih bertanggungjawab dan cekap	
	Menambah variasi pilihan kedai dan hiburan	

-SOALAN TAMAT-

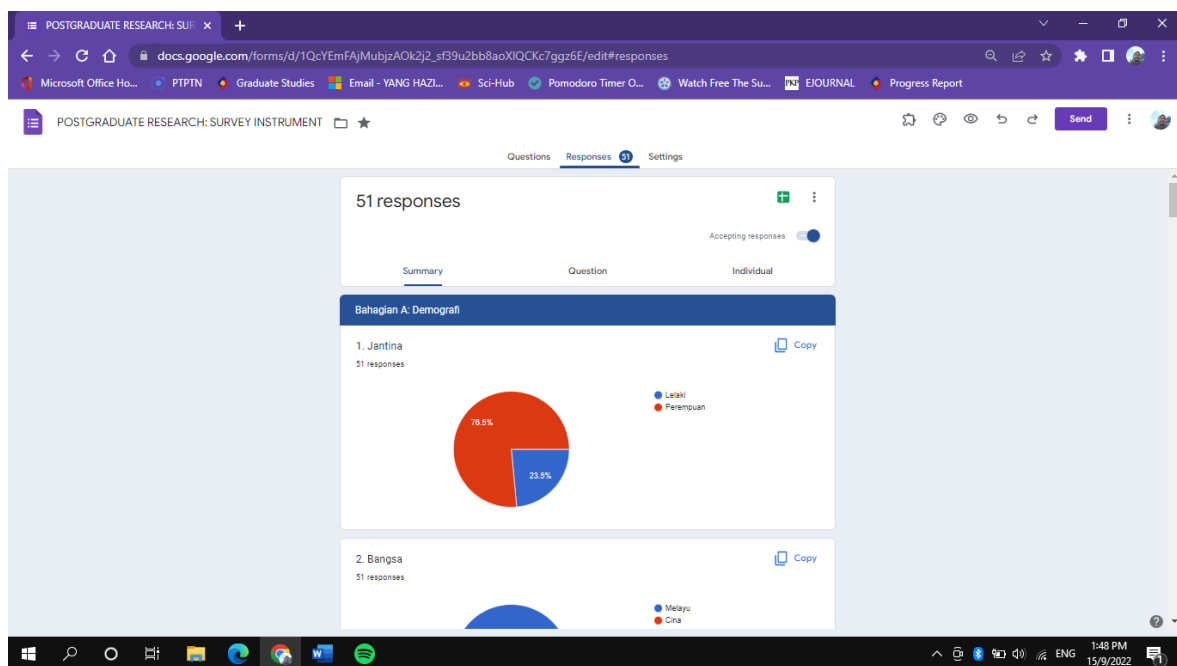
APPENDIX C

Survey by Google Form

POSTGRADUATE RESEARCH: FACILITY MANAGEMENT AND CONSUMERS' PERCEPTIONS TOWARDS SHOPPING MALL IN JOHOR BAHRU.

