
Munich Personal RePEc Archive

The characteristics of purpose built offices in Malaysia: a review of issues

Mohd Safian, Edie Ezwan and Bagdad, Mariati and Nawawi, Abdul Hadi

Universiti Teknologi MARA

5 July 2011

Online at https://mpra.ub.uni-muenchen.de/39422/
MPRA Paper No. 39422, posted 13 Jun 2012 12:52 UTC

Sixth International Conference on Construction in the 21st Century (CITC-VI)
"Construction Challenges in the New Decade"
July 5-7 2011, Kuala Lumpur, Malaysia

The Characteristics of Purpose Built Offices in Malaysia: A Review of Issues

Edie Ezwan Mohd Safian
(Ph.D Candidate, Universiti Teknologi Mara (UiTM), Shah Alam, Selangor, Malaysia)

Mariati bagdad
(Ph.D Candidate, Universiti Teknologi Mara (UiTM), Shah Alam, Selangor, Malaysia)

Abdul Hadi Nawawi
(Professor, Universiti Teknologi Mara (UiTM), Shah Alam, Selangor, Malaysia)

Abstract
The development of purpose-built office market in Malaysia is basically determined by a supply-demand market. Since the purpose built office market in Malaysia has shown positive developments and increasing level of competitiveness, many building and locational characteristics have emerged and become important during the process of assessment of the office property involving property market appraisal and building performance evaluation. With these characteristics, property market participants can evaluate their property efficiently based on their needs such as for investment, management, or business planning. Recently, many new characteristics of purpose built office have also been revealed according to technology growth and national policy such as green technology, green building index classification, energy saving and sustainable development. The purpose of this paper is to identify the existing characteristics of purpose built office in Malaysia and discuss the importance of these characteristics. Integral to achieving this objective, research on purpose built office characteristics in a global and local context will also be reviewed. As a result, the issues related to purpose built office characteristics in Malaysia will be identified, and documented with greater rigor.

Keywords
Purpose-built office, building and locational characteristics, building performance.

1. Introduction

Purpose-built office (PBO) market in Malaysia had shown a positive development since 1990s. Based on the National Property Information Centre (NAPIC) report, the stability of the economic condition has a major influence on the PBO market (Napic, 1994). During the rapid economic growth, Malaysia had enjoyed an increasing demand for PBO contributed by strong economic market, and there has been a steady increase in development projects conducted by public and private sectors (Rahim & co, 1993).

Due to its growth, PBO had shown to play a vital role in contributing to the property investment portfolio in the Malaysia office property market. Therefore, office property market had become increasingly competitive. Many buildings and locational characteristics have been revealed in order to meet the needs of property market participants and equilibrium of demand-supply in the office property market.

Basically, building and locational characteristics are important to determine building performance such as grading, classification, green building and sustainable development. However, these characteristics that

have been applied on PBO are different based on its purpose (Mohd Safian, 2010). For example, green technology had been focused on energy saving while innovation was a main characteristic for sustainable development.

In addition, building and locational characteristics also have been used to determine office property value, price as well as rental. Government and private sectors also play a vital role to reveal the new characteristics of PBO in order to make the office property market competitive and attractive. Therefore, this paper aims to determine the building and locational characteristics, specifically on PBO and review the related current issues in the country.

2. Differences of an office building and a purpose-built office

An office building consists of a commercial building that has a main lounge that is specially designed for the office's use (Bird, 1996). The objective of developing an office building is to make way for work spaces and a working environment for administration work, business and also management. The office space is usually furnished with office equipments, for example, chairs, desks, computers, and other office equipments that are needed for activities in the office space. Nowadays, an office space is furnished with sophisticated communication facilities to enable global connections in order to make sure the business activity and administration run smoothly and effectively such as telephone, fax and high-speed internet broadband.

An office building is usually divided to several divisions and occupied by different companies. It also may cover one company in a building based on their business activity, and administration that ran by the company. Normally, a company's office will include a lobby to greet guests, a few meeting rooms, an open office space, the manager's room, and toilets (Bird, 1996). Some office spaces may also have a pantry or a room to prepare food and drinks, as well as a room to rest or prayer room (Mohd Safian, 2010). As such, employees are free to arrange their personal activities during break hours.

