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THE WORKSPACES AND THEIR INFLUENCE ON EMPLOYEE'S WORK PRODUCTIVITY

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***Abstract:** Over the last decade, workspaces have been developed a lot, and so new concepts have begun to appear besides traditional offices such as co-working, home office. In this paper, an analysis was made of the factors influencing the choice of a workspace and which of them has an influence on employee productivity. Also, some aspects regarding the evolution of workspaces were presented, in the context of the real estate market.*

***Key words:** coworking, home office, traditional office, productivity, workspaces.*

1. INTRODUCTION

With the emergence and development of new jobs, the real estate market was forced to adapt to the demands of employees (workers) in various fields of activity.

In the current conditions of the market, it is necessary to create as diverse workspaces as possible, from office buildings with more facilities, to real estate products with mixed use: home and office.

One of the most exciting things about in the professional activity is on person decide when and where to work. Depending on the type of professional activity, a person may not even need a workspace. Working remotely, or from home, can be an excellent choice, but this comes with its advantages and disadvantages. For the employees who are not fully ready to work to a traditional office space, a coworking space can be a cost-effective solution that fills in some of the gaps of working from home.

In the first part of the paper are presented the types of real estate products, as well as the factors of influence (physical, environmental, socio-economic factors) in their choice.

The paper presents some aspects of the evolution of workspaces (Workplace, Workspace, Private (Cellular) Office and Open (Plan) Office) in the context of the real estate

market. Also, the results of quantitative research on the influence factors in choosing a workspace are presented, in the second part of the paper.

2. REAL ESTATE PRODUCTS

“Real estate is defined as the land above and below the earth’s surface, including all things that are permanently attached to it either natural or artificial. Therefore, the term “Real Estate” is broader than the term “land”. It includes not only the natural components of the land but also all artificially improved immovable features made by the man” [1].

There are four types of real estate products:

- **Residential real estate** that refers to resale homes and new constructions;
- **Commercial real estate** which includes all the public buildings, shopping malls, office buildings, medical and shops;
- **Industrial real estate** as the name says it refers to the industrial branch and represented by warehouses, production buildings and manufactory;
- **Land** that is the last category and includes farms, and free land.

The real estate assets are grouped according to their destination, in:

- **Residential** (apartments, houses, holiday homes, hotels, pensions etc.)

- **Administrative** (offices, public institutions);
- **Commercial** (warehouses, shopping centers, independent shops, restaurants etc.);
- **Industrial** (production halls, fuel stations, parking lots etc.);
- **Socio-cultural** (medical, educational, cultural, sports);
- **Land** (for construction, agricultural).

The real estate product includes four aspects:

- **One heritage** (buildings: residential, industrial, offices, commercial etc.). One heritage includes corporal elements, such as: walls, roofs, etc. which will withstand in time and which can be transmitted, from generation to generation, from one owner to another;
- **A financial one**, in a logic of investments (rents), profitability and/or resale;
- **A social one**, refers to the satisfaction of owning a property, of being responsible to the family and to the employees (colleagues);
- **An emotional one**, oriented to the pleasure of living and working in a space that offers satisfaction.

A major influence in choosing a real estate product has three categories of factors:

- **“Physical factors** regarding the physical characteristics of the building (location, size, natural lighting, seniority of the building, neighborhood, parking options etc.);
- **Environmental factors** (distance from vital facilities, accessibility, access to public transport);
- **Socio-economic factors** (maintenance costs, neighborhood, safety, economic situation)” [3].

3. THE WORKSPACE

If we are talking about workspaces, we are talking about a huge difference in the last twenty years. Two decades ago, an office will comprise of a team of people working at a desk, behind a much larger computer than our “Air laptops”, in a 9:00 a.m. to 6:00 p.m. program.

Nowadays, with the evolution of technology, the change of the workspace it is also noticeable. If twenty years ago, the employees will spend all their working hours behind a desk, in a meticulous planned schedule, now employees

have the freedom to choose when and where they want to work.

Another big difference in the workspace that it's easy to spot is the actual design of the office. In the beginning of the 20th century, the arrangement of a workspace would usually be long rows of desks, with chairs in front of each desk, for every employee. Today, the design of each office is different in its own way, with open spaces, more colorful furniture, plants and small details, all of this to make each individual more comfortable, and to provide a pleasant working environment for each person.

