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DIVERGENT OFFICE INTERIOR DESIGN FOR TWO DIFFERENT PURPOSES

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ABSTRACT

With this paper an analysis of the concepts for organization of interior space with two different functions was conducted. The purposes of the interior determine the project. Interiors can have a variety of functions. The purpose of this research paper is to analyze the process of designing business premises by comparing two companies/entities from different sectors, two completely different ways and approaches. Thus, it is possible to maximize the efficiency of the design process and minimize the time needed to resolve potential issues that may arise at work. The goal set, the efficiency of the design in business premises, is implicative for this topic and it involves all the elements of design: shape, dimension, colour, texture, light, proportion, scale, balance, harmony, composition, modularity. This analysis is made through strategic planning of the business premises. With this analysis the users of the business premises would have detailed overview of the space in which they would arrange the furniture and other inventory, as well as of the way the employees are being distributed in the company and which conditions are provided for them. In addition to this, there is a short overview of the ergonomic principles that can be applied.

With this method a detailed analysis is provided regarding the concepts related to organization and furnishing with furniture of the business premises.

Key words: design, concept, organization, business premises, diversity, functionality

1. INTRODUCTION

The main function of the business premises is to allow users convenient operation. These business premises are used for activities such as reading, writing, communicating with associates, media, work on computers (Nikoljski Panevski E. Impact of ergonomics in design of the workspace, Wood technology&Product design, International scientific conference, Proceedings Vol.1, Ohrid 2013).

Depending on the purpose and activities that an entity performs, the interior and the equipment that business premises feature, differ. This is due to the different needs of particular entities. For instance, the business premises in a news agency would preferably be of the open space offices type, for the purpose of better communication among employees, whereas the business premises in a lawyer's office are expected to have partitions for every employee, in order to allow privacy to customers. For deeper understanding of the differences between business premises and equipment in two entities with different activities, this paper will analyze furnishing of the business premises in a news agency and in a lawyer's office.

In this part of the research paper, an analysis of the design of business premises will be conducted, particularly the business premises for a news agency and the business premises in a lawyer's office. The analysis of the design of the business premises in these two subjects is conducted through its separation into three parts.

The first part analyzes the assessment of the size of the required space. The work on the design of business premises is limited if there is no assessment of the required space targeting proper implementation of the objectives and tasks of the organization.

Assessment of the size of the required space is made by characterizing the factors that affect the size of the required space. Factors that affect the size of the required space are the design of the building, the characteristics of the work that is planned to be performed in the respective business premises, the extent of necessity of auxiliary facilities (e.g., conference room, etc.) and the number of current and prospective employees.

In the second part the planning of the office interior is conducted. Although in the early years of the last century appropriate arrangement of the interior was not of great importance to the management of companies, nowadays it has a major role in the employment of the desired staff, as well as to increase work efficiency. Planning of the office interior is done by considering the following six elements: structure inside the building, walls and partitions, lighting, floor, ventilation and volume control.

In the final, the third part, the decoration and furnishing of the business premises is conducted, by selecting the necessary elements for the proper performance of the work, as well as their colour and size.

2. MATERIALS AND METHODS

The purpose of this research paper is to analyze the process of designing business premises by comparing two companies/entities from two different sectors, two utterly different ways and approaches. Thus, it will be possible to maximize the efficiency of the design process and minimize the time needed to resolve potential issues that may arise at work. The goal set, the efficiency of the design in business premises is implicative for this topic, and it involves all the elements of design: shape, dimension, colour, texture, light, proportion, scale, balance, harmony, composition, modularity.

This research paper makes an analysis of two offices located in the Business Trade Centre-BTC Mavrovka. One office is a news agency, while the other is a lawyer's office. The news agency will be designed in the open space offices concept, while the lawyer's office will be designed in closed space concept.

The study was done using several methods, which allow the correct way to get the information we need:

- The analytical method is only the first step in the research. The focus is on the intensity with which the process of formation and development of architectural space within the same building is conducted.

- The historical method allows determining patterns of architectural building and its urban surroundings, in order to get to information about potential interiors. This method determines the factors that had influenced the formation and definition of the urban corner segment of Skopje, where the BTC Mavrovka is located, which entails interior that is the point of concern of this research paper.

The historical development and transformations suffered by this area/neighbourhood as a result of various socio-economic conditions are determinant. Thus, each different period had left traces and their own mark; accordingly, the present state of this part of the city is symbiosis of specifications dating from different periods.

- The normative method, which used to specify the information, is carried out by transition from the general information to the specific information.

- The observation method, through self-observation and research, leads to definitions of the main architectural features and interior requirements of the building.

- The method of analysis and syntheses used to analyze the spatial organization of the building BTC Mavrovka and of its structural systems and elements.

