ANALYSING HOSTS' AND USERS' PERCEPTIONS TOWARDS COWORKING SPACE: FROM THE PERSPECTIVE OF REAL ESTATE AGENTS

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DECEMBER 2022

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A research project submitted in partial fulfillment of the
requirement for the degree of

BACHELOR OF BUILDING AND PROPERTY
MANAGEMENT (HONS)

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF ACCOUNTANCY AND
MANAGEMENT
DEPARTMENT OF BUILDING AND PROPERTY
MANAGEMENT

DECEMBER 2022

DECLARATION

We hereby declare that:

(1) This undergraduate research project is the end result of our own work, and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.

(2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.

(3) The word count of this research report is <u>17,631</u>.

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Date: 7 December 2022

ACKNOWLEDGEMENT

Dedicating this thesis to the Almighty God who gives me a glimpse into the wonderful and beautiful world of molecular biology He has created.

I would like to express my gratitude towards Sr. Dr. Chin Hon Choong for his excellent guidance and helpful comments throughout the completion of my Final Year Project. I have been beyond blessed to have a professional and knowledgeable supervisor who is passionate about research.

In addition, I would like to convey my heartfelt appreciation to Dr. Elia Syarafina Binti Abdul Shakur, my second examiner who had provided me with technical suggestions to improve my thesis.

I am also incredibly grateful towards Ms. Lim Yee Wui, Mr. Low Choon Wei, and Ms. Chin Wai Yin for their valuable comments on my thesis, including presentation slides and oral presentation.

Last but not least, I would be remiss in not mentioning my friends, family, and colleagues who have showed support directly or indirectly, for me to complete my Final Year Project. Their belief and faith in me has kept my spirits and motivation high during this process. I would also like to thank my dog for all the entertainment and emotional support along the journey.

DEDICATION

I am dedicating my dissertation work to my family and many friends. A special feeling of gratitude towards my loving and supportive parents, Mark Choy and Hon Shan Shan whose words of encouragement and push for tenacity ring in my ears. My brothers Antony, Andy, and Alex have never left my side and are very precious. Not to mention my dogs, Seven and Eleven, who gave me emotional support when I was feeling stressed and burnt out during the process.

TABLE OF CONTENT

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

CBD	Central Business District
CWS	Coworking Space
DC	Decentralized
GT	Grounded Theory
KL	Kuala Lumpur
KLC	KL City
KLF	KL Fringe
MNC	Multinational Corporation
PEA	Probationary Estate Agent
PV	Probationary Valuer
REA	Real Estate Agent
REN	Real Estate Negotiator
SME	Small and Medium Enterprise
SPaaS	Space-as-a-Service
TA	Thematic Analysis
WWII	World War II

PREFACE

This research project has been conducted to fulfil the graduation requirements of the Bachelor of Building and Property Management program at the University of Tunku Abdul Rahman in Kuala Lumpur, Malaysia. I was engaged in researching and writing this thesis from May to December 2022. The topic of "Analysing and Hosts' and Users' Perceptions towards Coworking Space: From the perspective of real estate agents" has been proposed. My passion for writing about coworking spaces has been a driving force behind my research project. While coworking spaces are on the rise, it is equally crucial to understand the users and hosts preferences towards coworking spaces. The outcome of this thesis is beneficial to future researchers, learners, public authorities, coworking space hosts, and institutions with regards to the understanding of hosts' and users' perception towards coworking spaces in Malaysia.

ABSTRACT

Over the past decades, the advancement of technology has shifted the way people work. With the increased flexibilization of workstyle, it is now possible to work anywhere and everywhere. However, employees still seek for a working environment that is able to stimulate collaboration and networking possibilities. This has led to the fast growth of coworking space as a new type of workspace concept. Coworking spaces offer a variety of spaces with ultimate flexibility. The aim of this study is to define the coworking hosts' and users' perceptions towards coworking spaces, specifically through the perspective of real estate agents in Malaysia. Data were collected by means of face-to-face interview with 13 respondents who were involved in the office leasing industry from different real estate companies in Kuala Lumpur, Malaysia. A thematic analysis was conducted in this study to analyse hosts' and users' perceptions towards coworking spaces. Results shows that the characteristics of coworking spaces can be categorized into three: physical, service, and leasing attributes. From the perspective of the agents, the characteristics of coworking space that drives users to coworking space are cost-effective, flexibility, services quality, networking and collaboration opportunities, and the working environment. Though a fair number of studies highlighted that CWS trend is high in demand nowadays, the agents observed there might be an oversupply issue in Malaysia. Nevertheless, they acknowledge and foresee the trend to stay even when the pandemic is over.

CHAPTER 1: RESEARCH OVERVIEW

1.0 Introduction

This chapter aims to provide a research overview and explains the background of the study to the readers. It will begin with research background, followed by problem statement, research questions, research objectives, significance of the study, and lastly, an illustration of research flow chart.

1.1 Research Background

The traditional long-term commercial lease has always been the expectations for corporate organizations while freelancers chose to work from home (Halvitigala et al., 2019). Since the beginning of 21st century, coworking spaces (hereinafter referred to as "CWSs") had challenged the traditional offices and changes the way people work. The first official CWSs was seen in San Francisco back in year 2005 and have gained its popularity since then. Reported by Knoll (2016), data illustrates that the growth of CWS around the world has increased by over 700% since 2011. As one of the most rapidly growing workplace movement over the past decade, CWSs enable individual from varied background and professions to collaborate in a shared space and most importantly, it is a cost-effective alternative to traditional offices. The rise of knowledge-based economy driven by the technology advancement has provided workers independency in terms of work schedules and arrangements. They emphasize the importance of having flexibility and have initiated new ways of working for themselves, resulting in a massive increase of CWS movement (Moriset, 2014). As a result, this has caused a heavy disruption in the office industry as traditional offices were no longer the only selection in the market. Besides, CWS is increasingly connected with the future of knowledge-based work tasks as they have the potential to stimulate community engagement and knowledge development (Merkel, 2015;

Spinuzzi, 2012). Hence, CWSs have reformed both the physical office space and the way people work nowadays.

In the context of Malaysia, the office sector has expanded at a dramatic rate in line with the country's economic growth. This has created a favourable business climate for local and foreign investors to establish operations in urban cities such as Johor, Penang, and Kuala Lumpur. Focusing on the research in the capital city of Malaysia – Kuala Lumpur (hereafter "KL"), its office market is booming in recent years with increasing supply of office space (Figure 1.1). Despite the increase in supply, the office rental in KL remains unaffordable especially for start-ups or smaller corporations. The traditional way of setting up an office usually involves longer tenancy periods and costly fit-outs or renovations that must be done before the business operation can begin. Consequently, CWS could reduce their burden as a less expensive alternative for their office.

While it has already been well recognized in the Western countries since the early 2000s, it wasn't until 2010 that the CWS concept started to take off in Malaysia (Cho, Ibrahim, & Zubir, 2020). Knight Frank Malaysia, a real estate consulting firm reports that the number of CWSs in the Klang Valley region has quadrupled from 2017 to 2020, with 66 coworking operators occupying 160 locations (Yeo, 2021). The movement was then accelerated by the ever-worsening Covid-19 pandemic that took place in 2020, which has prompted a reimagining of workplace. Malaysians are adopting the hybrid working culture triggered by the desire of wanting to be in a community-based workplace. Firms have taken this opportunity to "right-size" their workspaces and are searching for a more flexible, cost-efficiency, and plug-and-play kind of options. The pandemic had spawned new market trends that CWS would likely capitalize on, in order to stay competitive among others, coworking operators must improve their services and quality, particularly as demand from multinational corporations (MNCs) clients increases.

Though CWSs industry are expected to grow in the near future, the conventional office will not go entirely, but will be reduced – says Vijayakumar Tangarasan, the country head for Malaysia, Indonesia, and Brunei of International Workplace Group (IWG) PLC (Najihah, 2022). Figure 1.1 shows that KL's office space in 2021 totalled at 9.82 million square meters, which saw a drop of occupancy rate to 73.3% from 76.6% in 2020. The CWS business model is believed to have an impact on solving office space oversupply issue as operators usually occupy a minimum of one level in an office building, says Daniel Ma, the director of Nawawi Tie Leung Property Consultants Sdn Bhd (Tan, 2019). It may be viewed as a symbiotic partnership; developers can reduce their office lettable area while getting into a new market comprising start-ups, small and medium enterprises (SMEs), freelancers, and others.

Figure 1.1: Supply and Demand of Office Buildings in Kuala Lumpur, Malaysia, 2012 – 2021
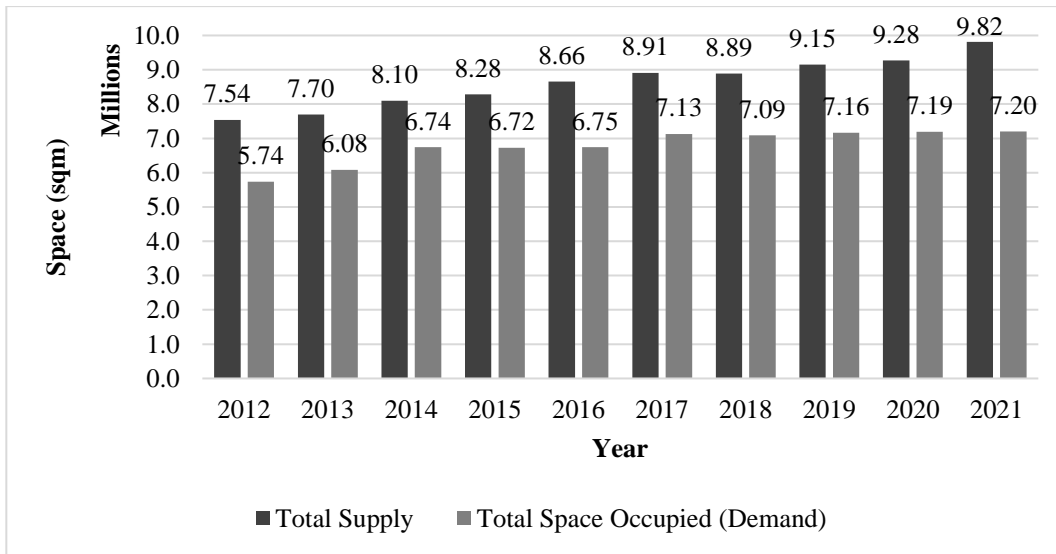
Source: Jabatan Penilaian dan Perkhidmatan Harta. (2022). *Existing Purpose-Built Office: Total and Occupied Space in Malaysia and WPKL (1992-2021).*

While the office building space recorded a Compound Annual Growth Rate (CAGR) of +2.67% between 2012 and 2021, the net lettable area (NLA) or the total supply of CWSs in KL from 2017 to 2022 has increased by 14.82% on average per year (Figure 1.2), representing now nearly 1.5% of the traditional office supply. The CWS stock in

KL has doubled since 2014 (JLL, 2019), with the strongest upturn between 2018 and 2019 (+49.99%). Anyhow, there was a limited growth from 2019 to 2022, this can be reasonably argued that it was influenced by the Covid-19. In spite of these uncertainties, demand for CWSs is presumably to be resilient. In JLL (2022)'s latest research, the CWSs in KL registered an average occupancy rate of 71% in 2Q22.