Brill et al. proposed some useful definitions:

- **“Workplace:** A general term for the entire physical environment for work [...] the whole floor, whole building, and whole campus. The workplace always contains large numbers of workspaces;
- **Workspace:** The space where an employee sits (mostly) when in the office;
- **Private (Cellular) Office:** A workspace that has four walls to the ceiling and a door;
- **Open (Plan) Office:** A workspace whose perimeter boundaries do not go to the ceiling” [2].

The four main trends that were driving workplace changes were identified as:

- “Organizational structure and strategies.
- Workforce attitudes and expectations.
- Technology – its ever-increasing power and widespread deployment.
- New recognitions about, and strategies for, the workplace” [2].

The evolution of the workspace through the year defines three categories, each with advantages and disadvantages, different one from another but with the same purpose, getting the job done. The three categories are:

- **Traditional office:** As the name says are the typical office and the first thought that comes into our minds when we think about an office. It is a space with the original rectangular desks, usually with no more than 5 employees in it, in which they will spend more than 40 hours/ week for work.
- **Coworking space:** As everything evolves so does the workspace, in the 2000 a new concept it appeared. As the name says, the coworking space is created so the employees

relate one to another to create a friendlier environment and to encourage the employees to build a stronger relationship than being just colleagues. The idea was established to increase the productivity of the firm.

- **Home office:** The last category is home office. This is the newer concept of them all and it made a step further than coworking. Employers all around the world have one purpose, to make a profit. In the last few years, the human resource become more and more hard to find, every person has more and more higher standards, so the employers had to deliver. If in the 20 century this sounded like a dream now it's a reality. There are many factors that were taken into account when this idea came thru, parenting, having a pet, the distance that an employee needs to navigate to get to work, time and maybe just the commodity of being in your own house. This concept is easy to understand, instead of going to you job every day, your job comes to you and that means that you must complete your tasks for work from home. This idea is becoming more and more popular in the information technology field, in international companies, where the job requires you being in front of the computer and it doesn't require your physical attendance in a certain building. Usually an employee will have anywhere between 4 and 15 days of home office. These concepts attract more and more people, and maybe soon will replace the traditional office.

“The trend towards open-plan office has largely been driven by organizations aiming to reduce “accommodation” costs.” [5; 6].

“Veitch argued that facilities managers have responded to such pressure by creating open-plan office with reduced space allocations” [7]. They suggested that by adopting the cost reduction paradigm, organizations run the risk of creating office space that are ultimately uncomfortable and unworkable.

Veitch maintained that the effects on the individual could be direct, caused by adverse physical conditions, or indirect through psychological process such as lack of privacy or stress [7].

4. THE RESEARCH METHODOLOGY

4.1 The research context

The research is based on the survey method and the research questionnaire instrument. The questionnaire used in conducting the research has 19 questions: 5 about workspaces, 6 about the influence of the workspace on work productivity and 8 questions for identification. The questionnaire was applied, online, on a sample of 94 subjects, 88 of them are employees, and the other 6 are unemployed, using the Google Forms application. The research was realized between February 15 and March 10, 2020. The subjects of the investigation are working in different activity fields. Most of the subjects are working in IT followed by the industrial field. At least one research participant works in areas such as: administration, consulting, construction, accounting, education, service provision, nutrition, insurance, quality control, delivery services and entertainment (Figure 1). The predominant socio-demographic characteristics of the investigated subjects are presented in Figure 2.

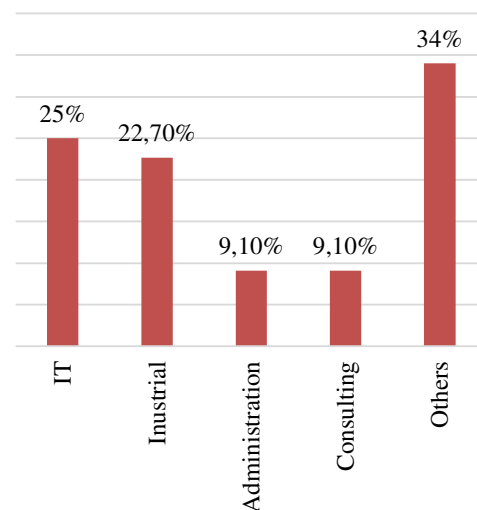


Fig. 1. The field of activity of the study participants

4.2. The research results

Most of the participants to this research in a 71.5 proportion have a static activity, meaning working in an office; they spend 8 to 12 hours at work which means that they will spend almost all their day in an office.

