# **Building Sustainable Tenancies: Tenants' Preference Criteria in Choosing the Location of Purpose-Built Office Buildings**

#### Zarita Ahmad@Baharum

Pusat Pengajian Harta Tanah, Kolej Pengajian Alam Bina, UiTM Shah Alam.

\*Email: zarit928@uitm.edu.my

#### **Abstract**

Building sustainable tenancies is a comprehensive strategy used with tenants to establish sustainable relationship connections. Tenants are said to be the lifeblood of the building, thus retaining them is a difficult task that requires a variety of tactics in guaranteeing that they receive high-quality services. According to their business nature & requirements, as well as other considerations that the company may need to take into account, tenants have preferences for location and space. This paper attempts to determine the criteria that tenants consider when choosing a location and space for purpose-built office buildings. Through the use of a quantitative approach, a survey among the tenants of office buildings in Kuala Lumpur was conducted. From the responses gathered, it is found that the Criteria that have the biggest impact on where tenants choose to rent include the property's condition, type of finishes, cleanliness, competent management and maintenance team, and proximity to transportation. In addition, the choices of tenants can also be influenced by criteria such as availability of facilities, location, property condition, security and access control, and branding/image.

Keywords: location, purpose-built office, space, sustainable tenancies, tenant preferences

# 1.0 INTRODUCTION

The expanding number of items and rivals, as underlined by Kotler (2005), means that there is no lack of products or a shortage of customers, thus, making the customer king. There is an increasing number of options and information that are available to the consumer than ever before. The standard by which clients, consumers, and users of real estate products and services distinguish one company from another is service. Building owners and property managers must therefore pay attention to and address tenants' needs, concerns, expectations, and opinions to create sustainable tenancies and stay competitive. They should also use these inputs to measure their performance and benchmark it against industry standards (Sanderson and Read, 2020). Tenants serve as the company's clients in the context of property management; thus, the staff members should be more considerate of their wants and needs.

Building sustainable tenancies is a concept that aims to achieve or retain tenants. In many cases, it costs more to secure a new customer, as marketing will involve more money. Good tenant retention alleviates this burden and eliminates the need to repeat the preceding steps. Hence, building sustainable tenancies is crucial and would require both the owner and property management team to use the six senses.

- i. Sight to observe and be vigilant
- ii. Hearing to listen and respond
- iii. Smell to be aware of the surrounding environment
- iv. Taste to be sensitive to the surrounding environment
- v. Touch to form relationships with tenants
- vi. The final one is introspection, which means self-analysis to improve and add value to the service.

Once all this has been provided, then the ability to sustain and build the tenancies can lead to a long and fruitful partnership.

#### 2.0 PROBLEM STATEMENT

In the property sector, tenants enter leases with the expectation that they will receive services that are worth their money or even more, therefore they do not know what they are signing up for. Any building owner or management business needs to gather the tenants' input to assess their performance and enhance their services. Tenants rarely desire to talk about their preferences freely, according to studies. Therefore, creating lasting leases would necessitate collaboration, cooperation, and communication between the owner/property management team and the tenants. This study will close the gap by analysing the criteria that affect tenants' preferences for location and space.

An organisation's management techniques are a crucial instrument for maximising returns and revenues. In the property sector, it is essential for the business to retain tenants. Tenant satisfaction surveys, service quality evaluations, and other methods are only a few of the many instruments available to monitor performance and feedback. From the tenants' feedback, improvements to the management strategies could be looked into to increase occupancy and create sustainable tenancies of the purpose-built office buildings.

The objective of this paper is to identify the criteria that influence the tenants' choice of location and space.

#### 3.0 LITERATURE REVIEWS

#### 3.1. Tenant preferences

Tenant preferences are the particular needs, wants, and considerations that people or organisations have when looking for and occupying rental premises. These preferences can include a wide range of elements and features that tenants value when making decisions. Landlords, property managers, and real estate experts must be aware of tenant preferences in order to manage and market rental properties successfully.

## 3.2. The importance of understanding tenants' preferences criteria

Tenant preferences are the top criteria that the tenant will specify when selecting the building that interests them. To be competitive and relevant to the market and business in property management, it is essential to comprehend the preferences of the tenants. The management staff will be able to use the behavioural data and obtain insight from the tenants by being aware of the tenant's preferences. The management can then implement the requirements and accomplish the goals of the tenants as well as enhance long-term involvement and connections with their tenants.