Figure 1.2: Coworking Spaces Net Lettable Area in Kuala Lumpur, Malaysia, 2017 – 2022
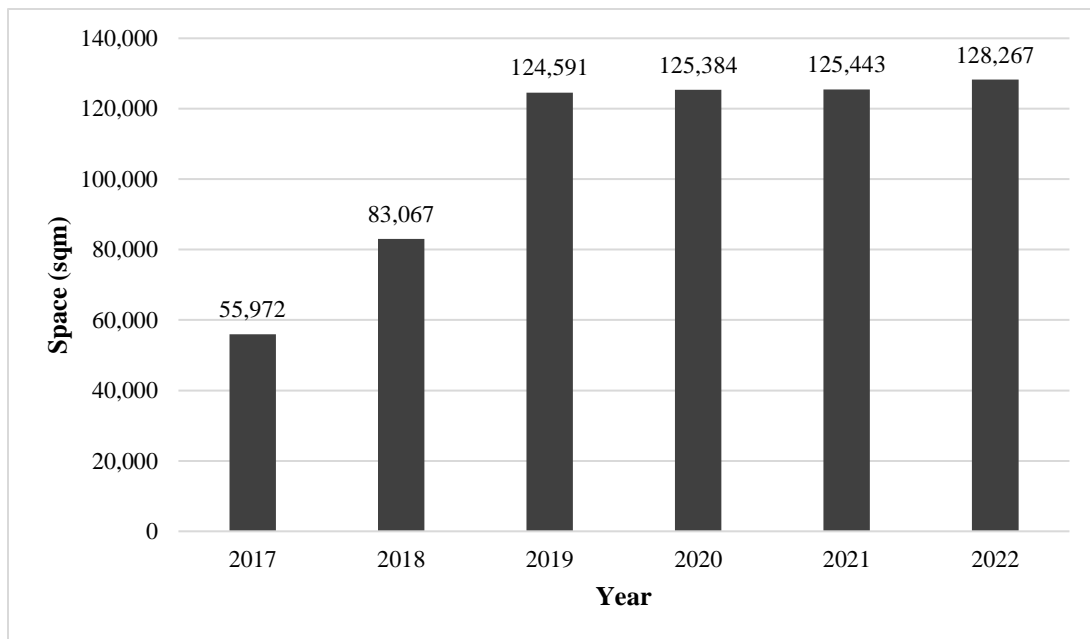
Source: JLL (2022).

1.2 Problem Statement

Based on the research background, there are two components identified to be the focus of this study. First, the CWS stock has been increasing steadily in the recent years and even had 71% of occupancy rate in 2Q22 (JLL, 2022). The high occupancy rate of CWS has triggered this research with an aim to find out the reason behind the high rates and whether or not the existing services of the coworking operators

fulfilled its tenants' needs. On top of that, though the occupancy rates are nearly over two third, does the market needs more supply? Will the tenants remain favourable towards CWSs instead of traditional offices? By understanding the underlying factors of demand and supply, stakeholders such as the office building owners and coworking operators get to benefit from it and hopefully it is able to sustain a success business model.

Considering the content of studies published, there is a dearth of research that focuses on the preferences of hosts and users from an agent's perspective, of which this was another issue that has prompted this study. Table 1.1 presents the numerous attempts of scholars in studying CWSs. Leforestier (2009), for instance, study CWSs from users' perspective and Seo et al. (2017) asserted that there are two main perspectives on CWSs: users and hosts. However, none has attempted to evaluate the underlying mismatches between the two parties. Despite the fact that both sides share the same objective – to succeed, their needs and demands are completely dissimilar. Just like the general rule of economics: matching supply with demand. If the hosts does not understand what the users want, they might end up increasing the wrong space capacity or providing the wrong service to its users. In an effort to closing the gap between the supply-side (hosts) and demand-side (users), the agents play a critical role as it captured a complete picture about the motives for occupying CWSs.

Table 1.1: Comparison of Scholarly Papers about Coworking Spaces

Author	Year	Title	Target
Leforestier	2009	The Co-Working space concept	Users
Kojo & Nenonen	2014	User experience in an academic coworking place: The Case of Aalto University's Design Factory	Users
Seo et al.	2015	A Study of Co-Working Space Operation Strategy: Focused on Operation Elements Analysis by AHP Method	Hosts
Antoniades et al.	2018	CoWorking Space v. The Traditional Office Space: Challenges and Opportunities in Sydney	Hosts
Seo et al.	2017	Priorities of coworking space operation based on comparison of the hosts and users' perspectives	Users and hosts
Tan & Lau	2021	Understanding users' and hosts' motives to co-working space: Case of Kuala Lumpur, Malaysia	Users and hosts

Source: Developed for the research.

1.3 Research Questions

In relation to the problem statements, the following research topics were raised: -

1. What are the characteristics of CWS arrangement?
2. What are the users' and hosts' perceptions towards CWS arrangement from the perspective of real estate agents?

1.4 Research Objectives

In order to answer the research questions, the objectives of this research have been proposed: -

1. To identify characteristics of CWS arrangement.
2. To investigate users' and hosts' perception towards CWS arrangement from real estate agents' perspective.

1.5 Significance of the Study

Through the comprehensive analysis on identifying users' and hosts' motives in CWSs from the perspective of real estate agents, this research will provide new perspectives in addressing mismatches between users and hosts expectations in coworking spaces.

In particular, this research will contribute to the following:

Academic and knowledge contribution – future scholars can benefit from the findings of this study since it provides a clear understanding of the relationship

between users' and hosts' expectations and motives in occupying CWS. With the lack of previous literature examining the role of real estate agents in CWS and the mismatches between two parties, this research paper contribute to a comprehensive understanding on the mismatch of coworking hosts and users from the middleman perspective, which are the real estate agents who connects both parties together.

Industrial implication – by understanding the relationship between supply (coworking hosts) and demand (users), relevant parties such as hosts, office building owner (i.e., landlord), and developers get to leverage on the findings of this study. Once mismatches have been identified, they can develop strong strategies and provide better offer to imitate the mismatches in terms of preference, services, products, leasing attributes, etc. Besides, it would increase the quality of professional practices of real estate agents in Malaysia in a sense that they get to manage hosts' and users' expectation through ensuring both parties meeting their own needs and goals.

Policy implication – office buildings are important as the space is needed for business and communication activities. Ever since the outbreak of Covid-19 pandemic, firms started to exercise rightsizing and it affects the demand for office space. With the findings in this study, office building landlord or developer is able to provide appropriate strategy to foster the office market and provide the right incentive to attract or retain tenants. Moreover, the contribution of this study aims to improving existing policy formulation, such as the Strata Management Act 2013, Contract Acts 1950, etc. that were only protecting the landlords and tenants of traditional office space. Since CWSs are on the rise, policy maker should ensure the interest of parties involved (i.e., hosts and users) are being protected by the legal.

1.6 Research Flow Chart

In general, there are 5 stages involved in this research. As shown in figure 1.3, each stage have been clarified with an aim and its outcome. It started with Stage 1

Literature Review and ended with Stage 5 Result Presentation. The flow chart illustrates how this research being conducted. A detail explanation on each stage will be presented in Chapter 3.

Figure 1.3: Research Flow Chart
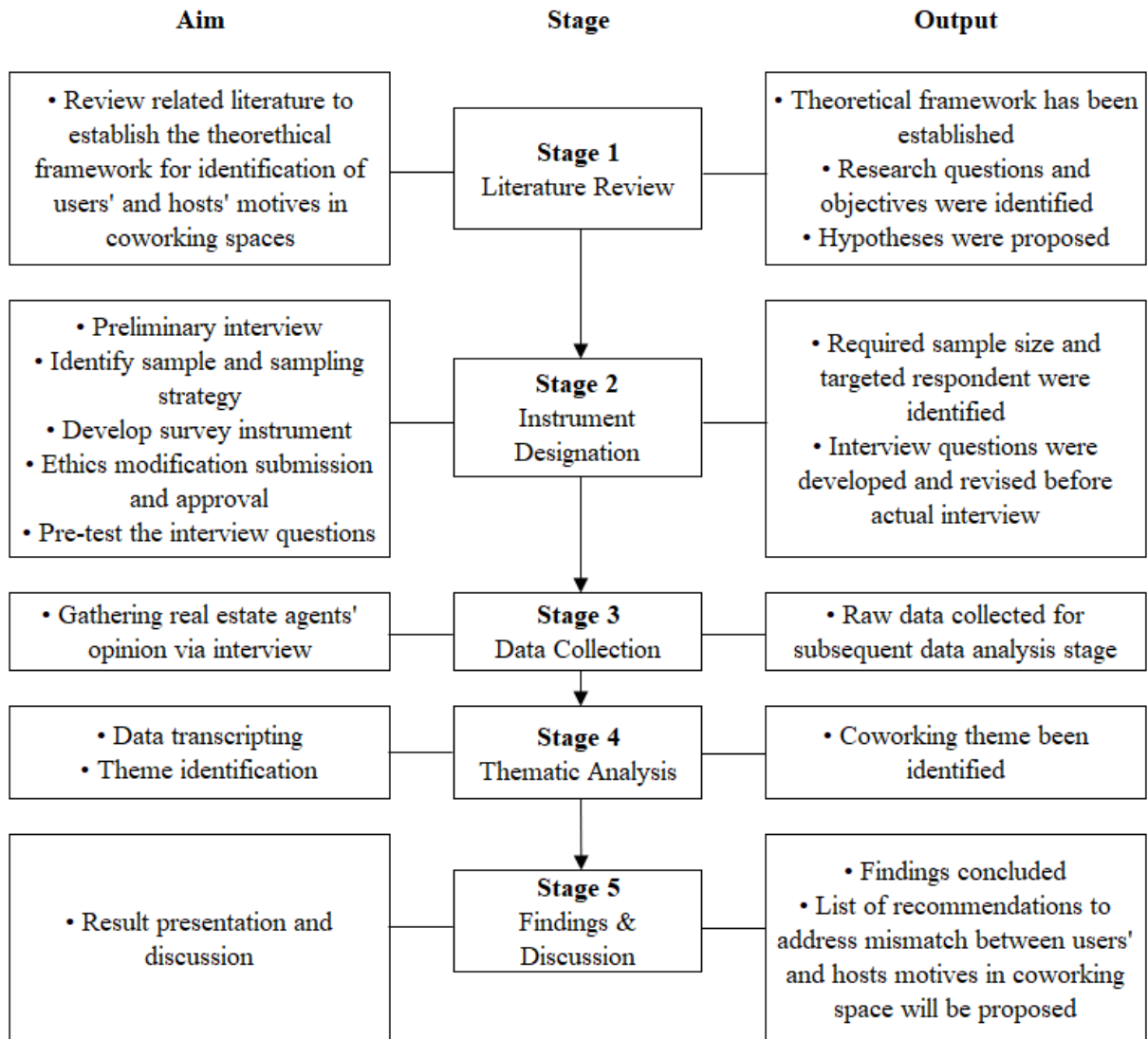
1.7 Chapter Layout

The first chapter provided a general outline of this study. It discussed the motivation of the thesis and explains in detail through various subsection, which includes research background, problem statement, research questions and objectives, significance of the study, and a proposed research flow chart. These elements are crucial as it assures the readers to have a clear understanding of the research purpose and general direction of this study.

