

Pandemi Koşullarında Değişen Ofis İç Mekân Tasarımı

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Özet

Son yıllarda değişen ihtiyaçlar çerçevesinde ofis çalışma ortamında da değişiklikler yaşanmış, daha çok açık ofis tasarımı tercih edilmeye başlanmıştır. Hızlı ve yerinde çözümler üretmek ve zamanı verimli kullanmak adına, telefon, tablet gibi dijital teknolojilerin de kullanılabilmesi, daha dinamik ofis tasarımları düşünölmeye başlanmıştır. Ancak bu ofislerin sağladığı bazı avantajlar bulunmasına rağmen kişisel alan yaratmak dezavantaj olarak karşımıza çıkmaktadır. Çalışanların sessiz bir ortamda çalışma ihtiyacı, özel görüşmeler yapması ve çalışması zor olmaktadır. Özellikle içinde bulunduğumuz pandemi sonrası sosyal mesafe kurallarının ortaya çıkmasıyla, sağlık açısından da bu şekilde planlanmış ofisler için başka çözüm önerileri bulunması gerekliliği doğmuştur. Özellikle açık ofislerde salgını önlemek ve çalışanların motivasyonu için, kişisel kullanımlara açık, psikolojik ayrımlar sağlayan alanlar yaratmak gerekmektedir. Bununla birlikte iş-yaşam dengesi bakımından çizgilerin daha belirsiz olduğu günümüzde, ofislerdeki sağlıklı ve verimli çalışma kişisel alanlar yaratmak neredeyse bir zorunluluğa dönüşmüştür. Açık ofis içindeki sosyal mesafe, gürültü ve herkesin birlikte aynı ortamda olması için yeni çözüm önerilerine ihtiyaç duyulmaktadır. Günümüz çalışma alanlarında insanı olumsuz etkileyebilecek çalışma ortamlarının önüne geçmek ve insanın hızla gelişen teknoloji, sürekli yenilenen çalışma sistemleri karşısında yetersiz kalmasını önleyecek ofis mekanlarının düzenlenmesi gerekliliği, çalışan ve işveren için önemli bir unsur haline gelmiştir. Bu çalışmada, özellikle pandemi ile birlikte yaşayabilmek adına açık ofislerde uygun alanlar yaratmak için kullanılabilir çözümler ve uygun çalışma ortamının yaratılması adına teknolojik donanım, havalandırma ve mobilya sistemlerinde yapılabilecek uygulamalara dikkat çekilmektedir.

Anahtar Kelimeler: Pandemi, ofis iç mekânı, kişisel alan, sosyal mesafe, mobilya sistemleri

Changing Office Interior Design in Pandemic Conditions

Abstract

The increase in open office environments in recent years, the need for a space to ensure privacy and concentration has become inevitable for employees. Although open offices provide significant advantages in terms of employee collaboration, being too intertwined is a disadvantage in business efficiency. Lack of suitable working environment in such offices creates negative effects on employees. Especially with the emergence of social distance rules after the C-19 we are in, the necessity of finding other solutions for the offices planned in this way has arisen. While the lack of personal privacy affects the employee psychologically, which causes the productivity of employees to decrease even more in busy and stressful office environments, the epidemic environment has also been added to such problems. When the unfavorable conditions in office environments are examined in terms of human psychology, they cause unrest, dissatisfaction in working life, harm to the physical and mental health of the person and cause them to be negatively affected. For this reason, it is necessary to create single, double and triple spaces that are open to personal use and create psychological distinctions in order to prevent epidemics and increase motivation in open offices. However, today, when the lines are more uncertain in terms of work-life balance, healthy and efficient working in offices has almost become a necessity to create personal spaces. New solutions are needed for social distance, noise and people being in a shared environment of open offices. In today's workplaces, the necessity to prevent work environments that may affect people negatively and to arrange office spaces that will prevent people from falling short in the face of rapidly developing technology and constantly renewed as working systems has become an important element for the employee and the employer. In this study, solutions that can be used to create personal spaces in open offices especially after pandemic will be mentioned. Technological equipment, ventilation and furniture applications will be explained in order to create a suitable environment. Spaces that meet the demands of employees will be presented with visuals and drawings, with practical, economical and functional applications to be made in dividers and furniture systems such as working units that provide social distance, sleep capsules, multiple / personal meeting rooms, standing meeting solutions.