Creating a positive first impression for customers when they interact with a business will enhance tenant retention. The first time the customers receive welcoming and helpful customer service, it always makes a big difference. Customers can feel confident that a company's products and services are reliable, care for their requirements and wants, and value the tenant by getting all of their inquiries answered and giving them accurate information. This is significant as customers will constantly inform others of their experiences. Positive experiences will encourage repeat business and additional recommendations, whilst negative ones will result in losses for other prospective tenants. The management team's appreciation and willingness to work with tenants is the final and most important aspect of the tenant experience.

A study conducted by Gallo (2014) showed that the retention of five percent more customers would increase profit by 25-95 percent depending on the line of business. However, as for the office building management, the increase could be 40 percent. Thus, keeping the present customers' needs can be a gratifying effort compared to attracting new customers and the cost involved is much higher (Kim and David, 2000; Kumar, 2022)

Tenants are the source of income for any real estate building, thus if the property owner/manager can retain tenants, this will contribute to a healthy cash flow. Building sustainable tenancies has become the ideal plan for any property managers and owners of real estate. As a result, occupancy in the buildings will increase as current tenants are more likely to extend their leases.

Retaining tenants and improving occupancy are positively correlated with tenants' satisfaction and delivering quality services. It has been recognised by managers in all industries the importance of service quality to their firms'

success. Rust et al. (1996) have also put forth the chain effects by which service improvements will increase loyalty, repeat purchases, retention, and ultimately profits to the organisations as in Figure 1 below.



**Figure 1**. The chain effects of service quality on profits through the retention (Source: Rust et al. (1996)

## 3.3. Criteria that influence tenants' preferences

A choice or judgment is formed through the decision-making process after giving something some thought (Oxford, 2009). Typically, decisions are made with a goal and objectives in mind. Accordingly, depending on the complexity and requirements of the company, any person or organisation will occasionally run into this process.

The tenant must decide to choose or occupy the business's spaces, which requires them to consider a few criteria before deciding. Numerous studies have examined the overall requirements of office tenants; however, a limited number of studies are known to examine the important factors influencing major tenant organisations in Kuala Lumpur except for a study conducted by Adnan and Daud (2010). In this study, the factors influencing tenants' decisions to occupy offices in Kuala Lumpur, particularly in the city centre were uncovered through a Delphi approach. Feedback was gathered from the stakeholders of office buildings which include building owners, property managers, investors, and leasing agents, who were asked for their expert opinions. Office occupancy decisions place importance on location, lease terms, financial variables, building attributes, and services.

The aforementioned study is consistent with the finding by Dean and Colacino (2010) that many Chief Executive Officers (CEOs) are focusing on reducing real estate costs, which are the second largest expense, and this has become part of many CEOs' long-term strategy.

Another study by Adnan and Daud (2009) found that, in addition to frequently significant criteria of location, the decision-making criteria for offices are more focused on the physical building features such as car park provision, access and circulation, efficient mechanical and electrical, ICT and communication, security and CCTV surveillance, hydraulics, floor plate size, flexible floor area, standby power-base building, building age, amenities, and tenant risers.

Office occupiers' top and bottom real estate preferences were studied by Luoma et al. in 2010. The study focused on whether the characteristics of the current premises fit the needs and preferences of the occupiers and what the occupants would select from the majority of earlier studies on the occupiers' current premises. According to this study, the most crucial factors for the majority of the analysed firms are the workspace, building, and location. The top five sub-attributes under locational criteria are proximity to public transportation, the sufficiency of parking places close to the office, neighbourhood safety, neighbourhood cleanliness, and proximity to private automobile transportation. The three most crucial characteristics of a structure were its ability to regulate temperature, air conditioning, and lighting. The value of having both small and large meeting rooms in an office or workspace was also highlighted by the research.

Beltina (2006) identified the primary variables impacting the customer's decision to lease office space in Riga, Latvia which include favourable location, parking accessibility, affordable rent, and office infrastructure stood out. Ho et al (2005) study on the significance of various CBD office building quality attributes revealed that respondents ranked column layout and sub-divisibility as the top building quality, followed by space efficiency, HVAC (heating, ventilating, and air conditioning) control and capacity, and passenger lift performance and control. Thirty office buildings in Sydney's central business district were used as the basis for the study, while owners, managers, and users of those buildings were the survey respondents.

