

## CZEŚĆ III PART III

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### SPOŁECZEŃSTWO SOCIETY

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Vesna Krizmanić,  
Eva Vaništa Lazarević

#### TRANSFORMATION OF A WORKPLACE DESIGN APPROACH: THE IMPACT OF NETWORK SOCIETY AND INFORMATION TECHNOLOGY

##### **Abstract**

In this paper, the necessity of architectural approach change of workplace design is identified because of the change in the way business processes are used to challenge the transition from the post-industrial to the information society. Transformation is explained firstly by changing the interpretation of the territory of workplace, which today requires new extended definitions. Understanding transformation of the territory of workspace, whose physical frames do not follow fast information society and the modern work processes changes, goes through interdisciplinary approach. By analyzing the theories of organization - classical and contemporary, based on the views of Manuel Castell's social theory and space of flows, the paper argues that the network society has key impact on the transformation of the working areas in office buildings. Transformation divides areas on the „places” and “the spaces of flows”, and formats of territorial and non-territorial workplaces. The aim of the paper is to determine the basis for defining the modern architectural approach and critical attitude in designing office facilities and workspaces. The paper presents three case studies during last three decades – transformations that includes business processes and workspace changes, which was prepared for many years and interdisciplinary, with different results achieved.

**Keywords:** workplace, design approach, territory, network society, information technology.

# TRANSFORMACJA PODEJŚCIA W PROJEKTOWANIU PRZESTRZENI ROBOCZEJ SPOWODOWANA WPŁYWEM TECHNOLOGII KOMPUTEROWEJ I SPOŁECZEŃSTWA INFORMACYJNEGO

## Streszczenie

W niniejszym artykule autor próbuje dokonać (re)interpretacji terminu nieterytorialnego miejsca pracy, którego poprawne zrozumienie jest kluczowe podczas projektowania nowoczesnych budynków biurowych. Jaki wpływ na projektowanie miejsc pracy ma rozwój technologii informacyjnej? Aby odpowiedzieć na to pytanie należy najpierw dostrzec i zrozumieć dokonujący się proces transformacji obszaru roboczego, którego fizyczne ramy nie podążają za szybkim społeczeństwem informacyjnym, a współczesne procesy robocze wciąż ulegają zmianom.

Analizując teorie organizacji – klasyczne i współczesne, oparte na poglądach teorii społecznej Manuela Castells'a i przestrzeni przepływów, artykuł dowodzi, że społeczeństwo sieciowe ma kluczowy wpływ na przekształcenia miejsc pracy w budynkach biurowych. Transformacja ta dzieli je na „miejsca” i „przestrzenie przepływów” oraz formaty miejsc pracy terytorialnych i nieterytorialnych.

Celem artykułu jest określenie podstaw do zdefiniowania nowoczesnego podejścia architektonicznego i krytycznego w projektowaniu obiektów biurowych. W pracy przedstawiono trzy studia przypadków (z trzech ostatnich dekad). Są to transformacje obejmujące procesy biznesowe i obszary robocze.

**Słowa kluczowe:** workplace, design approach, territory, network society, information technology.

## Introduction

The development of information technology and the transformation of work processes, consequently during last decades, is seeking for the transformation of the physical territory of the workplaces. This work opens the question of the influence of information flows on the architecture and organization of the workplaces, and the impact of the transformation of work processes on the workplaces, asking for an answer to the question of the physical formation of new formats of working environments. This is why the subject of this paper are theories that are not only from the discourse of architecture, but before all by the domain of organizations, sociology and social changes that translation in the discourse of architecture can get a new, specific meanings, which can help to understand the transformation of working space and forming the theory of non-territorial space.

The subject of the research is the meaning of a workplace and a relationship to the territory, as well as theories that follow the transformation of these relationships, from classical theory of organization, through modern organizational management theories, to the interpretation of the theory of flows, which is the basis for defining the concept of non-territorial workplace.