Keywords: Pandemic condition, open office, technology, personal space, social distance, furniture systems.

1. INTRODUCTION

The word “office” is based on the French word “bureau” and Latin word “opus” etymologically. The words “bureau” and “office” have been used for the same concept in the literature. Offices are places where several different works and processes are carried out. The concept of office can be defined as “workplace, agency bureau; place where stationery, recording and editorial works are carried out” (Raymond, S & Cunliffe, R. 1997). Today, it is possible to observe that the concept of office has several definitions. Some of those definitions are related to the functions of the offices, some of them indicate their function as a productive social environment, and some of them emphasize the provision of privacy. The offices were created through working and the need of working. Earlier, people use their houses to meet their needs for working; then as the working opportunities and technology developed, people started to need larger and independent places to work. Offices became official after the economic and industrial sectors started to grow. The works carried out in offices were also developed in order to increase the productivity and profitability, and it led to different solutions. Creating the most productive environments for the people who spend their most of time in offices due to professional life lies under the concept of office. It became necessary to upgrade the design of the offices and the concept of home-office due to the epidemic experienced recently. Offices are places not only for working and storage, but also for communicating with others. Office users need internal and external contacts to make basic and important decisions. Both internal and external communications contain large amount of data and the same communication channels are used for both of them (İmal, F. 2009).

2. DEFINITION OF “OPEN OFFICE”

The concept of open office became popular in the second half of the 20th century. Working in a factory and being part of the production were more preferable when they are compared with office works due to the increasing demands on the consumable products. Therefore, scientific management changed in order to make the works less routine and the office environment started to be shaped accordingly. The need for workplaces as an environment was recognized and the first step to the concept of open office was taken. As the purpose of humanitarian management and statuses of the office workers changed, the loyalty for and productivity of the companies started to increase.

The designers who adopted new planning methods due to the lack of cell offices started to make some changes in order to cover the needs of different sectors and organizations. With the advances in technology, the diversity and functionality of the modes of communication started to be developed greatly. It became necessary to diversify the office equipment and its functional structures along with those advancements. The offices started to evolve because of the communication needs restricted by the cell offices from cell-like walls to the open and planned spaces. As its name signifies, there are walls creating cells between the employees in the open office places. Furnishing elements are placed based on a geometrical order with specific distances. In this order, there are spaces between the employees or the space is separated with specific sizes and distances (Soyak, Ş.G., 2009). The open office places cannot ensure privacy but they are systems enabling communication. The conventional (cell) offices are for managing staff in this system. The open offices have a dividable structure. The meeting spaces in the open office plans are designed to enable all employees to hold a sudden meeting. The work organizations in those offices are mostly the ones requiring team work. Thus, personal and private spaces are not deemed necessary. Therefore, transparent panels and the panels which the people can see others faces by making eye contact easily are used instead of thick, high or fabric panels. In time; those offices started to be developed, and the working order which increases the relationship and interaction between the employees and encourages the group work by creating more flexible working spaces was started to be aimed. Elements such as cabinets and panels as dividing agents are used instead of soundproof walls in order to enable the communication between the employees and not to separate them. Recently, both cell offices and open offices started to be combined as a third type office. This type is called as “office landscape”. This system was developed by Schnelle Brothers in Quickborn. Quickborn, which is a business professional and planning company, suggested a new office planning revolutionizing the conventional offices and office planning systems as a result of their studies on the working team office furnishing organization, communication, document flow surveys and filing systems (Çimen, T., 2008).



Figure 1: Population density of open office work environment (URL-1)

Lately, the new concept of virtual office has arisen through the advances on technology. Especially due to the epidemics; people started to work through virtual offices without real ones with the help of their mobile phones, tablets and computers etc. accessible through the technology. Besides, the concept of new generation office has arisen especially for the last ten years.

2.1. Interior Environment of Open Offices

The order designed for an office can make it easier or harder to place the means of communication. The level of privacy can be adequate or inadequate. Being close with others can make the communication with them easier, by it also can harm privacy and prevent the works to be carried out. Improper space planning can decrease the communication awareness and cause misunderstandings. The kind of works to be carried out in an office should be determined with all of those planning issues. The office spaces differ based on the cultures, technology and eras by changing when the people need them. Especially creating offices for a single person or for multiple people who are working in open offices is important for them to work more productively.