According to the study by Sing et al. (2004) on office space selection decisions of companies with offices in Suntec City, Singapore, the most important factors in choosing an office space are the image and prestige of the location, accessibility by public transportation, flexible lease terms, responsive management and maintenance teams, and large parking lots. The building's broadband and wireless connections were also deemed to be of utmost importance. Leishman and Watkins (2004) identified additional factors that affected office occupiers' decision-making behaviour, including construction type, property condition, building finishing type, building age, property size, and location.

Gibson (2000) also ranked the location, cost of the property (rent and rates), ability to vacate or exit, expansion capabilities, length of the lease, other occupational costs, the efficiency of layout, speed of occupancy, branding, and image of the location as well as an inclusive package of real estate, fit out, and services to identify the criteria used to choose new office space. In a study of tenant needs in San Francisco's "Silicon Valley by the Centre for the Built Environment (1999), the following factors were listed in order of importance: (1) Cost; (2) Location; (3) Building configuration; (4) Building infrastructure; (5) Building image and amenities/competition; (6) Workplace quality; and (7) Green building. As they substantially rely on this "intellectual capital," the tenants who participated in the study are also prepared to pay more to be close to highly educated, competent staff.

Abel (1994) found that while cost is a key consideration for more than 212 large businesses that relocated from central London to other regions of the UK, the five (5) most important factors in choosing a location are accessibility to transportation, a modern, prestigious building, the availability of parking, flexible floor space, and a high-quality and secure workplace. An additional factor in choosing a location for workplaces is the availability of amenities. Table 1 below summarises tenants' criteria from various literature.

Table 1. Matrix of Literature from Various Years and Studies

Criteria	Sub criteria	Mohd Adnan & Daud	Luoma et al	Mohd Adnan & Daud	Beltina	Ho et al.	Sing et al	Leishman & Watkins	Gibson, V. A	CBE Centre for Built Environme nt et al	Abel
		2010	2010	2009	2006	2005	2004	2002	2000	1999	1994
	Location								$\sqrt{}$		
	Branding/Image								$\sqrt{}$	V	
	Access to amenities (e.g.,	V	V								V
	banking, shops)										
	Transport Accessibility	V	V	V							V
	Traffic conditions	V									
	Level of crime	$\sqrt{}$	V								
Tanation	Proximity to major clients		V				$\sqrt{}$				
Location	& support										
	services/suppliers										
	Proximity to employees										
	International connectivity		V								
	(near the airport, port)										
	Proximity to competitors										
	A cultural history of the										
	area										
	Cost of property (rents,						<b>√</b>		$\sqrt{}$	V	
	rates, service charge)										
	Renewal terms	$\sqrt{}$									
	Length lease (lease term)	$\sqrt{}$							$\checkmark$		
	Termination clause	$\sqrt{}$							$\checkmark$		
	Expansion/contraction								$\checkmark$		
Lease feature	capabilities										
	Other occupational costs								$\sqrt{}$		
	Speed of occupancy								V		
	Inclusive package of real estate, fit-out, and services								V		
	Security and access control	V	V			$\sqrt{}$	V				V

		1				1 /	I	1		I	
	Responsible management	$\sqrt{}$				<b>√</b>					
	& maintenance team		,								
	Cleanliness		√			√			,		
	Efficiency of layout						ļ.,,		V	,	,
	Workplace quality					√	√			$\sqrt{}$	$\sqrt{}$
	(comfortable working										
	environment, presence of										
Service &	prominent										
management	companies/organisations)										
management	Pro-business environment									$\sqrt{}$	
	(Networking activities,										
	introduction services,										
	business referrals,										
	promoting strategic										
	alliances, effective										
	communication &										
	publicity, etc.)										
Moneton	Rental rate										
Monetary consideration	Total occupancy cost										
consideration	Cost of fit-out	1									
Economic	Prospect for rental &										
Economic	capital growth										
	Property Condition							V			
	Finish type							V			
	Car park provision and	<b>√</b>	<b>√</b>			<b>√</b>					
	accessibility										
	Modern prestigious				$\sqrt{}$			V			
	building (construction type										
Dl	- cellular/ multi-storey)										
Physical/ Building Features	Access and circulation			$\sqrt{}$		√					
	(passenger lifts, goods lifts,										
	building wayfinding)										
	Efficient Mechanical &			<b>V</b>						V	
	Electrical										
	Building Management			$\sqrt{}$							
	ICT & Communication			V		<b>√</b>	V				
	(Broadband & wireless										
	access)										
			1	1	1	1		1	1	1	

