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THE IMPACT OF INTERIOR LAYOUT OF DESIGNER'S OFFICE ON EMPLOYEE'S PERFORMANCE AT SHOP OFFICE IN KUALA LUMPUR

BY

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ABSTRACT

Kuala Lumpur as the capital city of Malaysia is booming with development of new commercial buildings. The major components of commercial floor space in Kuala Lumpur are offices, shopping, hotels and service apartments and other services. Office is still the highest services targeted to the strategic zone in Kuala Lumpur and its conurbation. Among the types of office building in Malaysia, shop offices stayed dominant demand for small and medium (SME) business activities. A small office space with a large number of employees and many space requirements is the major problem faced by small private organizations in Malaysia. As the cost of rental are now rising, efficient planning and utilization of the office space is becoming crucial. Mostly the office is designed with due importance to the nature of the job and the individuals that are working in that office. Therefore, designer's office which located in shop office building typology is selected as the office setting for this study. The aim of the research is to examine the relationship between offices interior layout and environment in shop office typology and developed a framework of best practice criteria for designer's office in shop offices typology. The objectives of the study firstly 1) to evaluate the existing condition of interior design and layout of designer's office at shop offices typology secondly 2) To obtain employees' perception towards the existing office condition and its relationship towards their productivities and performance thirdly 3) To identify the impact of building typology towards interior layout in shop office building typology and 4) to test the office environmental factor in a controlled subjective experiment in order to understand their influence towards employees task performance and perceived satisfaction and the final objectives is 5) To underline the criteria for best practice of designer's office setting in shop office building typology. This research comprises of three distinct stages of methodology which are 1) Case Study which consist of field observations and field survey of 17 Designer's Offices in Kuala Lumpur, 2) Computer Simulation of Space Syntax Analysis and 3) Control Subjective Experiment of focus group consisting 8 interior designers as respondents. Duffy's concept of office layout which is, DEN, HIVE, CLUB and CELL types of layout concept has been selected as the basis for office layout analysis throughout the study. Findings from the case study suggest that Majority of Designer's office uses DEN type of layout concept. Meanwhile the most preferable layout in the control subjective experiments is HIVE type over the DEN type. Space syntax analysis on building typology suggest that shop office type with high Connectivity Value gives more flexibility to accommodate DEN and HIVE types of layout. The research showed that office layout and design has significant impact towards employees' performance of Designer's Office in Malaysia's shop offices typology.

خلاصة البحث

في التجاري الطابق لفضاء الرئيسية المكونات .الجديدة التجارية المباني تطوير مع تزدهر ماليزيا عاصمة كوالالمبور التي الخدمات أعلى يزال لا المكتب .الخدمات من وغيرها الخدمات وشقق والفنادق والتسوق المكاتب هي لمبور كوالا مكاتب بقيت ماليزيا، في المكاتب مباني أنواع بين ومن .كونورباشيون و كوالالمبور في الاستراتيجية المنطقة تستهدف كبير عدد مع صغيرة مكتبية مساحة وهناك .والمتوسطة الصغيرة التجارية الأنشطة على الطلب على مهيمنة المتاجر في الخاصة الصغيرة المنظمات تواجهها التي الرئيسية المشكلة هي المساحة من الاحتياجات من والعديد الموظفين من أمرا أصبح المكتبي للحيز الفعالين والاستخدام التخطيط فإن الآن، الارتفاع في آخذة الإيجار تكلفة أن وبما .ماليزيا المنصب هذا في يعملون الذين والأفراد العمل لطبيعة الواجبة الأهمية إيلاء مع المكتب تصميم تم الغالب في .حاسما والهدف .الدراسة لهذه مكتب كإعداد التجارية المكاتب مبنى تصنيف في يقع الذي المصمم مكتب اختيار يتم ولذلك، لمعايير إطارا ووضع التجارية المكاتب تصنيف في والبيئة الداخلية المكاتب تخطيط بين العلاقة دراسة هو البحث من للتصميم الحالية الحالة تقييم)1 :أولا الدراسة أهداف .التجارية المكاتب تصنيف في المصمم لمكتب الممارسات أفضل تجاه الموظفين تصور على الحصول)2 ثانيا تيبولوغي التجارية المحلات بمكاتب المصمم مكتب وتخطيط الداخلي الداخلي التصميم نحو التصنيف بناء تأثير على التعرف)3 ثالثا وأدائها إنتاجيتها تجاه وعلاقتها القائمة المكتب حالة فهم أجل من للرقابة خاضعة ذاتية تجربة في للمكتب البيئي العامل لاختبار)4 و التجاري المكتب مبنى تصميم في الممارسات لأفضل معايير تسطير)5 هي النهائية والأهداف المدرك والارتياح الوظيفي الموظفين أداء تجاه نفوذهم وهي للمنهجية متميزة مراحل ثلاث من البحث هذا ويتألف .المكاتب تصنيف البناء مكتب في وضع المصمم مكتب من الحاسوب محاكاة)2 لمبور، كوالا في المصمم لمكاتب ميداني ومسح ميدانية ملاحظات من تتألف حالة دراسة)1 كمستجيبين الداخليين المصممين 8 من المكونة التركيز لمجموعة الذاتية التجربة مراقبة)3 و الفضائي التركيب لتحليل لتحليل كأساس مفهوم تخطيط أنواع سيل و كلوب هيف، دن، اختيار تم وقد هي، التي المكاتب تخطيط من دافي مفهوم نوع دن يستخدم المصمم أغلبية مكتب أن إلى تشير الحالة دراسة من النتائج .الدراسة أنحاء جميع في المكاتب تخطيط نوع على هيف نوع هو السيطرة الذاتية التجارب في تفضيلا الأكثر التخطيط نفسه الوقت
وفي .التخطيط مفهوم من يعطي الاتصال قيمة ارتفاع مع المحل مكتب نوع أن إلى تشير المباني تصنيف على الفضاء جملة بناء تحليل .دن كبير تأثير له وتصميمه المكتب تصميم أن البحث ويؤكد .التخطيط من أنواع هيف و دن لاستيعاب المرونة من المزيد ماليزيا في للمكاتب التجاري المكتب في المصمم مكتب في الموظفين أداء على