- The method of strategic physical planning is a proactive approach to the design of the space and its usage. Companies, regardless their size and whether the area in which they operate is rented or owned, may benefit by trying to implement strategic planning of the premises.

3. RESULTS

As stated in the previous parts of this research paper, the location of the news agency, matter of concern of this the analysis, is BTC Mavrovka.

The required business premises of the news agency were done through characterisation of the factors that influence the size of the required space. Firstly, the design is perceived, according to the dimensions of the space (Fig.1). Besides the dimensions of space, the pillars also had to be taken into account. Their position is also shown in Fig.1.

Moreover, something that needed to be considered is the characteristic/nature of the work that would be performed there. At the end of this section you needed to determine what kind of premises would be separate for each employee individually, open or closed space type, and which would be the size of each room separately. The News Agency in question employs 14 people who hold the following positions: one Editor in Charge (Director), one secretary, one person for public relations, ten journalists, and one person for maintenance of the business premises.

In the news agency, the business premises will be of open space offices type. Only the areas for the Editor in Charge and for the person of public relations are enclosed by a transparent material. The advantages of the open space offices type is efficient use of space, more flexibility in planning, visual access to other employees, easier communication and less costs in operation. Also, the open space offices type enables quick response in case of need to increase the capacity or need to reorganize the layout of the space.

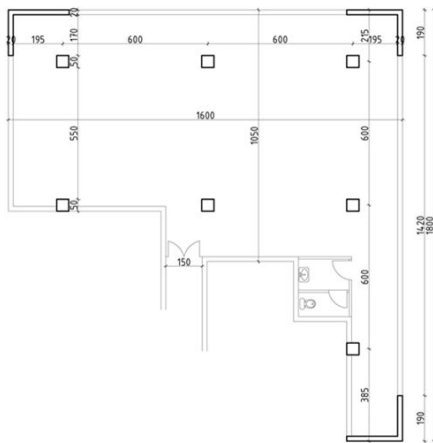


Figure 1. Basic dimensions of the office space in BTC Mavrovka Skopje

Even though this type of open space offices has also downsides such as higher initial costs and a lack of visual privacy, we must recognise its advantages: this type of open space offices is most suitable for efficient performance of duties in a news agency.

However, choosing the application of open space offices type or closed space type does not mean a choice between a correct or a wrong way, since both types of arranging offices represent two distinct ways of approach to designing space. At the end, each entity's decision is necessary to be the one that best corresponds to the activities that the entity performs.

Planning the premises interior of the news agency begins by considering the structure of the building. Internal pillars in office space are located at a 5-meter distance one from another. As regards the height of the ceiling, for a more comfortable interior it should preferably be higher than 8 feet (2.4 meters).

The next step in the planning the office interior is checking the walls or partitions that will be used for marking the space for certain employees. In the business premises for the news agency, only the office intended for the Editor in Charge, for the person responsible for public relations and the conference room will be enclosed with glass. The glass which will be used for enclosing these areas is presented in the figure below, Fig.2.

The kitchen space will not be enclosed while the toilet will be enclosed with bricks.



Figure 2. Glass structure of the internal partition walls

The glass used for construction of the internal partitions provides transparency, simplicity and contemporary expression. All of these partitions will be at the height of the ceiling. In this way, the person/persons in the enclosed space will be completely physically isolated and will not be disturbed by the sounds that come out of the office.

Next factor which should be taken into consideration is the lighting, because it is needed so that a person can see well. In the business premises of the news agency the required quantity of light is 50 FC. The standard amount of light is referred to in the book of (Robichaud Beryl, 2012) and the same applies to the general business premises and private business premises. The lighting system chosen is direct lighting, where light bulbs are of compact fluorescent type.

This type of light bulbs is chosen because they provide three times as much light per watt, have six times as long expiration date and emit less heat compared to incandescent light bulbs. This lighting system is also embedded in the ceiling as material for protection from using plastic.

The next step in planning the interior is choice of floor covering. In the separate office for the Editor in Charge, the office for the person responsible for public relations and in the meeting room, the floor will be covered with carpet, while in the other parts of the office it will be covered with tiles. In order to ensure proper temperature, humidity and freshness, cleanliness and air circulation in the business premises, a ventilation system is necessary. The ventilation system that will be used in the news agency is a central ventilation system. This kind of system will be able to maintain the required characteristics of the air in all seasons. Although this system is expensive, yet it will contribute to maintaining the proper temperature, humidity and related parameters of air, and will thus increase the employees' productivity.

