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Identification of Important Factors for Office Space Decision by Tenants in Kuala Lumpur city centre, Malaysia – Experts’ View

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Abstract

While the central business district (CBD) in most cities is referred to as the heart of the city, the development strategy within the Kuala Lumpur city centre area is to have a moderate commercial growth. This is to curb the oversupply of commercial space and attracting quality development with the aim of enhancing Kuala Lumpur’s role as an international and financial centre. As the Kuala Lumpur city centre has the most concentration of office space in Malaysia, it would be useful to identify the factors which would attract and retain tenants for the existing office buildings in the area. It has been noted from various studies on office occupation in the central business district (CBD), different factors influence the decision. In the preliminary part of a study to identify the factors influencing tenants’ decision in office occupation, the view of experts’ were sought. This paper highlights the findings of a survey among property consultants/agents and property/leasing managers in which the main important factors are identified. This result will then be used into the study for the determination of the relative importance of the factors and sub-factors across the different categories of office buildings’ tenants in Kuala Lumpur city centre.

Keywords : CBD, important factors, office space decision, experts’ view

Introduction

For many building owners, investors, marketing agents of office buildings in Kuala Lumpur city centre, identifying the specific requirements of office occupation by tenants would be useful towards the fulfillment of their specific objectives. The achievement of full occupancy with quality tenants would enhance the maximization of the returns through a stream of income. Marketing agents on the other hand would benefit by minimizing the search of both the types of tenants and office buildings in satisfying the customer’s requirements. Making the assessment of requirements of tenants for office buildings in the city centre is a challenge as there has been a trend of decentralization to the suburban area of Kuala Lumpur in recent years (A E Ahmad, Z M Isa, 2008)

Kuala Lumpur, the capital city of Malaysia started as a tin mine settlement in 1867 and has been the centre of trade. Kuala Lumpur has since then progress to attain a city status in 1972 with an area of 92 km square (City Hall of Kuala Lumpur, 1991).

In aspiring to make Kuala Lumpur a world class city, one of the goals mentioned in the Draft Structure Plan 2020 is to enhance the role of Kuala Lumpur as an international commercial and financial centre. However, its development strategy for the city centre is to have a moderate growth in order not to exacerbate problem of oversupply of commercial space in the city. The motive to achieve a world class status for major cities in the region are many including a national pride for most government as well in addition to the fact that it is seen as an answer to the critical problem of making a successful transition from low wage assembly platforms to technical advanced production and high order corporate service centre (Douglass, 2000).

Drawing from the above aspiration towards meeting the visions of turning Kuala Lumpur into a world class city, there are concerns highlighted in the Draft Structure Plan 2020 on the commercial development. They are the over concentration of office buildings in the city centre; especially the quality of older buildings included those vacated by the relocation of government offices to Putra Jaya which are deficient in basic information communication technology (ICT) facilities.

Though there are these concerns, it has been noted generally in most cities in the world that central business district (CBD) or the city centre is referred to as the heart of the city where there is a concentration of firms and office employment. It can often be regarded as the engine of city growth which can filter its impact on other parts of the city. It is also often the focal point of a city and its population where it has a high concentration and diverse range of high value activities.

It is the aim of the study to promote the achievement of the above vision by identifying the factors considered important by firms and organizations especially of international status in attracting and retaining them to be in Kuala Lumpur specifically the city centre. The study further aims to determine the choice of office location of the main categories of tenants' in improving the occupancy status of the existing and incoming supply of office buildings to meet their demands.

The main objective of this paper is to provide a preliminary examination of the factors considered by tenants and occupiers generally for office occupation decision from the experts' perspectives. This result will then be used into the study for the determination of the relative importance of the factors and sub-factors across the different categories of office buildings' tenants in Kuala Lumpur city centre.

