



The Importance of Office Layout for Employee Productivity

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Abstract

This study was conducted to explain the impact of open and enclosed plan office layouts on employee productivity. The subject area for this study was in Amanah Saham Pahang Berhad (ASPA). This study involved 52 respondents from Administration Department, Finance Department, Logging, Planning and development of Forest Department and Investment Department. Data collection method used a questionnaire, and descriptive analysis is used to data analysis. The results showed that the condition of employee productivity was in good condition, but the office layout did not affect employee productivity. Moreover, the results from the findings showed that only enclosed plan office had significant positive relationships and it answered research questions and supported the hypotheses presented in this research study. As a conclusion, this research study helps the other researcher to explore the impact of office layout on employee productivity. This research study result was supported by previous results presented at every research finding.

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INTRODUCTION

Sustainable office design layout gave big impact to the employees in the organization because they work in the office for a long period of time and because it should be convenient and comfortable. Although convenient workplace conditions in many organizations were requirements for improving productivity and quality of outcomes, working conditions in many organizations may present lack of safety, health and comfort issues such as improper lighting and ventilation, excessive noise and emergency excess. People working in improper condition may end up with low performance and face occupational health diseases causing high absenteeism and turnover.

There are many organizations in which employees encountered with working conditions problems related to environmental and physical factors. As argued by Pech and Slade (2006) the employee disengagement was increasing, and it became more important to make workplaces that positively influenced workforce. Even though the organization might have to spend much more budget at the beginning, the result may end up in flying colors because the employees will feel closer to the office due to convenient environment. Roelofsen (2002) indicated that improving the working environment reduces complaints and absenteeism while increasing productivity. Also agreed with Wells (2000) that stated workplace satisfaction has been associated with job satisfaction.

Office design layout is something important in the workplace that will influence the employee productivity because they were considered to increase employee working motivation, job satisfaction, and most importantly their productivity which stated by Vuolle (2010). For example, in the facility management literature there are prior studies on the impact of office environment on productivity said Haynes (2008). From the previous research from Leblebici (2012) stated that workplace quality has to be improved to have a better employee productivity. Usually the conformity

is one of the effects that influence to employee productivity because the space of workstation gives some pressure to them to perform their task so the facilities should be consider better.

In Amanah Saham Pahang Berhad (ASPA) they have problem with their office workplace. For example, they do not arrange their workplace with the proper arrangement. This was convinced by Tompkins (2010) facility design consists of non-human elements including equipment, facility layout, lighting, and colour which influence human cognition, emotions and behaviour. Facilities are especially important in-service settings because these are the places where customers and organizations still meet face-to-face stated by Wall and Berry (2007). Therefore, it is necessary to conduct this study in order to assist organization in their decision making.

Employee productivity is a ratio to measure how well an organization converts input resources into goods and services. There are various facet of employee productivity, but in this study, the researcher only uses few of its which are excellent staffs, motivational staffs (motivated or demotivated) and teamwork. Many organizations have been trying new designs and techniques to construct office buildings, which can increase productivity and attract more employees. The physical layout of the workspace, along with efficient management process is playing a major role in boosting employees' productivity and improving organizational performance as stated by Uzee (1999), Leaman and Bordass (1993), and Williams et al. (1985).

Productivity also can define the product that employees distribute from their services. According to Meneze (2006) he stated that productivity as the employee ability to produce work or goods and services according to the expected standards set by the employers, or beyond the expected standards. The relationship between employee productivity growth and overall economic growth would seem to be obvious. Blinder (1997) defined output growth is the sum of the growth of labour hours plus labour productivity growth. Emp-

Employee productivity is a particularly important issue to managers and supervisors as the primary purpose of their job is to get the most out of the people they are responsible for. Caruso (2009) the founder of David Caruso & Associates Inc., stated that employees are the secret of the success of any industry.

Office layouts have encouraged participation as a means to facilitate work transactions and increase productivity. Participation is the mechanism of work dialog among workers, which gives them the opportunity to exchange information and ideas. A systematic office layout give positive feedback of productivity to the employees itself as the new world of work provides office workers with wonderful opportunities to work where they are as stated by Gates, (2005), still many people spend a lot of time at their office for work said Henderson, (2000). Roughly the study explores the effects of layout and the facility design. The plan of office layout which is open plan office and enclosed plan office gives impact of employees' productivity.