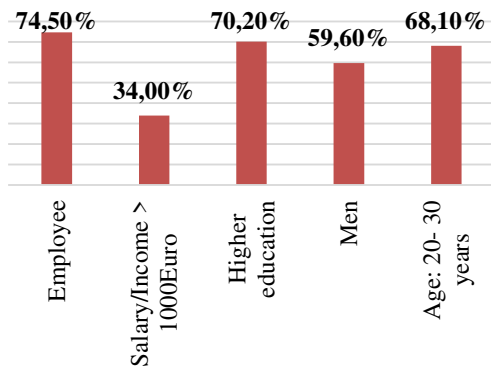


Fig. 2. The predominant socio-demographic characteristics

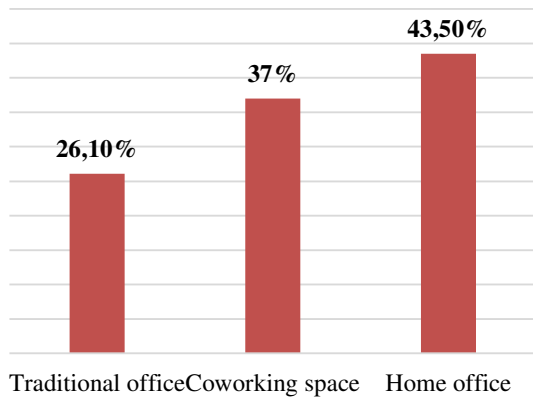


Fig. 3. Favorite workspace

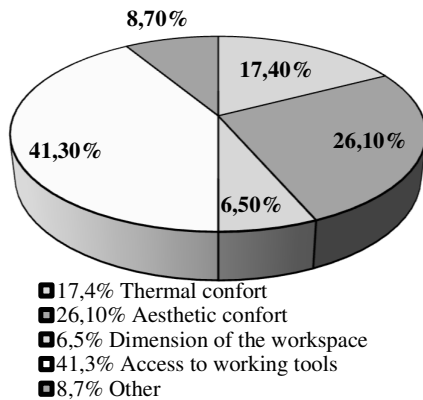


Fig. 4. The most important characteristics of the workspace

In majority, when asked where they would like to work, 43% of the interviewed people answer that they will prefer to work from home (Figure 3).

The opportunity to work from home appeared as a facility provided by the employer in order to

motivate and retain employees. Employees want to work from home to save time (navigating from home to work), but also to reduce transportation costs. In addition, employees, with kids, benefit from this facility when they have no one to leave them with (they are sick, kindergartens/public schools are closed during the holidays etc.).

At the question regarding the most important characteristics of the workspace, the most important characteristic was the access to working tools (computer, print etc.) 41.3%, followed by the aesthetic and thermal comfort (Figure 4). 56.1% said that their colleague’s mood influences their work abilities. Following the research, it was found that the most important feature of the workspace is of ergonomic nature (easy access to the working tools 41.3%, thermal comfort 17.4%, the size of the workspace 6.5%), but also emotional (aesthetic comfort 26.1%) (Figure 4).

The most important factor in choosing a workplace (for 67.4%) is the distance between home and work. 39.1% said the distance between work and the interest points (schools, parks, shops, and restaurants) is more important. Considering “distance” as the main factor influencing the choice of a workplace, that means that the employee is influenced in his decision by the time factor (he loses no time in traffic), the economic factor (costs less transport) and even ecological (he can travel on foot, without using any means of transport). 67% of the study participants stated that the conditions in the workplace have a great influence on the work productivity.

The productivity of the employees' work is largely influenced by the factors in Table 1, except: the distance between the workstations and the design of the workspace which are considered to have a smaller impact.

According to the results presented in Table 1, 53.1% of the study participants consider that the level of noise pollution in the workspace influences their work productivity.