The reason for the research paper is to open interdisciplinary topic and improve the design approach and strengthening the relationship between theory and practice and change a series of adopted design models that are identified through practice, and lack of interaction with real needs of user companies, and the lack of previous analysis and research. The basic field of research is architectural design and modern architecture, but closely related disciplines are the organizational management, social studies and research of social transformations and behavior of the users (and their wellbeing). Researching the interaction between the design solution of office space and workplace, technological transformations, organization and business goals, and user behavior, would therefore represent the underlying focus of the topic. As a result, with interdisciplinary approach, for further research as next step will be guidance for the design of new formats of commercial space and the proposal of the development strategy of workspace, especially taking into account the flexibility and non-territorial workplaces, that was enabled new technologies and open as topic in this paper.

## **1. Workplace and territory**

### **1.1. The concept of workplace and territory**

*Workplace* (eng.) according to the semantic definition, the place where the work is carried out is related to the physical location and includes, except for the workplace itself (work desk or equipment) and all physically defined areas used (lobbies, common spaces, corridors). Workplace is defined by defined physical area - determined by the territory of the act that part of the particular physical environment, measured and targeted for the execution of activities<sup>1</sup>.

*„The workplace is a unit with all spatial characteristics defined and measured for a particular activity”* <sup>2</sup>.

*Workspace* as a term, often equals the workplace. In addition to the semantic difference (the place opposite the space), significant differences are in the modern interpretation of the workspace, especially in the light of modern technologies and the emergence of a virtual workplace. Thus workspace means any place where the work is performed (unlike the workplace – the place to go to work) including virtual (digital) spaces, public spaces and private spaces as places of modern response not only to the possibilities of technology but also to the trend of establishing balance of job quality – quality of life, as well as the results of modern research on efficient work and achieved results. Workspace represents a connection between user, process and technology, while the workplace defines the physical framework. The virtual workplace is part of the workspace, and it actually supports this connection from the inside to the outside.

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<sup>1</sup> Миленковић Б., Увод у архитектонску анализу Грађевинска књига, Београд 2001.

<sup>2</sup> Ibidem.

In the research process<sup>3</sup> we are interested in the current change from the workplace on the workspace, and the impact of these changes on the space itself - the influence of the change of the working culture on the change of the design process and the physical environment of the workplace and space itself. Many companies will be in a situation to reduce workplace, and by increasing it workspace - increase the efficiency of work and employee satisfaction and reduce the cost of doing business. What are the effects of increased workspace Information on configuration, structure and elements of the physical shape of the space or the workplace?

## **1.2. Understanding the transformation of the workplace**

The history of work process development can be traced back to the late 19th century, when routine work was carried out in line with production processes - lines in factories. The specialization of occupations and the supervision of production processes by managers, with clearly defined areas of action, are the basic features of early job development. At the beginning of the 20th century, the development of technologies and increased employment needs, the specialization of work processes and jobs is accelerating, and development of a new approach to the organization of the team as a social system opened between 1930 and 1950. that open development of private-individual territories for employees. From the 1970th rise of cubicles (mean less space on the territory of

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<sup>3</sup> Job design and employee satisfaction are explored through various aspects: through the effect (Parker and Turner, 2002), motivation and satisfaction (Hackman and Oldham, 1980) and health (Warr, 1999). More and more often, a physical space analysis is combined (Windlinger, 2007). The perception of space and the sociological aspect is interpreted by analyzing climatic conditions and conditions (Sundström, 1986), noise (Banbury and Berry, 2005, Sundstrom 1994), the size of the workspace (Charles and Veitch, 2002), the aesthetic impression and quality of furniture, the adaptability of space according to personal needs, distance of work-distance, organization of the base. Some experts analyze the impacts of physical space on job satisfaction, work environment and work in general (Sundstrom 1994, Brennan 2002, Lee and Brand, 2005). Commitment (van der Voordt, 2003), privacy (Sundstrom, 1986a, Kupritz, 1998), the social climate (Oldham, 1988, May et al., 2005) were also investigated. Depending on long-term behavior and health and performance reactions, key variable variables (De Croon, 2005, Becker and Sims, 2001), which are dependent on the environment, are identified.

