

UNDERSTANDING USER'S PERSPECTIVE ON COWORKING SPACE: CASE OF KUALA LUMPUR

Ain Farhana Jamaludin, Ainoriza Mohd Aini

Department of Real Estate, Faculty of Built Environment,
Universiti Malaya

Corresponding Author: ainoriza@um.edu.my

ABSTRACT

Working from anywhere at any time has become possible due to changes in attitudes about work and the greater use of mobile technologies over the past few decades. However, employees continue to look for work settings that encourage networking and collaboration opportunities. Coworking spaces are becoming more and more popular as a result of this. The exact preferences of coworking space users, however, are not well understood. The purpose of this study is to examine user perceptions of coworking spaces. 200 respondents from coworking spaces in Kuala Lumpur completed a questionnaire to provide the stated choice information. The user preferences were examined using a multinomial logit model. The findings indicate that coworkers' primary reasons for choosing to work in a coworking setting were to find a location of employment other than their homes where they could do so in a stimulating environment. The most crucial factors to consider while selecting a particular coworking place are accessibility and atmosphere/interior. These findings give coworking space owners and managers strong insights into how to accommodate coworker preferences by providing coworking spaces with decent vehicle and public transportation a semi-open layout, and a homely decoration.

Keyword: *Coworking space, Kuala Lumpur, perspective, multinomial logit model.*

1. INTRODUCTION

Coworking spaces have become a brand-new and exciting phenomenon in business during the past ten years. Coworking is increasingly significant to theory, practise, and policy in entrepreneurship due to its prevalence, popularity, and potential for disruptive change: nevertheless, given the quick emergence of the phenomena, its consequences are mostly unstudied. Overall, additional study is required to inform owners, decision-makers, and business people about the impacts of this new organisational style.

Past study by Bueno (2018) is related to analyzing the main factors for increasing productivity in coworking spaces. However, there hasn't been much research done in this area, and none that has particularly examined coworking spaces has been found. This study extended a research model based on earlier literature and demonstrated the impact of the coworking environment and social interactions on productivity in this type of workplace. The results offer valuable information for elucidating the most important reasons why a group of people, primarily freelancers, with more or less diverse backgrounds, prefer to co-locate themselves in the same working environment. Overall, based on the opportunities provided by some of the core features of the spaces, like social interactions, new opportunities, and knowledge sharing, the analysis conclusively shows that coworking spaces are suitable places to engage in collaborative activities to produce highly productive work.

In Malaysia, the office market has grown dramatically in tandem with the nation's economic expansion. This has made it easier for both domestic and foreign investors to set up business in major cities like Johor, Penang, and Kuala Lumpur. In recent years, Kuala Lumpur, the capital of Malaysia, has experienced a boom in the office sector due to an increase in the supply of office space. The cost of office space in KL remains prohibitive despite the rise in supply, particularly for start-ups and smaller businesses. The conventional approach to office setup typically entails lengthy lease terms and expensive fit-outs or renovations that must be completed before the business operation can start. So as a less expensive option to their office, coworking space could ease their load. Since operators often occupy at least one floor of an office building, the coworking space business model is thought to help with the problem of oversupply of office space. (Tan, 2019). The number of coworking space in Kuala Lumpur has increased drastically by time (Yeo, 2021). The exact demands of coworking space customers in Kuala Lumpur, however, are not well understood. The characteristics of coworking spaces for users in Kuala Lumpur itself have not yet been studied. Therefore, the purpose of this study is to comprehend the user's perspective of the Kuala Lumpur coworking space.

2. LITERATURE REVIEW

2.1 Coworking Space

More than any other type of space, coworking spaces have developed rapidly in the past five years. Since originating in San Francisco in 2005, they have grown at rates as high as 250 percent annually, and 1,200 coworking spaces now exist in Europe and 3,000 at a global level (Deskmag, 2014). In turn, approximately 160,000 employees functioned in coworking spaces in 2014, and more than one million people will do so by 2018 (Marzloff, 2013). Despite the lack of any accepted academic definition of coworking, it implies a new form of work organization that enables collaboration opportunities and encourages a sense of community inside a shared space, gathering together workers from different companies or even freelancers with different profiles and objectives (Johns and Gratton, 2013). This new type of work organization has led to a transformation of not only working spaces but also the way people work and collaborate. These new spaces, which workers co-create themselves to reflect the high value they place on autonomy and empowerment, have started disrupting classic models of work organization.

People from a variety of professional backgrounds, such as freelancers, entrepreneurs, startups, and small businesses can use coworking spaces, which are various types of contemporary open workspaces that offer shared office amenities and infrastructures (Bouncken & Reuschl, 2018). These areas frequently adhere to custom-made or upscale interior design principles (WatersLynch & Duff, 2019). Most coworking spaces run by service providers are accessible to all businesses and professions. Independent coworking spaces strive to improve flexibility, and networking. Cooperation, and creativity in addition to offering shared office facilities (Clayton et al., 2018). Additionally, businesses like Google, SAP, and consulting firms have adopted this trend and manage their coworking spaces to improve project coordination and widen their innovation pipeline (Bouncken & Reuschl, 2018). People from other professions who are not in the same firm may use some of the corporate's coworking space. For example, freelancers are able to collaborate in the same coworking space with the employees of Maxis Berhad in WeWork.

Workers now have more options for where, when, and how they work allowing them to be more independent in both their professional and personal lives because to the quick speed of technical innovation in digitization (Green, 2014) The use of information and communication technology to complete work virtually has become a reality (Kubatova, 2014). This led to the emergence of the "creative economy, which describes a more imaginative approach to knowledge-based jobs that may support the expansion of start-ups and independent contractors. These two sorts of workers adopt a new way of working where they plan their own work schedules rather than being restricted to the traditional working hours (Waber et al., 2014). Additionally, knowledge professionals can now work through portable laptops while benefiting from ubiquitous access to information (Moriset, 2014). However, Spinuzzi (2012) mentioned that there are drawbacks of working alone. They discover that they are no longer interested in making connections and establishing trust in their interactions with others. This pertains to the problems of segregation, loneliness, difficulty to form relationships, and the potential erosion of boundaries as people fight to keep personal lives and work separate (Spinuzzi, 2012). Therefore, the growth of coworking spaces, which fall somewhere between telecommuting and working in an actual office setting, acts as a safeguard against these problems.

