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# OFFICEMOTION

## Introduction: the office space and its current state

Despite places where people carried out intellectual tasks always existed, the “office” is an invention of the 19<sup>th</sup> century, which adapted to the organizational of companies along the 20<sup>th</sup>. The recent financial crisis and the development of technologies changed the concept of work on several levels mining the centrality of the office on the economic scheme. People do not spend the same amount of time on the workplace anymore since most activities do not require a specific physical space to be performed and the static idea of offices is in crisis, giving space to new concepts like desk sharing or hot desking.

## Herman Miller Corporation

The partner of our project is Herman Miller, one of the major companies for the design and production of office furniture since the beginning of the 20<sup>th</sup> century. It recently launched on the market the “Living Office”, a new set of furniture showing the company’s interest in adapting to users’ new needs.

## Design inspiration and background research: the emotions

Offices used to be designed to host specific work tasks, but since that economic model is no longer valid so it is that design thinking. The worker does not need a specific place to *be able* to carry out an activity, so how can the office be a place where that activity can be executed *better*? The focus of the design process needs to change from an activity-centered perspective to a user-oriented one.

Product design based on users’ emotions is a recent trend, whose results proved to be effective and successful, however the application in architecture and interior design are still scarce.

User-oriented and emotion-driven design led to Officemotion, introducing the study of emotions in the office space, allowing the workers to find in the workplace the best atmosphere to perform their tasks.

## TEAM MEMBERS



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## Layouts design process

The design has been approached by breaking down the office life to its fundamental activities. Each of them has been subsequently associated to a set of positive and negative emotions, deploying existing tools applied before only in product design. The physical architectural elements have been studied separately to arouse (or to avoid) the emotions linked to each activity and then combined in the final layouts. The furniture was selected among the catalogue of Herman Miller and its partners.

## Flexible application

The key aspect of the layouts is the interchangeability of most of them among each other by adding or removing some of the elements composing the set. This leads to a great flexibility of uses during the working hours of the week overcoming the static of traditional offices.

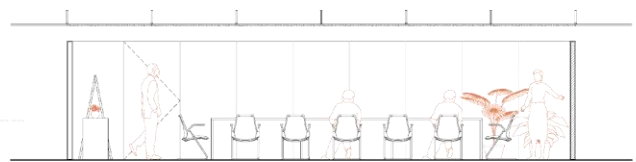
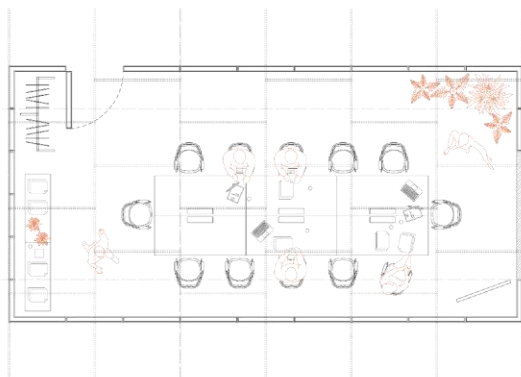
The physical combination rules of the layouts transported into an app and the fact that design of them deployed recurrent elements will allow the re-arrangement of the space according to managerial demands.

## Key Words

Office, emotions, work, activity, design, worker.



*Figure 1: OfficEmotion  
representative logo*



**Project description  
written by the  
Principal Academic  
Tutor**

In all the contexts, interactions between actors play a central role. When we think in terms of interactions, we tend to underestimate the size of interplays occurring between actors and the environment they are immersed in. This is true also when modelling spaces that harbour productivity, learning and creativity. Especially for service companies, working offices are going through a Deep transformation that is increasingly mixing production activities, learning spaces and creative oasis.

We can observe that the design of working offices is increasingly taking into consideration how to transform the traditional concepts about space to better support diverse and heterogeneous interactions. We are convinced that art and beauty, together with technology, can be elements to be added in this process to permit the design of spaces that can sustain the different working activities but also inspire and sustain various emotions and emotional states.

With the work of this project it will be possible to model spaces and furniture to sustain the different interactions required in contemporary workspaces. The main dimensions taken into consideration within this project will be strongly interdisciplinary. To design the offices of the future it will be fundamental to take into consideration all the following dimensions: the spatial places and the furniture to sustain interactions, learning and creativity; the emotional dimension to create spaces where emotions can be exploited and expanded; art and beauty to help reinforce the desired emotions and eventually mitigate negative ones; technology to create living spaces that can sense, adapt and transform themselves.