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TABLE OF CONTENTS

Abstract…….. ii
Abstract in Arabic…….. iii
Approval Page……..... iv
Declaration…… v
Copyright Page……... vi
Acknowledgement…… vii
List of Tables…… xi
List of Figures…… xv
List of Abbreviations…… xviii

CHAPTER ONE: INTRODUCTION……... 1
1.0 Introduction…….. 1
1.1 Definition of Terms……. 1
1.1.1 Building typology…….. 2
1.1.2 Commercial Building…….... 2
1.1.3 Shop Houses……. 3
1.1.4 Shop Offices……. 3
1.1.5 Office Building…….. 4
1.1.6 Purposed-built Offices……... 4
1.1.7 Workplace…….. 5
1.1.8 Office Interior Design…… 6
1.1.9 Designer's Office……... 6
1.1.10 Employee's Performance……... 7
1.1.11 Employee's Productivity…… 7
1.2 Research Background…….. 8
1.3 Problem Statement……... 9
1.3.1 Un-conducive office environment …… 13
1.3.2 Lack of awareness on the issues pertaining office design and workplace environments …… 13 14
1.3.3 Limited spaces and window opening……. 15
1.4 Aim and Objectives…… 17
1.5 Research Questions…….. 17
1.6 Contribution to Knowledge…….... 18
1.7 Scope and Context of Research……... 19
1.8 Justification of Research…….. 19
1.9 Research Methodology…… 21
1.10 Thesis Organizations…….. 23

CHAPTER TWO: LITERATURE REVIEW…….. 27
2.0 Introduction……. 27
2.1 Physical Office Environment……... 28

2.1.1 Evolution of Workplace……..... 30
2.1.2 Designer's Office ……..... 40
2.1.3 Impact of Physical Office Environment towards Employees..... 50
2.1.4 Physical Office Environment Component..... 54
2.2 Building Typology..... 58
2.2.1 Influence on Office Interior Layout……..... 58
2.2.2 Shop Office Evolution in Kuala Lumpur……..... 67
2.2.3 Type of Modern Shop Offices in Kuala Lumpur…….. 72
2.3 Summary…….. 79

CHAPTER THREE: RESEARCH METHODOLOGY……. 82
3.0 Introduction……. 82
3.1 Review of Research Methodology……. 87
3.2 Preliminary Stages…….. 89
3.2.1 Background Research……. 89
3.2.2 Literature Review and Formulation of Theories…… 89
3.3 Field Work and Data Collection Stages……. 90
3.3.1 Comparative Case Studies…….. 90
3.3.2 Field Survey…… 96
3.3.3 Computer Simulation of Spatial Mapping……. 100
3.3.4 Control Subjective Experiment…….. 102
3.4 Summary…… 108