The last step in planning the interior of the business premises is sound control. An appropriate level of sound control may be achieved when the sound sources are eliminated, partially or entirely. The sound sources are traffic noise, other external sounds, opening doors and windows, telephone ringing or talking to each other and the employees themselves, as well.

The sound from the external sources is controlled by setting concrete and windows in the building. Control of the sound from internal sources can be achieved by initially detecting the sound source (phone call, door opening, etc.) and then by installing additional insulation material, if it is needed in some areas, or through changing the layout of the elements, and similar methods. When designing the interior and setting elements, measurement of the volume will be done frequently in order to detect undesired volume and eliminate it.

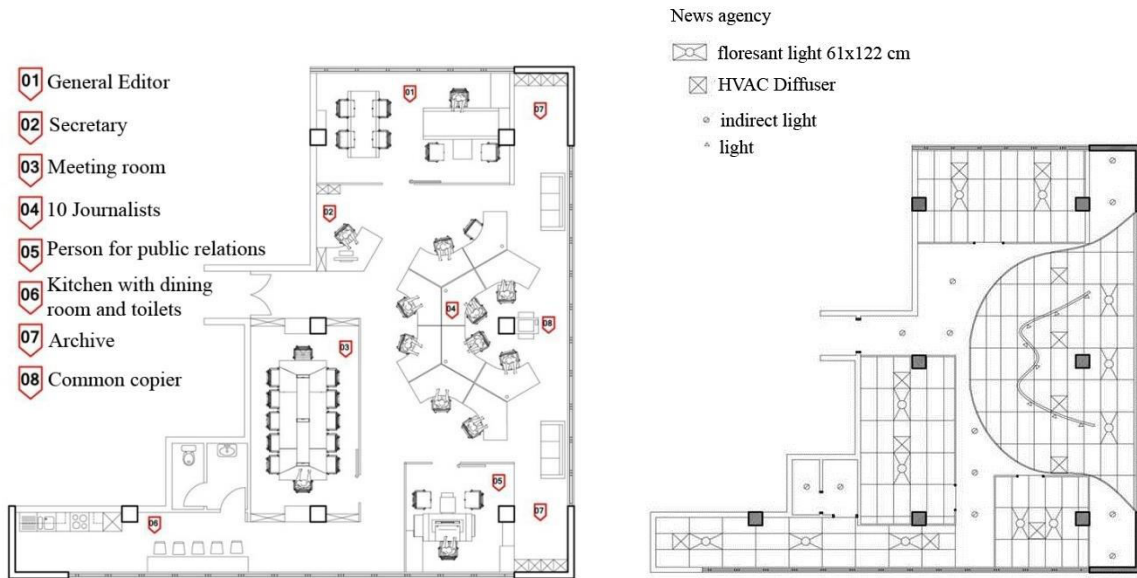


Figure 3. News Agency furniture layout and **Figure 4.** Ceiling with lighting



Figure 5. News Agency Axonometric view with furniture layout and **Figure 6.** Open space design

3.1 Planning the office interior for the lawyer’s business premises

The shape and size of the space for the lawyer’s office is the same as the business premises in the news agency. The dimensions of the space are shown in Fig.1.

The lawyer’s office in question employs eight people, who hold the following positions: four lawyers, one Notary Public, one assistant to the Notary Public, one secretary and one person for maintenance of the business premises.

The business premises in the lawyer’s office are closed space type. The advantages of this type of business premises are as follows: monitoring, security, privacy, visual and physical separation. These features of the business premises represent the most appropriate lawyer’s office, despite its disadvantages such as: less effectiveness compared to the open space offices, need for flexibility, relocation costs and prevented communication.

The first step to be taken is to determine the type of the business premises, open or closed, for each employee separately.

Most of the activities of the lawyers are based on reading materials and meeting people who come from outside the company. Therefore, lawyers need large but closed office space. Enclosure will allow the lawyer to be protected from visual and audible disturbance from other lawyers and Notary Public who are located in the other business premises, as well as from their conversations.

As well as that, the activities that the lawyer will carry out will not be monitored by other persons (e.g. conversations with clients). Finally, this space is automatically accorded the status of privacy,

which is priority number one for lawyers, as they work with documents and cases that are of a private nature.

The activities of the Notary Public are often based on verification of customers' documentation and consultation with them if necessary. Hence, the Notary Public and his assistant need a closed space enclosed with opaque material. In this way, they will be visually and audibly protected from other persons who are in the business premises, as the clients may not want others to hear the conversation they have with the Notary Public.

Activities of the Secretary are predominantly based on communication with the other employees in the office and with the people who come from outside, the customers. Thus, there is a need for open space, space which is not closed and is located near the entrance of the office. In this way the secretary will be in direct communication with the other employees in the office, and will also be the first point of contact for the prospective customers.

