



Designing Office Layout for Faculty Staffs at University to Increase Efficiency and Effectiveness

Fanny Kristine

Department of Management

Maranatha Christian University, Bandung, Indonesia

fannykristine@yahoo.com

Imelda Junita

Department of Management

Maranatha Christian University, Bandung, Indonesia

Imelda_junita@yahoo.com

Abstract

Office space at university is recognized as one of organizational resources. Office layout deals with physical arrangement of equipment and facilities in an office space. Faculty staffs are more productive when the office layout coincides with their working needs, thus, office layout for faculty staffs should be designed to be more responsive and agile, so that faculty staffs are able to function efficiently and effectively.

In this study, the existing office layout for faculty staffs at Management Department, Maranatha Christian University has been investigated and the problems of inefficiency and ineffectiveness are identified. The objective of this study is to describe how the new concept of office layout can provide more space for work activities, easier to access equipment, easier for people to see and communicate with each other, work area can be shared which lead to better use of space, and team spirit and working together are encouraged. The suitable of new office layout can ensure a smooth work flow, people, and information in a given space provided for the department.

Keywords: *office layout, faculty staffs, smooth work flow, people, and information, efficiency, effectiveness*

Introduction

Layout decisions include the best placement of machines (in production setting), offices and desks (in office settings), or service centers (in setting such as hospitals or department stores). An effective layout facilitates the flow of materials, people, and information within and between areas (Heizer & Render, 2004).

In all cases, layout design must consider how to achieve (Heizer & Render, 2004):

- Higher utilization of space, equipment, and people.
- Improved flow of information, materials, or people.
- Improved employee morale and safer working conditions.
- Improved customer/client interaction.
- Flexibility (whatever the layout is now, it will need to change).

Meyers (1993) also stated the goals of layout planning are to promote the effective use of people, equipment, space, and energy and provide for employee convenience, safety, and comfort. Promoting the effective use of people, equipment, space, and energy is another way of saying 'to reduce' costs and 'increase' productivity. People, equipment, space, and energy are company's resources. They are expensive and we want to use them effectively. The location of services like restrooms, locker room, cafeterias, and any other service will affect employee productivity, and therefore, the employees' effectiveness. But, besides being a productivity subject, the goal of layout planning is also about employee relations factor. If we design layout with inconvenient employee services, we are telling the



9 7860219 72588

employees every day that we do not care about them. The company should provide comfortable surroundings so the employee can work refreshed and therefore productive.

Types of layout have been developed to achieve the objectives are (Heizer & Render, 2004):

- Fixed position layout, addresses the layout requirements of large, bulky projects such as ships and buildings.
- Process oriented layout, deals with low volume and high variety production (job shop production).
- Office layout, positions workers, their equipment, and spaces/offices to provide for movement of information.
- Retail layout, allocates shelf space and responds to customer behavior.
- Warehouse layout, addresses trade-offs between space and material handling.
- Product oriented layout, seeks the best personnel and machine utilization in repetitive or continuous production.

In this paper, the layout problem is to arrange physical spaces required for faculty staffs at Management Department, Maranatha Christian University, Bandung in a given places provided for the department. In designing layout for faculty staffs, one factor to be determined is capacity and space requirements for each faculty staff and an open office has been seen as an economical and effective way to divide up the office space. In this era of information, the necessity for more teamwork has been emerged. Improved communication is a major point of the open office. Otherwise, the faculty staffs are able to exist in one office, and still feel the presence of other human beings, and not feel like they are warehousing people, thus the office layout should put the people in cubbyholes, so they have their privacy. That means, even more communicating with each other, one to one interaction is more pivotal.

Literature Study

Office layout is the grouping of workers, their equipment, and spaces/offices to provide for comfort, safety, and movement of information (Heizer & Render, 2004).

Goals of office layout design are (Meyers, 1993):

- To create value to good-looking facilities for customer and employee morale and attitude.
- To increase productivity of employees by promoting effective use of the people.
- Noise must be kept to a minimum.
- Material flow (paper and supplies) as well as people flow distances must be held to a minimum.
- Create a pleasing atmosphere in which to work in order to promote pride and productivity.
- Minimize visual distractions.
- Each employee needs adequate work space and equipment.
- Provide for the convenience and safety of employees.