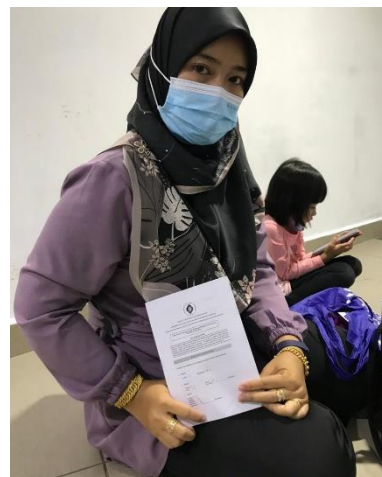
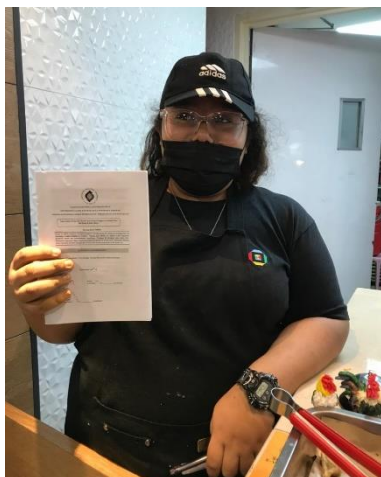
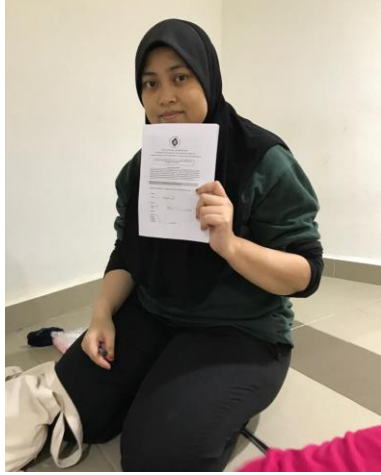
Assalamualaikum dan Selamat Sejahtera, saya merupakan pelajar Sarjana dari Universiti Malaysia Sarawak (UNIMAS). Kajian ini adalah mengenai persepsi pengguna terhadap pusat beli belah di Paradigm Mall Johor Bahru (berkaitan dengan Pengurusan Fasiliti). Borang kaji selidik ini adalah untuk kegunaan akademik sahaja dan kerahsiaannya dijamin. Terdapat 4 bahagian yang perlu diisi. Diharapkan tuan/puan dapat menjawab borang kaji selidik ini secara telus. Kerjasama daripada pihak tuan/puan amatlah dihargai dan terima kasih di atas penyertaan untuk kajian ini.