The idea of coworking spaces is becoming more and more common in the Asia Pacific area as a result of changes in corporate cultures and organisational structures. In 2019, the region alone accounted for more than 35% of all coworking spaces globally (Moore, 2020). This exemplified how a growing number of workers from the particular are drawn to shared workplaces due to their more flexible work patterns, as well as the chance to be socially and geographically close to other professionals (Gerdenitsch et al., 2016). Coworking is a relatively new idea, although having a lot of potential. The number of coworking spaces worldwide has increased significantly in recent years despite being mostly unknown of ten years ago. According to projections, there will be some 41,975 coworking spaces worldwide by the end of 2024, refer to Figure 1. Investors have taken note as a growing number of entrepreneurs move into these spaces. Since they have been among the “Few bright spots in the office-market during the economic recovery” making them “one of the few sources of demand, many of the major landlords in the world are spending extensively in these spaces. Numerous sources have analysed the latest developments in coworking and what they might mean for entrepreneurship and the future of work as coworking has grown in popularity. The majority of individuals think that the growth of coworking is one of the most ubiquitous trends in recent entrepreneurial activity (Kreamer, 2012).

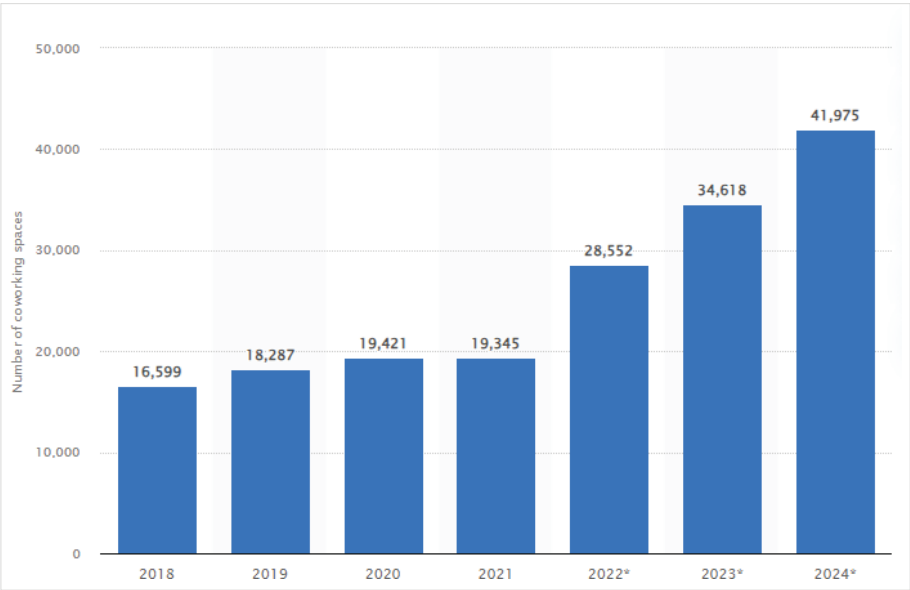


Figure 1: Number of coworking spaces worldwide 2018-2024

2.2 Coworking Space in Urban Malaysia

In Malaysia, the office market sector has grown at a remarkable rate in tandem with the economic development activities in the country. This has caused a favourable business environment for both domestic and international investors to set up their operations in urban cities such as Kuala Lumpur, Penang and Johor. Focusing on the study in Kuala Lumpur (henceforth known as KL), this capital city of Malaysia is divided into a few major central business districts (CBDs) around the area of KL city center (KLCC, Bukit Bintang) and KL fringe (Bangsar, Mid Valley, Sunway Velocity, Bangsar South, KL Sentral). In recent years, the

office market within KL has expanded with growing supply with a fluctuating number based on the market condition at the time as reported by Savills (2019). Currently, the total office space supply stood at 126 million square feet. However, despite the growth of office supply, the office rental rate has stayed relatively consistent at an average gross rent of US 1.40 per square feet for office buildings with good specifications (Savills, 2019). Although the KL's office rental is one of the most affordable in the region, the rental rate is still relatively unaffordable especially for smaller-sized companies such as start-ups. Thus, co-working space could help to alleviate their burden as a cheaper option for their office.

The strong support from local government initiatives such as Malaysia Global Innovation and Creativity Centre and Malaysia Venture Capital Management, which are established to support local budding start-ups (Lee, 2014), has successfully led to the rapid growth of co-working space operators in urban Malaysia. With the current co-working pie in Malaysia shared by 31 operators as identified by JLL (2017), this number is continuously growing with both new international and local players entering the market. With more than 60% of co-working spaces located outside KL city centre, the undeniable precondition the co-working space looks at is a location with access to transportation and easy accessibility to shopping malls.

Although it has been widely accepted in Western nations since the early 2000s, the coworking space concept didn't begin to gain attraction in Malaysia until 2010 (Cho, Ibrahim & Zubir, 2020). According to Knight Frank Malaysia, a real estate consultancy firm, there are now 160 coworking spaces spread across 66 coworking operators in Kuala Lumpur, increasing fourfold from 2017 to 2020 (Yeo, 2021). Then, in 2020, the Covid-19 epidemic occurred, prompting a redesign of the workplace and accelerating the movement. Due to their desire to work in a community-based environment, Malaysians are embracing a hybrid work culture. The chance to "right- size" their workspaces has been seized by businesses, and they are now looking for more adaptable, economical, and plug-and-play choices. To compete with other coworking operators and capitalise on the new market trends that the epidemic had created, coworking operators must enhance their services and product quality particularly as demand from clients rises.