Office Market In Kuala Lumpur

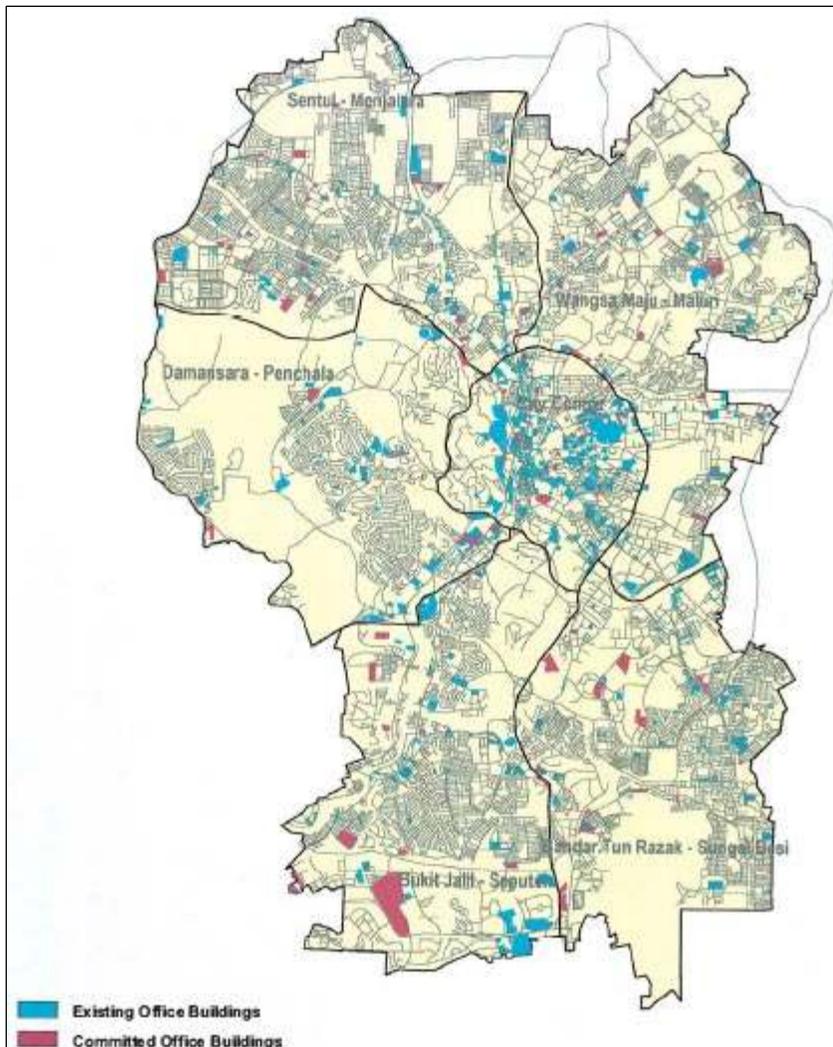
There has been a tremendous transformation of the Kuala Lumpur city centre since it first started as the centre of trade. Kuala Lumpur being the capital city of Malaysia and started as a tin mine settlement in 1867 has been the centre of trade. Kuala Lumpur has since then progress to attain a city status in 1972 with an area of 92 km square (City Hall of Kuala Lumpur, 1991). Since the 1960s and the 1970s, Kuala Lumpur started to portray its position as a centre of trade and business. As the country progresses in achieving more than 50 years of independence, the initial central area of business activities of Kuala Lumpur, Malaysia located between the two rivers, Klang River and Gombak River (the city early formation business area) has undergone tremendous changes. The manifestation of its physical function as a centre of business and office location activities is through the emergence of the Golden Triangle area (the area bounded by Jalan Ampang, Jalan Sultan Ismail and Jalan Bukit Bintang) which is built upon with international hotels and office and commercial blocks. At the same time, the previous Central Business District (CBD) of Kuala

Lumpur used to be the traditional city centre remains as the business and trade area with colonial economic features (Morshidi, 2002).

In most cities, CBD is easily distinguishable by its centrality, easy accessibility and clustering of up market commercial organizations and tertiary employment. Information is vastly collected, processed and disseminated in this area. Hence CBD is a highly dynamic place that is normally associated with the fast pace of life.

In Malaysia, the Kuala Lumpur city centre has been labeled in different forms by various parties. The City Hall of Kuala Lumpur has defined the area to be encompassing the central business location covering an area of 18,125,660.4 sq meters (see Figure 1). From the perspectives of the property professionals on the other hand, the definition varies. The definition by the National Property Information Centre (NAPIC), Department of Valuation and Property Services, Ministry of Finance, Malaysia has identified the office buildings location in Kuala Lumpur as: Central Business District (CBD), Golden Triangle (GT), Jalan Ampang (JA), Within City Centre (WCC) and Suburban (SU) area. The Central Business District (CBD) identified as the older part of Kuala Lumpur city was gazetted in accordance with the Comprehensive Plan No 1039 in 1970. The office buildings located within the area are mainly built before 1980s though some buildings have undergone refurbishment.