After section 1 Continue to next section



POSTGRADUATE RESEARCH: SURVEY INSTRUMENT (Responses)											
	A	B	C	D	E	F	G	H	I	J	K
1	Timestamp	1. Jantina	2. Bangsa	3. Agama	4. Umur	5. Pekerjaan	6. Kekerapan ke pusat beli	7. Alamat/kawasan temp.	8. Kategori responden	9. Tujuan ke pusat beli	Purata masa dihabiskan
2	2/23/2022 11:01:08	Perempuan	Melayu	Islam		20 Pelajar	Seminggu beberapa kali	Taman Kempas Indah	Pengunjung	Membeli belah, Hiburan	Lebih 3 jam
3	2/23/2022 11:56:04	Perempuan	Melayu	Islam		24 Pelajar	Seminggu sekali	Bandar Baru Uda	Pengunjung	Membeli belah, Hiburan	2 jam
4	2/23/2022 11:59:51	Perempuan	Melayu	Islam		24 Sektor swasta	Sebulan sekali	Taman Nusa Damai, Pas	Pengunjung	Membeli belah, Hiburan	3 jam
5	2/23/2022 12:00:45	Perempuan	Melayu	Islam		24 Sektor swasta	Sebulan sekali	Daerah Johor Bahru	Pengunjung	Membeli belah, Hiburan	1 jam
6	2/23/2022 12:02:26	Lelaki	Melayu	Islam		26 Sektor swasta	Seminggu sekali	Shah Alam Selangor	Pengunjung	Membeli belah, Makanan	1 jam
7	2/23/2022 12:05:04	Perempuan	Melayu	Islam		23 Sektor swasta	Sebulan sekali	Johor bahr	Pengunjung	Hiburan	Lebih 3 jam
8	2/23/2022 12:05:48	Perempuan	Melayu	Islam		25 Sektor swasta	Sebulan sekali	Johor Bahru	Pengunjung	Membeli belah, Hiburan	Lebih 3 jam
9	2/23/2022 12:10:45	Perempuan	India	Islam		24 Sektor swasta	Berkala	Taman Johor Jaya, Joho	Pengunjung	Membeli belah, Hiburan	2 jam
10	2/23/2022 12:12:32	Perempuan	Melayu	Islam	21 tahun	Pelajar	Sebulan sekali	Johor Bahru	Pengunjung	Membeli belah, Hiburan	Lebih 3 jam
11	2/23/2022 12:25:05	Perempuan	Melayu	Islam		24 Sektor swasta	Sebulan sekali	Johor bahr	Pengunjung	Membeli belah	2 jam
12	2/23/2022 12:32:43	Lelaki	Melayu	Islam		24 Sektor swasta	Seminggu sekali	taman bukit dahlia pasir	Pengunjung	Membeli belah	2 jam
13	2/23/2022 12:42:39	Lelaki	Melayu	Islam		24 Pelajar	Sebulan sekali	Bandar Baru Uda	Pengunjung	Membeli belah, Makanan	1 jam
14	2/23/2022 14:13:42	Perempuan	Melayu	Islam		24 Pelajar	Berkala	Bandar Baru Uda	Pengunjung	Membeli belah, Hiburan	3 jam
15	2/23/2022 15:48:37	Perempuan	Melayu	Islam		24 Sektor swasta	Sebulan sekali	Taman Sri Skudai	Pengunjung	Membeli belah	1 jam
16	2/23/2022 18:28:50	Lelaki	Melayu	Islam		22 Sektor swasta	Berkala	Pekan Nanas	Pengunjung	Hiburan	2 jam
17	2/23/2022 19:21:59	Perempuan	Melayu	Islam		24 Pelajar	Seminggu sekali	Taman Bukit Mewah	Pengunjung	Membeli belah, Hiburan	2 jam
18	2/23/2022 20:31:23	Perempuan	Melayu	Islam		24 Sektor swasta	Berkala	Kulai, Johor	Pengunjung	Membeli belah, Hiburan	Lebih 3 jam
19	2/23/2022 20:43:18	Perempuan	Melayu	Islam		22 Pelajar	Seminggu sekali	Taman Daya JB	Pengunjung	Membeli belah, Hiburan	2 jam
20	2/23/2022 20:50:46	Perempuan	Melayu	Islam		22 Sektor awam	Sebulan sekali	21, jalan pulau indah 3/14	Pengunjung	Membeli belah, Makanan	Lebih 3 jam
21	2/23/2022 21:08:53	Perempuan	Melayu	Islam		24 Sektor awam	Berkala	Bbu	Pengunjung	Hiburan	3 jam
22	2/23/2022 23:13:13	Perempuan	Melayu	Islam		24 Sektor swasta	Berkala	Sabak Bernam	Pengunjung	Membeli belah, Hiburan	2 jam
23	2/24/2022 9:53:18	Perempuan	Melayu	Islam		25 Sektor swasta	Seminggu beberapa kali	Seni Manjung, Perak	Pengunjung	Membeli belah, Hiburan	Lebih 3 jam
24	2/24/2022 11:14:18	Perempuan	Melayu	Islam		24 Pelajar	Seminggu beberapa kali	Bandar Baru UDA	Pengunjung	Membeli belah, Hiburan	3 jam
25	2/24/2022 23:39:47	Lelaki	Melayu	Islam		25 Sektor swasta	Sebulan sekali	Pasir gudang	Pengunjung	Membeli belah, Hiburan	2 jam
26	2/25/2022 16:19:22	Perempuan	Melayu	Islam		24 Sektor swasta	Berkala	Pasir gudang	Pengunjung	Membeli belah, Hiburan	2 jam
27	2/25/2022 16:25:01	Perempuan	Melayu	Islam		24 Sektor awam	Seminggu sekali	bukit indah johor	Pengunjung	Membeli belah, Hiburan	2 jam
28	2/25/2022 15:32:46	Perempuan	Melayu	Islam		24 Sektor swasta	Seminggu beberapa kali	Taman impian emas	Pengunjung	Membeli belah, Makanan	2 jam
29	2/25/2022 15:56:53	Perempuan	Melayu	Islam		23 Sektor swasta	Seminggu beberapa kali	Taman pelangi	Pengunjung	Hiburan	1 jam
30	2/25/2022 16:01:51	Perempuan	Melayu	Islam		24 Sektor swasta	Seminggu sekali	Senai	Pengunjung	Membeli belah, Hiburan	3 jam