These are all old, classic research that does not take into account the modern way of business development, and the technologies that are developing. Multidisciplinary studies began to appear (Lee and Brand, 2005), trying to see a wider matrix and the formation of multi-dimensional models. It is also necessary to foster satisfaction with space and content with the content of work (Hackman and Oldham, 1980). Therefore, when choosing a research methodology, in future work, it is necessary to take into account in particular the complexity of the problem, other influences on the effect and the selection of optimal cases, samples and the consideration of all aspects.

each employee) with the development of an open plan space dominated by the US, while in Europe still cellular (individual) type of office space dominates<sup>4</sup>.

The concept of an open plan emerged in the 1950s when the German team *Quickborner* organizing groups of furniture in organic gardens (the concept of *Burolandschaft* – office landscape)<sup>5</sup> within the open-ended floors without barriers, developed a concept that suited the social and cultural moment after the Second World War, the formation of spaces where all individuals are equal, where communication and collaboration are provided. The concept was soon adopted in the United States and developed by Robert Propst, who has been working in the development of furniture company Herman Miller since 1958. Their conceptual solution *Action Office One*, the developed form of the cubic modular for flexible premises, and at the office *Action II* introduced a newspaper in semi-open workplaces, with low barriers around the work table. Although flexible, relationships among workplaces within the open plan are clearly defined by the communications and dimensions of the workplace itself.

Beginning of the 21st century is characterized with develop of collaborative space - the concept of space that is widely applicable in the corporate meeting modern standards - brainstorming, collaboration, innovative methods of work and communication. Territorially, it can be physically separated and defined space, but also any other space inside or outside the facility, including workplaces<sup>6</sup>, unless they are the focus points<sup>7</sup>. The role and definition of collaborative space in the office space is directly related with a business process that is done, which is defined by performance management.

*Hot desking* and *Hoteling* Methods in office management are methods arising from the development of digital technologies and the increase of knowledge work (technology, knowledge and service delivery) relate to the flexible use of space (which first comes takes up the table, or reserves the hotel desk before arrival). With the initial research in this field, they will deal with the cohesion of the group and workspace, i.e. Collaboration<sup>8</sup>. Kampschoer (2007)<sup>9</sup> as part of

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<sup>4</sup> Danielsson, 2010

<sup>5</sup> Founded in 1958. *Quickborner* consulting group was founded by two brothers, Wolfgang and Eberhard Schnelle who had previously worked in the studio j in the name reassigning with his father. In the vicinity of Hamburg founded the company that puts the spotlight on precisely the group name fits in the empty spaces with curved their walls and note points in the space, and the company that hired them is Bertelsmann, the German publishing company.

<sup>6</sup> The furniture industry even works on redesigning classroom desks, as it is noteworthy that employees gather around jobs to solve certain work dilemmas, and the transformation of working furniture from work to collaborative could be found soon in use

<sup>7</sup> Focus space – a term which define spatially isolated jobs and is attached has the jobs for which the required concentration, and does not need to communicate with other employees

<sup>8</sup> Kampschoer K., Heerwagen J., Powel K. & Loftess, V., *Colaborative knowledge work environments*, „Buiding Research & Information”, 2004 Volume 32.

the Workplace 2020 project<sup>10</sup>, focusing that the team, above all, have the influence on the development of workplaces and processes that take place in space.

A key change in understanding the concept and transformation of the workplace is actually in the transformation of its territory - the workplace has become flexible, the working processes are partly virtual, and the territory of the work action have dual characteristics – physical and virtual, that flows.

## 2. Organization theories

### 2.1. The classical theories of the organization

Classical organization theory appeared at the beginning of the 20th century, following the rapid development of industrialism and increased desire for profit and economy. Rationalization of business and research of new organizational concepts were addressed by F.W. Taylor, F. L. Gilberth, H. Grant, H. Ford (USA), as well as H. Fayol and M. Weber (in Europe). American induction and European deduction approach and views of the theoreticians of the classical theory of organization, had a common focus, first of all on the technical and structural aspects of the organization<sup>11</sup> but three directions have been developed, and in theory, management of the School of Lacemaking consists of theories: scientific management (Frederik Taylor)<sup>12</sup>, administrative management (Fayol) and bureaucratic management (Weber). While F.W.Taylor considered that managers should be technically more capable than their subordinates in order to manage success, H. Fayol theory advocates the existence of experts with managerial education, but on the very aspect of space, for us is most important bureaucratic theory of the organization of German sociologist and philosopher Max Weber, advocating a bureaucracy, control and supervision has been placed at the heart of the problem. Spatially, the organization is formed to be observable and strictly controlled. The basic characteristic of bureaucratization as an ideal form of organization according to Weber is the hierarchy of authority, the application of rules and procedures in everyday activities, strict division and specialization of

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<sup>9</sup> Kampschoer K., Heerwagen J., & Powel K., *Creating and testing workplace strategy*, „California Management Review”, 2007 49 (2).