There are recent years publication from researcher in Asia which are summarised in Table 1; in Malaysia carried out by Kenanga (2018), "The rise of coworking spaces in Malaysia" to study about core factors of increasing popularity of coworking spaces; Malaysia by Aliff Yusri (2018) "Room To Grow: Coworking Spaces And SMEs" to explore about current economics of coworking spaces; Malaysia by Lim (2018) "Curating Coworking Space as A Third Place" to study the concept and possibility of coworking space for interaction; Singapore by Tie (2018) "Coworking Space" to study about facts in Singapore on the growth of coworking spaces; China by Zhai (2017) "A study of the coworking operating model" to explore on optimal types of operating coworking spaces.

Table 1: Recent Years Publication From Researcher In Asia

Title	Year of Publication	Author	Context	Description of Study
The rise of coworking spaces in Malaysia	2018	Kenanga	Malaysia	Core factors of increasing popularity of coworking spaces
Room to grow: Co-working spaces and SMEs	2018	Aliff Yusri	Malaysia	Current economic of coworking spaces
Curating coworking space as a third place	2018	Lim	Malaysia	Concept and the possibility of coworking spaces for interaction
Coworking spaces	2018	Tie	Singapore	Factors in Singapore on the growth of coworking spaces
A study of the coworking operating model	2017	Zhai	China	Optimal types of operating coworking spece

(Source: Author, 2023)

2.3 Coworking Space Characteristics and User Preference

Kojo and Nenonen (2016) based on the business model and level of user access, identified six types of coworking spaces: public offices (ie., free coworking spaces, like libraries); third places (i.e., public spaces that demand payment for services, like cafés); collaboration hubs (ie., public offices that emphasise worker collaboration); coworking hotels (i.e., shared office space with a brief lease contract and a minimal service package); and incubators (i.e., shared off-site workspace). Only those who used coworking hotels and shared studios were included in this study; public areas like libraries, cooperation hubs, or third places are not. The primary objective of these public areas is not to offer coworkers offices, and there is no rental agreement. These public offices are not considered in this study because its goal is to aid coworking space providers in strengthening their competitive position. Additionally, incubators are not taken into account in this study because they are a particularly specific kind of multi-tenant office that are primarily supported by public funding and are designed to assist start-up businesses. (Weijs-Perrée et al., 2016). Although there are several types of coworking spaces, they share the same core values, namely: collaboration, community, accessibility, sustainability and (Kwiatkowski & Buczynski, 2011). Collaboration refers to working together with other co-workers.

Additionally, because to the open setting of a coworking space, participants regularly engage in spontaneous encounters with one another (Gerdenitsch, Scheel, Andorfer, & Korunka, 2016), it is occasionally necessary to assign a coworking host to foster collaboration, networking, and engagement among coworkers (Fuzi, 2015). Furthermore, some coworking spaces foster a sense of community where users can develop professionally with the assistance of other users (Sykes, 2014). Its greatest asset is that the community is welcoming and accessible to everyone. Coworkers can locate other individuals, ideas and resources in this network, exchange experiences, grow from one another and recognize each other's' achievements (Waters-Lynch & Potts, 2017). Additionally, a number of coworking space companies supply space at various places. Independent professionals thus have the freedom to pick their place of work. Coworking spaces are also widely available because office space is frequently provided for inexpensive rental rates and flexible leasing agreements. They have a rental duration of one day, one week, or one month (Sykes, 2014). A common coworking environment mixes features of a workstation (functional spaces) with leisure and artistic spaces (Rus & Orel, 2015). A co-working space's traditional physical layout features an open floor plan with communal workplaces where employees can readily engage with one another. Compared to conventional multi-tenant offices, this one provides more informal places and amenities including coffee shops, kitchens, meeting 24/7 to the internet, printers, copy machines, lounge areas, and other such areas (Sykes, 2014). The characteristics of typical coworking spaces listed in earlier studies are shown in the table 2. Important common coworking space attributes are based on these traits, which are then studied to determine user preferences for them.

Table 2: An overview of the coworking space qualities cited in the literature

	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	Tan and Lau 2021	Bouncken & Reuschl 2016
Physical Attributes													
Atmosphere and interior aesthetics		*			*	*	*		*	*	*	*	
Collaborative spaces	*					*	*	*				*	*
Concentration rooms			*	*									*
Event spaces	*					*	*		*			*	*
Shared workspaces	*					*	*		*			*	*
Pantry		*					*	*				*	
Meeting rooms							*	*				*	
Open space layout							*	*				*	
Convenience location			*		*							*	
Services Attributes													
Access to tools and resources		*	*		*	*	*		*			*	
Co-working host24-hr access	*			*			*	*	*	*		*	
Diversity of tenants					*	*	*		*		*	*	
Networking events and workshops		*			*		*		*		*	*	*
Virtual platform						*	*		*		*	*	*
Sense of community				*	*								
Collaboration opportunities				*								*	
Information and knowledge sharing				*								*	
Leasing attributes													
Lease flexibility		*	*	*	*	*	*	*	*			*	