Chapter 2 served as the theoretical backbone for this study. It identified and summarized the relevant past literature in accordance with the research objectives and questions.

Next, Chapter 3 explained the methodology used in this research by referring to the research flow chart illustrated in Chapter 1. There are five stages involved throughout the study, namely literature review, instrument designation, data collection, thematic analysis, and findings and discussions.

The subsequent chapter, Chapter 4, conducts and details the actual data analysis. Thematic analysis is adopted to analyse the interview results.

Lastly, the thematic analyses is summarized in this final chapter, together with the discussions of the major findings of the study and its practical implications towards practitioners and policy makers. Furthermore, limitations and restrictions were discussed with suggestions to future researchers relating to the research topic.

1.8 Conclusion

To sum up, this chapter provided a brief overview on CWSs, in the context of both globally and specifically in Malaysia. The issues and literature gap that has triggered this study were also revealed. Research objectives and questions have been raised in

view to study the mismatches of expectations between coworking hosts and users. In addition, the implications of this research were discussed along with the chapter outline of this thesis. The following chapter focuses on the review of literature.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

As concluded by Cooper (1988), literature review plays an increasingly vital role in the defining of knowledge by social scientists. It focuses on identifying and critically discussing the relevant literatures with a view to compare with the findings in previous studies, and finally, creating a new theoretical framework based on the particular research topic (Bem, 1995). This chapter aims to provide a substantive review of literatures relating to CWS beginning from the evolution of workplace development all the way to the emergence of CWS and the tenants' preference towards occupying an office building.

2.1 The Evolution of Workplace

The development of workplaces and offices has a relatively short history (Hysom & Crawford, 1997). The lack of demand for large office spaces and absence of advanced technology to construct multi-storey buildings limited progress in the past. However, throughout its historical development since 1880s, particularly after the Civil War, towns and businesses began to flourish and there has been a significant growth in the contributions of the workplace concept (ibid).

Different authors have discussed the trends of workplace development, though they expressed differently, similarities were identified. To summarize, the workplace has been through three waves of revolution: "Taylorist" office, "Social-Democratic" Office, and "Networked" office – according to Jeremy Myerson, a design professor and the director of London's Helen Hamlyn Center for Design at the Royal College of Art (Susan, 2014).

In the eighteenth century, the office is designed in such a way that the spaces are separated into several individual offices by walls and the sizes are different based on the position of the office holder (Anton, 2015). As a general rule of thumb, the typical workers were housed together in a large space whereas those who held higher positions would worked independently (i.e., has their own office space). Eighteenth-century office buildings were distinguished by their segregated space-use, which impacted the office planning of the nineteenth century (Rassia, 2017).

Starting from the late nineteenth century, the emergence of Taylorist office had been witnessed. Taylorist – as the first wave of office revolution, was named after Frederick Winslow Taylor, known as the father of scientific management who introduced the "Taylorism" principles (Myerson, 2014). Taylor's beliefs centred on hierarchy, supervision, order, and depersonalization. It attempted to maximize the efficiency of labour productivity with the use of science and engineering. Since 1920s, his management theory has been influential in altering workplace design by breaking down complicated jobs into a set of simple and repetitive tasks that could be performed by a lower-status employee seated on a machine-like, standardized, and fixed seat (Figure 2.1). The implementation of Taylorism led to an office with a pool of clerical staff working in an enormous open-plan room, under the supervision of managers. Taylorism-inspired office structure allowed for uninterrupted workflow and for workers to be more task-focused, especially under a strict superintendence. Yet, Taylor's theory has been criticized due to its failure to consider human and social factors and instead, it focused solely on maximizing productivity from workers (Tseng, 2018).

Figure 2.1: The Taylorist Office in the 1920s

Source: The HR Observer (2014).

World War II (WWII), along with the Great Depression that took place in the 1930s, causing nearly 20 years of building slump and office development was halted (Hysom & Crawford, 1997). After the war, the economy was once again restored. Thus, leading to the second wave of office revolution in the early 1960s in which Jeremy Myerson called it the "Social-Democratic Office" (Triomphe, 2015). The economy was experiencing full employment at that period of time and companies were competing for labour. The Taylorist concept was no longer in practical. Instead of offering higher pay, companies provide a more pleasant working condition with an appropriate degree of physical comfort to attract talent. As a result, the office environment improved and became more collegiate and conducive to informal connections between workers. In addition, due to the Socio-Democratic nature of post-WWII, government across Northern European nations starting to foster a more egalitarian management style where all workers share the same power and responsibility. Eventually, we witnessed some attempts with the German idea of Bürolandschaft originating in Germany back in 1958. Bürolandschaft, which translates as "office landscape", may be viewed as the first ground-breaking reinvention of the office space since Taylorism. This workplace design was developed by a space management consulting firm called Quickborner Team with a view to break the ineffective, hierarchical, and rigid structure of office space and to encourage internal communication and collaboration (Remmele, 2012). Unlike

Taylorist Office, Bürolandschaft uses an approach where the space are unstructured and loosely divided with plants, furniture, and creative partitions (Architects, Mozas, and Per, 2017), advocating democracy and openness in a workplace (Figure 2.2).

Figure 2.2: The Social-Democratic Office

Bürolandschaft enjoyed a short period throughout the office development – 1973 marked the end of it as the economic crisis left the high rents unsustainable. Few years later, the emergence of technology in the 1980s, especially since the turn of 21st century, ushered in the third wave of change which Myerson described it as "the Networked Office" (Triomphe, 2015), while other author named it "the Information Age" (Tseng, 2018). Figure 2.3 demonstrates a modern and cosy office of Facebook in Hong Kong. This era was characterized by networks, ease of internet accessibility, and digital innovations – these were the main drivers that radically shifted the workplace and created the term for what we called today as the "knowledge-based economy". Given the advantages of technologies such as cloud technology and mobile devices (e.g., phones and laptop), workers could work possibly everywhere, from the office to cafes or their homes. At the time being, economic recession combined with intensifying job competition in the early 1990s, affected majority of companies. Business decision maker could not ignore the fact that it is a cost-saving method to adopt "telework" (Anton, 2015). As mobility became the norm, the workplace practice further evolve into "hot-desking" in which employees were not

assigned a dedicated workstation, but instead work at any available space. Some businesses even eliminate part of its physical offices, allowing their workers to work at coworking spaces that located nearer to their homes and thus better suited to the workers' needs. According to Mariotti et al. (2017) and Anderson (2012), the trend of coworking spaces such as the Hat Factory, Spiral Muse, and other space makers, can be witnessed in the late 2000s.

Figure 2.3: Facebook's Office in Hong Kong

Source: Tseng (2018).

2.2 Coworking Space as the Emerging Trend of Workplace Evolution

From the previous section, one may notice that the workplace arrangement is continuously transforming to meet the demands of a constant-changing modern working classes and environment. In spite of the conflicting estimates as to the degree of the change, majority of data sources acknowledge that there has been a substantial change from traditional job (i.e., typical full-time and long-term employment) to non-traditional job (i.e., work that is contracted, vulnerable, temporary, e-lance, freelance, alternative, or disposable (Ashford et al., 2007 Howell & Bingham, 2019)). In 2016, Katz & Krueger (2016) carried out a large national survey, concluded that the labour market in the United States comprises more than 15% of independent workers who are account for approximately 80% to 100% of the net employment growth since

2005. This great change was contributed by numerous factors, such as shifting demographics (e.g., millennials that prefer non-traditional career), new technologies (e.g., online jobs, social media, or sharing economy websites), and a vanishing stigma surrounding non-traditional careers. The nature of work seems to be evolving at a much faster pace, however, here comes a question: where will these groups of people work?

In the recent years, a comparatively new phenomenon has emerged within the work organization – coworking space (CWS), in which individuals or users from different backgrounds and entities working together in a shared space (French, 2022). CWS can be seen as a phenomenon that happens via a collaborative and shared workspaces in which the central of CWS is on creativity, community, productivity and relationship (Fuzi et al., 2014). Following this, CWS can be regard as an arrangement that supports collaborative work while allowing users to work individually in an uncommon, creative way. Table 2.1 shows the definitions of CWS by different authors over the years.

Table 2.1: Definitions of CWSs by Different Authors over the Years

Year	Author(s)	Definition of Coworking Space
2008	Fost	Working independently in a shared space
2012	Spinuzzi	An open-plan office spaces in which they collaborate with independent professionals that comes with a monthly fee
2013	Tadashi	A way of working in which working individuals gather in a place to create value while sharing information and wisdom by means of communication and cooperating under the conditions of their choices
2014	Fuzi et al.	Phenomenon that happens in a collaborative and shared workspaces in which the attention is on creativity, community, productivity and relationship
2015	Rus and Orel	Coworking spaces, a shared workplaces that brings together individual's creativity while allowing them to work independently, are a reaction to the underlying demand of the creative class to reject to work in bureaucracies that hinder creativity and innovation and to keep independence
2016	Waters-Lynch et al.	Shared physical workspace and (often) intentional cooperation between independent workers

2016	Bouncken and Reuschl	Coworking space offers its users a flexible and independent use of both office and social space, which facilitates direct interaction among users for cultural, social, learning, and business-related pursuits
2017	Kojo and Nenonen	Coworking spaces are shared offices where a group of persons from diverse backgrounds co-locate in the same workplace.
2019	Löfvenberg and Sörensson	Coworking space is a flexible and shared workplace between several individuals and corporates with emphasis on knowledge sharing and collaboration.

Source: Developed for the research

Though unofficial, the concept of CWS was founded by Brad Neuberg who has started the coworking movement in 2005 by establishing Spiral Muse Coworking group in San Francisco (Hunt, 2009; Spinuzzi, 2012; Waters-Lynch & Potts, 2017). Neuberg, a young computer programmer who was miserable at that time being, has developed a solution to his career dilemma of needing independence, structure, and community – a solution that was now happening all over the world and altering the way people worked (Fost, 2008). In his blog, Neuberg (2014) asserted that the society forces people to choose in between working at home for themselves or working in an office for a company. If people chose working at a regular 9 to 5 company job, they get structure and community but loses the ability and freedom to control their lives; in contrast, people gain freedom by working for themselves at home, but they suffer from loneliness and the disadvantage of not being accompanied by a work community. Therefore, the solution that Neuberg created is to address the issue and provide an ideal balance between work and community (Yang et al., 2019). The coworking concept grew initially in the San Francisco region, then throughout the United States, and finally globally (Hunt, 2009; Orel and Rus, 2015).