APPENDIX D
Respondents for survey



APPENDIX E

Observation checklist



FACULTY OF SOCIAL SCIENCES AND HUMANITIES

UNIVERSITI MALAYSIA SARAWAK, KOTA SAMARAHAN, SARAWAK

MASTER OF SOCIAL SCIENCES: DEVELOPMENT STUDIES – PLANNING AND MANAGEMENT

Observation Instrument: Facility Management and Customers' Perceptions Towards Shopping Mall in Johor Bahru – Paradigm Mall JB

Facilities/infrastructure/service offered

Facilities/infrastructure/service	Presence	Amount	Notes
Store opening/closing			
Outlet			

Small shop			
Air conditioner			
Fire host			
Toilet			
Baby's room/diaper changing room			
Food court			

Security guard			
ATM/Topup			
Escalator			
Lift			
Parking			
Seating/resting area			

Lost and found service			
Prayer room			
Entertainment area			
Directory information			
Fire hose			

Exit door			
Signboard/signage			

APPENDIX F

SPSS for data analysis and data collection

	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
1	Gender	Numeric	8	0	A1	{1, Male}...	None	8	Right	Nominal	Input
2	Ethnicity	Numeric	1	0	A2	{1, Malay}...	None	8	Right	Nominal	Input
3	Ethnic	Numeric	40	0	A2_a	None	None	8	Right	Scale	Input
4	Religion	Numeric	1	0	A3	{1, Islam}...	None	8	Right	Scale	Input
5	Age	Numeric	8	0	A4	None	None	8	Right	Scale	Input
6	Age_1	Numeric	8	0	A4_a	{1, Below 1...	None	8	Right	Scale	Input
7	Occupation	Numeric	1	0	A5	{1, Public s...	None	8	Right	Scale	Input
8	Frequency...	Numeric	1	0	A6	{1, Every da...	None	8	Right	Scale	Input
9	Address	String	100	0	A7	None	None	8	Left	Nominal	Input
10	Respondent...	Numeric	1	0	A8	{1, Visitors}...	None	8	Right	Scale	Input
11	Purpose_shop	Numeric	1	0	A9_shop	{1, Yes}...	None	8	Right	Nominal	Input
12	Purpose_en...	Numeric	1	0	A9_ent	{1, Yes}...	None	8	Right	Nominal	Input
13	Purpose_wo...	Numeric	1	0	A9_work	{1, Yes}...	None	8	Right	Nominal	Input
14	Purpose_eat	Numeric	1	0	A9_eat	{1, Yes}...	None	8	Right	Nominal	Input
15	Purpose_wi...	Numeric	40	0	A9_a	{1, Yes}...	None	8	Right	Nominal	Input
16	Average_tim...	Numeric	1	0	A10	{1, Below o...	None	8	Right	Nominal	Input
17	IssueToilet...	Numeric	1	0	Dirty	{1, Yes}...	None	8	Right	Nominal	Input
18	IssueToilet...	Numeric	1	0	Narrow	{1, Yes}...	None	8	Right	Nominal	Input
19	IssueToilet...	Numeric	1	0	Foul odour	{1, Yes}...	None	8	Right	Nominal	Input
20	IssueToilet...	Numeric	1	0	Broken	{1, Yes}...	None	8	Right	Nominal	Input
21	IssueToilet...	Numeric	1	0	Always full	{1, Yes}...	None	8	Right	Nominal	Input
22	IssueToilet...	Numeric	1	0	Far	{1, Yes}...	None	8	Right	Nominal	Input
23	IssueToilet...	Numeric	1	0	Hot temperature	{1, Yes}...	None	8	Right	Nominal	Input
24	IssueToilet...	Numeric	1	0	Cold temperature	{1, Yes}...	None	8	Right	Nominal	Input