Figure 1: Existing and Committed Office Area (Draft Structure Plan 2020)



The definition of Kuala Lumpur City has now changed to meet the aspiration of the government to be a world class city. The centre which was formerly referred to CBD now includes areas bounded within the Golden Triangle, Jalan Ampang and Within City Centre (WCC). For this study, the definition by City Hall Kuala Lumpur shall be adopted.

The perceived need to influence office location decision is readily available from the Malaysian Planning documentations, the following extract being typical of the kinds of generalised policy objectives incorporated in the Structure Plan: “ Objective iii to ensure and ix.....(Draft KL Structure Plan, 2020) Much of the policy making and planning initiatives is aimed at the development companies and others that supply office premises, in the expectation and hope that these are able to accurately assess the requirements of the occupiers. An alternative to such a supply orientated approach, an examination of the locational motives of the occupants of the office buildings is advocated here.

While older office buildings located in secondary location or on the fringe of CBD area are said to be more susceptible to being left vacant due to its unpopular office addresses and poor building images, similar buildings located close by the Kuala Lumpur City Centre (KLCC), an area within the Golden Triangle area gained from the strategic location and continued to enjoy sustainable occupancy rates (Rahim & Co, 2006).

By the third quarter of 2009, there are approximately 68 million square feet of office space in Kuala Lumpur. Out of this amount, 79% of the space is located within the area demarcated by the City Hall Kuala Lumpur as the Kuala Lumpur city centre. The average occupancy rate of the office space in Kuala Lumpur is 84% while the average occupancy rate of the office space in the city centre (as defined in the study) is 82% (NAPIC, Commercial Property Stock Report, 2009).

An overview of the occupancy rate of office space within the areas in Kuala Lumpur as defined by NAPIC shows varying figures as follows:

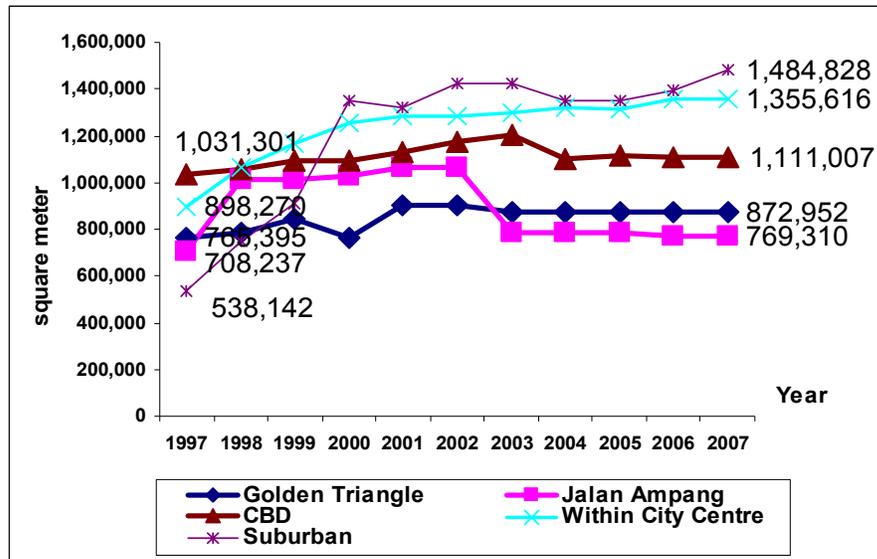
Table 1: Occupancy Rate of Office Space in Kuala Lumpur

Defined Area	Occupancy Rate
Golden Triangle	82%
Jalan Ampang	95%
Central Business District	85%
Within City Centre	83%
Suburban	83%

(NAPIC, Q3, 2009)

There has been a slight improvement of the office market over the past few years (before the recent economic crisis) as evidenced by the improvement in the take up rates of office space in the Kuala Lumpur office market. An observation of the 10 year supply trend from 1997 to 2007 is illustrated below:

Figure 2: Supply of Office Space by Location



(Source: A E Ahmad, Z M Isa, 2008, NAPIC (various publications, 1998 – 2008))

Cross-sectional analysis by location and various development stages shows pertinent movements over the years up to 2007. Although there has been an increasing trend of supply in the suburban area during this period, the Kuala Lumpur city centre has the most concentration of office supply.

Factors Influencing Office Occupation

Whilst a number of studies have been published in other countries on the overall requirements of office tenants for office occupation, little research is known to exist that examines the particular important factors considered by the major tenant organizations in Malaysia. There appears to be a lack of precise knowledge for commercial property stakeholders especially property managers, owners/investors and leasing agents in Kuala Lumpur.

