

Conference Paper

The Effect of Circulation and Spatial on Performance of KVI Notary Office Employees

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ABSTRACT

The office is a place to conduct administrative activities and the processing of data or information. One of the offices engaged in the field of law is the KVI Notary Office in Tangerang. Because KVI Notary Office is quite frequented by clients, the mobility of users in the office is quite high. This mobility if not supported by circulation and spatial patterns adapted to the unique shape of office buildings, as well as the selection and laying of furniture that is not in accordance with the work needs of employees can have an impact on the decrease in the quality of employee performance. If the quality of employee performance is not good it can lead to a decrease in the level of service to the client. This research aims to find out how the circulation and spatial pattern of KVI Notary Office in order to make employees have good performance quality. The research will look at the context of circulation patterns and spatial patterns embedded in the building of the KVI Notary Office qualitatively. The results of the study are how the circulation pattern and proper office layout can improve the quality of office employees' performance.

Keywords: Circulation; Employees Performance; Notary Office; Spatial

Introduction

Nowadays there are many buildings with unique and diverse designs. With the many unique shapes and appearances of various buildings at this time, not a few people choose to design residences, offices, and others with unique shapes as well. One example of a building with a unique shape is the KVI Notary Office in Tangerang, with the shape of several cubes arranged on one site. KVI Notary Office is a crowded place to be visited with the purpose of making authentic deeds, deed storage, and so on. Due to the high mobility of the KVI Notary Office and the unique shape of the building, the selection of circulation patterns and spatial planning must be adjusted.

The application of circulation patterns and spatial planning at the KVI Notary Office is certainly related to employee performance. The quality of employee performance in an office can be seen from the duties, functions and responsibilities as well as the goals of employees whether they have been achieved optimally or not. According to Hao (2013) quality of work is reliability in carrying out timely, high-quality, careful tasks that can make employees have great responsibility for the obligations and tasks assigned. Therefore, the question arises whether the circulation and spatial arrangement at the KVI Notary Office will be able to affect the quality of employee performance.

There has been no previous research on the KVI Notary Office, therefore this research on circulation and spatial planning on employee performance at the KVI Notary Office is the first research. The purpose of this study was to determine whether the circulation pattern and spatial planning affect the quality of employee performance.

Material and Methods

This type of research uses qualitative and descriptive research methods. The implementation is based on the collection of circulation and spatial data of the Notary Office of the KVI then performs analysis and interpretation based on the data obtained. The initial step of data analysis can be done by understanding the potential and the existing condition. The data was obtained from archdaily.com which provide a photograph and architectural drawing of the study case. The data is then analyzed to investigate the circulation and layout of the KVI Notary Office concerning architectural standards (Neufert and Neufert, 2012). The things analyzed are the user circulation in the room, circulation between rooms, spatial planning including furniture arrangement as well as lighting and ventilation at the KVI Notary Office which has impacts on employees working activity. The results of the research are the influence of circulation patterns and spatial planning applied to the KVI Notary Office building on the quality of employee performance. From the results of this study, the data that has been obtained will be used as a reference for good and appropriate circulation patterns and spatial planning in the notary office building.

Results and Discussion

a. Study Case Description

This three-story high notary office building is located in a low-density neighbourhood in BSD, Jl. Comp. Bsd, Lengkong Wetan, Kec. Serpong, South Tangerang City, Banten 15310, Indonesia. This office was built in 2020 with an area of 460m². The shape of the building mass is inspired by geometric cubes, where these cubes are arranged in such a way that they become the KVI Notary Office building by considering the aesthetic appearance of the building (figure 1). The site is located in the corner of a residential block overlooking a busy intersection (figure 2). The first floor of the building is dedicated to client reception and meeting rooms. While the second and third floors are for work areas (figure 3). The single staircase is the main vertical circulation in the building. Lifts and ramps were also added for disabled access.



Figure 1. KVI Notary Office
Source: William Sutanto



Figure 2. Location of KVI Notary Office
Source: Google Maps



Figure 3. Illustration of the shape of the building mass
Source: archdaily.com

b. Spatial Analysis

• Zoning/Function Typology

In this building, each floor has different zoning. Nonetheless, generally, the floor zoning typology provides a distinct spatial classification for the employer and for the guest that are visiting the office. The zoning typology will determine the spatial classification and organization which will affect the user mobility and activity. An effective spatial layout zoning will provide effective user mobility and activity which would affect the working performances of the employee.