According to Fuzi et al. (2014), the term "coworking" originally refers to the new workspace culture of the "freelance economy". There are several trends behind its successful spread around the globe. One of it was linked to the aftermath of the global economic crisis that took place in 2008 where there has seen a sudden surge of coworking spaces and shared working spaces (Löfvenberg & Sörensson, 2019;

Merkel, 2015). This can be attributed to the increasing number of people leaving the traditional workplace and start a professional career on their own. Another parallel trend was confirmed by Mariotti et al. (2017), the authors asserted that the spread of CWS is in relation to the rapid rise of Information and Communication Technologies (ICTs) where it enables people to have less geographical dependency and the ability to work remotely. This is aligned with Toffler (1980)'s prediction where he foresee that the invention of personal computer (PC) would lead to a scenario where employees could work at home, in which he uses the term "electronic cottage" and his prediction has come into existence 40 years later. He continued his point of view by asserting that white-collar jobs will no longer require 100% of the workers to be concentrated in a workplace. Indeed, the advance in technology such as internet of things (IOT), open-source data, cloud computing, and laptop – has shifted the way people work (i.e., employees can work almost anywhere) and at the same time contributing to the development of creative, innovative, digitalize, and knowledge-based economy.

This space-as-a-service (SPaaS) business model of CWS is usually offered on a membership package that provides the members access to a physical, social, and even virtual workplace environment for a pre-agreed period on an hourly, weekly, monthly, or yearly basis (Bouncken & Reuschl, 2018; Halvitigala et al., 2019). The space is supplementarily offered with user-centric values such as networking events, personal development program, and services related directly or indirectly to their work (e.g., printing and cleaning services) with the objective of providing a hassle-free and high-quality working environment. This is corresponding to what Danivska (2018) considered as "servitization of a workplace" – a shift in paradigm that stresses the bottom-up workplace management, where members are given the flexibility to select the use of various service packages on a temporary basis. Kyrö (2020) claimed that this concept has shifted the commercial real estate, because as opposed to the conventional office space, CWS encourages access over ownership and the system strategically combine tangible products (i.e., the physical space) with intangible service.

As discussed in the previous chapter, the Covid-19 pandemic has expedited the coworking trend and led to a globally "forced experiment" in remote working for most of the office-based works (Felstead & Reuschke, 2020), with a widely anticipated change to hybrid working style in the post-pandemic (Cooke et al., 2022). As reported by JLL (2021), the office demand has shifted from traditional lease to flexible space options and in response to that, office building landlords has seen to be adding hospitality and flexibility services to their real estate portfolio. On a side note, it is also worth mentioning that more office building developers are researching the trend and searching for resources to study coworking ecosystem, even before the pandemic took place (Orel & Almeida, 2019). Further, the JLL report explained that there is a growing demand for flexible leasing terms. While they are waiting for more clarity in business environment and workplace policies in the midst of uncertainties, tenants are increasingly seeking for expansion, shrinkage, and terminating the long-term office lease of their current office building.

Nathan & Overman (2020) contended that the general consensus of "death of the office" scenarios that were proclaimed in the beginning of the pandemic might be exaggerated, but there will probably be a permanent transition to hybrid working mode, though it is still too early to predict how things will develop in the long run. In fact, based on the findings of Felstead & Reuschke (2020), the percentage of workers in the UK that were working from home increased from 5.7% in the pre-pandemic (early 2020) to 36.5% in June 2020. Notably, even when the government loosen the restrictions and allowed the workforce to return to their workplace, 50% of them indicated that they would prefer to WFH "often or always". This has prompted questions regarding the function of offices as a workplace and its potential role in cities – whether or not offices will still be relevant in the future.

2.3 Characteristics of Coworking Spaces

The section will inform readers on the characteristics of coworking space. Evidently, all CWS appear to be similar as they have a function of bringing people – non-traditional worker and entrepreneurs – in a shared space. According to the fundamental concept of CWS, Spinuzzi (2012) distinguishes between federated workspaces, community workspaces, and unoffices, while Kojo and Nenonen (2016) differentiate CWS based on the type of business model (i.e., profit or non-profit) and the degree of accessibility for users (i.e., private, semi-public, and public). Several characteristics of CWS to which users react regarding to the benefits of CWS are classified along with a multidimensional construct. A number of research proved that CWS's characteristics, in which they uses the term "features" or "attributes", have an impact towards users' experience and preference (Appel-Meulenbroek et al., 2020; Howell, 2022; Hua, 2010). Nowadays, CWSs exist differently from one another in terms of its atmosphere, resources, and other critical criteria. With that being said, the selection of a CWS is not merely the convenience of location, but also depending on the users' needs and the opportunities they perceived from the space itself. In general, the attributes can be categorized into three groups: physical attributes, service attributes and leasing attributes. These attributes will be discussed thoroughly in the following sub-sections. Lastly, a summary of CWS attributes will be provided in Table 2.2.

	Leforestier 2009	Deijl 2011	Deskmag 2012	Spinuzzi 2012	Deskmag 2013	Fuzi et al. 2014	Kojo and Nenonen 2014	Sykes 2014	Fuzi 2015	Gandini 2015	Parrino 2015	Spreitzer, Bacevice, and Garrett 2015	Bouncken and Reuschl 2016	Tan and Lau 2021
Physical Attributes														
Atmosphere and interior aesthetics		*			*	*	*		*					*
Collaborative spaces	*					*	*	*				*	*	*
Concentration rooms			*	*		*						*	*	
Event spaces	*						*						*	*
Shared workspaces	*					*	*		*	*	*		*	*
Pantry		*					*	*				*	*	
Meeting Rooms							*	*						*
Open space layout							*	*				*		
Convenience location			*	*	*									*
Service Attributes														
Access to tools and resources		*	*		*	*	*		*				*	
Co-working host				*			*		*	*			*	
24-hr access	*							*					*	
Diversity of tenants					*	*						*	*	
Networking events and workshops		*			*		*		*		*	*	*	*
Virtual platform						*	*				*			
Sense of community				*	*				*			*	*	*
Collaboration opportunities				*										*
Information and knowledge sharing				*										*
Leasing Attributes														
Lease flexibility		*	*	*	*	*	*	*	*					*

Source: Developed for the research

2.3.1 Physical Attributes

Moriset (2013) and Spinuzzi (2012) claims that the physical attributes of CWS are based on aspects that were believed to be the intentions for users working in the CWS. As a general rule, workstations are provided by operators in accordance with the fee schedule so that different persons may share a workplace. As presented in Table 2.2, Han (2013) differentiates the physical attributes of CWS into two:

(1) Spaces to work: private offices, conference rooms, hot desks, open workstations; and

(2) Shared spaces for amenities: lobby, CW lounge, reception areas, pantry, and breakout rooms.

Howell (2020) differentiates CWS's attributes by space, particularly, the variations of physical layout. First, it varies significantly in size (i.e., square meter or square footage). This is an important factor as smaller areas are typically correlated with a tighter-knit community in which a strong relationship among users will be established, while greater spaces provide more opportunities where weak ties are formed between users (Granovetter, 1977). The weak tie theory was founded by Granovetter in 1973, which was about spreading information through networking, particularly between a group of people that are not close to each other. Strong ties, on the other hand, typified by close social relationships with frequent interactions, such as family, business associates, close friends, etc. Weak ties are generally better in the context of CWSs because members get to receive information from different perspectives, create new opportunities, and broadening their social circles with new people. This is corroborated by Cabral (2021), the study evidence that CWS promotes the existence of weak ties, which were considered by the users as a great form of social support.

Second, it differ in the types of space provided. A usual CWS combines creative and informal spaces with elements of a workplace (Orel, 2015). Kojo & Nenonen (2014) and Sykes (2014) opined that CWS typically comprised of large open plan office that comes with meeting room, conference room, cafes, or private offices. Data from coworker.com in Howell (2022) reveals that 92% of the CWSs they studied have "hot-desking" area – i.e., spacious, open areas with sofas, desks, and chairs, where seating is on first-come-first-served basis. 65% of them also offer "fixed desks" where users can enjoy their own dedicated desk for a certain period at a price, whereas 54% provides private offices for lease. In his study, Markeso (2018) affirms the importance of having a flexible balance between open and segmented spaces. The ratio between these two is a crucial design element because it might influence the frequency of interactions between users and the determinant of culture prevailing in the CWS, as well as to retain and attract members.

Furthermore, the space vary in the sense of "vibe" or atmosphere of CWS. Many of the CWS are designed to portray a "Silicon Valley" start-up culture with elements such as arcade games, ping-pong tables, and bean bag sofas. This, in turn, is to contrast drastically with traditional offices in order to appeal to more non-traditional workers and entrepreneurs who usually fancy a more individualized and creative environment (Waters-Lynch et al., 2016). Yang, Bisson, and Sanborn (2019) adds that CWSs are often known as the early pioneers of innovative and aesthetic workplace design. After all, the CW members that the operators serve have abandoned their initial corporate workplace, for range of reasons, and are searching for a unique place to work.

To stimulate users' creativity, CWS's workplace design plays a crucial role. The majority of the hallmark features of successful CWSs are associated with creative and expanding cognition, according to environmental psychology studies. In his review of previous studies relating to space design and performance, Attaianese (2018) and Orel & Almeida (2019) discovered

evidence associating acoustics settings, modular furniture, various colour pallets in interior finishes, window or daylight views, and taller ceilings to creative thoughts. Studies have also proven that random background noise, such as those found in a café or library, is associated with increased creativity (Mehta et al., 2012). These including other design elements give passive advantages for creative thinking and convey the values of the CWS to potential members at the same time.

Like most of the traditional offices, CWS positioned themselves in a highly accessible locations to attract tenants, either by public transports or by car may often be distinguished as appropriate attribute levels. Capdevila (2014) expressed the opinion that location is the most essential attribute of a CWS. Several studies also revealed that location is the main factor that coworkers are looking after (Appel-Meulenbroek et al., 2020; Spinuzzi, 2012; T. H. Tan & Lau, 2021; Weijs-Perrée et al., 2019). More often than not, users prefers a CWS that is close to their home and convenient for them to navigate.

2.3.2 Service Attributes

Tan & Lau (2021) determined five service attributes, namely collaboration opportunities, sense of community, information and knowledge sharing, networking opportunities, and events organized by operators. This is in line with the scholars who conducted a survey and discovered that the main service attributes of CWS collaboration, openness, sustainability, accessibility, and community (Kwiatkowski & Buczynski, 2011; Schürmann, 2013). Similar to that, Spinuzzi (2012), as one of the earliest researchers studying the topic of CWS, opined that CWS is not merely a concrete product, but a service indirectly offered by the operators, through space, to the users where they get to network with others by engaging interactions. Due to the nature of CWS where diversity of tenants from different industries are working together

in the same space, this gets to encourage spontaneous contacts between users and benefit those who are seeking for collaboration or connection in business (Gerdenitsch et al., 2016; Roth & Mirchandani, 2016). In another perspective, the diversification of business brings convenient to users that are looking for services they need such as marketing, consulting, and IT development, as they may be just located at their next door, and it saves time for all parties.