Trend in office layout is toward more open offices, with personal workspaces separated only by low divider walls. Companies have removed fixed walls to foster greater communication and teamwork. (Chase, et al., 2004).

Open office spaces are large rooms which house many people. Open offices are very popular because of the following reasons (Meyers, 1993):

- Communications are easier.
- Common equipment is accessible to more people.
- Less space is required as compares to private office.
- Heating, cooling, and ventilation costs and problems are minimized because one big room is easier to work with than the same area divided into private offices.
- Supervision of people in an open office is easier.
- Layout changes are quicker and less costly in open offices.
- Files and literature are accessible to all requiring less files and copies of magazines and journals.
- Cleaning, vacuuming, and sweeping work is reduced.

The disadvantages of the open office concept are (Mayers, 1993):

- The lack of privacy is probably the biggest problem with open offices.
- Noise is another problem with open offices.
- Confidentiality of some work may require private space.

The choice of open office space or private space depends upon balancing the advantages and disadvantages for each position. Each company could have both open and private offices, but who gets a private is an important decision that can not be made without high-level planning (Mayers, 1993).

The open office design concept tailors individual work areas to satisfy the needs of organization. The open office will provide private office space where needed without negatively affecting the cost of utilities, maintenance, and accessibility, because:

- Panels do not go either to the ceiling or the floor. Air can circulate. Panels are with soft material to hold down noise.
- Cabinets are built into the panels to better use the space over desks and tables.
- Tables are built into the panels to save space and costs.
- Drawers under the tables allow for storage of supplies just as a desk would.
- Utilities (electrical, computer, and phone) lines can be carried in the panel. This will give the office a cleaner look and it will also improve safety.
- Open office can be arranged and rearranged to meet the changing needs of the organization.
- Open offices are very flexible.

Designing Layout for Faculty Staffs

This article presents the analysis of office layout for faculty staffs at Management Department, Maranatha Christian University, Bandung, Indonesia. Offices for faculty staffs are assigned at first floor, Faculty of Economics building. The existing office layout is shown in Figure 1.

The space for office layout is divided into seven rooms. Each room is occupied by 2 to 11 faculty staffs. Since the number of faculty staffs has been increasing, the executives need to consider new layout design for satisfying the faculty staffs as assets of the organization. Higher salaries and compensation benefits may seem the most likely way to attract organization staffs. However, quality of the physical workplace environment may also have a strong influence on an organization's ability to retain talented people. Some factors in workplace environment may be considered keys affecting staffs' engagement, productivity, morale, comfort level, etc, both positively and negatively. Although convenient workplace



conditions are requirements for improving productivity and quality of outcomes, working conditions in many organizations may present lack of safety, health and comfort issues (Leblebici, 2012).