CHAPTER FOUR: RESARCH STRATEGY – DATA COLLECTION AND ANALYSIS …… 111
4.0 Introduction…… 111
4.1 Physical Office Environment……..... 111
4.1.1 Case Studies ……. 111
4.1.2 Survey…… 120
4.1.3 Computer Simulation…… 135
4.2 Building Typology…….. 136
4.2.1 Connectivity Attributes……. 137
4.2.2 Integration Attributes……. 138
4.3 Task Performance…… 139
4.3.1 Office Condition Evaluation…….. 140
4.3.2 Task Performance Evaluation…… 152
4.4 Hypothetical Layout Analysis…….. 156
4.5 Summary…….. 158

CHAPTER FIVE: FINDINGS AND DISCUSSIONS…….. 161
5.1 Synthesis of Findings…….. 161
5.1.1 Building typology influence towards office layout…… 161
5.1.2 Independent variables influence towards employees' performance…… 162
5.2 Implication Of Findings…….. 164

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS…….. 166
6.0 Conclusions…… 166
6.1 Recommendations…….. 167
6.2 Suggestions for Future Research ……... 169

REFERENCES…… 171

APPENDIX 1: SURVEY AND INTERVIEW …….. 201
APPENDIX 2: CASE STUDY …… 211
APPENDIX 3: COMPUTER SIMULATION ANALYSIS …… 239
APPENDIX 4: CONTROL SUBJECTIVE EXPERIMENT……. 250

LIST OF TABLES

Table 1.1	Projected Commercial Floor Space Requirement for KL Development Plan 2020.	10
Table 1.2	Building typology of (LAM) Registered Architect's Offices in Kuala Lumpur.	12
Table 1.3	Summary of the research objective, research question and the overall thesis organization.	25
Table 2.1	Summary of representative workplace layout in the history of modern office building.	35
Table 2.2	Explanation for Duffy's model	40
Table 2.3	Space and equipments requirements for Standard Office and Designer's Office.	44
Table 2.4	Summary of the literature review on the physical office environment component.	57
Table 2.5	Shows the observation of shop offices design in Setapak and Wangsa Maju, Kuala Lumpur.	74
Table 2.6	Measurement of the shop office according to the type.	78
Table 2.7	Summary of the literature review in relations with research question and findings.	81
Table 3.1	Summary of the research objective, research question and research methodology in this research.	85
Table 3.2	Summaries on the related research methodology by previous researcher.	88
Table 3.3	Scene design for the office environment to be tested to the respondent.	106
Table 3.4	Summary of the research methodology in relations with research question and findings	109
Table 4.1	The compilation of observation and computer simulation analysis of office A to F	112
Table 4.2	The compilation of observation and computer simulation analysis	113

of Office G to L

Table 4.3	The compilation of observation and computer simulation analysis of M to Q	114
Table 4.4	The compilation of observation of 17 case studies of designer's office.	115
Table 4.5	The location of designer's office involves in this case study, the floor occupancy and type of building typology.	116
Table 4.6	The demographic analysis according to type of building typology.	117
Table 4.7	The demographic analysis according to the number of technical staff in the offices.	117
Table 4.8	Summary of furniture usage by the offices involves in this case study.	118
Table 4.9	Summary of type of lighting use by the offices involves in this case study.	118
Table 4.10	Summary of type of air-conditioner use by the offices involves in this case study.	119
Table 4.11	Summary of type of floor finishes use by the offices involves in this case study.	119
Table 4.12	The response received by the designer's offices.	120
Table 4.13	The response received sorted by gender.	122
Table 4.14	The reliability test conducted on Spatial Arrangement	123
Table 4.15	This reliability test conducted on Spatial Arrangement	124
Table 4.16	The KMO and Bartlett's Test which indicated the sampling adequacy and factorable probability of the items in the questionnaire.	125
Table 4.17	The component found by principal component analysis and the variables that load on them.	126
Table 4.18	The designer's office in HIVE and DEN category.	127
Table 4.19	The frequency of respondent's perceptions towards the equipment provided by their office.	128
Table 4.20	The frequency of respondent's perceptions towards the provision of material storage which have been provided by their office.	129
Table 4.21	The shop offices which have been chosen into category. The layout has been re-drawn.	130