Meanwhile, a purpose built office (PBO) represent an office building that has a main function which is for office use, and is supported by other services. The main function when combining the initial design is to optimise the space for its benefit. When about 75% of the initial design is made for office use, the initial function is changed for a new function (NAPIC, 2007). For example, a PBO is a building which has a main area that functions for office use and supported by other facilities or services, such as bank, post office, restaurants, shopping complexes, and retails (Mohd Safian, 2010).

Basically, the term purpose-built office is typically used by few countries such as United Kingdom, Australia, as well as Malaysia. This intents to distinguish PBO with other commercial buildings or retail offices. In contrast, United States and Russia, still use conventional term for office building, which is an 'office building' or 'office block'. However, it depends on the PBO or office building itself whereby it has support services or not. Figure 1, shows the difference of an office building and a purpose built office.

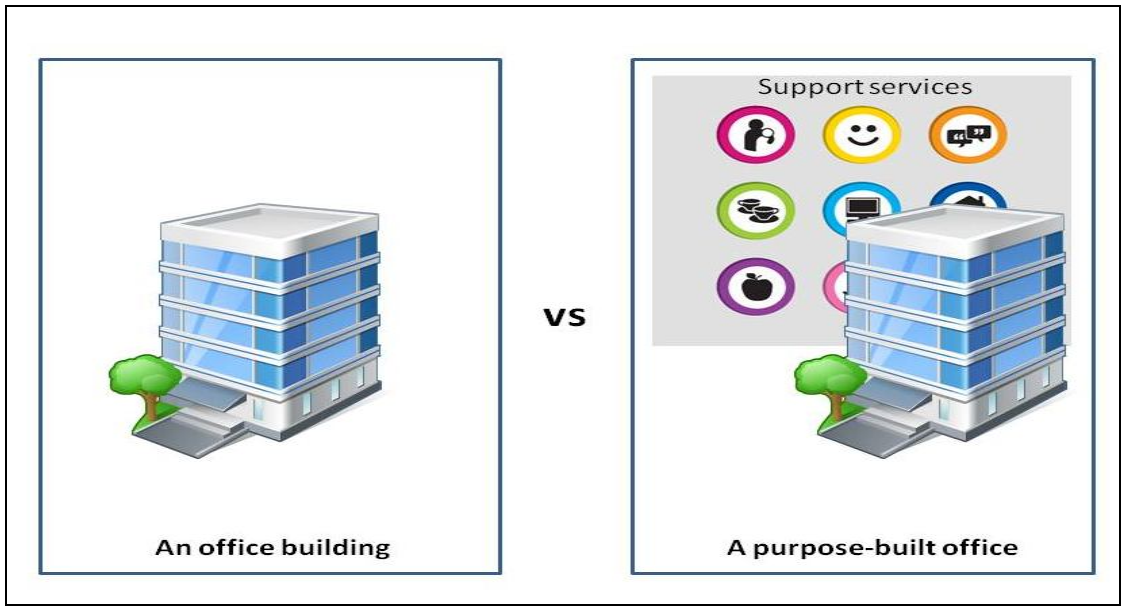

Figure 1: The difference of an office building and a purpose built office

3. The building and locational characteristics of PBO

Based on the statement by Duntavs (2006), a PBO offers a flexible work environment for growing companies. This centre is a great value for money without having to compromise on facilities. Therefore, explanation on the functions of PBO leads to reveal the building and locational characteristics on the PBO itself. This concept is very important to understand as well as differentiate PBO characteristics with other commercial building characteristics. The building and locational characteristics of PBO, including internal and external characteristics can show the identity of PBO itself as a commercial building which is specifically for office use.

However, each PBO has its own building and locational characteristics depending on its location, design, age, services as well as the technology that applied in the building. The uniqueness of building and locational characteristics of PBO can attract investors such as buyers or tenants to invest in PBO. As a result, the building and locational characteristics of PBO have been taken as criteria in determining the performance of PBO by valuer or assessor in a relevance area.