CWS provide necessary amenities and services that can usually be found in a traditional office, for instance, fax machines, printing machines, internet access, reception service, cleaning service, 24/7 access (Kojo & Nenonen, 2014; Spinuzzi, 2012; Sykes, 2014). As stated by Spreitzer et al. (2015), flexible operating hours (i.e., open 24/7) offer users the flexibility in their work arrangement that would best fit their schedule. Those that were uncommon in corporate offices can also be found in some of the CWSs such as napping pod, membership newsletters, ping pong table, scooter rentals, free-flow beverages, kitchens, and cafes (Howell, 2022; Waters-Lynch & Potts, 2017). Some even offer on-site living accommodations and childcare facilities. In an interview conducted by Maher, Tantawi, and Ragheb (2020), a CWS owner indicates that in order to measure clients' satisfaction, they encourage their clients to rate them and give feedbacks via mobile apps on the following matters: payment plans, staff behaviour, service quality, and internet speed. These services provided are important as it enables its users to operate their day-to-day business efficiently.

Apart from that, Fuzi (2015) asserted that CWS host or its community manager plays a crucial role in inducing interaction, collaboration, and networking through organizing events and trainings for the users. This can include non-business-related events such as games night, movies night, personal development talk, monthly breakfast, and birthday parties; and those events that are educational or business-related such as training programs for

start-ups, workshops on entrepreneurship, human resource, or financing (Maher et al., 2020).

2.3.3 Leasing Attributes

Leasing flexibility is one of the key attributes of CWS. The average leasing contract for a commercial office building is usually fixed to three years or more. In contrast, coworking users get to enjoy the benefit of flexible lease and not having to tie themselves with a fixed contract. CWS offer an extremely flexible lease contract, or in this case, membership plan, ranging from daily, monthly, quarterly, up to a year (Kojo & Nenonen, 2014; Sykes, 2014). The low commitment office alternative is to attract tenants, often are those start-up companies, self-employed workers, freelancers, or "digital nomad" (i.e., workers that need to work remotely and travel to several locations to work). CWS also offer a longer lease to cater to corporate clients (Howell, 2022). Gandini (2015) and Spinuzzi (2012) expressed that these lease flexibilities provide a solution for users to independently create their own working environment and work hours. Interestingly, Bouncken and Reuschl (2018) note that there the coworking concept might have incorporated into a company's business strategy. This is because companies could utilize its funds on other aspects of the business rather than using it to rent an office space.

2.4 Types of Coworking Users

CWS is often associated with self-employed individuals, independent workers, freelancers, or entrepreneurs (Gandini, 2015; Parrino, 2015; Waters-Lynch et al., 2016), it could possibly because these group of individuals might not be able to commit to an office space which usually tied for at least 3 years. In particular, Parrino

(2015) explains that freelance workers usually manage their own work and report to only themselves; microbusinesses (i.e., start-ups or SMEs) that do not need or cannot afford to have their own office space in a traditional office building; self-employed or independent workers who are working on behalf of another company or entity and they are given the freedom to work in multiple locations. Similarly, backed by Foertsch (2011)'s research on the types of coworking users, it shows that 54% of them are freelancers, 20% entrepreneurs, and 20% independent workers or contractors who are mostly working in the new media and creative sectors.

On the contrary, a recent study conducted by Sargent et al. (2018) suggests that CWS is no longer limited to individuals and start-ups as what has been mentioned by Parrino (2015), instead, large MNCs like IBM, ByteDance, and Microsoft are gradually adopting this trend. It is then again, accelerated by the Covid-19 pandemic where corporations are becoming agile and responsive towards changes. Corporates are getting aware of the various services that a CWS can offer to them and they see this as a solution for their corporate real estate portfolio (Echeverri et al., 2021). In their study, the researchers have concluded six different strategies that implemented by corporations as their office strategy and solutions, either temporary or permanent:

(1) Testing Market: start-ups who are experiencing uncertainties in their businesses, CWSs enable them to establish a business operation at a lower risk;
(2) Expansion Space: CWSs are utilized by some corporations to support its fast business expansion;
(3) Core and Flex: dual strategy that combines long-term leases for the corporate's primary office location and short-term leases with a CWS;
(4) Swing Space: while the new office are still in construction or renovation, CWS as a temporary solution to relocate its employees and continue the business operations;
(5) Touchdown Space: a workspace and network of locations for employees who constantly work outside of their corporation premises, e.g., employees who are on a business trip; and

(6) Temporary Projects and Staff: CWS as a temporary space to accommodate employees, whether external or internal to the corporation, for a predetermined period to conduct specific work or projects.

2.5 Tenant's Preference Towards Office Building

The commercial real estate industry comprised of multitude groupings of influential stakeholders. The occupants of office buildings constitute one of the most significant groups. In order to forecast the future direction of the real estate market over the next few years, industry professionals must understand what the building occupants (i.e., demand-side) want and desire in terms of the office buildings' attributes.

Just like any other real estate, location has always been the interest of many scholars (table 2.3). In 1890, Alfred Marshall first proposed the idea that urbanization benefits could be achieved by the specific industries in particular regions, and Richard Hurd developed a theory in 1903 that claimed property values were depending on the structure of localities. In a recent research conducted by Kim et al. (2019), 100% of the respondents agreed that location was the main motivation in office leasing decision, with one respondent saying that "*location is always the number 1*". It is of no doubt that employees would want to be located in a prime location where it has a greater accessibility to central business districts (CBDs), amenities, public transports, major highways, and better views. However, this is in contradict with Celka (2011) study on tenants' preferences on office buildings. The survey was conducted in Poznań, Poland, and the result shows that approximately one third of the overall respondents opined that lease terms and conditions are the most important criteria when it comes to selecting office spaces. To be specific, monthly rental is the one that tenants concern the most. Similar to the findings in Adnan et al. (2012) where the study reveals that rental rate being the topmost critical factor in occupying office space.

Building services and the management have also been mentioned by few researchers in the literature, such as Lin & Perng (2019), Rothe et al. (2011), etc. It could include security control, fire prevention and protection, HVAC systems, building automation, responsible management and maintenance team, and others. Research conducted by in the CBDs reveals that having good building services and management is more important than the location and financial factor.

Other office building attributes that were studied are functionality (e.g., typical floor plate, slab-to-ceiling height, floor loading, backup power supply, etc.), access and circulation (e.g., passenger lifts, ingress and egress point, amount of car parks, etc.), and presentation (e.g., building age, external façade, design of entrance, image of the building, etc.). It is worth highlighting that the presentation of the building is the most influential factor among others, according to Nurzukhrufa et al. (2018)'s research. It can be reasonably explained that the building physical is important towards selection of office building because it gives a better impression to the company's clients and business partners, and it presents a certain level of reputation.

Table 2.3: Overview of the Literature that Mentioned Office Building Attributes

Office Building Attributes	Ho et al. 2005	Luoma et al. 2010	Rothe et al. 2011	Adnan et al. 2015	Lin and Perng 2019	Andrews 2020
Location		*	*	*	*	*
Amenities	*		*	*	*	*
Functionality	*	*	*	*		*
Building Services	*	*	*	*	*	
Management	*			*	*	
Access and Circulation	*			*		
Presentation	*	*	*		*	

Source: Developed for the research

2.6 Conclusion

To sum up, this chapter provides a comprehensive definition and explanation of the origins of workplace, emergence of CWS, and other important aspects related to CWS. Three main categories of CWS's characteristics have been discussed thoroughly in this chapter as well. In addition, the tenants' preference towards office buildings were identified and further elaborated.

CHAPTER 3: RESEARCH METHODOLOGY

3.0 Introduction

This chapter introduces further detail about the methodologies conducted in this thesis. A methodological approach has been selected to achieve the thesis's objective and improve the quality of the research. The chapter begins with the conducted research design and approach, followed by a detail explanation of the research process stages which includes literature review, instrument designation, data collection, thematic analysis, and findings and discussions.

3.1 Research Design

There are two ways for researchers to conduct research: quantitative or qualitative technique. The formal is predicated on the interpretation of numerical data, whereas the latter consists of interpretation of words and subjective judgements (Saunders, Lewis, & Thornhill, 2019). This study employs a qualitative approach since it is deemed suitable in relation to addressing the research questions raised. Understanding coworking hosts' and users' preferences and motives towards CWS from the real estate agents' perspective might be arguably complex, henceforth, a qualitative approach enables a more in-depth comprehension of the research questions (Bryman & Bell, 2011). Since the focus of this study is not numerical analysis but rather the agents' opinions and thoughts, a quantitative research methodology would have been impractical. In addition, the selected qualitative approach is effective for studying individuals as it permits the researcher to obtain a natural viewpoint on the phenomena in a specific context. Consequently, a qualitative approach offers a natural understanding of what the hosts' and users' motives are in CWSs and what the underlying mismatches are between both parties.

3.2 Research Flow Chart

As quoted by Tie, Birks, and Francis (2019), a researcher must have a thorough understanding of the research process before initiating any research study. Figure 3.1 depicted the flow chart of this research process for which it will be explained thoroughly in this subsection.

Figure 3.1: Research Flow Chart

Aim	Stage	Output
• Review related literature to establish the theorethical framework for identification of users' and hosts' motives in coworking spaces	**Stage 1** Literature Review	• Theoretical framework has been established • Research questions and objectives were identified • Hypotheses were proposed
• Preliminary interview • Identify sample and sampling strategy • Develop survey instrument • Ethics modification submission and approval • Pre-test the interview questions	**Stage 2** Instrument Designation	• Required sample size and targeted respondent were identified • Interview questions were developed and revised before actual interview
• Gathering real estate agents' opinion via interview	**Stage 3** Data Collection	• Raw data collected for subsequent data analysis stage
• Data transcripting • Theme identification	**Stage 4** Thematic Analysis	• Coworking theme been identified
• Result presentation and discussion	**Stage 5** Findings & Discussion	• Findings concluded • List of recommendations to address mismatch between users' and hosts motives in coworking space will be proposed

3.2.1 Stage 1 – Literature Review

To refine the research topic and form research questions, this research was started off by a literature review. Journals and articles were searched through UTAR's library, the databases were mainly Scopus, Emerald, Science Direct, and Sage Publications. Besides, useful websites such as ResearchGate and Google Scholar has been utilized in this study as well. Keywords have been identified to assist in literature searching process. These include coworking space, coworking, shared office, flexible space, and flexi space. The purpose of selecting CWS as the research topic is because there is a need for understanding CWS from the perspective of the real estate agents. The majority of the past literature focused on studying CWS from the perspective of either users, hosts, or both. However, little to none studied from the agents' point of view, is it believed that there might be a mismatch between the preference of users and hosts. Thus, real estate agents, acting as a middleman between both parties, is able to address the mismatches. A systematic review was conducted to identify the evolution of workplace, trend and characteristic of CWS as well as its business model. All these had been discussed in detail and presented in Chapter 2. Evidently, findings from literature review will served as an input to later interview question designation.

3.2.2 Stage 2 – Instrument Designation

This study applied the Grounded Theory (GT) (Glaser & Strauss, 1967) to address the research questions. GT is a systematic qualitative approach that first gathers empirical data then after develops a theory "grounded" in the outcomes (Heydarian, 2016). Lazar, Feng, and Hochheiser (2017) confirms

the effectiveness of GT for research topics that has limited literature to build on and leading to difficulties in establishing theories that enables researcher to construct in advance the coding categories. Due to the fact that GT does not rely on a pre-formulated hypothesis or theme, instead, a set of data, it is crucial for researchers to begin the study process without any predetermined theoretical assumptions and allow the theory and concepts emerge naturally from the data. The successful factor in performing GT research is to keep an open mind and be creative. GT was chosen in this study because of the under-studied research area that has limited current literature.