	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
25	IssueToilet...	Numeric	1	0	Not user friendly	{1, Yes}...	None	8	Right	Nominal	Input
26	IssueSurau...	Numeric	1	0	Dirty	{1, Yes}...	None	8	Right	Nominal	Input
27	IssueSurau...	Numeric	1	0	Narrow	{1, Yes}...	None	8	Right	Nominal	Input
28	IssueSurau...	Numeric	1	0	Foul odour	{1, Yes}...	None	8	Right	Nominal	Input
29	IssueSurau...	Numeric	1	0	Broken	{1, Yes}...	None	8	Right	Nominal	Input
30	IssueSurau...	Numeric	1	0	Always full	{1, Yes}...	None	8	Right	Nominal	Input
31	IssueSurau...	Numeric	1	0	Far	{1, Yes}...	None	8	Right	Nominal	Input
32	IssueSurau...	Numeric	1	0	Hot temperature	{1, Yes}...	None	8	Right	Nominal	Input
33	IssueSurau...	Numeric	1	0	Cold temperature	{1, Yes}...	None	8	Right	Nominal	Input
34	IssueSurau...	Numeric	1	0	Not user friendly	{1, Yes}...	None	8	Right	Nominal	Input
35	IssueMall_D...	Numeric	1	0	Dirty	{1, Yes}...	None	8	Right	Nominal	Input
36	IssueMall_V...	Numeric	1	0	Ventilation prob...	{1, Yes}...	None	8	Right	Nominal	Input
37	IssueMall_L...	Numeric	1	0	Lighting problem	{1, Yes}...	None	8	Right	Nominal	Input
38	IssueMall_T...	Numeric	1	0	Hot temperature	{1, Yes}...	None	8	Right	Nominal	Input
39	IssueMall_T...	Numeric	1	0	Cold temperature	{1, Yes}...	None	8	Right	Nominal	Input
40	IssueMall_P...	Numeric	1	0	Poor decoration...	{1, Yes}...	None	8	Right	Nominal	Input
41	IssueMall_B...	Numeric	1	0	Broken escalat...	{1, Yes}...	None	8	Right	Nominal	Input
42	IssueMall_I...	Numeric	1	0	Inefficient mana...	{1, Yes}...	None	8	Right	Nominal	Input
43	IssueMall_P...	Numeric	1	0	Poor security	{1, Yes}...	None	8	Right	Nominal	Input
44	IssueMall_P...	Numeric	1	0	Poor directiona...	{1, Yes}...	None	8	Right	Nominal	Input
45	IssueMall_L...	Numeric	1	0	Less interestin...	{1, Yes}...	None	8	Right	Nominal	Input
46	IssueMall_L...	Numeric	1	0	Less interestin...	{1, Yes}...	None	8	Right	Nominal	Input
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postgraduate analysis1.sav [DataSet1] - IBM SPSS Statistics Data Editor												
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49	IssueParkin...	Numeric	1	0	Less parking lo...	{1, Yes}...	None	8	Right	Nominal	Input	
50	IssueParkin...	Numeric	1	0	Dangerous slop...	{1, Yes}...	None	8	Right	Nominal	Input	
51	IssueParkin...	Numeric	1	0	Poor security	{1, Yes}...	None	8	Right	Nominal	Input	
52	IssueParkin...	Numeric	1	0	Pricey parking f...	{1, Yes}...	None	8	Right	Nominal	Input	
53	Other_issu...	String	100	0	B5	None	None	8	Left	Nominal	Input	
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55	Availability...	Numeric	8	0	CA2	{1, Very not...	None	8	Right	Scale	Input	
56	Opening_an...	Numeric	8	0	CA3	{1, Very not...	None	8	Right	Scale	Input	
57	Space_plan...	Numeric	8	0	CA4	{1, Very not...	None	8	Right	Scale	Input	
58	Toilet_locat...	Numeric	8	0	CA5	{1, Very not...	None	8	Right	Scale	Input	
59	Prayer_roo...	Numeric	8	0	CA6	{1, Very not...	None	8	Right	Scale	Input	
60	Shop_or_re...	Numeric	8	0	CA7	{1, Very not...	None	8	Right	Scale	Input	
61	Number_of...	Numeric	8	0	CA8	{1, Very not...	None	8	Right	Scale	Input	
62	Number_an...	Numeric	8	0	CA9	{1, Very not...	None	8	Right	Scale	Input	
63	Number_an...	Numeric	8	0	CA10	{1, Very not...	None	8	Right	Scale	Input	
64	Number_an...	Numeric	8	0	CA11	{1, Very not...	None	8	Right	Scale	Input	
65	Information...	Numeric	8	0	CA12	{1, Very not...	None	8	Right	Scale	Input	
66	Thermal_co...	Numeric	8	0	CB1	{1, Very not...	None	8	Right	Scale	Input	
67	Lighting_co...	Numeric	8	0	CB2	{1, Very not...	None	8	Right	Scale	Input	
68	Acoustical...	Numeric	8	0	CB3	{1, Very not...	None	8	Right	Scale	Input	
69	Building_ve...	Numeric	8	0	CB4	{1, Very not...	None	8	Right	Scale	Input	
70	Safety_from...	Numeric	8	0	CB5	{1, Very not...	None	8	Right	Scale	Input	
71	Emergency...	Numeric	8	0	CB6	{1, Very not...	None	8	Right	Scale	Input	
72	Safety_sign...	Numeric	8	0	CB7	{1, Very not...	None	8	Right	Scale	Input	
73	Cleanliness...	Numeric	8	0	CB8	{1, Very not...	None	8	Right	Scale	Input	
74	Cleanliness...	Numeric	8	0	CB9	{1, Very not...	None	8	Right	Scale	Input	
75	Cleanliness...	Numeric	8	0	CB10	{1, Very not...	None	8	Right	Scale	Input	
76	Lift	Numeric	8	0	CB11	{1, Very not...	None	8	Right	Scale	Input	
77	Escalator_o...	Numeric	8	0	CB12	{1, Very not...	None	8	Right	Scale	Input	
78	Decoration...	Numeric	8	0	CC1	{1, Very not...	None	8	Right	Scale	Input	
79	Interior_des...	Numeric	8	0	CC2	{1, Very not...	None	8	Right	Scale	Input	
80	Exterior_de...	Numeric	8	0	CC3	{1, Very not...	None	8	Right	Scale	Input	
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82	External_fini...	Numeric	8	0	CC5	{1, Very not...	None	8	Right	Scale	Input	
83	Comfort_saf...	Numeric	8	0	Ci	{1, Yes}...	None	8	Right	Nominal	Input	
84	FM_perfor...	Numeric	8	0	Cii	{1, Yes}...	None	8	Right	Nominal	Input	
85	Overall_sati...	Numeric	8	0	Ciii	{1, Yes}...	None	8	Right	Nominal	Input	
86	Hygieneco...	Numeric	8	0	Upgrade prayer...	{1, Yes}...	None	8	Right	Nominal	Input	
87	Hygieneco...	Numeric	8	0	Upgrade praye...	{1, Yes}...	None	8	Right	Nominal	Input	