These characteristics of PBO can be found in the framework that is based on the building performance indicators such as green building index, grading, classification, as well as sustainable development model. Even though there were many characteristics introduced by government or private sectors, the selection of the reliable characteristics is very complicated. Every building and locational characteristics of PBO are needed to be adapt with local culture, environment as well as suitable in a related area.

Based on National Institute of Building Sciences (NIBS), there are two basic characteristics of office building. Firstly, the space attributes which are requiring flexibility, comfort and safety, energy efficiency, cost-effective and good working environment. Secondly, the building attributes namely safety, healthy, comfortable, durable, and accessible (NIBS, 2009). These characteristics also have been applied by other countries such as United Kingdom and Australia, but they have modified it and focused more details on a certain aspect.

Furthermore, the building and locational characteristics also have been used to determine the quality level of PBO. With the selection characteristics, the quality level of PBO is ease to identify in order to categorise the building. With these characteristics, property market participants are free to decide their investment or business activities on the PBO efficiently. Indirectly, with a clear concept and understanding on the building and locational characteristics of PBO, it will be significance to the office property market growth.

In a global context, the building and locational characteristics of PBO have been investigated through advanced studies. As a result, they can easily develop many indicators for quality level, green building index, sustainable development, and classification as done by Colliers-United States, BOMA, HK-Beam, PCA, NIBS and BREEAM. However in Malaysia, the PBO building and locational characteristics studies is still lacking in terms of having a complete and suitable framework that can use and apply accordance to all PBO in the country. The reliable framework of building and locational characteristics for PBO is still in development.

4. The issues of building and locational characteristics in Malaysia

In Malaysia, only few studies have been done by researcher to look into building and locational characteristics of PBO in the country. However, it shows a positive development whereby Green Building Index Malaysia (GBIM) was officially launched in May 2009 (Rahardjati et al. 2010). The characteristics of PBO have been selected and come out with a structured framework to evaluate building performance in terms of green building.

Furthermore, research on the classification model also helps to identify the building and locational characteristics of PBO in more details frameworks as done by Rahim & Co (2006), DBKL (2010), Mohd Safian (2010), and Adnan (2008). Many new characteristics in the classification model have been revealed during these studies. However, the actual framework on the classification is still in development. The building and locational characteristics of PBO at the same time are not meeting the needs of property market participants such as investors, tenants and owners.

Through the study done by Mohd Safian (2010), the main characteristic of PBO in Malaysia is the presentation, but after the survey had been conducted, number of parking was the main interest by respondents. The same situation also happened on Green Building Index Malaysia (GBIM), which is an indoor environment was the main characteristic that chosen by respondents instead of energy efficiency (Rahardjati et al. 2010). Through that survey as well, innovation is the lower choice by respondents. The results show the building and locational characteristics of PBO in Malaysia are still not satisfying the needs of property market participants, and further study should be done.

This paper, however, has identified the building and locational characteristics in a local context that have been used covering all the research relates. These building and locational characteristics have been divided into eight groups namely presentation, management, functionality, services, access and circulation, amenities, green building and sustainable development and location. Table 1, shows the characteristics and locational of PBO that have been used to evaluate building performance, which are in grading/classification, green building/green technology, and sustainable development.

Table 1: The existing building and locational characteristics in Malaysia (2007-2011)