General Office Space Decision

The paper has not made any distinction of examining the factors that influence the decision making of office space to be made by tenants either to be retained at the existing premises or to attract to the Kuala Lumpur city centre. It intends to provide a general overview of the factors that have been considered in the above scenarios.

Historically, it has been said that firms choose to cluster in a centre that offers comparative advantage (Sing, Ooi, Wong, Lum, 2004). This gives rise to high concentration of employment which evolved through CBD (Marshall, 1961; Krugman 1991, Sing et. al., 2004). When CBD grows and reach a critical size, agglomeration benefits diminish (traffic congestion, increased office density etc.). The tenants' firms are more ready to trade off agglomeration economies for new office location. Subcentres are formed as a result of the outward movement from the CBD (Richardson, 1978). In an earlier study on the future of the city centres for property investments by Richard Ellis in 1996, office occupiers have indicated the following factors when considering relocating. They are total building occupational costs, quality of buildings, road infrastructure, security of the area, availability of staff, availability of car parking, quality of life for employees, access to client/target market, skills of staff, out of city centre, prestige location, rail and air infrastructure, competing companies in the area and

city centre location. Total building costs and the quality of accommodation are the most important factors while city centre location is the least important factor.

Agglomeration economies (Clapp, 1980; Bollinger et al., 1998) as an extension of the location literature have been identified as an important factor for the central location of firms. However, the role of face to face contact and the associated of agglomeration economies is not the only factor determining the location of a firm. Alexander (1979) argues of the over emphasis of this factor and identified other factors which include tradition, distance from the most prestigious addresses, proximity to inner city train station, link with commuter train and bus network or closeness to the main shopping centre. The need for face to face contact and accessibility has been questioned with the advent of the advancement of information and communication technology (ICT). However, it was found that as technology progresses, the effect of IT is nominal on the demand for office space (Peter Dent et al (1998)). On the other hand, another study in Singapore had shown that the advent of ICT had reduced the need for fact to face contact with customers and suppliers (Tien Foo Sing et al, 2004).

There has been a strong proponent that within the location factors, accommodation has been overlooked (Louw, 1998). It was found that it has a major role in the decision making process in particular for firms that want to rent office space. It is said that firms that rent office space are dependent upon the supply offered on the real estate market and what it offers. Thus, the core of the accommodation issue lies in bridging the gap between the static nature of buildings and the dynamics development of organizations that have responded to technical developments and quickly changing markets. The type and size of premises will affect the productivity of the firm.

Examining the behavioural approach to firm relocation decision, it has been mentioned that there are given push and push factors in the process. Frequently, push reasons are both internal and external to the firm. The main internal reason is related to from growth: limited expansion space at current location or limited representivity of the present location (the need for it usually increases with the size and age of the firm). External factors include limited accessibility, deterioration of the building, environmental considerations, limited labour supply or high location costs. Pull factors are largely the opposite of the internal factors: enough space, accessibility to deliverers, suppliers, customers, the labour market, representivity, low costs and often locational amenities (Pallenberg et al, 2002). Studies has been conducted to explore the pull and push factors on location, building and organisational levels (Pen,2002). Many of the factors that relate to these levels are from the behavioural context and are location specific which relate to the premise, organization or the environment.

The heterogeneity of office stocks has since then been included in studies to determine the office space decision. On the demand side, assumption as to firms being rational, homogeneous and have perfect information on their choice of office location decision has been questioned (Wyatt, 1999; Leishman; Watkin, 2004 and Leishman, Dunse, Warren and Watkin, 2003, Sing, Ooi, Wong, Lum, 2004). These studies provide findings that the office space preference decision varies between different types of occupiers. The occupiers' characteristics which influence the office space decision may vary between their nature and priorities. A study on the different profile of occupiers in Singapore major commercial development revealed that firms placed significant importance on face to face convenience, image and branding of the office location (Sing et al, 2004).

In an earlier study to determine the causes and patterns of new space demand in Australian commercial property market, it was found that there are macro and micro influences in the decision making process (Higgins, 2000). They are the property market dynamics, technical

change, political factors, economic factors, building locality, business profile, cost implications, lease arrangements and occupiable space. Thus it can be derived that the commercial property landscape is changing to accommodate the requirements of organizations. While it would be useful to examine the impact of the economic and political factors on the decision making process for office occupation, these factors are excluded in this study considering that they are not 'product offering' specific. In a study to determine the main factors that determine the consumer choice for office space in Riga Latvia, good location, parking availability, rent and office infrastructure were chosen to be important.