Sources: Developed for the resear

Studies that focus on people who use coworking spaces are typically more open-ended and focus on understanding the factors that motivate people to choose coworking spaces as their work environment (Table 3). For example, Deskmag (2012) found that rental expenses are cited by most respondents as the main justification for coworking. In addition, Capdevila (2013) stated that location is one of the main factors in deciding to join. Coworkers were motivated by feeling like they belonged to a community and being in an exciting workspace (Fuzi, 2015). Research on users' preferences for coworking space features is relatively scarce, nevertheless. One of the research projects on the characteristics of multi-tenant workplaces in general focused on user satisfaction, which is related to user preferences (Hartog, Weijs-Perrée, & Appel-Meulenbroek, 2017). Results showed that users of multi-tenant workplaces are most satisfied with the accessibility and availability of fixed workspaces and least satisfied with their ability to adjust to the indoor climate. Previous studies also demonstrated how user preferences are influenced by individual attributes in addition to the features of coworking spaces. For example, Rothe, Lindholm, Hyvönen, and Nenonen (2011) showed that the preferences of single tenants in office spaces are influenced by individual characteristics in a variety of ways. They demonstrated, for instance, that younger employees prefer a work environment that fosters teamwork, but older employees prefer having personal control over the indoor climate. Additionally, they demonstrated that respondents who spent all their working hours at the office placed the greatest value on the workplace environment's capacity to uphold the image and values of the company for which they were employed (Rothe et al., 2011). Furthermore, Remøy and Van der Voordt (2013) showed that user preferences are influenced by the organization's sector. For instance, they demonstrated that employees working in the creative industries prefer a flexible arrangement with shared spaces, conference rooms, and an interior that represents their company.

Table 3: An Overview of The Research on Coworking Space Motivations

	Capdevila 2015	Capdevila 2013	Deijil 2011	Deskmag 2012	Deskmag 2013	Fuzi 2015	Fuzi 2014	Gandini 2015	Kojo & Nenonen 2014	Leforestier 2015	Markel 2015	Moriset 2015	Sykes 2014
Access to a network of co-workers	*	*				*	*				*		
Affordable accommodation		*	*		*	*	*	*	*	*	*		*
Collaboration with co-workers		*	*		*	*	*	*	*	*	*	*	*
Feeling part of a community	*	*	*	*	*	*	*		*	*	*	*	*
Interaction and social support	*		*	*	*	*	*			*	*	*	*
Professional support from co-workers	*		*	*	*	*				*	*		*
Sharing ideas and knowledge	*	*	*		*	*	*		*	*	*	*	*
Inspiring and Creative atmosphere			*		*	*	*		*		*	*	

Source: Development for the research

3. METHODS

This study was conducted in several coworking spaces located within Kuala Lumpur and the sampling method of this research was based on a purposive basis. In this study, 200 users participated in the survey. Respondents were asked to choose between two given hypothetical or alternatives of coworkspaces and a non-option. Each respondent will be presented with nine choice sets of two alternatives and an answer option for 'none of the alternatives suffice'. Each alternative has its own type of attributes that the respondents can choose from. In order to create the alternatives of workspaces, seven attributes have been identified with each attribute contains three attribute levels as in Table 4 and Table 5. In the end, nine chosen sets were assembled from the eighteen alternatives co-workspaces. These nine choice sets were offered to the respondents. The list of the alternatives is as shown in Table 4.

Table 4: Alternatives Coworking Space

No	Accessibility	Environment and interior artistic	Layout space	Reception and hospitality	Events	Type of lease contracts	Variety in spaces
1	Public Transport	Homelike	Open Layout	No Reception	Sometimes	Short Term	Standard
2	Car and Public Transport	Industrial	Open Layout	No Reception	No Events	No Contract	Basic
3	Public Transport	Modern	Open Layout	Reception and Host	No Events	No Contract	Premium
4	Car	Industrial	Open Layout	Reception and Host	Often	Short Term	Premium
5	Public Transport	Industrial	Semi-Open Layout	Reception But No Host	Often	No Contract	Standard
6	Car and Public Transport	Homelike	Semi-Open Layout	Reception But No Host	No Events	Short Term	Basic
7	Car	Homelike	Open Layout	Reception and Host	Often	Long Term	Basic
8	Public Transport	Modern	Semi-Open Layout	No Reception	Often	Long Term	Basic
9	Car and Public Transport	Industrial	Semi-Open Layout	Reception and Host	Sometimes	Long Term	Premium
10	Car and Public Transport	Modern	Closed Layout	No Reception	Often	Short Term	Premium
11	Transport Public Transport	Homelike	Closed Layout	Reception But No Host	No Events	Long Term	Premium
12	Car	Industrial	Closed Layout	No Reception	No Events	Long Term	Standard
13	Car and Public Transport	Homelike	Closed Layout	Reception and Host	Often	No Contract	Standard
14	Public Transport	Industrial	Closed Layout	Reception and Host	Sometimes	Short Term	Basic
15	Car	Modern	Closed Layout	Reception But No Host	Sometimes	No Contract	Basic
16	Car and Public Transport	Modern	Open Layout	Reception But No Host	Sometimes	Long Term	Standard
17	Transport Car	Modern	Semi-Open Layout	Reception and Host	No Events	Short Term	Standard
18	Car	Homelike	Semi-Open Layout	No Reception	Sometimes	No Contract	Premium

Table 5: Attributes Level

Attributes	Attributes Level
Accessibility	Car and public transport Car Public transport
Environment and interior artistic	Industrial Modern Homelike
Layout space	Open layout Semi-open layout Closed layout
Variety in spaces	Basic Standard Premium
Reception and hospitality	No reception Reception but no host Reception and host
Events	No events Sometimes Often
Type of lease contract	No contract Short term Long term

The questionnaire is used in this study to collect information about the respondents' experiences and observations. As part of the questionnaire survey, online surveys were distributed to the users of the coworking space. The online surveys were distributed from 11th April until 26th May 2023. The online surveys were accessible through a QR code and link that leads straight to the survey online. The QR code and link of the online survey are shared among the coworking space users in Kuala Lumpur by email blasts and approaching the users of coworking space themselves. The survey questionnaire were analysed using Multinomial Logit Model (MNL) to study the overall workspace preferences. A coding scheme will be utilized because this calls for highly specialized coding. To calculate the utility weights of each attribute level, this is necessary. The following equation can be used to determine an alternative's utility (Hensher, Rose, & Greene, 2015b):

$$U_{iq} = V_{iq} + \epsilon_{iq} = \sum \beta_n X_{inq} + \epsilon_{iq}$$

- U_{iq} = The overall utility of individual q for alternative i;
- V_{iq} = The structural utility of individual q for alternative i;
- ϵ_{iq} = The error-component (random utility component);
- β_n = The utility weight for attribute n;
- X_{inq} = The score for alternative i on attribute n for individual q.