<sup>10</sup> Workplace 2020 is a research platform that included researchers from five leading universities and from Canada and the United States.

<sup>11</sup> Most classical theorists were engineering professions.

<sup>12</sup> F.W.Taylor was a versatile person, worked intensely, and did not rest on Sundays. He worked in a factory from 7–17 pm, then ran before bedtime. He played tennis and in 1881. he won the first US Open in the doubles competition, has registered more than 40 patents in the business of operating squirmed workers to general manager and the end of his career was a professor at Harvard University . He confirmed his theory with personal practical work.

work. The basis of the organization is employees who perform routine tasks with written communication as an imperative<sup>13</sup>.

White through the classic theory of postindustrialism<sup>14</sup> explains the characteristics of changes in post-industrial society, and the fundamentals of characteristics are: moving from goods to services, the source of productivity is in the production of knowledge, the economic activity is shifted from the production of goods to the production of services, in the structure of occupation – the rise of manager professions, the emergence of new forms of employment.

## 2.2. Contemporary organization theories

To understand the objectives of the strategy of development of business premises is essential to understand the modern theory of organization management. Performance management and productivity management is a complex process of creating activities that define the goals of an organization, work or employee to fulfill the goals<sup>15</sup>. Today, often being use, and the term Business performance management BPM or CORPORATE CPM performance management, which includes three main activities: objectives, the definition and implementation of the operational rate of the corporate system. Productivity depends on four key factors: personal, social, organizational and spatial – environmental (Clements-Croome, 2000), and the spatial aspect of productivity impact is very important to us. In the theory, the number of studies deals with the negative effects of space on employees, our goal is just to deal with space as a potential for a healthy and productive life<sup>16</sup>.

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<sup>13</sup> In the mid-1950s, Parkinson studied administration, and associated bureaucracy, and the logic and regularity he saw in the behavior of an officer called Parkinson's Law of Administration. The logic is that the volume of work does not follow the number of employees, that the bureaucrats want an increase in the number of subordinates rather than competitors, in order to gain importance, and it also deals with the formulas of increasing administrative staff and interpreting its upward path of growth. Today, certain segments of bureaucratic organization are irreplaceable (military, state administration, nuclear power plants).

<sup>14</sup> Bell D., *The Coming of Post-industrial Society: a Venture in Social Forecasting*, Basic Books, New York 1973.

<sup>15</sup> Otley D., *Performance management: a framework for management control systems research*, „Management Accounting Research“, 1999, 10.

<sup>16</sup> Biologist Stephen Boyden (1971), in the article on the basics of understanding well-being, makes the distinction between "life needs" and "well-being" needs. Life needs have a direct effect on health (such as clean air and water, relaxation, etc.). Well-being needs, on the other hand, affect health indirectly, through a sense of fulfillment, quality of life and fulfillment of psychological needs. Failure to complete the first leads to illness or death, and other "gray life" or diseases caused by psyche or stress. Supposedly defines several well being needs that are directly related to the object: the possibility of social interaction, the possibility of expressing creativity, research, cooperation, the possibility of regular exercise, the noise level as or below the level in nature, the possibility of variability-variability, and visually interesting environment.

Contemporary corporate human resources sectors are crucial in the company's business development strategy, and within performance management among others: job descriptions, team and team potentials, knowledge of employees (strengths and weaknesses), cross-cutting tasks with company goals, education, trainings, discussions, rewards and other activities. It is precisely one of the goals of research work to cross spatial performance and increase productivity, as well as to align with the development of companies, technologies and new forms. In addition to increasing operating results (outcome) goal is to increase the satisfaction of the quality of life of employees while optimizing space and reducing costs – in line with the defined performance management. According to Judith<sup>17</sup>, productivity should be spatially measurable and manageable through increase abilities, motivations and opportunities, which are the postulates of contemporary organization theory, and this place of crossing architecture and organizational management is the point of this thematic interest<sup>18</sup>.