While the age of buildings may be one of the factors of consideration, a study pointed out that there is no straight forward relationship between age of building and the degree of obsolescence (Richard Barras et al (1996). In a study of depreciation of the office market in Kuala Lumpur for the period of 1996 and 1998, building obsolescence has largely attribute to the impact of depreciation, which are property specific factors (Md Yusof A, 2000). Variations in offices' characteristics, denoted by site obsolescence, building obsolescence and physical deterioration explained the scale of depreciation of the offices in the city of Kuala Lumpur. Among these three, physical deterioration and obsolescence were found to be the major sources of depreciation. It would be worthy to note that age and the physical conditions of the office buildings are important factors of consideration for occupation.

A satisfied tenant is much more committed, tend to be loyal and not move (Dogge, 2004). Various studies on the tenants' occupation within office buildings have been examined. Riannce, 2007 in a study in Netherlands explored the keep factors that could retain tenants as they become satisfied at the existing office. It was discovered that there can never a certain keep factors for an office space decision as they tend to be exchanged with the push/pull factors. The important push/pull factors seem to be building factors while the important keep factors seem to belong to the buildings and the surroundings.

Babcock (2003) discussed the BOMA International results of survey on tenant satisfaction and tenant retention. The paper discusses the factors of consideration for tenants' retention which include adding up amenities whereby tenants look for a physical place in synchronisation with its current status. Location was ranked as the most crucial consideration in tenant attraction and retention whilst technology was the most significant factor. CBE, University of California (1999) made a study on what office tenants want and how much they are willing to pay for. The traditional areas of real estate decision-making were described highlighting the major factors under consideration. Sullivan (2006) highlights the results of a survey conducted among landlords and tenants (involving 6,642 readers of Building Operations Management) as to the level of satisfaction derived from leased space. The survey shows that a majority of tenants are consistently satisfied with more than two-third of their landlord and to responsiveness to requests and complaints.

RICS Tenant Satisfaction Index (2005) describes the Index developed in providing an insight into the health of tenant relationships in the UK property industry. It is a measure of tenant satisfaction on the services provided by landlords. The study revealed that various component of performance used need not include location but also to include standard of premises and value for money, landlord & agent communication, contract detail (ease of contract alteration and problem resolution. lease flexibility). Historically, main concerns of a tenant have been location, standard and rent.

In a research report entitled "Why rent in Kuala Lumpur" by the National Institute of Valuation (INSPEN), Malaysia in 1993, examines the key selection criteria for office space occupation in Kuala Lumpur. Key factors used as guidelines for classification of office buildings were location, building design, building services, rental rates and building image. The study has

also revealed that majority of the building are managed in-house. It was also generally observed that the tenants in the Golden Triangle Area were more maintenance conscious than their counterparts in the CBD area, possibly due to their derived expectation of the better quality services to correspond with the comparatively higher service charge levied to them. The study however did not specifically rank the importance of the facilities accordingly or gauge the level of tenant satisfaction in terms of expectation and performance towards the factors identified. . It is interesting to note that various factors has been identified to solicit tenants' requirements from previous studies and it would useful to find out whether these factors are still relevant in the current market office and business scenario in Kuala Lumpur.

There are numerous factors in varying degrees that may influence the tenant office occupation decision. It can be observed that there are four main areas which can be said to encompass the "product offering" to the tenant as a consumer. Monetary factors have been one of the considerations and so are the other factors such as location, lease features and building or physical characteristics of the space. While it would be interesting to note of the factors highlighted in previous studies, it would be useful to determine the relevant factors to be adopted by tenants in the office buildings in Malaysia by soliciting the views of the property consultants/leasing experts in Kuala Lumpur.

Questionnaire structure

A questionnaire survey among selected experts' comprising property consultants/agents and property/leasing managers was designed to examine the factors that could have significant impact to the office occupation decision within the Kuala Lumpur city centre's context. It sought to identify the important factors that would have a significant contribution in tenant's office space decision making process during their interaction with tenants. The questionnaire was divided into two parts. The first part sought information about the experts' profile while the second part list the factors for importance consideration that were obtained through literature search on previous studies conducted. The questionnaire was sent to forty property consultants/agents and property/leasing managers in Kuala Lumpur through postal and email. Twenty seven were returned representing a response rate of 68%. The participants were asked to assess the extent of importance of the factors considered by tenants in the office occupation leasing decision. The questionnaire used a five-point Likert scale to measure a range of opinions from "Not very important" to "Very important". The Statistical Package for Social Sciences (SPSS) was employed to analyse the data using the percentage method and important index analysis.