The error component ϵ_{iq} is added to be able to account for example measurement errors (Kerkman, 2020).

It is necessary to execute or calculate several goodness-of-fit measurements to determine whether the analysis provides valid conclusions. Conclusions from the findings of this study may only be made once they demonstrate that the models functioned adequately. The measures that can be used are the log-likelihood of the estimated model ($LL(\beta)$) and the rho-square adjusted ($p2_{adj}$) (Kemperman & Timmermans, 2008). The log-likelihood can be calculated with the following formula (Train, 2009):

$$LL(\beta) = \sum \sum y_{qi} \ln(p_{qi}) \quad N_{qi} = 1$$

$LL(\beta)$ = log likelihood function at estimated parameters;

N = sample size

y_{qi} = choice of person q for alternative i .

With the use of the other measures can be calculated. First of all the rho-square ($p2$) (Train, 2009):

$$P2 = 1 - LL(\beta) / LL(0)$$

The rho-square has a value between 0 and 1. The higher the value the better the model. Models with a value between 0.2 and 0.4 are considered good, and models above 0.1 are usable (Kerkman, 2010). The rho-square however does not take the number of parameters into account. In order to do this, the rho-square adjusted ($p2_{adj}$) needs to be calculated (Nijënstein, 2012).

$$p2_{adj} = 1 - LL(\beta) - p / LL(0)$$

P = number of estimated parameters

4. Results and Discussion

The respondents were given the option of two fictitious workspaces and a non-option. With the help of this information and the Multinomial Logit Model, judgments regarding preferred workspaces can be drawn. The results of the Multinomial Logit Model are as in Table 6 below:

Table 6: Result of Multinomial Logit

Attributes	Levels	Coefficient (β)
Constant		1.376***
Accessibility	Car and public transport	0.688***
	Car	-0.930***
	Public transport	0.242***
Environment and interior artistic	Industrial	-0.172***
	Modern	-0.313**
	Home-like	0.485**
Layout space	Open layout	0.056***
	Semi-open layout	0.333***
	Closed layout	-0.389***

Attributes	Levels	Coefficient (β)
Variety in spaces	Basic	-0.072***
	Standard	0.124***
	Premium	-0.052***
Reception and hospitality	No reception	-0.206***
	Reception but no host	0.169***
	Reception and host	0.037***
Events	No events	-0.170***
	Sometimes	0.159***
Type of lease contracts	Often	0.011***
	No Contract	0.365***
	Short Term	-0.042***
	Long Term	-0.323***

*Significance with $p \leq 0.05$ ** significance with $p \leq 0.01$
Note: Attribute level 3 is calculated, and has no significance level

The significance of the attribute level is summarized as in Table 7 below:

Table 7: Summary of model based on significance.

Model co-workspace attribute		
Attributes	Levels	
Accessibility	Car and publictransport	
	Car	
	Public Transport	
Environment and interior artistic	Industrial	
	Modern	
	Home-like	
Layout space	Open layout	
	Semi-open layout	
	Closed layout	
Variety in spaces	Basic	
	Standard	
	Premium	
Reception and hospitality	No reception	
	Reception but no host	
	Reception and host	

Events	No events	
	Sometimes	
	Often	
Type of lease contracts	No contract	
	Short term	
	Long term	

Legend	
	Positive significance
	Positive without significance
	Negative significance
	Negative without significance
Third Level	

The goodness of fit is summarized as in the Table 8 below:

Table 8: Goodness of fit

Goodness of fit	
<i>Log-likelihood function (LL(β))</i>	<i>-2133.186</i>
<i>Restricted log-likelihood function (LL(0))</i>	<i>-2782.423</i>
ρ^2	<i>0.2333</i>
ρ^2 adjusted	<i>0.2218</i>

The effectiveness of a model can be assessed by examining its log-likelihood and rho-square values, which help decide whether the results can be used to draw inferences. As stated, models are considered good when the rho-square (ρ^2) is between 0.2 and 0.4 and are still usable if this value is between 0.1 and 0.2. Since the rho-square and rho-square adjusted are 0.2333 and 0.2218 respectively, the model is considered good to be used and the results can be used to make conclusions.

4.1 Utility of attributes

Higher preferences are demonstrated by a higher utility. Higher preferences are evident and demonstrate the attributes level that significantly influence the preference for the workspace as a whole.