### 3. Spaces of flows

*„The technological revolution has continued to speed up transforming the material base of our lives "19.*

Manuel Castells presented new “theoretical perspective for the understanding of trends that characterize structure and dynamics of our society in the 21st century and the world<sup>20</sup> which was conceptualized as a **networked society**. It deals with the interpretation and transformation of work and employment, workforce flexibility, introducing the terms "self-programming workforce" and "changeable workforce," by putting in front communication and information technologies as the main causes of the transformation of the labor market. New technologies have also spurred the development of social spaces of virtual reality, where experimenting with the new environment and playing new social roles gives a completely new dimension to the understanding of space and territory<sup>21</sup>.

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<sup>17</sup> For example, a 2011 survey of 45th coworking space shows that 75% of respondents increased their performance, and 80% increased the scope of work by moving to coworking spaces. According to Emergent Research in 2013, more than 160,000 people used several thousand coworking sites in the US and Europe, and in 2020, it is expected that millions of people will use 12,000 spaces globally.

<sup>18</sup> A significant area in the field of psychology, which is associated with the organizational management refers to the knowledge about the necessary motivation and health of its employees, social climate, commitment and etc., The psychology of work (business psychology), which studies depending success of psychological factors

<sup>19</sup> Castells M., *The Rise of the Network Society*, Blackwell, Oxford 1996., p. 49.

<sup>20</sup> Castells M., *Information technology and global capitalism*, [in:] W. Hutton and A. Giddens, Clements-Croome D., *Creating the Productive Workplace*, Taylor&Fransis, London 2006.

<sup>21</sup> Space of vitrual reality called "Second Life", has a vitrual properties, representations university centers, educational platforms, money that is convertible. Residents (curren-

Castells moves the analysis from the postindustrialism to informationalism. The transformation of work in the information paradigm follows a historical perspective, and involves primarily the individualization of work, which creates a potentially fragment society. He detailed made statistical analysis of the transformation of the employment structure 1920-1990 (with a cut on 1970. considering that societies had previously been post-agricultural, and after it the post-industrial), trying to predict the trend in the structure of the mature stage of the information society. Services are divided into production services, social services, distribution services and personal services. Explains the information process of work: creating additional value by innovating processes and products, creating "flexibility" – from jobless people without jobs <sup>22</sup>.

Castells clearly outline the theory of urbanism in the information age based on the distinction between the space of the place and space of flows. Space of flows is defined as material support for simultaneous social practices that are communicated remotely.

Flow area is explained through three layers: the first would be the electric circuits of electronic exchange, the other as nodes (hubs) and the third layer of space are the spatial organization of the managers elites around which this space is articulated<sup>23</sup>.

Flowing spaces differ from virtual spaces. According to Šuvaković, virtual space - cyberspace is a *nomadic space* in the sense in which there is no ultimate morphological (ontological) identification of identity (figures and bodies, screens and lights, software and spirit). Identity appears as a positive or negative feedback, and not as a source (essential) data<sup>24</sup>. For the first time, the term *cyberspace* appears in the novel *Neuromanser*<sup>25</sup>, by writer William Gibson, the key achievement of the cyberpunk literature<sup>26</sup> according to which cyberspace is a "virtual abstract environment in which economic information can be visualized as geometric structures". It is also defined as a three-dimensional area in which cybernetic feedback and control take place. "*The flow path is not without space, although its structural logic is*"<sup>27</sup>.

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tly there are about a million users) are avatars, and simulate realistic social life, with no set goal, a space is born with screw their continuous operation.

<sup>22</sup> According to Castells, the transformation to flexible working patterns includes four elements: full-time is not fixed, the orientation to the task, location-mobile, contractual obligation - without the loyal n grains, and corporative rules

<sup>23</sup> "The theory of the space of flows is based on the implicit assumption that society asymmetricly organized around the dominant interests specific to each social structure" Castells 2010.