Ranking of the factors

The factors were ranked by means of an important index which was adopted earlier by MA EI-Haram, MW Horner (2002) and calculated as follows:

$$\text{Important index} = \left\{ \sum_{i=1}^5 W_i \times f_{xi} \right\} \times \frac{100}{5n}$$

Where W_i is weight given to the response; $i = 1, 2, 3, 4, \text{ or } 5$ is the response frequency; $f_{x1} =$ not very important to $f_{x5} =$ very important and n is the total number of responses (27 responses). All the factors were listed in descending rank order based upon the important index. The results are shown in Table 2.

Table 2 : Ranking of Important Factors by Experts'

Rank	Factors	Important Index
1	Rental Rate	96.3
2	Car Park Provision & Accessibility	94.8
3	Responsible management and maintenance team eg responsive	94.1
4	Security and Access Control	93.3
5	Modern IT and Communication System e.g wireless, broadband	89.6
6	Building Identity/Image	89.6
7	Air conditioning & Ventilation Systems	88.9
8	Fire Prevention & Protection	88.9
9	Renewal terms	88.9
10	Electrical Systems & Provision	88.1
11	Total Occupancy Cost	88.1
12	Length Lease/Duration of Contract	87.4
13	Comfortable and Secure Working Environment	86.6
14	Flexible Space Layout and Large Floor Plate Size	86.6
15	Maintenance Policy	86.6
16	Cost of Fit Out	86.6
17	Building Visibility	85.9
18	Image/Branding of Location	85.9
19	Access to Amenities	85.1
20	Riser Space for IT and Security Systems	84.4
21	After Hours Operations	84.4
22	Space Efficiency	83.7
23	Accessibility to Public Transport & Terminal	83.7
24	View	82.9
25	Column Layout and Sub divisibility	82.9
26	Toilet and Sanitary Services	82.9
27	Modern Prestigious Building	82.9
28	Design of Entrance and Foyer	82.9
29	Termination Clause	82.9
30	Building wayfinding eg signages	82.9
31	Building Automation and Energy Management Systems	82.2
32	Safety Policies and Procedures	82.2
33	Cleaning/Housekeeping Services	82.2
34	Payment of Monies e.g rental, deposit	82.2
35	Traffic Condition	81.4
36	Passenger Lift Performance and Control	81.4
37	Quality & Presentation of External Finishes	80.7
38	Architectural design and building finishes	80.7
39	Level of Criminal Rate	80.7
40	Floor Ceiling Height	80
41	Accessibility by private vehicles	80
42	Food & Beverage Outlets	80
43	Alteration and Renovation Clause	79.2
44	Incentives e.g rent free period	79.2
45	Availability of Space for Future Expansion	77.7
46	Orientation of Office Space	77.7
47	Underfloor Trunking	77.7
48	Control of Building Services e.g M & E Services	77.7
49	Ease of Entrance Usage & capacity	77.7
50	Proximity to Clients/market eg Face to face contact	76.2
51	Compliance to Law & House Rules	75.5
52	Access to market	74.8
53	Age of building	74.0
54	Adequacy of Good Access & Circulation feature	74.0
55	Proximity to Support Services eg banks, postal etc.	73.3
56	Building Size	71.8
57	Repair and Insurance	71.8
58	Access to Skilled Labour	71.8
59	Proximity to major trunk roads	71.8
60	Energy Efficient/Green Buildings	71.1

Findings and Discussion

The result of the survey reveals that there varying degree of importance placed on various identified factors. Though rental rate is placed to be the most important factor, the location and physical features of the office space offering are chosen to be the immediate important factors. By choosing the important factors which have a relatively high index (70% and

above), the following subdivision of the main and sub factors that can adopted for further identification of important factors by tenants can be derived. Table 3 illustrates the categorization.