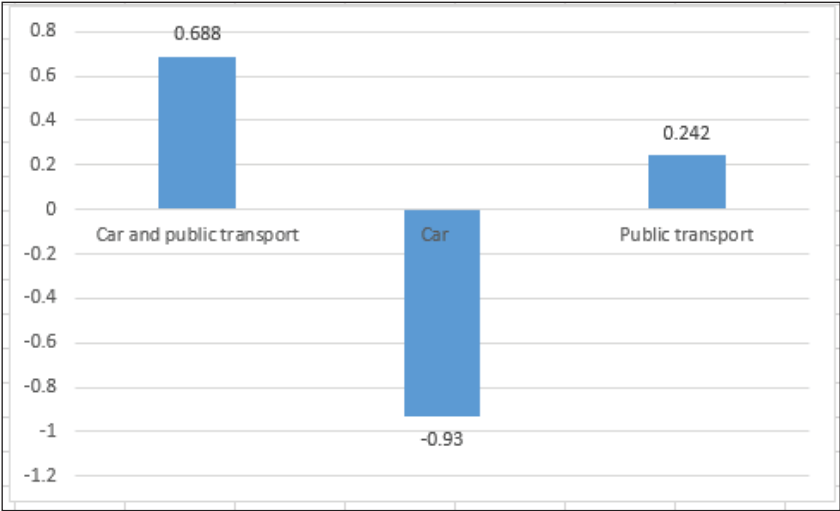


Figure 2: Utility of Accessibility

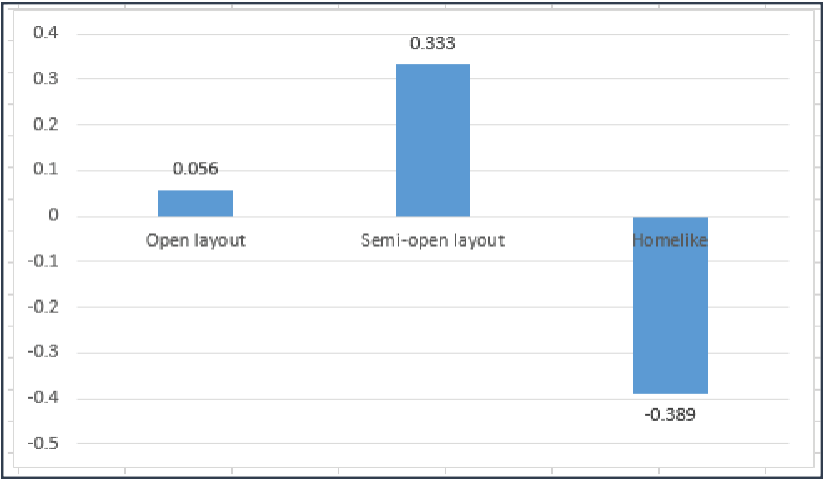


Figure 3: Utility of environment and interior artistic

As shown in Figure 1, the accessibility of the coworking space by car and public transport has the highest utility which indicates the highest preference. This shows that the car and public transport is more preferred than having accessibility by only just car and public transport. While, Figure 2 shows the environment and interior artistic of homelike have the highest utility (0.485) compared to industrial and modern which indicates that homelike features are the most preferred. The modern type is the least preferable, having the least amount of utility.

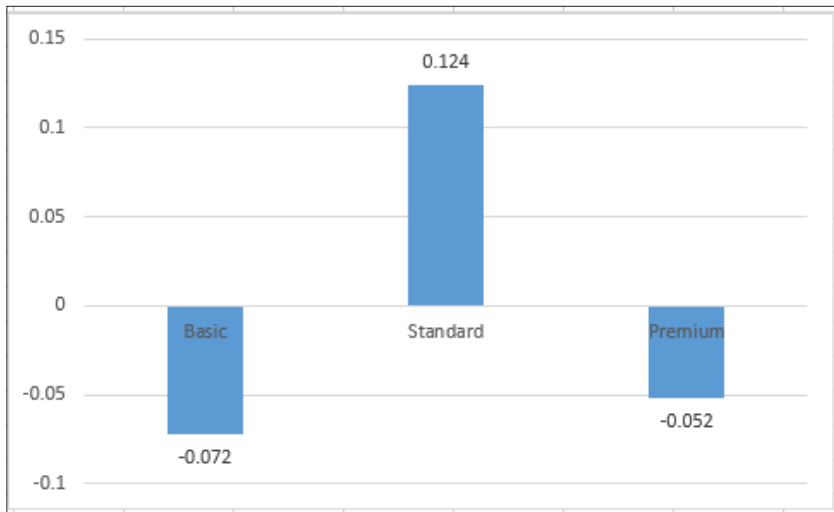


Figure 4: Utility of variety in spaces

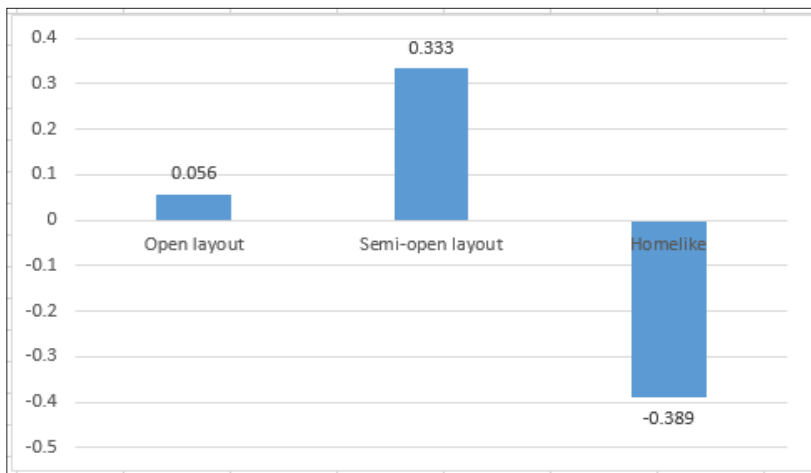


Figure 5: Utility of layout space

For the variety of spaces, the highest preference is the standard type due to the higher utility (0.124) compared to basic (-0.072) and premium (-0.052). The least preferred type is the basic having the lowest utility (-0.072) out of all the three (refer Figure 3). While for the layout space, the semi-open layout has the highest utility which means that the respondents have higher preferences for semi-open layout. Closed layout has the lowest utility which shows less preference towards that type of layout space.