Table 4.22	Frequency of respondent's perceptions towards the circulation.	131
Table 4.23	The frequency of respondent's perceptions towards their satisfaction of existing workstation position.	131
Table 4.24	The frequency of respondent's perceptions towards their seating position at their existing workstation.	132
Table 4.25	The frequency of respondent's perceptions towards their satisfaction on privacy aspect at their existing workstation..	133
Table 4.26	The frequency of respondent's perceptions on the aspect of ventilation in the existing office.	133
Table 4.27	The frequency of respondent's on the aspect of natural lighting in the existing office	134
Table 4.28	The frequency of respondent's perceptions on the temperature of the existing office.	135
Table 4.29	The summary of type of planning approach adopted by the designer's offices.	135
Table 4.30	The summary of circulation use by the offices involves in this case study.	136
Table 4.31	The Connectivity Attributes of Shop office floor plate.	137
Table 4.32	The Integration Attributes of Shop office floor plate.	138
Table 4.33	The observed value of question 1 with the expected value in parentheses.	140
Table 4.34	The observed value of question 2 with the expected value in parentheses.	141
Table 4.35	The observed value of question 3 with the expected value in parentheses.	141
1Table 4.36	The observed value of question 4 with the expected value in parentheses.	142
Table 4.37	The observed value of question 5 with the expected value in parentheses.	142
Table 4.38	The observed value of question 6 with the expected value in parentheses.	143
Table 4.39	The observed value of question 7 with the expected value in parentheses.	144
Table 4.40	Summary for the chi square analysis for Section B.	145

Table 4.41	The observed value of question 1 in Section C with the expected value in parentheses.	146
Table 4.42	The observed value of question 2 in Section C with the expected value in parentheses.	147
Table 4.43	The observed value of question 3 in Section C with the expected value in parentheses.	147
Table 4.44	The observed value of question 4 in Section C with the expected value in parentheses.	148
Table 4.45	The observed value of question 5 in Section C with the expected value in parentheses.	148
Table 4.46	Summary for the chi square analysis for Section C.	149
Table 4.47	Frequency of workstation layout preferences analyzed using content analysis.	151
Table 4.48	Frequency of seating preferences analyzed using content analysis.	152
Table 4.49	The percentage of respondents remarks stated on their Log Book before and after doing the task.	153
Table 4.50	The percentage of respondent's remarks stated on their Log Book before and after doing the task for (ET).	154
Table 4.51	The mean score for the task completion predictions target before doing the task and Mean percentage of completion after doing the task.	155
Table 4.52	The percentage for the respondents who achieved their own targets for POC.	155
Table 4.53	Summary of the case study findings in relations with research question and findings	158
Table 6.1	Recommendation of Best Practice of Designer's Office Design in Shop Office Building Typology	167

LIST OF FIGURES

Figure 1.1	The photo shows rapid developments of commercial buildings, mostly office buildings in Kuala Lumpur.	9
Figure 2.1	Monadock Building.	31
Figure 2.2	Atrium of the Larkin Building, 1906, Buffalo, NY	33
Figure 2.3	The design concept of the new office (Duffy, 1997)	36
Figure 2.4	Office Layout in relation to Duffy's model	37
Figure 2.5	The early design office interior shows a group of draughtsman being located in an enclosed room with open plan layout.	42
Figure 2.6	Norman Foster studio	43
Figure 2.7	The photos are selected architects and interior designer's desk submitted in Bob Borson survey.	46
Figure 2.8	The photo shows one of the workstation who still has drafting board.	47
Figure 2.9	The photo shows one of the architect's workstation. The workstation is cluttered with documentations.	47
Figure 2.10	The photo shows one of the architect's workstation. In the photo's	48
Figure 2.11	The photo shows Bob Borson's Office. The horizontal filing system is designed to keep the large drawings.	48
Figure 2.12	The photo shows Bob Borson's Office. The photo shows Material Room Area.	49
Figure 2.13	The figure shows the graphic representing the understanding of Shell, Scenery and Sets as describe in Duffy (1976) research.	60
Figure 2.14	The figure shows the characterizing of building typology and bay spaces by proportions and between length and width.	62
Figure 2.15	Characterizing workspace area by means of depth between core and perimeter as model by Duffy (1974)	63
Figure 2.16	Duffy (1974) model of characterizing shell by means of space stock capacity.	63
Figure 2.17	The fit between organizational requirements and shells according to a) space stock capacity (Upper rows); b) subdivision and c) clustering capacity –lower rows.	65