postgraduate analysis1.sav [DataSet1] - IBM SPSS Statistics Data Editor												
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66	Thermal_co...	Numeric	8	0	CB1	{1, Very not...	None	8	Right	Scale	Input	
67	Lighting_co...	Numeric	8	0	CB2	{1, Very not...	None	8	Right	Scale	Input	
68	Acoustical...	Numeric	8	0	CB3	{1, Very not...	None	8	Right	Scale	Input	
69	Building_ve...	Numeric	8	0	CB4	{1, Very not...	None	8	Right	Scale	Input	
70	Safety_from...	Numeric	8	0	CB5	{1, Very not...	None	8	Right	Scale	Input	
71	Emergency...	Numeric	8	0	CB6	{1, Very not...	None	8	Right	Scale	Input	
72	Safety_sign...	Numeric	8	0	CB7	{1, Very not...	None	8	Right	Scale	Input	
73	Cleanliness...	Numeric	8	0	CB8	{1, Very not...	None	8	Right	Scale	Input	
74	Cleanliness...	Numeric	8	0	CB9	{1, Very not...	None	8	Right	Scale	Input	
75	Cleanliness...	Numeric	8	0	CB10	{1, Very not...	None	8	Right	Scale	Input	
76	Lift	Numeric	8	0	CB11	{1, Very not...	None	8	Right	Scale	Input	
77	Escalator_o...	Numeric	8	0	CB12	{1, Very not...	None	8	Right	Scale	Input	
78	Decoration...	Numeric	8	0	CC1	{1, Very not...	None	8	Right	Scale	Input	
79	Interior_des...	Numeric	8	0	CC2	{1, Very not...	None	8	Right	Scale	Input	
80	Exterior_de...	Numeric	8	0	CC3	{1, Very not...	None	8	Right	Scale	Input	
81	Internal_fini...	Numeric	8	0	CC4	{1, Very not...	None	8	Right	Scale	Input	
82	External_fini...	Numeric	8	0	CC5	{1, Very not...	None	8	Right	Scale	Input	
83	Comfort_saf...	Numeric	8	0	Ci	{1, Yes}...	None	8	Right	Nominal	Input	
84	FM_perfor...	Numeric	8	0	Cii	{1, Yes}...	None	8	Right	Nominal	Input	
85	Overall_sati...	Numeric	8	0	Ciii	{1, Yes}...	None	8	Right	Nominal	Input	
86	Hygieneco...	Numeric	8	0	Upgrade prayer...	{1, Yes}...	None	8	Right	Nominal	Input	
87	Hygieneco...	Numeric	8	0	Upgrade praye...	{1, Yes}...	None	8	Right	Nominal	Input	