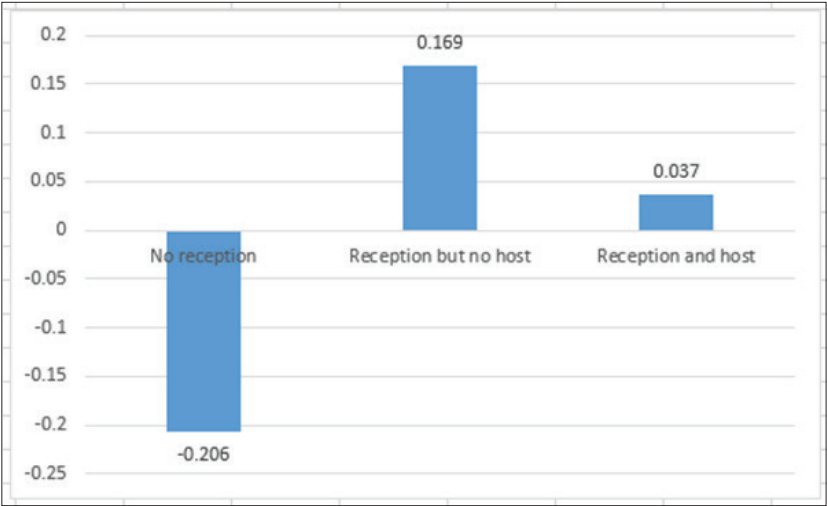


Figure 6: Utility of reception and hospitality

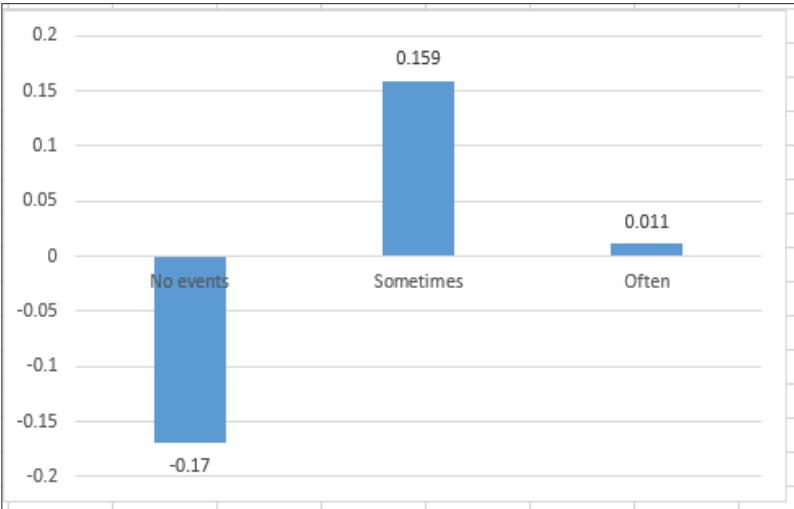


Figure 7: Utility of events

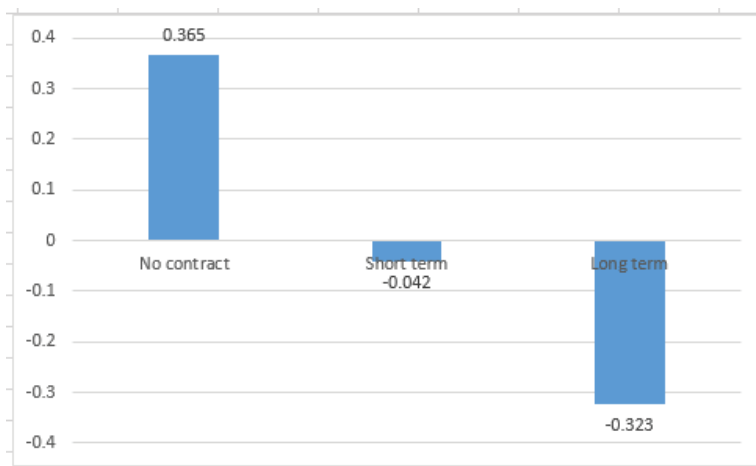


Figure 8: Utility of type lease contract

For reception and hospitality, the highest preference would be the reception but no host with the highest amount of utility (0.169). The lowest utility is the no reception and no-host (-0.206) indicating the least preferred among the three (refer to Figure 5). The highest utility for events to be held is sometimes (0.159) which indicates a high preference towards having events at the coworking space sometimes. While the lowest utility which shows the least preference is having no events at all (-0.17) (refer to Figure 6). The data collected indicates that having no contract has the highest utility which shows that having no contract has a higher preference. Meanwhile, for long-term contracts, it has the lowest utility which indicates that it is the least preferred for the type of lease contract (refer to Figure 7).

The conclusion that accessibility is the most crucial factor to consider when selecting a coworking place is consistent with earlier research. In terms of accessibility, the attribute level accessibility by vehicle and public transport exhibits the highest part-worth utility. This finding implies that coworkers like coworking facilities that are easily accessible by both car and public transportation. Coworkers more frequently select a coworking space that is close to their house and in a more convenient and central location.

The findings indicated that coworkers place the least value on amenities/services including reception and hospitality, events, and diversity in spaces. This is an intriguing discovery since these amenities and services could foster a stronger sense of community among coworkers. One explanation could be that fewer sample users selected belonging to a community as one of their top three reasons for working in a coworking space. Additionally, coworkers oppose having a coworking host. This is interesting because a coworking host's primary goals are to assist tenants, foster a positive work environment, and encourage collaboration among coworkers. The respondents in this sample work at coworking spaces without coworking hosts, which may have influenced their decision, therefore this outcome is likely. Additionally, it's likely that these people do not see the extra value of a host and would be content with a straightforward reception.

This study also revealed that coworkers favour an office setting with a mix of open and closed workplaces for various job activities. Previous research in single-tenant offices has shown

that entirely open-plan workspaces may cause issues with noise, privacy, and concentration and it appears to be the same for co-workers too. According to this study, coworkers prefer a standard coworking environment with informal gathering areas. They probably favour these settings because the chance to engage with other people is one of the reasons, they choose to work at coworking space. On the other hand, the findings revealed that the diversity of spaces was the coworking space's least crucial feature. Facilities that could be of a premium is not the priorities of the co-workers. This could be explained by the fact that the respondents in this sample choose coworking spaces that are affordable and lack extra amenities.