PRESENTATION				
Characteristics/ Locational	**Researcher**	**Grading/ classification**	**Green buiding/ green technology**	**Sustainable development**
External design	Mohd Safian (2010), Adnan, et. al (2008), Rahardjati, et. al (2010), Darus, et. al (2009), GBIM (2009).	/	/	/
Finishing	Mohd Safian (2010), Adnan, et. al (2008), Rahardjati, et. al (2010), GBIM (2009), Darus, et. al (2009).	/	/	/
Lobby design	Mohd Safian (2010), Adnan, et. al (2008), Darus, et. al (2009).	/		/
Number of storey	Mohd Safian (2010), Adnan, et. al (2008).	/		
Age of building	Mohd Safian (2010), Adnan, et. al (2008), Darus, et. al (2009).	/		/
MANAGEMENT				
Security	Mohd Safian (2010), Adnan, et. al (2008).	/		
Maintenance policy	Mohd Safian (2010), Adnan, et. al (2008), Rahardjati, et. al (2010), Darus, et. al (2009), GBIM (2009).	/	/	/
Cleaning services	Mohd Safian (2010), Adnan, et. al (2008), Darus, et. al (2009).	/		/
Energy saving/ recycle policy/ waste management	Mohd Safian (2010), Adnan, et. al (2008), Rahardjati, et. al (2010), Darus, et. al (2009), GBIM (2009).	/	/	/
CBMS	Mohd Safian (2010), Adnan, et. al (2008).	/		
FUNCTIONALITY				
Floor size	Mohd Safian (2010), Adnan, et. al (2008).	/		
Floor ceiling height	Mohd Safian (2010), Adnan, et. al (2008).	/		
Space efficiency	Mohd Safian (2010), Adnan, et. al (2008).	/		
Coloumn layout	Mohd Safian (2010), Adnan, et. al (2008).	/		
Floor loading	Mohd Safian (2010), Adnan, et. al (2008).	/		
SERVICES				
Toilet facilities	Mohd Safian (2010), Adnan, et. al (2008), Darus, et. al (2009).	/		/
Electrical & IT services	Mohd Safian (2010), Adnan, et. al (2008),	/		
Work environment	Mohd Safian (2010), Adnan, et. al (2008), Rahardjati, et. al (2010), Darus, et. al (2009). GBIM (2009).	/	/	/
HVAC	Mohd Safian (2010), Adnan, et. al (2008), Rahardjati, et. al (2010), Darus, et. al (2009). GBIM (2009).	/	/	/
Ease of services upgrading and maintainance	Mohd Safian (2010), Adnan, et. al (2008).	/		
ACCESS AND CIRCULATION				
Lift performance	Mohd Safian (2010), Adnan, et. al (2008).	/		
Lift design	Mohd Safian (2010), Adnan, et. al (2008), Darus, et. al (2009).	/		/

Number of car park	Mohd Safian (2010), Adnan, et. al (2008).	/		
Car park ingress from building	Mohd Safian (2010), Adnan, et. al (2008).	/		
Building way finding	Mohd Safian (2010), Adnan, et. al (2008).	/		
AMENITIES				
Landscape	Mohd Safian (2010), Adnan, et. al (2008), Rahardjati, et. al (2010). GBIM (2009).	/	/	
Bank, postal, retails	Mohd Safian (2010), Adnan, et. al (2008).	/		
Gym, health club	Mohd Safian (2010), Adnan, et. al (2008).	/		
Restaurants/cafe	Mohd Safian (2010), Adnan, et. al (2008).	/		
Pantry/ children nursery	Mohd Safian (2010), Adnan, et. al (2008).	/		
GREEN BUILDING & SUSTAINABLE BUILDING				
Indoor environment quality	Rahardjati, et. al (2010), Darus, et. al (2009). GBIM (2009).		/	/
Sustainable site planning	Rahardjati, et. al (2010), Darus, et. al (2009), GBIM (2009).		/	/
Meterial and resources	Rahardjati, et. al (2010), GBIM (2009).		/	
Water efficiency	Rahardjati, et. al (2010), Darus, et. al (2009), GBIM (2009).		/	/
Innovation	Rahardjati, et. al (2010), Darus, et. al (2009), GBIM (2009).		/	/
Air quality	Rahardjati, et. al (2010), GBIM (2009).		/	
Thermal confort	Rahardjati, et. al (2010), GBIM (2009).		/	
Lighting, visual, acoustic	Rahardjati, et. al (2010), GBIM (2009).		/	
Verification	Rahardjati, et. al (2010), GBIM (2009).		/	
Construction management	Rahardjati, et. al (2010), GBIM (2009).		/	
Green product	Rahardjati, et. al (2010), GBIM (2009).		/	
LOCATION				
Location of commercial feature	Adnan, et. al (2008).	/		
Availability of transport options	Adnan, et. al (2008).	/		
Transport distance	Adnan, et. al (2008), Rahardjati, et. al (2010), GBIM (2009).	/	/	
Vehicle flow	Adnan, et. al (2008), Rahardjati, et. al (2010), GBIM (2009).	/	/	
Efficiency of property markets	Adnan, et. al (2008).	/		

5. Results

As a result, based on survey analysis that shown in Table 1, this paper also has identified a new framework of the building and locational characteristics for PBO in Malaysia as shown in Table 2. These characteristics are formed from the entire assessment models that have been applied in Malaysia' PBO. With this framework, research relates will be more efficient, effective and reliable.