Table 1.

Factors that influence employee productivity in the workplace

No	Factors that influence work productivity	Slightly influence	Does not influence	Strongly influence
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1	Confidentiality of the conversation	14,89%	36,1%	48,9%
2	Noise level of other conversations	10,63%	36,1%	53,1%
3	Background noise level	8,51%	8,29%	53,1%
4	Workspace size	6,38%	38,29%	55,3%
5	Occupation of the workspace	6,38%	36,1%	53,1%
6	<i>The distance between the workstations</i>	10,63%	53,1%	36,1%
7	Possibility to change the environmental conditions (temperature, humidity)	10,63%	29,8%	59,5%
8	<i>Design of the workspace</i>	10,63%	48,9%	40,4%
9	Lighting quality	2,12%	27,65%	70,2%
10	Amount of light (for computer work)	6,38%	19,14%	74,4%
11	Air quality, temperature and ventilation	2,12%	17,02%	80,8%

The factors that are considered to have the greatest impact on work productivity are those of the environmental surroundings (quantity and quality of lighting, air quality).

Following the analysis of the factors that influence the productivity of the employees in the workplace, it was found that those of ergonomic nature are perceived as having the greatest impact. In addition, the employees would like to be able to manage the environmental conditions (temperature, humidity) in which they operate.

Between 68% - 74% of the study participants consider that the ideal workspace is the one that offers:

- Possibility of interaction/communication with colleagues;
- Teamwork;
- Comfort (thermal, aesthetic) and suitable size;
- Easy access to working tools;

- Quality of the light and access to natural light;
- Temperature/humidity control and air quality.

The research results are slightly contradictory. 43.1% of the study participants stated that if they had the opportunity, they would prefer to work from home (Figure 3), but at the same time 86.5% say they want to interact directly with their colleagues (without using the means of communication), in the workplace. This result shows that (collegiate) social relationships are considered important for most study participants.

After conducting this study, it can be concluded that the human resource in the 21st century prefers to carry out professional activity in the home office system, as this brings several advantages:

- **Economic** (lower cost with transport, time allocated to travel can be transformed into a productive one);
- **Ergonomic** (it organizes its activity in such a way as to have easy access to the working tools, creates its environmental conditions at own will, which leads to increased work productivity, etc.);
- **Aesthetics** (own workspace design);
- **Ecological** (less means of transport, less fuel consumption, less pollution, reduced agglomeration);
- **Emotional** (being close to family/children, independence so sought after by freelancer).

The professional activity carried out in the home office system has a major disadvantage: it depreciates social relations, which in the medium and long term can have a negative impact on the emotional state of the individual. This is one of the reasons that led to the emergence of coworking spaces.

Both the activity in the home office system and the coworking are suitable for certain professions: designer, lawyer, accountant, consultant etc.

5. CONCLUSION

The research was realized between February 15 and March 10, 2020, before pandemic period in Romania. During the pandemic, many companies implemented work at home, to

continue their work. After reviewing the questionnaire results, the younger generation (20 to 30 years old) is working in open spaces and sustain that the interaction between colleagues is very important to them, but they would prefer to work from home because it confers them flexibility in the schedule, and something that the younger generation is looking for.

In conclusion, from the perspective of our research we think that in the next few years the frequency of home office will increase, and we advise the companies to rethink their strategies and to adopt this new form of office, and to acknowledge that home office is more effective when financially speaking because it reduces the fixed expenses. In addition, we strongly support our idea that keeping up with the demand is more important and we truly believe that reviewing the employees' needs and helping them to achieve their goals will help the companies evolve.

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Spațiul de lucru și influența sa asupra productivității muncii angajaților

Rezumat: În ultimul deceniu, spațiile de lucru s-au dezvoltat foarte mult și astfel au început să apară concepte noi, pe lângă birourile tradiționale, precum cele de tip: coworking, home office. În această lucrare s-a realizat o analiză a factorilor de influență în alegerea unui spațiu de lucru, precum și efectul acestora asupra productivității muncii angajaților. De asemenea, au fost evidențiate câteva aspecte ale evoluției spațiilor de lucru, în contextul pieței imobiliare.

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