Figure 1. Existing Layout

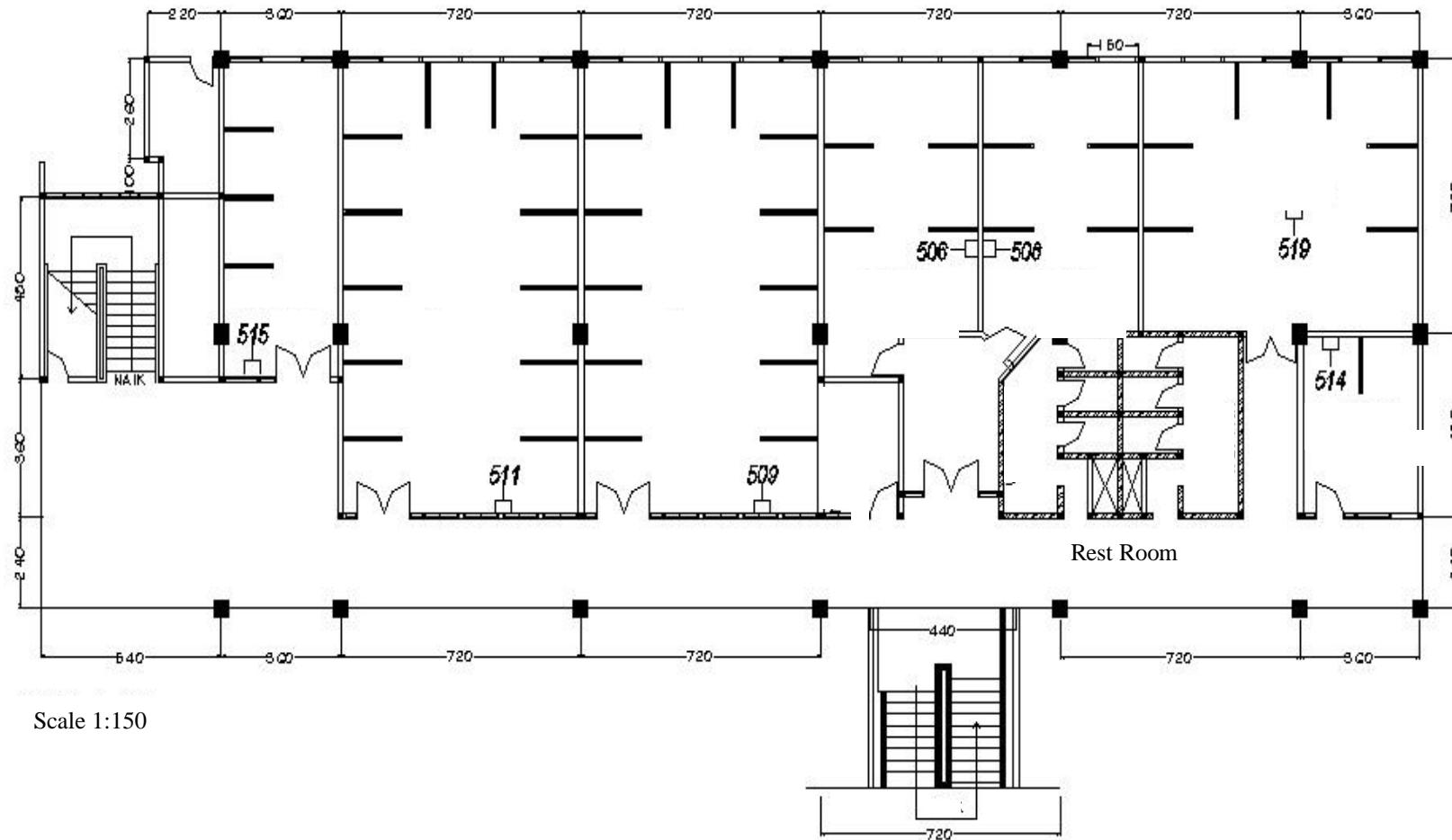
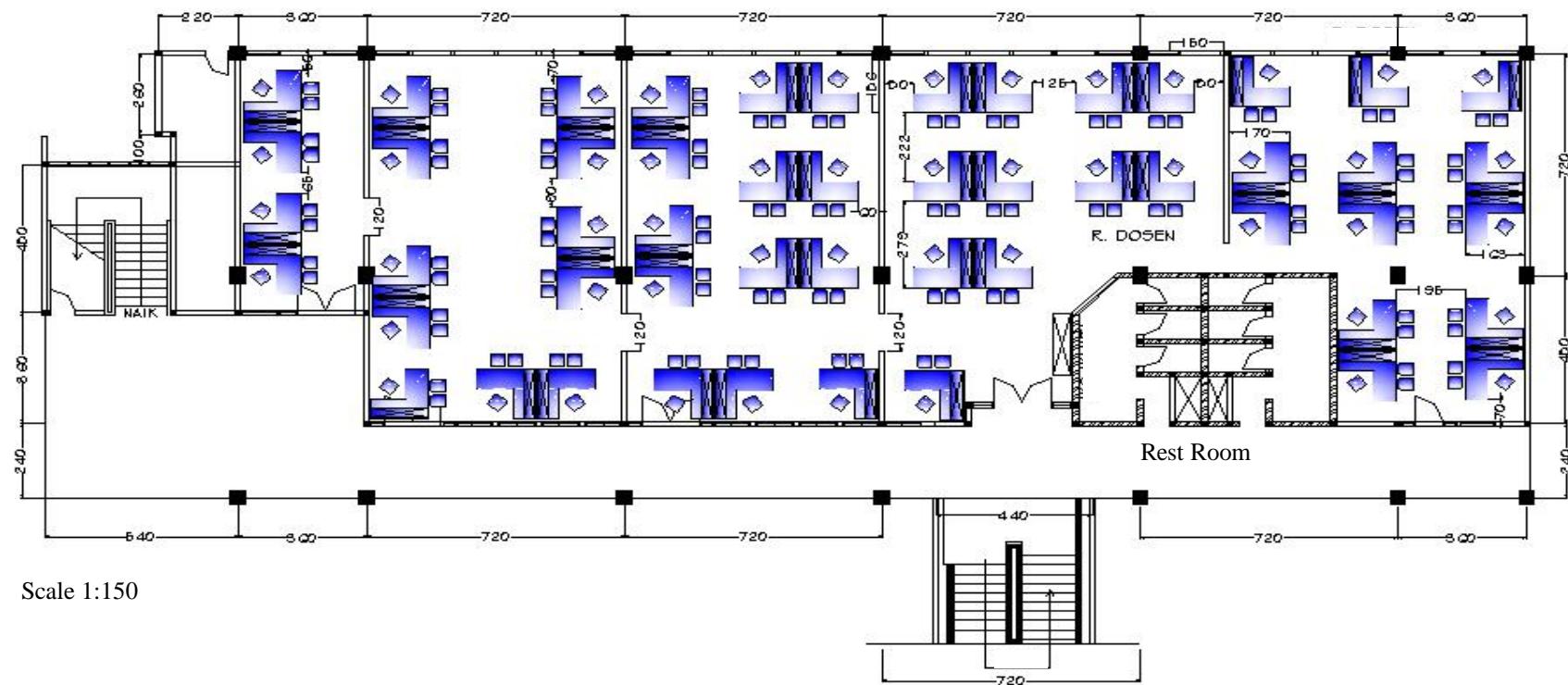