	Security and CCTV		√ I		V			
	surveillance		·					
	Hydraulics		<b>V</b>					
	Floor plate size, ceiling		√	<b>√</b>		V		
	heights & floor loading							
	Flexible floor area		√				$\sqrt{}$	$\sqrt{}$
	Standby power-base		$\sqrt{}$					
	building		,					,
	Amenities within the		√	$\sqrt{}$	V		$\sqrt{}$	$\sqrt{}$
	building (e.g., Reception,							
	tenant's pantry, bank &							
	retail/F&B outlets,							
	greenery & landscape,							
	water features)		,			,		
	Building age		7			V		
	Tenants' risers		٧					
	Sports & recreational							
	facilities Toilets facilities			<b>V</b>				
	1			<del>- 1</del>			ما	V
Envisonmental	Energy management			V	V		V	V
Environmental	system (environmentally user friendly)							

#### 4.0 RESEARCH METHODOLOGY

This research adopted a quantitative approach involving four stages. The Literature Review stage was undertaken to develop a thorough understanding of tenants' criteria. Secondary sources of data comprising journals, books, research papers, periodicals, publications, and commercial data were used to research the subject's theoretical aspects. Secondly, the data collection stage involved primary data collection through a self-administered questionnaire survey. This approach might have yielded some useful findings on how tenants perceived or experienced the service. A questionnaire survey was carried out for data collection. A structured questionnaire was sent to tenants to establish their experience in service delivery, their insights on perceptions, and attitudes that helped define the issues to be researched more formally.

Respondents were tenants that occupy the purpose-built office buildings owned by a GLIC company in Kuala Lumpur (a total of 8 buildings). From randomly selected tenants from each building, a total of 160 questionnaires were distributed. Thereafter at the data analysis stage, SPSS was adopted to analyse the data in the determination of discrepancies between the expectation and performance of service quality in the case study. These data were analysed and concluded at this stage.

**Table 2.** Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
.892	.903	32

It was observed in Table 2 that all the items of the instruments had high internal consistency, and Alpha's coefficient was above 0.90. Therefore, it was concluded that this instrument was reliable and applicable to be used.

#### 5.0 RESULT AND DISCUSSION

# **5.1. Profile of Respondents**

Respondents for this research are tenants that occupy the purpose-built office buildings owned by a GLIC company in Kuala Lumpur. A total of 160 questionnaires have been distributed and the response rate is 32.5%. Table 3 below shows the response rate:

 Table 3. Survey Response Profile

Building	Distributed	Frequency	Percentage	Location	
			Response (%)		
Building A	20	12	23.1	Jalan Sultan Ismail	
Building B	20	15	28.8	Jalan Sultan Ismail	
Building C	20	7	13.5	Jalan Raja Chulan	
Building D	20	5	9.6	Jalan Raja Laut	
Building E	20	2	3.8	Jalan Dungun, Damansara Heights	
Building F	20	2	3.8	Jalan Dungun, Damansara Heights	
Building G	20	3	5.8	Lorong Dungun off Jalan Dungun, Damansara Heights	
Building H	20	6	11.5	Medan Setia 1, Damansara Heights	
Total	160	52	100		

Table 4 shows the primary business function of the respondents who operate at the respective buildings. Most of the respondents are from technical and service types of businesses. With reference to the type of company based on the respondents, the majority represent the national-based company (59.2%) while 40.8% comprise of multinational-based company. As to the type of company 60.4% of the respondents are parent companies while 39.6% are subsidiary companies.

Table 4. Primary Business Function of the Respondents

No.	Type of Primary Business Function	Cumulative Percentage (%)
1.	Architecture	11.5
2.	Engineering	13.5
3.	Legal Services	5.8
4.	Trading	5.8
5.	Computer/Software Related	13.5
6.	Manufacturing/Industrial	1.9
7.	Medical	7.7
8.	Financial	7.7
9.	Insurance	1.9
10.	Telecommunication	13.5
11.	Others	19
	Type of Company Based	
1.	National based	59.2
2.	Multinational based	40.8
	Type of Company	
1.	Parent company	60.4
2.	Subsidiary company	39.6

# 5.2. Analysis of Data

Retaining existing tenants is important because renewing existing leases is more profitable than finding new tenants, as recommended by Matzler and Hinterhuber (1998). Thus, identifying the criteria that influence tenants' preferences for location and space is a proactive approach to further improving the services associated with the criteria. The findings of the respondents' mean criteria for location and space are presented in Table 5 below. The lowest and highest means are 3.03 (international connectivity) and 4.80 (property condition).