postgraduate analysis1.sav [DataSet1] - IBM SPSS Statistics Data Editor

File Edit View Data Transform Analyze Graphs Utilities Extensions Window Help

	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
78	Decorat...	Numeric	8	0	CC1	{1, Very not...	None	8	Right	Scale	Input
79	Interior_desi...	Numeric	8	0	CC2	{1, Very not...	None	8	Right	Scale	Input
80	Exterior_de...	Numeric	8	0	CC3	{1, Very not...	None	8	Right	Scale	Input
81	Internal_fini...	Numeric	8	0	CC4	{1, Very not...	None	8	Right	Scale	Input
82	External_fini...	Numeric	8	0	CC5	{1, Very not...	None	8	Right	Scale	Input
83	Comfort_saf...	Numeric	8	0	Ci	{1, Yes}...	None	8	Right	Nominal	Input
84	FM_perfor...	Numeric	8	0	Cii	{1, Yes}...	None	8	Right	Nominal	Input
85	Overall_sati...	Numeric	8	0	Ciii	{1, Yes}...	None	8	Right	Nominal	Input
86	Hygieneco...	Numeric	8	0	Upgrade prayer...	{1, Yes}...	None	8	Right	Nominal	Input
87	Hygieneco...	Numeric	8	0	Conduct more f...	{1, Yes}...	None	8	Right	Nominal	Input
88	Hygieneco...	Numeric	8	0	Improve ventilati...	{1, Yes}...	None	8	Right	Nominal	Input
89	Hygieneco...	Numeric	8	0	Improve lighting...	{1, Yes}...	None	8	Right	Nominal	Input
90	Hygieneco...	Numeric	8	0	Improve temper...	{1, Yes}...	None	8	Right	Nominal	Input
91	Hygieneco...	Numeric	8	0	Decorate the s...	{1, Yes}...	None	8	Right	Nominal	Input
92	Safetywellb...	Numeric	7	0	Upgrade/repair ...	{1, Yes}...	None	8	Right	Nominal	Input
93	Safetywellb...	Numeric	8	0	Upgrade to pro...	{1, Yes}...	None	8	Right	Nominal	Input
94	Safetywellb...	Numeric	8	0	Increase secur...	{1, Yes}...	None	8	Right	Nominal	Input
95	Safetywellb...	Numeric	8	0	Provide/upgrad...	{1, Yes}...	None	8	Right	Nominal	Input
96	Safetywellb...	Numeric	8	0	Reduce parking...	{1, Yes}...	None	8	Right	Nominal	Input
97	Safetywellb...	Numeric	8	0	Service manag...	{1, Yes}...	None	8	Right	Nominal	Input
98	Safetywellb...	Numeric	8	0	Add variety of s...	{1, Yes}...	None	8	Right	Nominal	Input
99	Age_Group	Numeric	8	0		None	None	11	Right	Nominal	Input
100											
101											