The number of companies changing their conventional cell offices with new generation open and shared offices is increasing and the factors of the working environment analysed within the scope of occupational health and safety are changing. Even though the open offices are preferred in order to advance the flexibility of the working environment, there are studies related to the facts that the employees working in them are increasingly feeling uncomfortable, they have higher potential for low air quality and noise and the open offices increase the cognitive burden (De Croon E., 2005). Additionally, there are some researches indicating that the open offices are a potential source of stress which can affect the physiologic processes and restrict the motivation and performance.

3. CHANGING CONDITIONS AFTER PANDEMIC

A new disease called COVID-19, caused by the novel coronavirus (SARS-CoV-2) started to spread fast in the last quarter of 2019. People had to spend most of their time at home after the epidemics in 2019. During this period, where the concept of social distance is unavoidable, people had to open their houses, which is the most private place reflecting their relationships with their families and friends and their personality for online meetings and courses. The living rooms of the houses are transformed into workplaces, offices, and classrooms; and some of the characteristics of their houses which had not been disturbing beforehand became disturbing for them. People tried to adopt the conditions which they are not familiar to them and struggled with them for a while.

3.1. Changing Dynamics of Office Design after Pandemic

The office managers had to make some arrangements for longer terms due to the necessity of working home because of the COVID-19 measures taken all around the world. There were some managers who start to consider that it is not necessary to make hundreds of people to work in crowded office environments and some costs decreased after employees started to work at home due to the epidemics. However, there were also some managers who think that houses are not suitable for working and the works cannot be carried out in this way. In this case, it became necessary to re-arrange the offices based on the conditions we are experiencing. The designers need to design the offices and adapt to the conditions which are called as new normal conditions. When the difficult

conditions of the current time are taken into consideration, the essentials of the interior design of offices can be summarized as: technology, flexibility, and sustainability. The works to be conducted related to the design of working spaces by detailing them based on those three issues can be summarized as follows:

Technology: Would it be possible to carry out the works under such difficult conditions if we did not have technology? Technology should be emphasized for the design of the interior of offices.

- Contactless products,
- Thermal cameras,
- Video conference systems,
- Wireless presentation systems,
- Desk reservation systems,
- Meeting room reservation systems,
- UVC disinfection systems,
- Sensor-fixed and audible control systems with sensors and sound



Figure 2: Office desk reservation systems (URL-3)

Recently, technology is the most essential part of our lives. There are some harms of it along with its benefits. Technology is essential from cleaning to planning and from presentation systems to ventilation of the offices due to the epidemics. Actually, this issue contains a renovation which can be studied independently. With the foregoing issues, the technology use in offices is tried to be summarized. The office environments are tried to be made safer places with the help of technology after COVID-19 epidemics by setting thermal cameras as thermometers at the entrances of working spaces and UVC disinfection systems which disinfect the spaces when the employees are absent.



Figure 3: Office meeting room reservation systems (URL-4)

Since we are in an era in which it is impossible to work without wireless presentation systems and video conference systems when working at home or office, it is necessary to detail this issue for the future office designs. Besides, it is possible to balance the population of the employees with the sensor-fixed and audible control systems and the desk and meeting room reservation systems.

Flexibility: It is uncertain for us to determine when the epidemics will end even though new predictions are made every day. Therefore, the offices should be designed with the flexibility enabling them to adapt normal/new normal conditions.

- Safe office design for diseases,
- Flexible furniture,
- Large halls and passages for office designs,
- Large working stations enabling social distance.



Figure 4: Office flexible working furniture solutions (URL-5)

The working spaces were mostly designed based on the open office environment before the epidemics. The plans which are suitable for collective working and socialization without the concern of distance between the employees and contact. However; it became necessary to minimize the contact and increase the distance between the employees after the epidemics. Designing the social spaces to enable distance rules to be followed by using dividing panels between the spaces and employees more became the first solution. Especially for the open offices with an intense population, it became necessary to consider more flexible solutions instead of working close to others. Since it is thought that the epidemics is temporary and everything is going to be the way it used to be, the

solutions are preferred not to be permanent. Flexibility became an issue primarily for furniture solutions in order to protect the employees who spend most of their days from diseases.