Table 3: Category of Main and Sub Factors

Main Factors	Sub Factors
Economic/Monetary Consideration	<ol style="list-style-type: none"> 1. Rental Rate 2. Total Occupancy Cost 3. Cost of Fit Out
Location	<ol style="list-style-type: none"> 1. Image/Branding of Location 2. Access to Amenities 3. Accessibility to Public Transport & Terminal 4. Traffic Condition 5. Level of Criminal Rate 6. Accessibility to Private Vehicles 7. Proximity to Clients/market eg face to face contact 8. Access to Market 9. Proximity to Support Services eg banks, postal 10. Access to skilled labour 11. Proximity major trunk roads
Lease Features	<ol style="list-style-type: none"> 1. Renewal terms 2. Length lease/duration of contract 3. Termination Clause 4. Payment of Monies terms eg rent, service charge 5. Alteration & renovation clause 6. Incentives eg rent free period 7. Compliance to Law & House Rules 8. Repair & Insurance terms
Building Features, Services & Management	<ol style="list-style-type: none"> 1. Car Park Provision & Accessibility 2. Responsible Management and Maintenance Team eg responsive 3. Security & Access Control 4. Modern IT & Communication Systems eg broadband, wireless 5. Building Identity/Image 6. Air-Conditioning & Ventilation Systems 7. Fire Prevention & Protection 8. Electrical Systems & Provision 9. Comfortable and Secure Working Environment 10. Flexible Space Layout and Large floor plate 11. Maintenance Policy 12. Building Visibility 13. Riser Space for IT and Security Systems 14. After Hours Operations 15. Space Efficiency 16. View 17. Column Layout & Sub divisibility 18. Toilet & Sanitary Services 19. Modern Prestigious Building 20. Design of Entrance & Foyer 21. Building Way Findings eg signages 22. Building Automations & Energy Management Systems 23. Safety Policies & Procedures 24. Cleaning/Housekeeping Services 25. Passenger Lift Performance & Control 26. Quality & Presentation of External finishes 27. Architectural Design & Building Services 28. Floor Ceiling Height 29. Food & Beverage Outlets 30. Availability of Space for Future Expansion 31. Orientation of Office Space 32. Underfloor Trunking 33. Control of Building Services eg M & E Services 34. Ease of Entrance Usage & Capacity 35. Age of Building 36. Adequacy of Good Access and Circulation 37. Building Size 38. Energy Efficient/Green Buildings Features

With the identification of the important factors, these factors shall be adopted in the later stage of the study for the determination of the relative importance of the factors and sub-

factors across the different categories of office buildings' tenants in Kuala Lumpur city centre.

Conclusion

It can be noted that there is an extensive list of factors that had been considered in the office space occupation decision literature and mainly it had concentrated on the aspects of location, building features and organisation profiles. While these studies have shown various factors which may influence office space decision from varying aspects, it will be useful to identify these factors from the perspective of the tenants occupying the office buildings in the centre of Kuala Lumpur. This paper reveals the results of questionnaire survey conducted among forty property consultants/leasing/property managers in Kuala Lumpur. The survey set out to establish the important factors from a list of factors identified in the literature which would be considered by tenants in making office occupation decision. The findings show that there is mixture of factors that have achieved high important consideration by the experts. By categorizing the factors into the four broad areas, the main and sub factors can be identified. These factors shall be adopted in the later stage of the study for the determination of the relative importance of the factors and sub-factors across the different categories of office buildings' tenants in Kuala Lumpur city centre.

Bibliography

A E Ahmad, Z M Isa, 2008, Performance Of Kuala Lumpur Office Market After The 1997 Asian Market Crisis, proceedings of the International Real Estate Research Symposium (IRERS) 2008

Alexander (1979), Office Location and Public Policy, Longman, London

Angus McIntosh (1996), Richard Ellis, City Centres: Do they have a future for property investment?, The Cutting Edge 1996, RICS Research

Archer, W.R (1981) Determinants of location for general purpose office firms within medium size cities, AREUEA Journal, 9, pp 283-297

Appel-Meulenbroek R. (2008), Managing "keep" factors of office tenants to raise satisfaction and loyalty, Property Management, Vol 26 No.1, 2008 pp 43-55

Babcock, R. R. (2003), The Tenant/Workplace Equation Part 1, *Buildings*, Jan 2003, 91.1, pp. 50-52.

Barras. R and Clark.P (1996), 'Obsolescence and performance in the Central London Office Market', *Journal of Property Valuation and Investment*, Vol. 14 No 4, pp (63-78).