The first floor, where the lobby and meeting rooms are located, were categorized as the public zone (figure 4). The service zone consists of a garage, pantry, stairs, and toilet. While the private room consists of a reception room, staff room, staff meeting room, and staff dining room. The lobby and meeting rooms are placed at the very front of the office so that there is a zone boundary for clients, so as not to interfere with the work of employees. Then the staff room, staff meeting room, and staff dining room are placed on the inside of the office so that the employees are hidden from visitors/clients. The typology is arranged so that the employee activity will not disrupt the consulting activity and the other way around which helps employees achieve better work performance (Haynes, 2007).

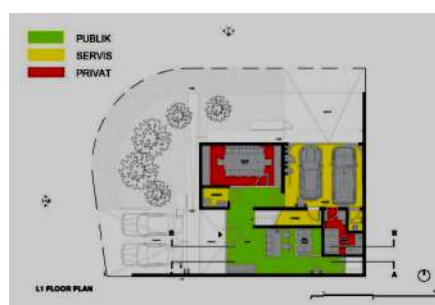


Figure 4. First-floor space zone
Source: archdaily.com with author's analysis

There are two zoning on the second floor (figure 5), which are the service zone and the private zone. The service zone consists of stairs and toilets. While the private room consists of a staff room, staff meeting room, and archive room. On this floor, mainly used for the staff activity or to support staff's activity. Similar to the second floor, there are two types of zoning which were indicated on the third floor (figure 6), which are the service zone and the private zone. The service zone consists of a pantry, toilet, balcony, and roof garden. While the private room consists of a staff room, staff meeting room, and staff restroom, director/leadership room.

For the most part, KVI Notary Office spatial zoning typology is generated to facilitate the employee working activity (located on the second and the third floor). Meanwhile, the first floor is the only floor which is dedicated to providing customer services. Therefore, the floor classification provides an effective program that will help the employee to perform better in their workplace.



Figure 5. Second-floor space zone
Source: archdaily.com with author's analysis



Figure 6. Third-floor space zone
Source: archdaily.com with author's analysis

• Space Organization

The KVI Notary Office in Tangerang was built three floors high (figure 7). The first floor of the building is dedicated to client reception and meeting rooms. On this floor, there are nine rooms, namely reception room, meeting room with clients, meeting room, dining room, toilet, carport, lobby, terrace, and garage. While the second floor and especially the third floor for the work area. On the second floor, there are four rooms, namely the archive room, toilet, workspace, and meeting room. Then on the third floor of the KVI Notary Office, there are eight rooms, namely the work-room, director's room, pantry, dining room, toilet, clinic, restroom, and roof garden.

The first floor to the third floor is a cluster space organization, where the rooms are arranged based on the proximity of spatial relationships, space functions, and other physical characteristics. The cluster pattern is very efficient when applied to the KVI Notary Office building. This is because

the pattern contains spaces that are arranged based on the closeness of the relationship and function of space. Therefore, even though the size of the rooms is quite narrow, the function of the space can still be maximized according to the needs of employees.

In addition, there are some very large work desk furniture and function like a meeting table. This causes the confusion of each employee's zone in storing, putting files, or even in daily performance between employees. This can be overcome by changing the work desk with a personal work desk that is adjusted to the employee's workspace area. Choosing a work desk for one person does not reduce the opportunity to discuss with other employees, because many spaces are used for discussions, for example, meeting rooms. If this is improved, then the quality of employee performance will increase.

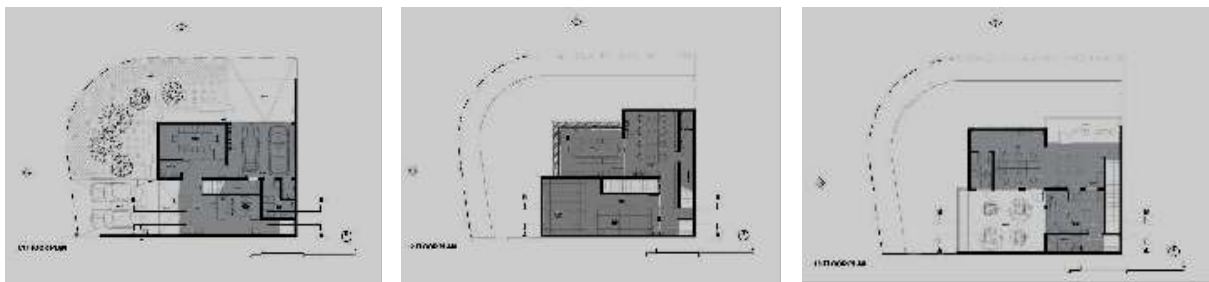


Figure 7. KVI Notary Office Floor Plan
Source: archdaily.com

c. Circulation Analysis

KVI Notary Office uses a grid and network circulation pattern (figure 8). The circulation network is applied on the first floor, where between spaces consists of roads that connect certain points. While the grid circulation is applied on the 2nd and 3rd floors. The grid circulation consists of two pairs of perpendicular roads and intersecting each other to create a square shape.