The activities of the person responsible for maintenance of the business premises are often based on serving the employees or guests with a drink or food and maintaining the hygiene of the space. Hence, the person responsible for maintenance of the business premises needs a closed room where the entire necessary inventory for proper implementation of his/her assignments would be placed.

As it is obvious, the space separated for the employees in the lawyer's office is closed space type, while in the news agency the space is partially closed space type (only for the Editor in Charge and the person responsible for PR) and partially open (for journalists). This difference arises from the nature of the work performed by each entity. In the lawyer's office the employees need a closed area in order to have more privacy, whereas the news agency's reporters need open space for easier communication. Hence, it can be seen that when it comes to entities with different activities there are differences in the design of the space.

Once the decision on the type of individual space for each employee has been made, closed or open, the next step is to determine the size of each space.

The space that is separated for attorneys varies from 14 square meters to 20 square meters. The size of this space is within the proposed standards in the book of (Robichaud Beryl, 2012) According to the standards, this space is sufficient to place a desk, two closets and two chairs. Fig. 7 and 9 present the basis and intersection with an axonometric presentation of the room for a lawyer in the lawyer's office.

The size of the space assigned for the Secretary equals 4.5 square meters (3 meters x 1.5 meters). This size will be sufficient to locate a desk and a chair that will be used by the secretary. It also includes space for free movement.

The space that is assigned for the notary together with his assistant, in its initial size amounts 33 square meters (7.9 meters x 4 meters). The size of this area is within the proposed standards in the book of (Robichaud Beryl, 2012) According to the standards, this space is sufficient to locate two desks, two closets and two chairs. Fig. 7 presents the basis and intersection with an axonometric presentation of the room for the Notary Public in the lawyer's office, Fig. 9.

The next step in setting the necessary business premises is determining the required size of the auxiliary space. The auxiliary space that the lawyer's office needs is: space for waiting, kitchen space, and a toilet with a separate room with a sink.

The size of the space assigned for waiting amounts 6.7 square meters (2 meters x 3.5 meters). This room will be equipped with a sofa for seating.

The kitchen space is the size of 8 square meters (4.2 meters x 1.85 meters). In this space, a refrigerator, a cooker and a sink for washing the dishes can be placed. For a table and chairs additional space will be used.

The space that is separated for the restroom is with size of 6.2 square meters (2.3 meters x 2.7 meters). This space will be divided into two parts, one of which will have only a sink and the other part will contain only a toilet shell. The size of this space is in compliance with the proposed dimensions for toilets.



Figure 7. Low office furniture layout and **Figure 8.** Ceiling with lighting



Figure 9. Low office Axonometric view with furniture layout, and **Figure 10.** Secretary and entrance with the waiting area

4. CONCLUSION

This research paper is an analysis of the concepts of organization and furnishing the business premises. This analysis is done through strategic physical planning.

There are two offices located in the Business Trade Centre-BTC Mavrovka. One office is a news agency while the other is a lawyer's office. The news agency will be designed in open space offices concept, while the lawyer's office will be designed in closed space concept.

The method of strategic physical planning is a proactive approach to the design of space and its usage.³ Companies, regardless their size and whether the area in which they operate is rented or owned, may benefit by trying to implement strategic planning of the space.

In this research paper an analysis of two offices located in Business Trade Centre-BTC Mavrovka was made.

Through this analysis, users of the business premises would have a detailed overview of the area they are supposed to work in, of the layout of the furniture and other pieces of equipment, the schedule of the employees in the company and the conditions created for them.

This method allows detailed analysis of the concepts of organization and furnishing the business premises.

This research paper shows how, depending on the purpose and activities that an entity performs, the interior and the furniture that the business premises feature, can differ. This is due to the varied needs.

For a deeper understanding of the differences between the business premises in the two entities with different activities and how they are furnished differently, this master thesis carried out an analysis of furnishing offices in a news agency and a lawyer's office.

The first part analyzed the assessment of the size of the required space. The work on designing business premises is limited if there is no assessment of the required space targeting proper implementation of the objectives and tasks of the organization.

Assessment of the size of the required space is made by characterizing the factors that affect the size of the required space. Factors that affect the size of the required space are: the design of the building, the characteristics of the work that is planned to be performed in the business premises, the extent of necessity for auxiliary facilities (e.g., conference room, etc.), the number of current employees and prospective employees.

In the second part, the planning of the office interior was conducted. Although in the early years of the last century appropriate arrangement of the interior was not of great significance for the management of companies, nowadays it has major role in the employment of the desired staff, as well as in enhancement of work efficiency. Planning of the office interior was done by considering the following six elements: structure inside the building, walls and partitions, lighting, floor, ventilation and volume control.

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