An early study by Sommer (1969) suggested that absence of interior walls and barriers in open plan offices facilitates the development of social relations. But in other study by Hundert and Greenfield, (1969) more information blow in the sense of duration in landscaped offices, privacy decreased, and distraction and interruption were reported to increase. So, the result for level productivity will be distracted by the facets. An enclosed plan office has been describing successful workplaces in terms of flexibility, the one which could bend, stretch, and realign itself like a yoga practitioner and calls for maximum layout flexibility to encourage interaction stated by Richmond, (2000).

By having a private space, the employee could have some relief time for themselves like stated before. So, they will not be pressure and stress about the bad workstation around them and the productivity level will show the result. Therefore, this study also will prove whether open-plan office or enclosed-plan office have positive or negative impact on employee productivity. The purpose of the study aimed to find out if the convenient workplace design layout will have any impact to the employee productivity in their work session in Amanah-Saham Pahang Berhad (ASPA).

METHODS

This research was conducted with a quantitative approach. Respondents in this study were obtained from the population of unit heads from staffs in Amanah-Saham Pahang Berhad (ASPA). Determination of the sample was done by using non-probability sampling. The sample of this research was 52 staff of ASPA. Research data was primary data which was collected by using questionnaire, by using a seven-scale agree interval scale. After the data was collected from the field, further processing was done (editing and data conversion) so that the data that was widely distributed in the questionnaire items.

This research showed that the current level of employee productivity among the management staff in Amanah-Saham Pahang Berhad (ASPA). It was important to know what were the office layout design that the staffs were using and which design gave impact to their productivity as the researcher has stated that the impact of office layout on employee productivity in Amanah Saham Pahang Berhad

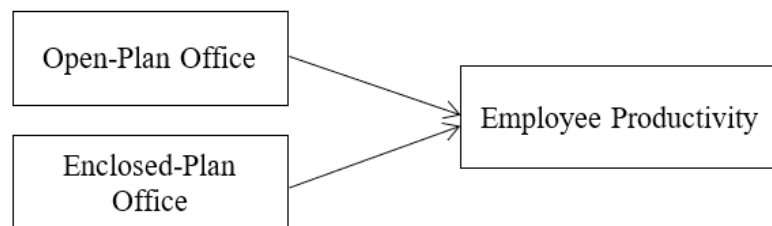


Figure 1. Research Framework

Sources: Leblebici (2012)

(ASPA). The study showed the relationship between independent variables and dependent variable. In this framework, the office layout was the independent variable with two plans which were open plan office and enclosed plan office while the dependent variable was employee productivity. The data analysis used descriptive analysis and the Pearson Product Moment Correlation Coefficient (PPMCC).

RESULT AND DISCUSSION

The Level of Employee Productivity in Amanah Saham Pahang Berhad (ASPA)

The first research question was to find the level of employee productivity in Amanah Saham Pahang Berhad (ASPA). Measurement of work productivity used in this study was to determine the extent of the effectiveness and efficiency of employees' work in producing a result. The findings showed there were the mean and standard deviation in this result for employee productivity. Caruso (2009) the founder of David Caruso & Associates Inc., stated that employees are the secret of the success of any industry. The highest means was "My interaction with co-workers is good" (mean = 4.2692).

Employees in Amanah Saham Pahang Berhad (ASPA) have been able to complete their duties and jobs well and in a relatively short time, although there were still a small number of employees who were still not working optimally. When completing work, employees were able to focus and not joke much; communication went well even though there were a few obstacles. Employee productivity can be said to be good, although not yet comprehensive. This was because there were some employees who have been able to work optimally even though in terms of office layout, it was only supported by the dimensions of the physical environment, and some other employees were still not optimal because they still did not feel comfortable with the current office layout.

The results of this study were in line with Asnar's (2013) research which stated that

most employees have been able to complete a large number of jobs in a relatively short time, although there were also a small number of employees who were unable to do so. Furthermore, even in terms of quality of work, employees were able to complete their work without making mistakes because they were really careful in carrying out their work, and were always ready to correct mistakes in their work. It was not different in terms of quantity of work and quality of work. In terms of timeliness in completing work, most employees have been able to optimize it.