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

Bollinger, R.C. Ihlandfeldt, K.R, Bowes, R.D. (1998), Spatial variation in office rents within Atlanta region, *Urban Studies*, 35:7, pp 1097-1118

Clapp (1980), The Intra-metropolitan Location of Office Activities, *Journal of Regional Science*, 20(3), pp 387-399

Dogge, P, Smeets (2004), In Search of customer loyalty – a research into relationship between tenants satisfaction and commitment, *Revista de Psihologie Aplicata*, special issue, 18th IAPS-conference, Vol 6 Nos 3-4, pp 111-20

Douglass M (2000), Mega-urban Regions and World City Formation: Globalisation, the Economic Crisis and Urban Policy Issues in Pacific Asia, *Urban Studies*, Vol. 37, No. 12, 2315-2335 (2000)

Draft Kuala Lumpur Structure Plan 2020 Kuala Lumpur City Hall, Http: www.dbkl.gov.my (Accessed 25/12/ 2009)

Dunse, N.A, Leishman, C, Watkins, C (2001), Classifying office submarkets, *Journal of Property Investments & Finance*, 19:3, pp 236-250

El-Haram, M.A and Horner, M.W (2002) Factors affecting housing maintenance cost, *Journal of Quality in Maintenance Engineering*, 8(20), pp115-123

Higgins, D (2000), An Overview of the Causes and patterns of New Space Demand in Australian Commercial Property Markets, proceeding of Pacific Rim Real Estate Society (PRRES) Conference 2000, Sydney

Krugman, P (1991), *Geography and Trade*, Cambridge MA:MIT Press

Leishman C, Watkins C (2004), The decision making behavior of office occupiers, *Journal of Property Investment and Finance*, Vol 22 No.4, 2004 pp 307-319

Leishman C., N.A. Dunse, F.J.Warren, C. Watkins (2003), Office space requirements: Comparing occupiers' preferences with agents' perceptions, *Journal of Property Investment and Finance* , Vol 21 No.1, 2003 pp 45-60

Louw E (1998), *Accommodation as a Location Factor for Office Organisations: Implication for Location Theory*

Marshall, A (1961) *principles of Economics*, New York: The Macmillan Company

Md Yusof, Y (2000), The Impact Of Depreciation – A Hedonic Analysis of Offices in the city of Kuala Lumpur, proceedings of the Pacific Rim Real Estate Society Conference 2000, Sydney, 23 - 27 January 2000

NAPIC (2007) *Property Market Report Quarter 4 2007*. NAPIC, Kuala Lumpur.

NAPIC (2008) *Property Market Report Quarter 4 2008*. NAPIC, Kuala Lumpur.

NAPIC (2009) *Property Market Report Quarter 2 2009*. NAPIC, Kuala Lumpur.

Pallenbarg, P H, Wissen LJG, Dijk J van (2002), *Firm Relocation: State of the Art and Research Prospects*, Research Report, University of Gronigen, Research Institute SOM paper, The Netherlands

Pen C J (1999), Improving the behavioural location theory: Preliminary results of a written questionnaire about strategic decision-making on firm relocations, proceedings of European RSA Congress, @3-27 August 1999, Dublin

Rahim & Co (2006), Property Market Research Report

Richardson, H.W (1978), Urban economics, Hinsdale, Illinois: The Dryden Press

RICS (2005) *RICS Tenant Satisfaction Index: Tune in to tenants*. RICS, London.

Ross S J (2003), The role of decision-maker preferences in tenancy selection of CBD office accommodation-preliminary literature review, proceedings of PRRES Conference 2003

Sing, T.F., Ooi, Joseph T.L., Wong, A.L., Lum, Patrick K.K, (2006), Network connectivity and office occupiers' space decision: The case of Suntec City, *Journal of Property Investment and Finance*, Vol 24 No.3, 2006 pp 221-238

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

Sing, T.F., Ooi, Joseph T.L., Wong, A.L., Lum, Patrick K.K (2004), Influence of occupiers' characteristics in office space decision, Research Working Paper (www.rst.edu.sg/research/workingpaper/2005-004) accessed 20/09/08

Sirat M, S Ghazali (1999), Globalisation Of Economic Activity And Third World Cities: A Case Of Kuala Lumpur: Utusan Publication & Distribution Sdn Bhd

Spurge V, Almond N (2004), Broadband technology: How developers are responding to office occupiers' needs, *Property Management*, Vol 22 No.2, 2004 pp 108-126

Sullivan, E. (2006) Satisfied Customers, *Building Operating Management*, Vol. 53(12), pp.21-26.

Wyatt, P (1999) Can a geographical analysis of property values aid business location planning? RICS Research Conference – the Cutting Edge, University of Cambridge, 6-7 September 1999

“Why rent in Kuala Lumpur” (1993), National Institute of Valuation (INSPEN), Malaysia