When viewed from the floor plan, the type of circulation applied to the KVI Notary Office building is to penetrate the space. Circulation through this space is the movement or scope of motion in all rooms on the three floors of this office, which functions as a liaison between rooms by passing through or penetrating other rooms.

The circulation pattern applied to the first floor of the building, namely the network pattern, is appropriate because on the first floor there are two entrances from the front door as well as from the garage. Likewise, on the second and third floors, the grid pattern is in accordance with the shape of the building. This circulation pattern is quite influential on employee performance due to the right circulation flow, so that mobility can be carried out properly. Circulation through this space is the movement or scope of motion in all rooms on the three floors of this office, which functions as a liaison between rooms by passing through or penetrating other rooms. This circulation classification does not have much effect on employee performance.



Figure 8. Circulation floor plan 1
Source: archdaily.com with author's analysis

The width of the circulation path at the KVI notary office is 1.5-2 meters (figure 9). The length and width of the circulation in the building are quite good. This can be seen from the accuracy of the size of the motion required by several employees in the building, as well as the size of the space used according to the Neufert standard that is appropriate. Therefore, the effect on employee performance is only related to mobility.

The shape of the circulation room at the Notary KVI Office forms a private corridor related to spaces connected through entrances to the wall plane, both on the 1st floor of the building and the 2nd and 3rd floors. Then the form of circulation space applied to the building is closed circulation. The form of circulation space applied to the building is closed circulation, causing the lack of natural lighting and ventilation in the office. Therefore, windows as natural lighting and ventilation are applied to these three floors. Another lighting for buildings is certainly needed, an example of artificial lighting is lamps. The artificial ventilation is from AC. This ventilation and lighting are very influential on employee performance. With adequate lighting and ventilation, it causes employee performance to be good as well.

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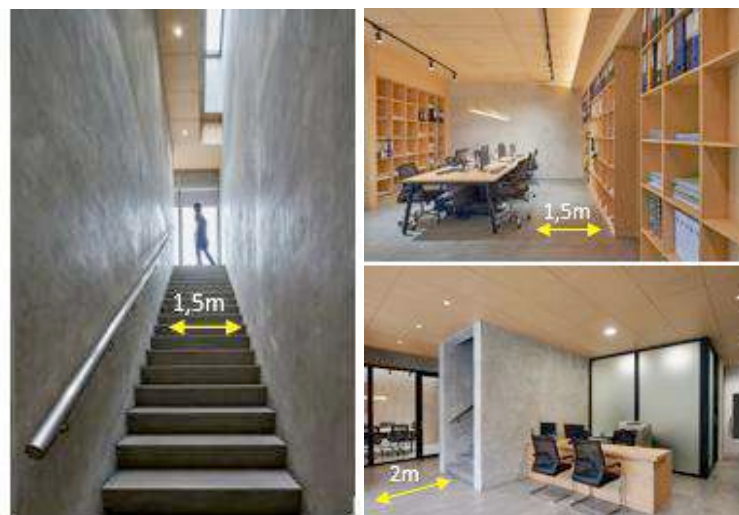


Figure 9. Length and width of circulation
Source: William Sutanto with author's analysis

Conclusion

Based on the analysis above, it can be concluded that the spatial planning and circulation applied to the Notary Office of KVI affect the quality of employee performance. Another conclusion in the form of spatial and circulation in the building is in accordance with the theory of architecture and the shape of the building itself. Indicators of appropriate circulation and good and appropriate spatial planning are seen from their influence on the quality of employee performance in the office. The benchmark for this quality is the increase in income, as well as the timely and high-quality completion of tasks and responsibilities carried out by each employee. In general, the quality of employee performance at the KVI Notary Office is quite good, so there is no need for proposals for other circulation and spatial planning patterns. However, the design of the work desk

furniture arrangement pattern is very large and functions as a meeting table, causing zone confusion between employees in storing, putting files, or even in their daily performance. This can be overcome by changing the work desk with a personal work desk that is adapted to the area of the space. By rearranging the furniture, it can improve the quality of employee performance at the KVI Notary Office for the better.

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