In this research, a semi-structured interview with a total of thirty-two questions (Table 3.1) was prepared to interview with real estate agents in Kuala Lumpur, Malaysia. Such an unstructured enabled researcher to acquire gather qualitative data that could further be examined from an academic perspective, so contributing to addressing the research questions raised earlier (Bryman & Bell, 2011). Additionally, pre-formulated questions corresponded to the research questions were structured before the interview and this ensured that every question was addressed, while allowing a certain flexibility. Before the actual interview sessions, the questions have gone through expert review and ethical clearance by the university's board, and a pre-test to ensure it is appropriate.

To assure that the appropriate individuals were interviewed, the population targeted are not only limited to registered estate agents (REA), but also includes probationary estate agents (PEA), real estate negotiators (REN), and professionals that are in the office leasing or corporate real estate leasing field. Snowball sampling strategy is adopted in this study to identify and recruit potential professionals for interview.

Table 3.1: Interview Questions

Interview Questions
Section A: Respondents' Background
1. In general, what are the challenges faced by the coworking (CW) operators, if any?
2. Are there specific kinds of tenants which operators prefer?
3. How do operators attract tenants into their coworking space (CWS)?
4. Can you think of any examples where the operators couldn't provide the clients' needs?
Section B: Understanding the supply side - Coworking Operators
1. In general, what are the challenges faced by the coworking (CW) operators, if any?
2. Are there specific kinds of tenants which operators prefer?
3. How do operators attract tenants into their coworking space (CWS)?
4. Can you think of any examples where the operators couldn't provide the clients' needs?
5. Are there scenarios where the operators offer is not up to the clients' expectations?
6. In your opinion, what motivates the coworking operators to invest in coworking spaces?
7. Can you describe the differences in dealing with a CWS operator vs. traditional office landlord?
8. What are the challenges that you always encounter when dealing with CW operators?
Section C: Understanding the demand side - Coworking Users
1. From the scale of 1 to 10, how often is it that you get enquiry about coworking space as compared to traditional office? What are the firms' business nature in general?
2. From your enquiry, what are the sizes that your client usually looking for?
3. In most cases, what would be your clients' priority when it comes to selection of coworking space? What are the unique characteristics of coworking space that your client is looking for?
4. In your opinion, what are the things that users expect to receive when they co-work?
5. What are the motives that drives people to co-work in a coworking space?
6. In the event where you receive feedbacks from your client after they moved into a CWS, what would that usually be? Is the feedback negative or positive?
7. Do you believe that coworking space promotes collaboration, community, sustainability, and openness?
8. What are the differences in handling a client who intend to rent a coworking space vs. traditional office space?
9. Can you describe the changes that you observe pre- and post-covid regarding office enquiries?
Section D: Concluding
1. How great will the impact of COVID-19 be with regards to affecting the landscape of office leasing, as well as coworking space?
2. What do you think is lacking in the coworking business ecosystem and, how to rectify the lacking part?
3. Describe your vision for coworking space in the future.
4. What do you think the stakeholders can benefits from coworking space arrangement?
5. Would you like to add anything regarding the topics we talked about?

Source: Developed for the research based on literature review

3.2.3 Stage 3 – Data Collection

This study had interviewed 13 respondents from the field. The interviews are expected to be 25-30 minutes each. Details of the respondents are to be recorded and can be referred in Chapter 4. The entire interview sessions will be voice recorded for academic purpose only and transcript into words after the interview.

3.2.4 Stage 4 – Thematic Analysis

The interview results were interpreted through the principles of thematic analysis (TA) (Braun & Clarke, 2006). TA is a method for identifying, evaluating, and reporting themes within the gathered data. It organises and explains extensively a data collection and interprets numerous aspects of the research area. It presents a theoretically flexible and practical approach for qualitative data analysis. Thematic coding is a technique utilized in major analytic studies, GT, for instance, rather than an independent method in its own.

After conducting and summarizing interviews, a preliminary set of codes and associated themes were identified using inductive analysis. The codes were then further refined and expanded in a close assessment of transcripts and summaries. The data interpretation were conducted and reviewed by two independent researchers, compared, discussed, and refined before generating the theme. Researchers continued to code the data by using the revised framework until no new codes were generated. Disputes were settled by clarifying the criteria of the codes. The aim of this iterative procedure was to

arrive at a consensus on the implementation of the codes. All the findings are presented in Chapter 4 of this thesis.

3.2.5 Stage 5 – Findings and Discussion

Findings and discussions from the results were highlighted and presented via tables and graphs with a detailed write-up. The theme gathered will be presented accordingly as well. All the findings will be discussed in reference to previous empirical evidence. Further details can be seen in Chapter 4.

3.3 Conclusion

This chapter demonstrates a detailed illustration of research flow chart which includes explanation of each process. Mixed mode of methodologies were used in this research: grounded theory in thematic analysis. A qualitative approach was selected as it deemed to be the most effective method for this thesis. The subsequent chapter will be focusing on thematic analysis.

CHAPTER 4: THEMATIC ANALYSIS

4.0 Introduction

The main focus of this chapter is on the findings of the thematic analysis. The respondents' profile and professional background are justified. The emerging themes and subthemes were presented and discussed thoroughly by comparing to the previous literature.

4.1 Findings

4.1.1 Respondents' Profile

Table 4.1: Respondents' Background and Profile

No	Designation	Professional Profile	Years of Experience
R1	Director	REN	5 years
R2	Manager	REN	12 years
R3	Assistant Manager	REN	5 years
R4	Executive	REN	>1 year
R5	Assistant Manager	REN	3 years
R6	Assistant Manager	REN	2 years
R7	Executive	PEA	>1 years
R8	Senior Executive	REN	2.5 years
R9	Senior Executive	REN	>1 year
R10	Assistant Manager	PEA	3 years 4 months
R11	Executive	PEA	2 years
R12	Assistant Manager	PV	4 years
R13	Senior Executive	REN	3 years

Source: Developed for the research

Table 4.1 shows the background of the respondents being interviewed for this study. In general, the respondents have possessed qualification certified by the Board of Valuers, Appraisers and Estate Agents Malaysia; most of them are REN, while some are PEA and probationary valuer (PV) attaching with MNCs like Knight Frank, JLL, and Savills. These respondents, with majority of them having 3 or more years of experience, are involved in office leasing that provides office strategy and solution to its clients. On top of that, as snowball sampling was adopted in this study, whereby each respondent was recommended by the previous one, hence, this ensures the reliability of the respondents. In the interviews, all respondents affirmed that they have dealt with at least 2 coworking operators and up to 10. On a side note, the interview process stopped at the thirteenth respondents because the data was saturated.

The following subsection disclosed findings from thematic analysis conducted based on the interview response. Themes, subthemes, and corresponding participant quotes are presented.

4.1.2 Understanding the Supply Side – Coworking Operators

A total of four domains have been identified in the study, namely challenges, tenant recruitment, improvement, and dissatisfaction from users (Figure 4.1).

There are few challenges that the coworking operators are currently facing. There have been an oversupply issue in certain subregion of KL, such as the city area. R3 and R6 contended that CWS in KLC is not performing well, there might even be price war going on, whereas in the fringe area, CWSs are thriving. Flexibility is one of CWS's biggest advantage, yet it is considered a drawback to the operators. As mentioned by R5: "*CWS offers a relatively short leasing period, so they need to keep getting new tenants into their space, there is a stickiness factor that they have to cater in*".

In terms of tenant recruitment, most agents have a similar response. R1 mentioned that operators attract tenants by offering unique services, WeWork, for instance, has a beer tap where users can enjoy free-flow beer during happy hour; R2 has also mentioned services – "*The main thing is their services. They provide solutions to the businesses, so they have to ensure that everything is hassle-free*". Besides, location is another strategy where operators used to attract tenant. R1 and R8 both gave an example of Regus, saying that the selling point of Regus is that they have many locations throughout the world, and members of Regus are entitled to enjoy and have access to any of the locations worldwide. R7 pointed out that flexibility in the sense of place customization and lease period is the utmost important for operators to attract tenants. Physical appearance and aesthetic design of CWS have been mentioned by a few as well. R4, R5, R6, and R10 shared the same opinion that aesthetic matters because that would motivate employees to go to work, especially the Gen-Z and millennials.

Seemingly, the business model of CWS are close to perfection, however, there is always room for improvement. Security issues are one of the dissatisfactions voiced out by the users, according to the respondents.

"I would say is the security issues. They felt like the CWS is not safe because the space are shared among other people." – R3

Among the dissatisfactions and improvements identified, space requirements and expansion issues were mentioned the most. There were two scenarios given where the operators couldn't accommodate to the respondents' size requirement: the size that the client is looking for was too big (e.g., more than hundred seats) or when the client is looking to expand but the CWS do not have enough space.
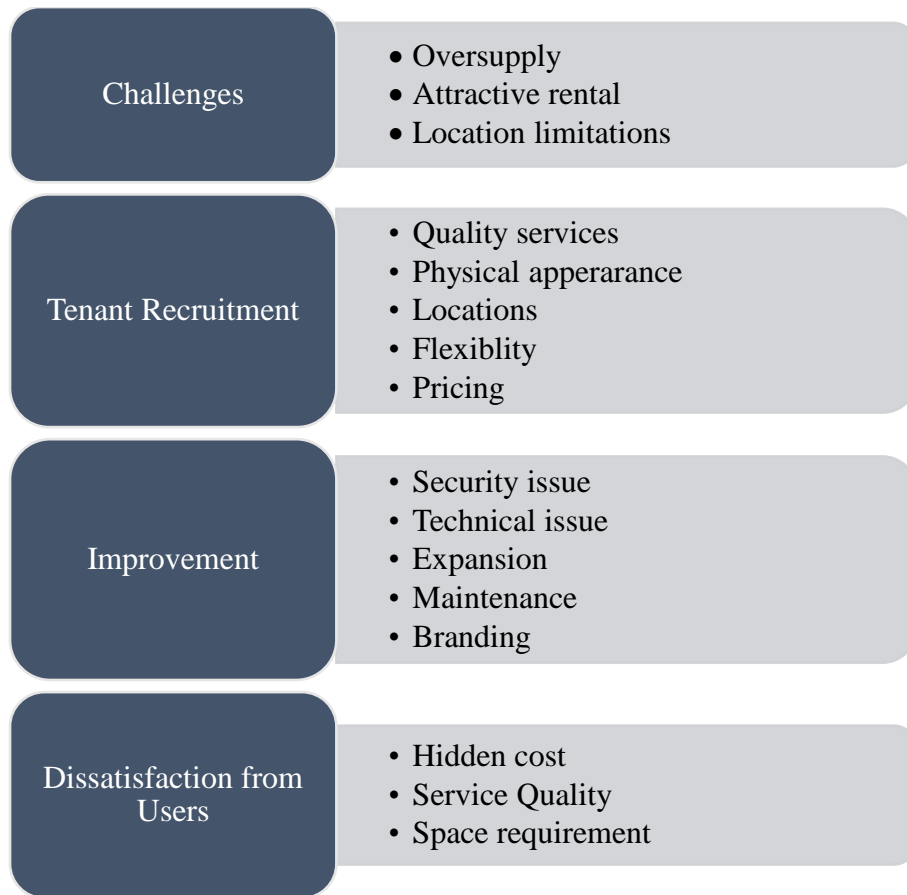
"The operators cannot accommodate to the clients' expansion." – R5

"First thing that came into my mind is that client requiring bigger space, say 100 headcounts, but not all operators have that availability." – R6

"It is more likely towards large requirements where the operators are not able to accommodate to that headcount." – R8

The other that were less mentioned are the branding issue, whereby the respondents' clients felt dissatisfied with the fact that they are only entitled to have a small signage on the reception area of the CWS and yet it has to be shared with other companies. With regards to technical aspects, the issues were mainly on the network connection (i.e., Wi-Fi is not strong enough, not enough space for server rack, not comfortable with sharing server rack with other companies). Aside from that, operators could probably improve on their maintenance services as some respondents asserted that there is a lack of maintenance from the CWS, though did not specified, R5 asserted that sometimes the services are not up to clients' expectations.