Data View Variable View

IBM SPSS Statistics Processor is ready Unicode:ON

9:46 AM 15/9/2022

postgraduate analysis1.sav [DataSet1] - IBM SPSS Statistics Data Editor

File Edit View Data Transform Analyze Graphs Utilities Extensions Window Help

Visible: 99 of 99 Variables

	Gender	Ethnicity	Ethnic	Religion	Age	Age_1	Occupati on	Frequenc y_mall	Address	Responde nt_catego ry	Purpose shop	Purpose entertain ment	Purpose working	Purpose eat	Purpose windowsh op	A in
1	2	1	.	1	24	.	3	3	Bandar Bar...	1	1	1	2	1	.	.
2	2	1	.	1	24	.	2	5	Taman Nu...	1	1	1	2	1	.	.
3	2	1	.	1	24	.	2	5	Daerah Joh...	1	1	1	2	1	.	.
4	1	1	.	1	26	.	2	3		1	1	2	2	1	.	.
5	2	1	.	1	23	.	2	5	Johor Bahru	1	2	1	1	1	.	.
6	2	1	.	1	25	.	2	5	Johor Bahru	1	1	1	2	1	.	.
7	2	3	.	1	24	.	2	4	Taman Joh...	1	1	1	2	1	.	.
8	2	1	.	1	21	.	3	5	Johor Bahru	1	1	1	2	2	.	.
9	2	1	.	1	24	.	2	5	Johor Bahru	1	1	2	2	2	.	.
10	1	1	.	1	25	.	2	1	Taman Ter...	3	2	2	1	2	.	.
11	2	1	.	1	25	.	3	2	UTM Skudai	1	1	1	2	1	.	.
12	2	1	.	1	22	.	2	4	Tampoi	1	2	1	2	2	.	.
13	2	1	.	1	39	.	2	5	Larkin	1	1	2	2	2	.	.
14	2	1	.	1	34	.	2	5	Larkin	1	1	2	2	2	.	.
15	2	1	.	1	34	.	2	5	Larkin, JB	1	1	1	2	1	.	.
16	2	1	.	1	30	.	2	5	Larkin	1	1	1	2	1	.	.
17	1	1	.	1	30	.	2	4	Kangkar P...	1	2	1	2	2	.	.
18	2	1	.	1	26	.	3	5	UTM Skud...	1	1	2	2	2	.	.
19	2	1	.	1	24	.	3	3	UTM Skudai	1	1	2	2	1	.	.
20	2	1	.	1	30	.	2	5	Larkin	1	1	1	2	1	.	.
21	2	1	.	1	17	.	3	4	Taman Per...	1	2	2	2	1	.	.

Data View Variable View

IBM SPSS Statistics Processor is ready Unicode:ON

1:52 PM 15/9/2022