Table 2: The new building and locational characteristics of PBO in Malaysia

CHARACTERISTICS	SUB-CHARACTERISTICS
Presentation	External design Finishing Lobby design Number of storeys Age of building
Management	Security Maintenance policy Cleaning services Energy saving & recycle policy Computerise building management system
Functionality	Floor size Floor ceiling height Space efficiency Column layout Floor loading
Services	Toilet facilities Electrical & IT services Work environment Heating, ventilation, & air conditioning (HVAC) Ease of services upgrading and maintenance
Access & circulations	Lift performance Lift design Number of car park Car park ingress from building Building way finding
Amenities	Landscape Bank, postal & other retail Gym, health club Restaurant, café Pantry, children nursery
Green building & sustainable development	Indoor environment quality Sustainable site planning Material and resources Water efficiency Innovation
Location	Location of commercial feature Availability of transport options Transportation distance Vehicle flow Efficiency of property market

The combination with classification model, green building model, and sustainable development model of PBO characteristics will lead to produce a better framework for assessment of the quality of PBO. It will cover all type of assessment that can meet the needs of property market participants in one framework. This framework also will help property market participants to identify their PBO effectively for various purposes. In such, property market participants will not confuse with a suitable framework or indicator that they want to use in decision making.

6. Conclusion

Since the government and private sectors have been looking deep to promote new building and locational characteristics for PBO in Malaysia, detailed elicitation of the characteristics of the PBO is essential. Our office property market will be drastically increased if the building and locational characteristics of PBO are meet the needs of property market participants. Due to this, the special research to look on characteristics and locational must be undertaken in order to facilitate understanding of the building and locational characteristics of PBO in Malaysia.

7. References

Adnan, M.Y. and Daud, M.N. (2008), Identifying the Potential Criteria and Sub-Criteria for Classification of Office Buildings in Malaysia, International Real Estate Research Symposium 2008, Kuala Lumpur.

Bird, R. (1996). Defining Quality in New Zealand Office Developments Relative to International Standards. BOMA New Zealand, Auckland.

Duntavs, A. (2006). Colliers International Baltic Commercial. Real Estate Market Overview 2006, Gauja Hall.

Mohd Safian, E. E. (2010), Model klasifikasi bagi pejabat binaan khas di kawasan segi tiga emas Kuala Lumpur, UTHM, Master thesis.

National Property Information Centre (1994). 1994 Property Market Report. Kuala Lumpur, Malaysia: Valuation and Property Services Department.

National Property Information Centre (2007). 2007 Property Market Report. Kuala Lumpur, Malaysia: Valuation and Property Services Department.

NIBS (2009). Get Energized about High Performance Building - Apr 02 2009 - http://www.nibs.org/index.php/nibs/newsevents/news/Entry/getenergizedabouthighperformancebuilding.

Rahardjati, Retno and Khamidi, M. Faris and Idrus, Arazi (2010). The Level of Importance of Criteria and Sub Criteria in Green Building Index Malaysia. In: International Conference on Sustainable Building and Infrastructure (ICSBI 2010), 15-17 June 2010, Kuala Lumpur Convention Centre.

Rahim & Co. (1993). The Klang Valley Office Market – An indication of Trends 1993-2008, Rahim & Co., Kuala Lumpur.

Zuhairuse Md Darus, Nor Atikah Hashim, Elias Salleh, Lim Chin Haw, Abdul Khalim Abdul Rashid, Siti Nurhidayah Abdul Manan (2009), Development of Rating System For Sustainable Building In Malaysia. WSEAS TRANSACTIONS on ENVIRONMENT and DEVELOPMENT. Issue 3, Volume 5, March 2009.