Figure 2. Alternative Layout



Scale 1:150

Figure. 3The Furniture





Summary

This article describes analysis of layout design for faculty staffs' office at Management Department, Maranatha Christian University, Bandung, Indonesia, which has 52 full time faculty staffs. Based on observation, most of faculty staffs are unhappy with the physical conditions of the office.

The alternative layout design is proposed. But, the real effects of workplace environment on faculty staffs' performance has not been measured systematically.

References

Chase, Richard B., et al.(2004). *Operations Management for Competitive Advantage*; 10th ed.; McGraw-Hill/Irwin; New York.

Francis, Richard L., et al. (1992). *Facility Layout and Location: An Analytical Approach*; 2nd ed.; Prentice Hall; New Jersey.

Gogi, V., et al. (2014). Efficiency Improvement of A Plant Layout; *International Journal of Innovative Research in Science, Engineering and Technology*; Vol. 3, Issue 4; 11203-11209.

Hameed, Amina. (2009). Impact of Office Design on Employees' Productivity: A Case Study of Banking Organizations of Abbottabad, Pakistan; *Journal of Public Affairs, Administration and Management*, Vol. 3, Issue 1, 1-13.

Heizer, Jay, Barry Render. (2004). *Operations Management*; 7th ed.; Pearson Education, Inc; New Jersey.

Leblebici, Demet. (2012). Impact of Workplace Quality on Employees' Productivity: Case Study of A Bank in Turkey; *Journal of Business, Economics and Finance*; Vol. 1, Issue 1, 38-49.

Meyers, Fred E. (1993). *Plant Layout and Material Handling*; Prentice Hall; New Jersey.

Peponis, John, et al. (2007). Designing Space to Support Knowledge Work; *Environment and Behavior*; 39, 815. <http://www.sagepublications.com>

Victoria, Worksafe. (2006). *Officewise-A Guide to Health & Safety in The Office*; A Handbook for Workplace; 5th ed.