<sup>24</sup> Miško Šuvaković, 2015.

<sup>25</sup> Giddens A., *The Constitution of Society: Outline of the Theory of Structuration*, Berkeley CA: University of California Press 1984.

<sup>26</sup> Miško Šuvaković, 2015.

<sup>27</sup> Kastels M., *Uspon umreženog društva*, Službeni glasnik, Beograd 2018.

However, Castells points out that face-to-face communication processes and decision-making processes still need to have face-to-face contact and often still require a place that is well-connected because of its articulation in the area of flows <sup>28</sup>.

The effects of technological changes in the workplace is still not fully marked and are looking for new researches, a faster one, because empirical studies lag behind the fast process of technological changes. Defining cities as communication systems, transforming of work processes in the territorial and non-territorial, we can set a new research platform for contemporary workplace design process.

#### **4. Case studies: first steps, implementation, advanced approach**

##### **4.1. First steps**

###### **1997. The CHIAT DAY Building in Venice, California**

###### **Design: Frank Gehry, Clive Wilkison Architects**

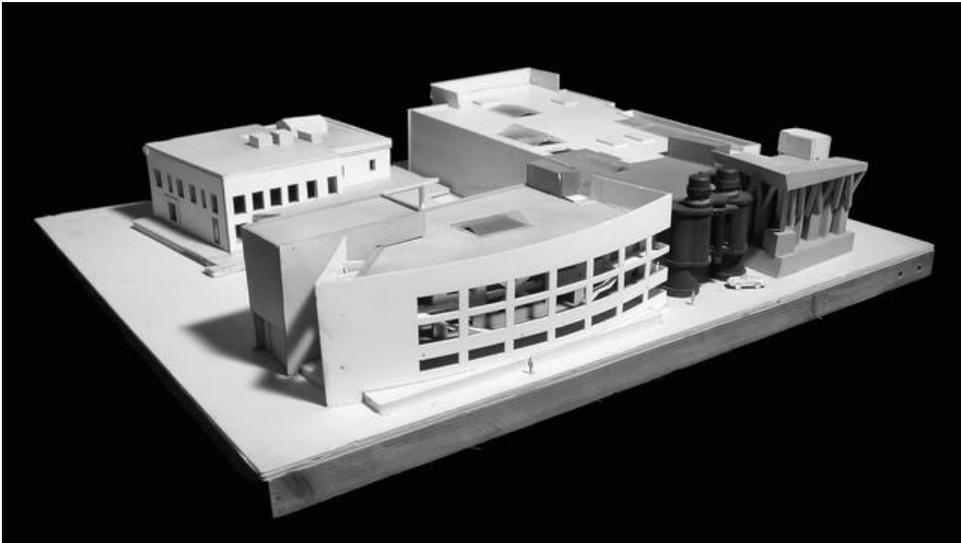
The case of transformation of the working territory that failed. The company was one of the most successful in the marketing area in the United States. A virtual office inside space, without paper, a hot desking concept (the first to take the place), lasted for several years from 1995-1999. and turned out to be completely unsuccessful. Enclosed as “Lost in space”<sup>29</sup>, because employees were looking for their territory, and the possibility of cooperation – social moment and collaboration on projects lost. The experiment was extreme, and perhaps premature (the employees had mostly had no place to sit, the concept was virtual). At the moment, the facility is used by the Google Community with a redefined concept.

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<sup>28</sup> Ibidem.

<sup>29</sup> Warren Berger: Lost in Space. 1999. Available at: <https://www.wired.com/1999/02/chiat-3/> [07.05.2019].

**Figure 1.** Frank Gehry. 1985–1991. Chiat Day Building Final Model (Architectural model).



Source: <https://www.artsy.net/artwork/frank-gehry-chiat-slash-day-building-final-model-venice-california> [Accessed 1 May 2019].

**Figure 2.** Clive Wilkinson Architects. 1997. Chiat Day, Los Angeles.



Source: [https://clivewilkinson.com/portfolio\\_page/tbwa-chiat-day-los-angeles/](https://clivewilkinson.com/portfolio_page/tbwa-chiat-day-los-angeles/) [Accessed 1 May 2019].