Figure 4.1: Themes Identified for Coworking Operators

Challenges	• Oversupply • Attractive rental • Location limitations
Tenant Recruitment	• Quality services • Physical appearance • Locations • Flexiblity • Pricing
Improvement	• Security issue • Technical issue • Expansion • Maintenance • Branding
Dissatisfaction from Users	• Hidden cost • Service Quality • Space requirement

<u>Source:</u> Developed for this research

4.1.3 Understanding the Demand Side – Coworking Users

Four domains were identified in the transcripts of understanding the coworking users, including preferred characteristics, perceived benefits, motives, and changes in office leasing enquiry (Figure 4.2).

When the respondents were asked about their clients' priority when it comes to selection of CWS, three categories of CWS characteristics discovered in the literature review have been mentioned. For instance,

"I would say they prioritized the location; it has to be accessible by car or near to public transport and have access to food because they want to make sure their employees have variety selection of food; another thing is the working environment and ambient." – R9

"There are two contexts here, for those that need CWS as a temporary solution, location and cost are their main concern; for permanent solution, still location, next is facilities, and lastly cost." – R3

"From the client's perspective, it would be location, availability (for example., client looking for a window unit with daylight, if the operator cannot provide, client will just go to other CWS), and of course costs." – R6

The benefits that users perceived when they work in CWSs were identified, which is also the motives that drives them to CWS. Most users chose to work in CWS because of its cost-effectiveness. There is no involvement of capital expenditure because CWS provides everything that clients need to run their business, such as modern furniture, IT facilities, printing facilities, cleaning services, etc., whereas for traditional offices, client would need to obtain huge capital to pay for deposits, buying furniture and fittings, renovation costs, any many more. Next, flexible in terms of leasing period is one of the motivations for users to work in a CWS, compared to traditional office where usually require at least 3 years' lease, CWS have more flexibility:

"Client don't have to sign for longer terms." – R1

"I'd say is the flexibility because they have day pass or contract on monthly basis and the flexibility in case they need an expansion or shrinkage, especially for startups or entrepreneurs who are uncertain about their future plans." – R6

Collaboration and networking are one of the key characteristics of CWS. This characteristic are especially beneficial for startups or freelancers because they

get to create new business opportunities or establish business relationship with other firms and individuals.

"I think it's the collaboration and opportunities to network with other companies, mostly for startups." – R1

Some users prefer to be working in a CWS because of the services provided. They enjoy not having to worry about paying utilities, cleaning of premises, and other subtle matter. To put it simply, they desire to have an environment where they can work professionally while other things were being taken care of. As conveyed by R3: *" Not needing to worry about the common area, e.g., cleaning services, reception services, pantry restock."*

Working environment plays an important role in this new era. Unlike traditional office, CWSs are usually furnished with colorful, modern, and aesthetic design to attract young people or Gen-Z.

"The environment and vibe of the CWS. Some clients they really just enjoy sitting there and watching people pass by, talking, while doing their work." – R7

Ever since the Covid-19 pandemic, there has been changes in the office leasing enquiry. The fact that most organizations have been practicing hybrid and flexible working mode, the offices were not utilized at its maximum capacity. Therefore, firms are becoming more aware towards space optimization and are rethinking the exact amount of space they need.
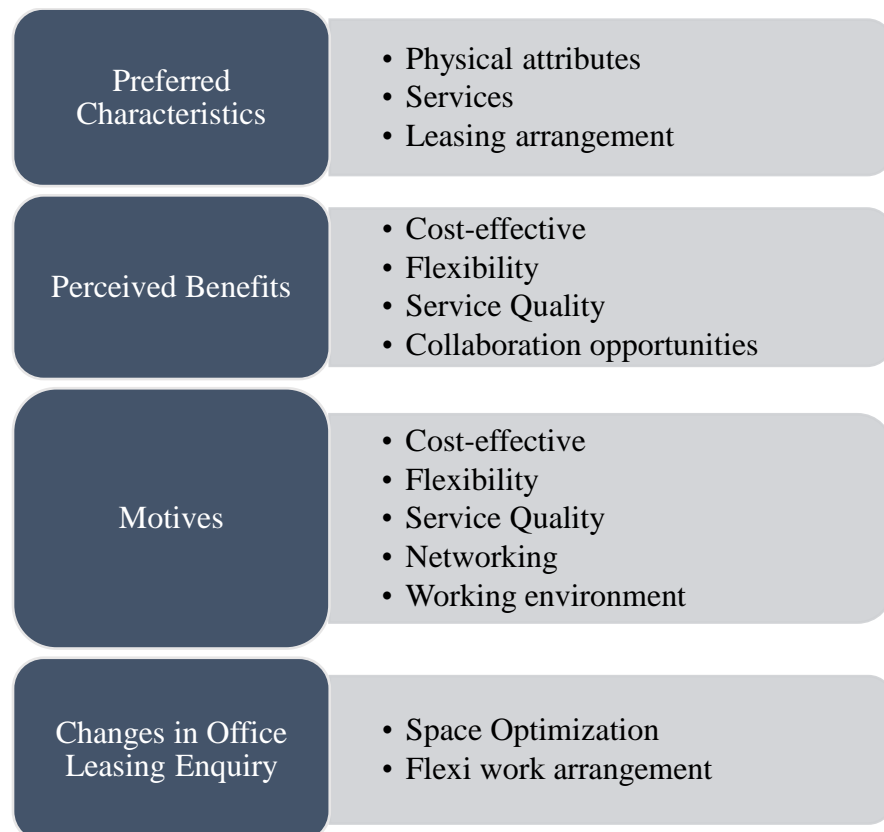
"...one thing for sure is that majority is right sizing their office space in the post-pandemic scenario. They feel like they don't need such big office space." – R1

"People became more cost concious and aware of space optimization, therefore, a lot of rightsizing is going on now." – R6

Whenever firms approached the professionals for relocation advice, they tend to enquire both traditional office and CWS. This is for them to perform an in-depth financial analysis between these two office models and compare which one has the highest potential in cost-saving in the long run.

"Nowadays, tenant tend to ask office and CWS requirements together for them to make a comparison of rental, location, accessibility for the next 3 to 5 years' time. Because they wanted to understand the trend of CWS as in is it able to reduce their capex and improve the flexibility (i.e., remote working)."

Figure 4.2: Themes Identified for Coworking Users

Preferred Characteristics	• Physical attributes • Services • Leasing arrangement
Perceived Benefits	• Cost-effective • Flexibility • Service Quality • Collaboration opportunities
Motives	• Cost-effective • Flexibility • Service Quality • Networking • Working environment
Changes in Office Leasing Enquiry	• Space Optimization • Flexi work arrangement

Source: Developed for this research

4.2 Discussions

CWSs has been growing exponentially in the past few years, especially the presence of Covid-19 which acts as an accelerator to the growth. There is consensus from previous literature contending that CWSs are on demand because tenants' preference have shifted from traditional office space to a more flexible option. Indirectly, this has prompted the operators' motives to open more CWSs as there is demand, which can be translated into revenue. This is aligned with the interviewees' response as nearly 90% of them agrees that the only motivation for operators to invest in CWSs is the revenue and profit. Yet, Kojo & Nenonen (2014) conclude that operators see interaction and collaboration as their most significant value and strength for attracting tenants. Back to the topic, does the demand for CWSs high enough for operators to keep expanding their business operation? The interviewees concur on this by stating the fact that CWSs are facing an oversupply (not academically supported by any literature). Because of that, it leads to another issue that operators faced – price war. In order to attract tenants into their space (which is the biggest challenge that operators are facing (Deskmag, 2018)), operators tend to offer a much lower price, making it attractive compared to other competitors. Respondents are also of the view that locational limitations are one of the challenges. CWSs in the Greater KL are concentrated in the major business districts, for instance, KL City (KLC) and KL Fringe (KLF) area; in contrast, CWSs in the Decentralized (DC) area are relatively lesser. Similar to the findings in Reuschke et al. (2021) who summarize that CWSs are more favour towards central locations and business clusters in the cities whereas lesser supply in the suburban area, due to the benefits of having main transportation lines and larger workforce population (Marino & Lapintie, 2017; Waters-Lynch et al., 2016). Another interestingly contradict perspective have been brought up by Antoniades et al. (2018). Their study mainly focuses on Melbourne, and it demonstrated that approximately 80% of CWSs are located in the fringe and DC areas where market demand is lower and office landlords would offer cheaper rents to the operators.

From the interviewee's perspective, the operators attract tenants by their services quality, physical appearance of the CWS, located in a good location, provide flexibility in terms of contract and space customization, and attractive pricing. On the other hand, when they were asked about the users' preferred characteristics in a CWS, the interviewees mentioned physical attributes (location, aesthetic design, and facilities provided), services (day-to-day services, internet access, and resources), and leasing arrangement (flexibility). These were the characteristics mentioned in the previous studies to which users prefer, for example, atmosphere and interior aesthetics (Tan & Lau, 2021), location (Spinuzzi, 2012), access to tools and resources (Bouncken & Reuschl, 2018), and lease flexibility (Fuzi, 2015). Among these factors, location has been mentioned the most by the respondents, in line with Capdevila (2014)'s research where he discovered that location is the most important factor of a CWS as users usually select a CWS that is located at an accessible location and proximity to their home. Additionally, Remøy & Voordt (2014) highlighted the importance of CWS location to be accessible by vehicle, public transport, and bicycle for the creative industry, which represents a large portion of the study's sample.