For standard deviation the highest was "I feel respected in enclosed-plan office" (standard deviation = 1.00433). "I feel respected in enclosed-plan office" the question showed the lowest for mean (3.8269), "Open plan offices make communication easy" for standard deviation the lowest (0.60509). Asnar (2013) stated that the advantages of open office layouts are easy supervision, flexibility in room changes, easier communication, and more efficient maintenance of space. The results of this study found that employees were more comfortable working in an open office.

Table 1. Mean and Standard Deviation for Employees Productivity

Employees Productivity	N	Mean	Std. Deviation
Valid	52	4.0592	.51288
Null (listwise)			

Source: Processed Primary Data (2019)

The results of this study were consistent with Muzaffar et al. (2020) who found that employees who were in closed office showed a high level of dissatisfaction with the aspects of social interaction in the work environment. Asnar (2013) stated that a closed office layout created many obstacles, such as: complicating supervision, the use of space was not flexible if there was a change and organizational development; communication processes were not optimal, both among employees and with leaders. If you were going to do work coordi-

nation, it would be hampered due to distance and inefficient office layout.

Relationship Between Open Office, Enclosed Office and Employees Productivity

The relationship between open plan offices, enclosed plan office towards employee productivity was investigated by using the Pearson Product Moment Correlation Coefficient (PPMCC). The correlation between the open plan office and employee productivity in Amanah Saham Pahang Berhad (ASPA) was that open plan and employee productivity relationship were weak. There were only 0.375 and the table strength showed the weak was about 0.21 to 0.40. The H1 which stated that there is a relationship between open-plan office and employee productivity rejected the Null Hypothesis, H0 which stated that there is no relationship between office layout and employee productivity. The enclosed plan office in Amanah Saham Pahang Berhad was moderate about 0.421.

The results of this study contradicted the research results of Asnar (2013) which found that there was a strong relationship between office layout and employee productivity. This study found that office layout was only a small part of the factors that could affect the way employees completed their tasks. Completion of tasks in accordance with leadership expectations, completed in a timely manner and producing maximum work results was a priority to be developed, not just demanding a comfortable office layout.

Muzaffar et al. (2020) found the same thing in their research which found that employees were unsure or neutral about the impact of their office layout on perceived productivity. Jaffri (2015) in his research found that office layout did not affect employee productivity. His research results implied that employees tended to fulfill their responsibilities regardless of the availability and adequacy of resources. However, the work environment factor "spatial comfort" had a significant effect on employee performance. Other environmental factors such as light, noise level, and temperature

had less influence on employee performance.

Table 2. Pearson Product Moment Correlation Coefficient (PPMCC)

Correlation Between	Are to be
0.00 – 1.00	Very Strong
0.60 – 0.80	Strong
0.40 – 0.60	Moderate
0.20 – 0.40	Weak
0.00 – 0.20	Very Weak

Source: Salkind (2009)

Enclosed Plan Office and Employee Productivity

The relationship between enclosed plan office and employee productivity in Amanah Saham Pahang Berhad (ASPA) was moderate. It was about 0.421 only. Hypothesis 2 which stated that there is a significant study between enclosed-plan office and employee productivity rejected the Null Hypothesis, H0 which stated that there is no relationship between office layout and employee productivity. In Amanah Saham Pahang Berhad (ASPA) they preferred the enclosed plan office. With the enclosed plan office, they can have their own life and work without hesitated. Since then, some employees prefer to go back to conventional closed office layout where they could maintain the desired level of privacy said Pile, (1978).

Employees feel they did not have sufficient privacy if they occupied an open office layout; they were easily stressed because they could not concentrate properly at work. Bernstein & Turban (2018) summarized lack of privacy and personal space as key factors that have the potential to cause significant reductions in social interactions and overall effectiveness in open office layouts. According to their findings, people need to feel comfortable and need boundaries to understand their environment. Lack of privacy can make it more difficult for employees to concentrate and fo-

cus on tasks due to a lack of visual and voice privacy which can hinder cognitive performance, increase stress, and decrease their desire to engage in social interactions at work.