## 4.2 Implementation

### 2001. British TELECOM, Brentwood

#### Design: Arup Associates

The project was made within the framework of the WORKSTYLE STRATEGY 2000 project.

Increased number of flexible spaces, restaurants are used for meetings. Productivity measured and increased by 8%. Transformation priorities: to provide a better space for employees through reorganization, to change communication and work habits to adapt to open communication. According to the Workstyle 2000 Initiative in BT: 4500 employees work from home, and 40,000 employees have the ability to, thanks to technology tools, work from any location. The program saved £ 180m in real estate prices and plans to reduce another 40%. The use of restaurants and public spaces for meetings and work proved successful, and the "meeting space" has gained wider and more flexible use.

**Figure 3.** Arup Associates 2001. British Telecom, Brentwood, UK.



Source: <http://www.usablebuildings.co.uk/Pages/UBGALLERY21.html> [Accessed 1 May 2019].

## ADVANCED APPROACH

### 2017. Bloomberg office, London UK

Design: Foster + Partners

The concept is based on the areas of collaboration and communication. Employees are provided with a certain territory, within the tables that are circular in shape with a central meeting table. All employees, including management, have the same territories, the same equipment and tables. The oversized central ramp, double halls and integrated collaborative spaces, with a large number of artworks, provide diversity and emphasis on communication and flow spaces.

**Figure 4.** Foster and Partners. 2017. Bloomberg office, London.



Source: <https://www.archdaily.com/882263/bloombergs-european-hq-foster-plus-partners>[Accessed 1 May 2019].

**Figure 5.** Foster and Partners. 2017. Bloomberg office, London.



Source: [https://www.fosterandpartners.com/media/2636375/hero\\_1942\\_fp631887.jpg?width=1920&quality=85](https://www.fosterandpartners.com/media/2636375/hero_1942_fp631887.jpg?width=1920&quality=85) [Accessed 1 May 2019]

**Figure 6.** Foster and Partners. 2017. Bloomberg office, London.



Source: <https://www.detail-online.com/article/985-ecology-bloomberg-office-building-in-london-31959/>

## Conclusions

Influence of information technologies on the architecture will have the great impact on workplace design as it has on work processes business transformation. Goal of architects as designers should be defining new forms of space and adapting the physical territories toward new needs. In this paper, pointing on the interdisciplinary interaction of architecture, organizational management and social transformations gives us the answer that leads to a general workplace improvement and productivity growth, seen in line with the rapid development of new technologies and wither spaces, as our reality.

A study of the transformation of the territory of the workplace, through the analysis of the organization's bureaucratic theory to flow theory, gives us a basis for setting up a new platform that would define non-territorial workplaces as key in design guidelines. By identifying non-territorial work spaces in this paper, new research fields are opened, which can operatively result in more efficient use of space, economical savings and better performance from one and improving the quality of work and wellbeing of employees on the other. The next step for research would be to define specific design forms and guidelines, interrelations and relationships, materialization and spatial parameters of physical elements of space. A smaller number of architects and architectural practices have been identified, which have begun the research and have associated them with their own practice, and the significant involvement of research centers within larger international design houses is marked, and they use the results of the research in practice. The aim of this paper should be to stimulate them to be more, because the development of virtual and non-territorial space is faster than the transformation of the physical framework of the workspace and the question is what spatial and economic effects of a late view of the new reality will be.

Traditional approach to the open plan office or cell offices is overcome. Now the architect must focus on the technological and organizational changes of the client, the impact of the network society, and the benefits provided by new technologies. As a result, we can get optimized and efficient workspaces, and a balance between physical, social and virtual space, as our answer on inevitability of the information society change.

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#### **Information on the authors**

Eva Vanista Lazarević, Full Professor PhD  
University of Belgrade,  
Faculty of Architecture, Department of Urban Planning, Serbia  
e-mail: eva.vanistalazarevic@gmail.com

Vesna Krizmanić  
University of Belgrade  
Department of Architecture, Serbia  
e-mail: vesna.krizmanic@archinova.rs