Figure 2.18	Broadgate Project Study appraisal of building performance for different types of office – Duffy Model.	65
Figure 2.19	Broadgate Project Study appraisal of building performance for different types of office using space syntax VGA analysis.	66
Figure 2.20	The photo shows Medan Pasar, Kuala Lumpur in the year of 1950.	68
Figure 2.21	The evolution of shop houses in Malaysia.	69
Figure 2.22	The Photos show replacements of old shop houses 'Loke Yew Building' with new commercial complex.	71
Figure 2.23	This is Medan Pasar in 1970 with the famous Naina Mohamed bookstore on the right and the old Mercantile Bank on the left.	71
Figure 2.24	The remaining of early 1990s design of shop houses at Jalan Genting Klang, Kuala Lumpur. The streamline façade with more storeys.	72
Figure 2.25	The observation of shop offices design in Setapak and Wangsa Maju,	74
Figure 2.26	The examples of common layout of modern shop offices.	75
Figure 2.27	The selected layout plan which have been re-drawn and labeled	76
Figure 2.28	Continuation of the selected layout plan which have been re-drawn and labeled	77
Figure 2.29	Reposition and coded shop office layout in alphabetical order for analysis	78
Figure 3.1	The research methodology framework	82
Figure 3.2	The research strategy chosen for this research.	84
Figure 3.3	The office condition in Layout Hive and DEN in normal condition. (Control Subjective Experiment)	106
Figure 3.5	The label for each table. The hardcopy of A3 size AutoCAD drawing also placed on the table. Also in the picture is the light meter. (Control Subjective Experiment)	107
Figure 3.6	Group 1 rotation- normal condition: Each of the respondents has to seat on each of the table for all condition and for both layout.	108
Figure 4.1	The Scree Plot of the principal component analysis with Varimax rotation shows 13 components with eigenvalue greater than 1.	125
Figure 4.2	The Integration attributes of axial map for shop offices floor plate	137
Figure 4.3	The Integration attributes of axial map for shop offices floor plate	138

Figure 4.4	The layout 1 and 2 Layout 1 represents Duffy's Model type – HIVE, Layout 2 represents Duffy's Model type – DEN	150
Figure 4.5	Graphic diagram on respondent's seating preferences.	151
Figure 4.6	Two types of shop office layout which have been selected due to its highest value of Connectivity and Integration.	157

LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
df	Degree of Freedom
E.g.	(*exempligratioa*); For Example
F	Frequency
M	Mean
N	Sample Size
OCE	Office Environment Evalution
RO	Research Objective
RQ	Research Question
SME	Small Medium Enterprise
SPSS	Statistical Package for Social Science
TPE	Task Performance Evaluation
OCE	Office Condition Evaluation
POC	Percentage of Completion
ET	Estimation Time

CHAPTER ONE

INTRODUCTION

1.0 INTRODUCTION

As is the case within every field, workplace designing also has new problems that require innovative solutions. Better outcomes and increased productivity is assumed to be the result of better workplace environment. Better physical environment of office will boosts the employees and ultimately improve their performance. Various literatures relates to the study of multiple offices and office buildings indicated that the factors such as dissatisfaction, cluttered workplaces and the physical environment plays a major role in the loss of employees' productivity (Carnevale 1992, Clements-Croome 1997). Hughes (2007) surveyed 2000 employees pertain to various organizations and industries in multiple levels. The reported results of these survey showed that nine out of ten believed that a workspace quality affects the attitude of employees and increases their productivity.

Office interior design and layout is closely related to the type of business and work culture. This will determine the space requirements as well as office setting of that particular business type. Employees in different organizations need different office designs. Another factor that will determine an office layout is the type of building it is located. The shape of floor plates, as a particular aspect of office shells, is one among the multitude of factors intervening in the design of an office layout (Shpuza, 2006).

The purpose of this study is to test the impact of the office layout and environment on employees' performance in shop office building typology in Malaysia. The literature reveals that good office design has a positive effect on employees' performance and the same hypothesis will be tested in this study for the designer's office setting in shop offices building typology in Kuala Lumpur, Malaysia. This study aims to recommend a framework of design criteria of interior layout and environment which is suitable to be implemented in order to improve employee's performance.

1.1 DEFINITON OF TERMS

In order to have a better understanding of the subject discussed in this research, it is important to understand the definition of terms related to the issues in this study.

1.1.1 Building typology

Typology is the comparative study of physical or other characteristics of the built environment into distinct types (Guney, 2007). Typologies help to readily recognize and clarify both the commonly shared aspects and the differences between a range of objects, and classify them into groups (Casakin & Kreitler, 2012). Building typology refers to the study and documentation of a set of buildings which have similarities in their type of function or form. There are two ways of looking at the term "building typology". The first is a functional typology that categorizes buildings into groups by the similarity of their use. A functional building typology under this definition may create groups such as hospitals, schools, and shopping centers. The second is a typology that groups buildings according to their forms, which is explained is this article.