Table 5. Mean score of items

Criteria	Sub criteria	Mean score	Total Mean score			
	Location	4.4423				
	Branding/Image	4.0192	]			
	Access to amenities (e.g. banking, shops)	4.1154	]			
	Transport Accessibility	4.4615	]			
Location	Traffic conditions	4.2115	4.023			
	Level of crime	4.2115				
	Proximity to major clients & support services/suppliers	3.8654				
	Proximity to employees	3.8431	]			
	International connectivity (near the airport, port)	3.0385				
	Cost of property (rents, rates, service charge)	4.3654				
	Renewal terms	4.3654	]			
	Length lease (lease term)	3.8846	]			
Lease feature	Termination clause	4.0577	3.942			
Lease leature	Expansion/contraction capabilities	3.8846	3.942			
	Other occupational costs	3.7843	]			
	Speed of occupancy	3.5962				
	Inclusive package of real estate, fit-out, and services	3.5962				
Service &	Security and access control	4.3600	4.237			
Management	Responsible management & maintenance team	4.4808	4.237			

		4 4000	
	Cleanliness	4.4808	
	Efficiency of layout	4.0192	
	Workplace quality (comfortable working environment,	4.0980	
	presence of prominent companies/organisations)		
	Pro-business environment (networking activities, introduction		
	services, business referrals, promoting strategic alliances,	3.9808	
	effective communication & publicity, etc.)		
Monetary	Rental rate	4.4423	
consideration	Total occupancy cost	4.3654	4.303
Consideration	Cost of fit-out	4.1000	
Economic	Prospect for rental & capital growth	3.8800	3.880
	Property Condition	4.8000	
	Finish type	4.6000	
	Car park provision and accessibility	4.3269	
	Modern prestigious building (construction type - cellular/	4.0000	
	multi-storey)	4.0000	
	Access and circulation (passenger lifts, goods lifts, building	4.1520	
	wayfinding)	4.1538	
	Efficient Mechanical & Electrical	4.2115	
	Building Management	4.0769	
	ICT & Communication (Broadband & wireless access)	4.0577	
Physical/	Security and CCTV surveillance	4.2885	2.070
Building	Hydraulics	3.4600	3.979
Features -	Floor plate size, ceiling heights & floor loading	3.7692	
	Flexible floor area	3.8824	
	Standby power-base building	3.9412	
	Amenities within the building (e.g., Reception, tenant's pantry,		
	bank & retail/F&B outlets, greenery & landscape, water	3.8400	
	features)		
	Building age	3.5000	
	Tenants' risers	3.3673	
	Sports & recreational facilities	3.1923	
	Toilets facilities	4.1538	
Environmental	Energy management system (environmentally user-friendly)	3.3725	3.37

Following the above mean analysis for the location and space criteria, respondents were asked to rank the importance of those criteria. Figure 1 displays the ranking of the criteria's mean results. According to the analysis, the ten (10) most influential criteria are (i) property condition, (ii) finish type, (iii) cleanliness, (iv) responsible management and maintenance team, (v) transport to accessibility, (vi) location, (vii) rental rate, (viii) renewals terms, (ix) cost of the property, and (x) total occupancy cost. It should be noted that the top three (3) most influential criteria are components of the building's physical condition. This is intriguing because the location ranks sixth on the list, and because the properties are mostly in strategic areas, the tenants' preferences/criteria are strongly opposed to the physical condition of the building. Furthermore, these criteria will have an impact on the quality of the working environment and, as a result, the image and productivity of the employees.