5. CONCLUSIONS AND RECOMMENDATIONS

The shift in the knowledge economy has led to the proliferation of co-working as a modern form of work realized in a shared work environment and has led the number of coworking spaces in Kuala Lumpur to increase drastically over time (Yeo, 2021). This paper has applied the notion of curating to comprehend the user's perspective of the Kuala Lumpur coworking space. Through the study on this phenomenon, this paper has successfully determined and identified seven attributes with each attribute contains three attributes level for user preferences on the coworking space in Kuala Lumpur. This finding implies that coworkers like coworking facilities that are easily accessible by both car and public transport. As for coworking space has a lively and creative atmosphere, the homelike type has the highest utility. According to the assessments made at this level, coworkers prefer a homely atmosphere over a modern one. Regarding the layout space, coworkers are keen towards semi-open layout rather. Beside that, coworkers prefer not to have a leasing contract on average as the no lease contract has the highest utility compared to short and long term contracts. This provides fresh perspectives on coworking space user preferences that can be applied to the planning or creation of coworking spaces. The findings of this study can therefore be used to create new theories about how and why a multi-tenant workplace is becoming more and more commonplace around the world. The variation of results from the analysis indicates that not all users are fully adapted to the concept of working in a collaborative driven workplace as the concept of co-working space is generally still new in Malaysia. Overall, the co-working movement has significantly transformed the way we work by offering a smart solution that goes beyond traditional design. It is more than just an office alternative but is a service-oriented real estate business that has the ability to facilitate socialisation of knowledge.

5.1 Limitation

There are obviously some drawbacks to this study. First, the questionnaire did not ask about the characteristics of the present coworking spaces where the majority of respondents work. As a result, the relationship between their present situation and preferences could not be examined. Future research should take respondents' existing circumstances into account as a control variable because they might affect their decision to choose the hypothetical coworking space.

Additionally, the preferences for conventional coworking space amenities or services like a coffee shop, event venue, lounge area, fitness centre, or bar were not thoroughly examined. In the attribute "diversity of supply spaces," these were integrated. These traits or other techniques could be used in future research to gain better understanding of a coworker's unique requirements and preferences. On top of that, the scope of the study was limited to users of coworking space in Kuala Lumpur. Thus, the results may not be applicable to represent other parts of Malaysia.

REFERENCES

- Ricarda B. Bouncken & Andreas J. Reuschl, 2018. Coworking-spaces: how a phenomenon of the sharing economy builds a novel trend for the workplace and for entrepreneurship. *Review of Managerial Science, Springer*, Vol. 12(1), pages 317-334, January.
- Bueno, S., Rodriguez-Baltanás, G., & Gallego, M. D. (2018). Coworking spaces: A new way of achieving productivity. *Journal of Facilities Management*.
- Fuzi A (2015) Coworking spaces for promoting entrepreneurship in sparse regions: the case of South Wales. *Reg Stud Reg Sci* 2:462-469. <https://doi.org/10.1080/21681376.2015.1072053>
- Gerdenitsch C, Scheel TE, Andorfer J, Korunka C (2016) Coworking spaces: a source of social support for independent professionals. *Front Psychol* 7:1012. <https://doi.org/10.3389/fpsyg.2016.0058>
- Gerdenitsch, C., Scheel, T. E., Andorfer, J., & Korunka, C. (2016). Coworking spaces: A source of social support for independent professionals. *Frontiers in psychology*. 7, 581.
- Gerdenitsch, C., Scheel, T. E., Andorfer, J., & Korunka, C. (2016). Coworking spaces: A source of social support for independent professionals. *Frontiers in Psychology*. 7(581), 1-12
- Green, R. (2014). Collaborate or compete: how do landlords respond to the rise in coworking? *Cornell Real Estate Review*.
- JLL (2017), "KL coworking space: the race is on. Available at: www.jllapsites.com/research/kl-coworking-space-race/ (accessed 3 March 2018).
- Kojo, I., & Nenonen, S. (2016). Typologies for coworking spaces in Finland - what and how? *Facilities*, 34(5/6), 302-313.
- Kojo, I., & Nenonen, S. (2017). Evolution of coworking places: Drivers and possibilities. *Intelligent Buildings International*, 9(3), 164-175.
- Kreamer, A. (2012). The rise of coworking office spaces. *Harvard Business Review*, 1-3
- Leclercq-Vandelannoitte, A., & Isaac, H. (2016). The new office: How coworking changes the work concept. *Journal of Business Strategy*, 37(6), 3-9.
- Lee, J. (2014). Govt incentives for startups. The Star Newspaper, available at www.thestar.com.my/news/community/2014/11/19/govt-incentives-for-startups/ (accessed 14 April 2018).
- Moore, M. (2020). Tourism industry in Asia Pacific-statistics & facts.
- Moriset, B. (2013) Building new places of the creative economy. The rise of coworking spaces. <https://shs.hal.science/halshs-00914075>
- Rus, A., & Orel, M. (2015). Coworking: A community of work. *Teorija in Praksa*, 52(6), 1017– 1038.
- Savills (2019), Greater KL Office Market Overview, First Quarter Report, Savills Malaysia.

- Spinuzzi, C., Bodrožić, Z., Scaratti, G., & Ivaldi, S. (2019). "Coworking is about community": but what is "community" in coworking?. *Journal of Business and Technical Communication*, 33(2), 112-140.
- Sykes K., (2014) Coworking: a workplace paradigm shift. *Contract* 55:140-145
- Tan, T. H., & Lau, K. (2020). Understanding users' and hosts' motives to coworking space: Case of Kuala Lumpur, Malaysia. *Open House International*, 46(1),
- Waber, B., Magnolfi, J., & Lindsay, G. (2014). Workspaces that move people. *Harvard business review*, 92(10), 68-77
- Waters-Lynch J., Potts J. (2017). The social economy of coworking spaces: a focal point model of coordination. *Review of Social Economy*, 75:417-433