Formal building typology may be based on configuration, format, or relationships of building to streets and each other. Any single functional type can be subdivided into formal types. For example, the residential functional type may be further subdivided into formal categories such as high rise towers, single family homes, duplexes, and townhouses (Firley & Stahl, 2009). Documenting a type is the process of discovering the elements of similar forms which are the same. Usually building types are distinguished by their basic form, site configuration, and scale, but not their specific architectural style, color, or even precise use and are related to the era, the culture, and the environment in which they arise (Caniggia & Maffei, 2001; Scheer & American Planning Association., 2010).

1.1.2 Commercial Building

Commercial building is a type of building that is solely for commercial use. It can be used for offices, warehouses or retail outlets. In some places, commercial buildings combine functions such as an office on levels 2-10 with retail on level 1 (Mui, Badarulzaman, & Ghafar, 2003).

1.1.3 Shop Houses

They are generally low rise buildings with one or two storeys where on the ground floor there are shops which open up to a five foot way and upstairs it is residential accommodation (Vlatseas, 1990). Shop houses generally have the same design as shop offices, a row of buildings which are linked together. Usually the shop is a coffee shop, barber, and auto workshop or school association. Residential accommodation is meant to accommodate one or more families or used as a dormitory for workers. Shop houses are usually used for family businesses where the shop is used for businesses and the upper floors for residential purposes. The position of the

shop and residential space depends on the number of floors of the shop house: A single storey shop house tends to include residential space behind the shop, while residential spaces in shop houses of two or more storey are typically located above the shop (Vlatseas, 1990).

1.1.4 Shop Offices

The term shop office is used to refer to terraced buildings of a similar to layout as a shop house, but is occupied in full for commercial use on both the ground floor and floors above, which are accessible through stairwells built to the front of the building (Vlatseas, 1990). During the early-twentieth century, the style of building was common in major urban centers closer to commercial districts, and is often utilized for larger businesses, where large-scale operations needed a large amount of space. A shop office may also adopt dual commercial-residential use, so long as the building has necessary amenities (i.e. proper plumbing). To maximize office and retail spaces, some shop offices may reach up to heights of five to six floors, and a five-foot ways may be incorporated for the floor above the ground level (Singam & Syarifuddin, 2011).

1.1.5 Office Building

Office building according to Brid (1996) is a commercial building which consist a main lounge and build specifically for the office use. The main objective of developing the office building is to provide dedicated work space and works environment for administrative works and business managements. An office building is commonly divided to several unit or lot 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). In order to facilitate office activities, the office spaces usually equip with office furniture such as chairs, desk, filing storage and office equipment such as computers, copiers, fax etc. Today, with the availability high speed internet broadband, 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.

1.1.6 Purpose-built Offices

According to Safian, E.E.M. Bagdad, M., Nawawi, (2012) Purpose built office (PBO) represent an office building which is for office use, and also 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 distinguishes PBO with other commercial buildings or retail offices which also known as shop offices.

1.1.7 Workplace

Webster, the online dictionary, defines the term ‘workplace’ simply as: “a place where work is done.” In an attempt to search for a broader definition of the workplace, the one made by PdK Consulting, a consultant that specialized in workplace performance believe that the ‘workplace’ should be defined as; “The environment (as place, tools, social connections, physical wellbeing) enabling work to be done”. They also add that this broader definition, will lead workplace development to include the identification of the location of the work which can be in an office, at home, in a plane or a car, and the identification of the physical environment which will support the work such as office design and layout, furniture, equipment, temperature, lighting and view. The workplace also should accommodate the process needed to execute the work such as transaction processing, innovating, communicating and learning. Office as one of the common type of workplace has a specific design requirements which needs specific research for itself.

1.1.8 Office Interior Design

Interior design defined by the National Council for Interior Design Qualification (NCIDQ), as the art and science of understanding people’s behavior to create functional spaces within a building through creative and technical solutions. Within a structure, these solutions are applied to achieve a built interior environment, and they are functional, enhance the quality of life and culture of the occupants and are aesthetically appealing. Office Interior design is a key factor in job satisfaction. It affects the way in which employee’s work. Office design may enhance organizational success by creating workplace that support work quality, quantity and style, while improving turnover and absentee rates (Becker, 1981). Office design is defined by