Figure 5: Office flexible social space furniture solutions (URL-6)

The flexible solutions such as dividing fabric panels, trilateral separator panels, separators to be placed between the desks, glass separators which can be attached and removed, and trilateral separators enabling personal working space can be applied to the furniture systems in order to enable social distance for the office desks after the epidemics. All materials used within this scope are designed from hygienic and easily cleanable ones. Besides, there are some solutions for social spaces in offices. Solutions which bring less people together as far as possible should be designed by planning a timetable instead of eating or having a coffee break at the same time.

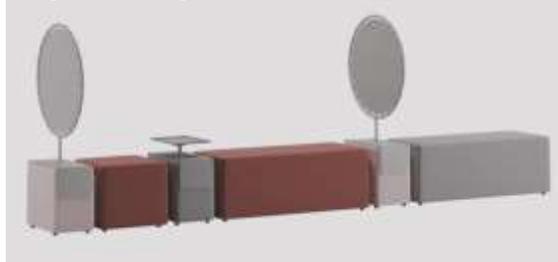


Figure 6: Office flexible social space furniture solutions (URL-7)

Besides, the criterion of flexibility involves not only the interior design, but also the working plans of the offices in some way. It is planned to reduce the number of employees by planning flexible shifts with the choice of alternate working.

Sustainability: As the criterion of flexibility, the concept of sustainability will be a factor affecting the design more. It is important in terms of design and sustaining the know-how and relationship within the team. It became important to working remotely, holding meetings and sustaining the works and external relations by being in touch after all of the design processes.

- Office design sustaining works despite the changing conditions,
- Reducing the population density of employees/meeting room organizations/eating and break organizations,
- Office organization enabling adaptation for working remotely,
- Enabling hygiene with antiviral and antibacterial products.



Figure 7: Office work desk reservation systems (URL-8)

The most efficient way to prevent spread of a virus in the working spaces is reducing the number of employees by restricting the number of people in the office. Enabling specific groups to come to work at specific times in order to prevent crowd and reduce the risk

can be considered as an option instead of a working system in which all employees are at the office all day. Another solution is planning the return to the office from working at home gradually.

For the sustainability of a working environment, first it is necessary to take some measures aiming to increase the safety of the employees. It seems that it is unavoidable to adopt a new office concept by reducing the number of employees in an office with shift-working, considering hygiene as the basic element of office planning in short term and making design changes for the office in long term due to the epidemics.

CONCLUSION

There have been some changes on the working spaces in offices with the changing needs recently, and open office design started to be preferred. In order to produce fast and suitable solutions and use time productively, more dynamic office designs have been started to be considered where technological devices such as mobile phones and tablets can be used. However, the disadvantage of creating a personal space has become an issue despite some of the advantages of those offices. Since the end of the epidemics cannot be predicted, we decided to learn living with it. It is necessary for us to work to maintain our lives. Arranging the offices which we spend most of our days became necessary in order to protect the health of the employees. The design of the open offices which is especially difficult to enable social distance was started to be discussed. Managers carry out some works with architects and designers in order to adapt the new normal conditions.

It seems that the solutions emphasizing technology are preferred for the designs of the offices changing after the epidemics. Technology is used highly from the thermal cameras as thermometers when entering into offices, video conference systems, desk and meeting room reservation systems, sensor-fixed and audible control systems, ventilations and UVC disinfection systems. Another design criterion is flexibility. The application of flexible solutions for the interior design of the offices and planning working times has increased. Sustainability is a necessary criterion for maintaining the working conditions of the offices. The sustainable offices have arisen with office designs adapting changing

conditions, sustainability of the employee population and organizations and offices enabling working remotely.

Consequently, interior designs of the offices have been changed as other issued changed by the pandemics. Even though the epidemics ends, the new normal conditions will continue to affect the offices. It is considered that the solutions provided to be protected from epidemics will become more of issue for the interior designs of offices in the future. It is predicted that a new office concept is unavoidable with the working conditions changed by the epidemics and that those works will be continued by developing in the future.

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