Although the feedbacks received from the clients are generally positive, there are some dissatisfactions. Majority of the respondents asserted that the operators couldn't accommodate to clients' space requirement, especially when there is expansion needed. Surprisingly, this is inconsistent with Echeverri et al. (2021) and Gibson & Lizieri (2001)'s findings where the authors claimed that organizations utilized CWSs as a support to their expansion or contraction needs. Besides, users are also dissatisfied about the "hidden" costs that they are paying for. The respondents usually receive a quotation from the operators whereby the price will be stated in the business proposal (this is not academically supported by any research). Other than the monthly rental that the tenants are expected to pay, there are still some other costs, such as printing fees, beverages costs, reception services, restoration fee, one-time set up fee, etc., different operators would have different pricing scheme. However, little to no research have mentioned this issue. With regards to security issues, respondents

claimed that their clients felt unsafe and insecure while working in a CWS because the spaces are shared among all different kind of people (Aslam et al., 2021).

More often than not, real estate is usually costliest factors in businesses (Ruostela et al., 2014). Respondents generally contended that cost-effectiveness is one of the motives and benefits which users perceived. This result ties well with previous study (Leforestier, 2009; Nappi & Eddial, 2021; Pfnür & Wagner, 2020), wherein working in a CWS is able to reduce costs in terms of office footprint and operational costs in the long-term. In fact, a business can save up to 30% for a 20 to 30 pax office space in CWS compared to a traditional office (Arora, 2017). Due to real estate's inherent characteristics: expensive, immovable, and large in size – makes transformation a challenging matter (Silva, 2021). As corporates require more flexibility nowadays because of volatile business environment triggered by the Covid-19 pandemic, this SPaaS business model has become a popular option for them to unleash flexibility. Aside from financial flexibility which relates to flexible contract terms and tenure, Gibson & Lizieri (2001) suggest that CWSs provide functional flexibility to organization by allowing them to expand, contract, or even exit rapidly through short-term leases at different business cycle stages. Users also enjoy the services provided by the operators, which is what Silva (2021) called as an "easy-in, easy-out" renting process. The managed workspaces allow businesses to enjoy the aesthetic features and services of the CWS for a monthly rent that is all-inclusive and without involvement of upfront cost (Sargent et al., 2018). Nevertheless, in Weijs-Perrée et al. (2019)'s study, they concluded that services (e.g., hospitality, reception, networking events) are the deemed as the least important factors to users. Next, though lesser respondents have mentioned during the interview, networking and collaboration opportunities are one of the reasons that drives the users to CWS, and in consistent with a recent study by Clifton & Reuschke (2022), the users perceived collaboration opportunities as the key motivations to work in a CWS. However, Leforestier (2009) and Tremblay & Scaillerez (2020) share a different opinion on the collaboration factor by stating that some individuals would rather work individually than to collaborate with others, and see CWSs merely as an office space to work.

The Covid-19 pandemic has shifted the office leasing environment, one of the most obvious changes are the flexi work arrangement, which ultimately leads to the increased awareness of space optimization. As informed by R3 during his interview, compared to the early days of Covid-19, organizations are quite set nowadays in the sense that they know they are exercising hybrid working and they know the exact amount of office space they need in order to achieve resources and space optimization. In corresponding to previous literature (Cooke et al., 2022), the pandemic has forced many organizations to re-assess and re-imagine their office portfolio. Many real estate consultancy firms forecasted a hybrid future with elevated rates of working from home, contrasting with the time spent in the office (e.g., CBRE, 2021; Savills, 2020). Some analysts saw the health crisis as an opportunity to adopt and adapt different approaches in an effort to create better environment for company's talent, increase productivity and collaboration, and cut down cost; but such changes would require transformative thinking rooted in facts (Boland et al., 2020). The ultimate goal of this reformation something that good businesses have always desired: an environment where employees can enjoy their work, collaborating with one another while accomplishing their organizational objectives.

4.3 Conclusion

In this chapter, I presented the qualitative study of my research. To achieve the research objectives, I interviewed 13 respondents from the office leasing industry. The involved respondents' professions and background had been identified and justified thoroughly. After interview response has been transcribed, a thematic analysis were performed in this stage based on the transcripts. To test the reliability of the analysis, two independent researchers were involved in the process. The transcript were being coded twice with Code 1 and Code 2 until no codes were identified, and the emerging themes were discussed thoroughly between the researchers. Codes were arranged into themes that matched the research questions.

This study highlighted that even though CWSs are on the rise, the operators do face certain challenges such as the issue of oversupply, struggle to attract tenants, etc. We also understand that the effort operators put in attracting tenants are actually in line with the coworking users' preferred characteristics. Nevertheless, the users voiced out their dissatisfaction regarding CWSs, mostly is on the expansion or space requirement issue.

On the other hand, understand from the perspective of leasing agents that the preferred characteristics of users are the physical attributes, services provided, and leasing arrangement of a CWS. The main drivers that drives them to CWSs were identified and discussed: cost-efficiency, flexibility, service quality, collaboration opportunities, and the working ambient of CWS. Last but not least, the Covid-19 has shifted the office leasing environment in a way that there is an increased awareness of space optimization by the corporates, due to the fact that majority of them are practising hybrid working mode.

Limitations from this study and recommendations to overcome it will be presented in the next chapter, along with implications and suggestions for future research development.

CHAPTER 5: DISCUSSIONS, CONCLUSION, AND IMPLICATIONS

5.0 Introduction

The final chapter aims to conclude the research conducted and emphasize its main findings. Implications that can or may be relevant in the sense of either theoretical or practical ways will be discussed. Limitations observed from this study and recommendations to overcome them can also be found in this chapter.

5.1 Achievement of Research Objective

This thesis focused on the analysis of CWS, an emerging social dynamic that is constantly changing. The findings had shed some lights on the real estate agent's perspective in users' and hosts' preferences towards CWSs in Malaysia. In an effort to study in depth the concept of CWS and other related topics, this research had systematically review 125 previous literatures from 1967 to 2022. From the previous literature, it is found that characteristics can be classified into 3 categories, namely physical attributes, service attributes, and leasing attributes. Thus, achieving the first objective of this study: what are the characteristics of CWS arrangement?

Secondly, this study also aims to address the objective of attain a deeper understanding of users' and hosts' perceptions in the CWS from the perspective of real estate agents involved in office leasing industry. Conclusively, from the supply factor, which are the coworking hosts, the real estate agents stated that they generally do not have a preference, as they would welcome whoever is interested to be working in a CWS. Though a fair number of studies highlighted that CWS trend is high in demand nowadays, the agents observed there might be an oversupply issue in

Malaysia. Nevertheless, they acknowledge and foresee the trend to stay even when the pandemic is over. On the other hand, from the demand factor – coworking users, the motivations and drivers for them to be in a CWS are cost-effective, flexibility, services quality, networking and collaboration opportunities, and the working environment. In terms of characteristics, the users prioritize more on the location factor, flexibility of the lease terms and space customization, services and facilities offered by the hosts, and of course, the costing factor. Despite the benefits of occupying CWS, there are dissatisfactions voiced out by the users. This research also highlights the optimistic future for CWS in Malaysia as firms are seen to embrace hybrid working and flexibility.

5.2 Implications of the Study

5.2.1 Managerial Implication

This thesis studied about CWSs in general and even narrow down to Malaysia's context. Stakeholders that involved either internally or externally to the CWSs can benefit from this research. For instance, coworking hosts or the managers would better understand the users' preference as well as their dissatisfaction on CWSs. With that, it helps the hosts to develop a better marketing strategy to attract, or what's even important, to sustain its tenants. This study presented leasing agents' view on the overall CWS environment in Malaysia in which there might or might not be an oversupply issue. In the event where the coworking hosts are looking into expanding their business operation, they could take this insight into consideration and conduct a more feasible study about the micro and macro factors related to CWS, to help them avoid undesired outcome.

Another main stakeholder involved in CWSs are the office building owners and landlords. With the literature and findings demonstrated in this thesis, building owners will have a comprehensive view of CWS as a whole, starting from the origins of CWS, all the way to the demand of CWS in Malaysia and the future of workplaces. Office buildings with lower occupancy rate or lower demand can consider cooperating with CWS as a strategy to increase footfall into the office building. For those that already have a CWS in the building, landlords can utilize the findings of this study to reanalyse whether or not having a CWS in their building would profit them in the long run. Besides, the current working trend (i.e., hybrid working, shifting preference towards CWSs, space optimization, etc.) have been discussed in this study, office landlords should take advantage of this by rethinking their business models, be creative and innovative to stay competitive and relevant in the commercial real estate industry.

5.2.2 Policy Implication

CWS is a rather new workplace concept in Malaysia, given that it only started to emerge somewhere in 2010. Unlike traditional office business model where it is being regulated by the Malaysian authorities, National Land Code 1965 for instance, on the other hand, little to no regulation is regulating the CWS business operation. Before tenant moved into a traditional space, there will be a various of documents that has to be signed by both the landlords and the tenants, such as the letter of offer, tenancy agreement, and handover documents – these documents aimed to secure both parties' interest in the event when things go wrong, and breach of clauses will lead to serious consequences because it constitutes as breach of contract law; contrastingly, tenants that keen to move into a CWS would only require to sign a 3-to-4 pages service agreement and some of it were not even properly documented by a certified legal. Hence, this puts the operators' and tenants' interest at risk

and through this study, I am optimistic about the increasing awareness by the governing bodies towards CWSs business in Malaysia.

In addition to traditional property management services, i.e., services that focuses on the physical asset, it is important to note that there is a requirement for social services. The CWS business model emphasizes a lot on "collaboration", "networking", "information sharing" etc., policy makers and authorities should also pay attention into the underlying factors of "social services".

5.3 Limitations of the Study

Though the research questions and objectives have been periodically explored, it is not without any limitations. There are three limitations that should be addressed to avoid any misunderstandings.

Firstly, this study mainly focuses on the characteristics of CWS which in turn, has causes the study to lose focus on the other important aspects. In the literature, I review the CWS characteristics in three parts, namely the physical, service, and leasing attributes. Yet, I only address the positive characteristics and failed to illustrate deeper insights such as whether or not the characteristics brings any disadvantages or drawbacks to the users.

The second limitation is that this thesis examined only the Klang Valley region and did not take into consideration other regions such as Penang and Johor Bahru (JB). Also, since the findings were obtained from analysing the responses of real estate agents in KL, Malaysia, it cannot be generalized to CWSs throughout the world.

Last but not least, the thesis was conducted in an exploratory way, in which the findings were contributed by respondents through face-to-face interview. A total of

22 open-ended questions were asked during the interview, that means respondents are having more control over the content of the data obtained prior to the interview. In addition, there is a lack of credibility as observations and judgements are highly influenced by knowledge and personal experience, and the responses given were not measured.

5.4 Recommendations for Future Research

With the limitations mentioned earlier, there is ample room for future research in the CWS topic. I advocate further research on the literature review to other aspects of CWSs such as its types of business model, the drawbacks of CWS characteristics, behaviours of stakeholders such as office landlords, etc. to gain an in-depth understanding of CWS. Next, to overcome the second limitation, I suggest future researchers could extend their studies to other region aside from KL, such as Penang and JB, to understand the local market sentiment and the locals' behaviour towards CWSs. Lastly, the lack of credibility can be resolved by conducting quantitative research based upon the findings of this research and to gather representative findings.

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