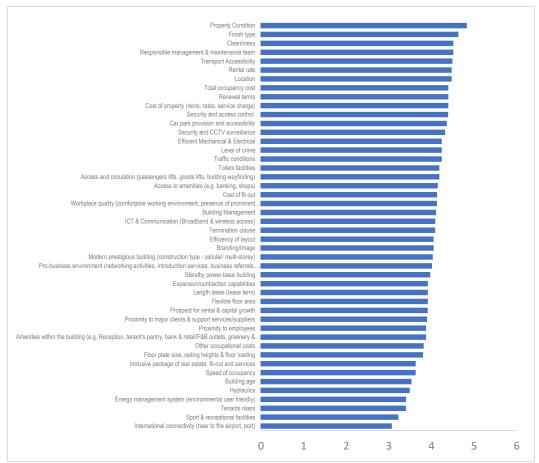


Figure 1. Bar chart for the mean score of items

## 6.0 CONCLUSION

Tenants are the building's most important assets. This study attempts to determine the criteria that influence tenants' preference toward location and space and consequently identify strategies for tenant retention. Thus, it has identified the criteria that influence the tenants' choice of location and space. Seven (7) criteria have been identified with forty-six (46) sub-criteria. The criteria include location, service features, service & management, monetary consideration, economic, physical & building features and environmental. The most significant criteria that influence tenants' choice of location and space are namely property condition, finish type, cleanliness, responsible management and maintenance team, transport to accessibility, location, rental rate, renewals terms, cost of property and total occupancy cost. From these findings, the top three (3) are components of the physical condition of the building.

Overall, this research has revealed an important step for the management, especially towards identifying strategies to retain tenants and to keep tenants longer. Through various studies that have identified some of the strategies that can be used, it has been revealed that the strategies include tenants' retention programs, practicing responsive property management and being a good landlord through the maintenance of good communication. These strategies however need to suit the local context and culture as the literature is mostly nationwide. This is important as the management is dealing with a multidimensional characteristic of organisations.

Tenants have been acknowledged as the main customer of the space within a building. Thus, it is vital to build sustainable landlord-tenant relationships as a way forward for property management practice through the identification of the main criteria in choosing the location of office buildings.

## 7.0 REFERENCES

- 1. Abel, J. (1994). What tenants want and what they will not compromise on when looking for new premises: considerations influencing relocation. *Property Management*, 12(1), 28-30.
- 2. Beltina E, A. Labeckis (2006), Riga's class A &B+ office space: An analysis of the main factors that determine consumer choice, Stockholm School of Economics (SSE) Riga Working Papers
- 3. Center for the Built Environment (1999), Office Tenant Needs Study
- 4. Gallo, A. (2014), The Value of Keeping the Right Customers. Harvard Business Review
- 5. Gibson, V. A (2000), Property portfolio dynamics: the flexible management of inflexible assets. *Facilities*, Vol. 18 No. 3/4, pp. 150-154.
- 6. Ho, D., Newell, G., & Walker, A. (2005). The importance of property-specific attributes in assessing CBD office building quality. *Journal of Property Investment & Finance*, 23(5), 424-444.
- 7. Fam, K. S., & Waller, D. S. (2000), Attracting New Clients. *Journal of Promotion Management* 5(2), 85-99, DOI: 10.1300/J057v05n02 07
- 8. Kotler (2005), According to Kotler: The World's Foremost Authority on Marketing Answers Your Questions, AMACOM; 1st edition (May 6, 2005)
- 9. Kumar, S (2022), Customer Retention Versus Customer Acquisition, Forbes Business Council (https://www.forbes.com/sites/forbesbusinesscouncil/2022/12/12/customer-retention-versus-customer-acquisition/?sh=78c898d01c7d)
- 10. Leishman C., and C.Watkins (2004), Office space requirements: Comparing occupiers' preferences with agents perceptions. *Journal of Property Investment and Finance*, Vol 21 No.1,2004 pp 45-60
- 11. Luomo et al, (2010) Office Occupiers' Real Estate Attributes-Identifying Occupiers' Preferences, FIG Congress 2010
- 12. Matzler and Hinterhuber (1998), How to make product development projects more successful by integrating Kano's model of customer satisfaction into quality function deployment. *Technovation*, Volume 18, Issue 1, Pages 25-38
- 13. Mohd Adnan, Y., Nasir Daud, M.D., (2009), Determining the criteria for the classification of purpose-built office buildings in Malaysia. *Pacific Rim Property Research Journal*, Vol 15, No 2
- 14. Adnan, Y. M., & Daud, M. N. (2010), Factors influencing office building occupation decision by tenants in Kuala Lumpur city centre a Delphi study. *Journal of Design and Built Environment*, Vol. 6, June 2010, pp. 63-82
- 15. Oxford-Fajar Advanced Learner's Dictionary (2009)
- 16. Rust et al. (1996) Service Marketing, Harper Collins College Publishers
- 17. Sanderson, D.C. and Read, D.C. (2020), Recognizing and realizing the value of customer-focused property management. *Property Management*, Vol. 38 No. 5, pp. 749-764. https://doi.org/10.1108/PM-04-2020-0029
- 18. Sing, T.F (2005), Impact of information and communication technology on real estate space (perspective of office occupiers). *Journal of Property Investment and Finance*, Vol 23 No.6, 2005 pp 494-505