The organization can redesign the office layouts in order to fulfill the employee suggestion. The organization must know that with the enclosed plan office their employees can make more good productivity to the organization. The customers or suppliers that come to the organization will not complaint that the employees do not do their work or playing games more than working. The physical structure of organizations provides messages about a firm’s capabilities and qualities to outsiders and employees alike (Bitner, 1992) and has been found to characteristics of the physical environment (servicescape) affect employees’ attitudes (e.g., job satisfaction) (Parish et al., 2008).

Consequently, firms may alter their physical dimensions through office redesign in order to affect organizational culture (i.e. affect, the way things are done) and reinforce desired changes in culture and strategy (Higgins and McAllaster, 2004). The organization should have their own administrative department. When they have their own administrative department, they can arrange their own work without any interrupt with the other department. The success of organizations depends to a great degree on how well they are administered says D. Quinn Mills (2005).

Factor that Most Explain Towards Employee Productivity

In Amanah Saham Pahang Berhad (ASPA) the factor that most explain towards employee productivity was enclosed plan office. The enclosed plan office made the moderate level with 0.421, although the level was moderate but, in employees in Amanah

Saham Pahang Berhad (ASPA) preferred with the enclosed plan office. An enclosed plan office has been describing successful workplaces in terms of flexibility, the one which could bend, stretch, and realign itself like a yoga practitioner and calls for maximum layout flexibility to encourage interaction stated by Richmond, (2000). With the enclosed plan office, they can have their own life and work without hesitated.

The magnitude of the influence of the enclosed plan office on employee productivity was 0.177 or 17.7%, while the rest was influenced by other variables outside the research. Although this figure was included in the low impact category, the enclosed plan office variable had a bigger effect than the open plan office variable. The results of this study corroborated the research of Anggraeni & Yuniarsih (2017) which stated that there was a significant influence in choosing a closed office layout on employee performance. The level of employee performance was higher if they were facilitated with a suitable layout for their work.

Likewise, if the office layout along with the provision of facilities is inadequate, employees will feel uncomfortable and their performance will decrease. Therefore, employee work effectiveness can be increased through an increase in office layout conditions (Sedarmayanti, 2014). Similar research results by Wolfeld (2010) and Pramana (2020) which explained that office layout had an effect on employee productivity. With the influence of office layout, the level of employee productivity was getting higher. Ayu (2014) stated that office layout arrangements had a significant effect on the level of work productivity of employees at PT. Bank Negara Indonesia (Persero) Tbk. with a percentage of 58.5%, while the remaining 41.5% was influenced by

Table 3. Enclosed-Plan Office and Employees Productivity

Model	R	R Square	Adjust Square	Standard Error of Estimate
1	.421	.177	.161	5.00576

Source: Processed Primary Data (2019)

other factors.

Mariam (2014) in her research stated that one of the factors that affected the success of staff performance in the office was the office layout factor which included the arrangement of furniture and machines used when working. The results of research by Olson (2001); Brennan, Chugh & Kline (2002) further supported the results of this study where the workplace must support the rapid development and implementation of technology, dynamic organizational changes, and the needs of employees who were in line to balance privacy, collaboration, and other work processes.

Lee & Brand (2005) made clear the results of this study that the open plan office has been positioned to provide at least a partial solution to many of these historic and contemporary challenges. However, there were many problems with an open plan office, such as noise, lack of privacy and other distractions; however the enclosed plan office hindered communication and teamwork. On the other hand, the advantages of using an enclosed plan office made the space more flexible and had more personal control over the physical workspace and ease of access to the meeting place, causing group cohesiveness and perceived job satisfaction.

CONCLUSION

The findings showed there were the mean and standard deviation in this result for employee productivity. The highest means was "My interaction with co-workers is good" (mean = 4.2692). For standard deviation the highest was "I feel respected in enclosed-plan office" (standard deviation = 1.00433). There was no relationship between office layout and employee productivity. And in Amanah Saham Pahang Berhad (ASPA) the factor that explained most towards employee productivity was enclosed plan office. This recommendation and suggestion were made for the employees in order to improve their office layout especially to the enclosed plan office. The organization should have their own administra-

tive department. When they have their own administrative department, they can arrange their own work without any interrupt with the other department.

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