**Team description by  
skill**

The Officemotion team is composed by seven students from the fields of architecture, building engineering and design. To each component a specific role was assigned in order to develop a strategic topic:

**Adriano Aimar** (MsC in Architecture, Politecnico di Torino) the management of the research on emotions and how they affect office work.

**Juan Pablo Alvarez Buitrago** (MsC in Architecture, Politecnico di Milano) the complementary research on how to translate the research done into the design phase.

**Elena Busoni** (MsC in Architecture, Politecnico di Milano) the design and final detailing of the spaces designed.

**Francesca Calloni** (Msc in Communication Design, Politecnico di Milano) the structure of the mobile app and the final communication strategy for the project presentation.

**Maja Kopanja** (Msc in Interior Design, Politecnico di Milano) the digital rendering and postproduction of the layouts designed.

**Luga Lagorio** (Msc in Architecture, Politecnico di Torino) the planning of the clusters of layouts and their composition rules.

**Michele Maritano** (Msc in Architectural and Building Engineering, Politecnico di Milano) the state of the art research and the economic and group management regarding the workflow overview.

## Goal

The Officemotion project goal is to design a new concept of office space, in which the dimension of the emotions is added to the traditional values regarding office spaces. In order to make the office working experience more enjoyable by the worker as well as more productive for the employer, emotions are embedded into the design. At the same time, flexibility and the possibility to rearrange the spaces on demand make it possible for the company boss to fill empty or vacant spaces into the office floor, e.g. open spaces. In this order, the paradigm of working in offices is transformed, from the use of fixed and unifunctional spaces to layouts with more than one purpose, where owners can earn space to develop the required functions, and also where users have different options to appropriate a space and make work time something more pleasant.

## Understanding the problem

Working is an almost daily activity that has been constantly thriving, showing specific lineaments along the story. The concept of a working space, since 19th century, has evolved according to different requirements by users as well as the perception of place and architecture in different periods of time. Factors of contemporary lifestyle such as technological revolutions have a great impact on the way people behave and deploy certain functions, and afterwards in the spatial configuration and interior design, which tends to embrace the concepts of flexibility and identity.

In this order, working spaces have evolved from an evangelist and individual model with confined spaces that pretended to insulate the worker from the context giving privacy and concentration, passing through the industrial and taylorist models where individual work is replaced by offices that host groups following a hierarchy, to the contemporary “liquid office”, in which concepts like hot desking or co-working represent the temporality of space configurations and the free share of information. There are new working spaces where, for a few days or even hours, collectives with different specialties can work together with simultaneous inputs to a same goal. Therefore, human being has arrived to a new office concept where space and time compresses towards focusing in working efficiently as possible.

However, despite of the big influence of technological devices in nowadays society, the design concept used in several offices seems quite distant from representing this evolution, and some outputs do not fulfill users’ requirements to perform in a comfortable environment. Apart from the fact that many companies just omit the contributions of contemporary lifestyle in daily’s tasks and deploy outdated models, there is still one element which is not taken into account when it comes to design and configure working places, quite important to ensure workers’ satisfaction at workplaces and efficiency at developing activities; this neglected element is emotions. There is the need to deeply analyze in parallel the most frequent activities at offices and so the emotions evoked by workers while carrying out them. If designers were capable to finely understand how emotions work in certain spaces and their semiotic relationship with architecture, those final outputs might be more accurate towards people’s performance at work.

In this way, the commitment is to put users in the center of the design process, bringing out the precise elements that embody an atmosphere where the correct emotions can improve comfort, well-being and productivity to perform better. For this reason, offices must be rethought in the way that embrace working contemporary assets, and also meets not only capacity needs, but also the emotional ones.





Figure 2: Layout deployed for Analytical Work.



Figure 3: Layout deployed for Formal Events.

## Exploring the opportunities

The positive aspect regarding contemporary office design and its relationship with workers' emotional ambit is the plenty of tools to harness and exploit aiming at achieving a balance between productivity and wellness. Many tendencies and concepts in nowadays workplaces, as well as research documents about emotions and status, could be used in favor of finding the way emotions can influence a space or vice-versa and also to deploy layout options that can be easily applied in many offices to improve work quality. Workplaces are in constant transformation and seek for a robust structure that meets workers and bosses needs. In this order, the theoretical base and the final outputs made by the team can assess companies on how to materialize high quality offices that, by understanding and managing the emotions through flexible workplaces, are capable of reaching a scheme where production and enjoyment can be simultaneous and harmonic.

## Generating a solution

The final solution consists in a set of workspace layouts that can be easily applicable and adaptable according to specific activities and workers' requirements regarding them. To accomplish this, one of the main goals was to reach flexible and customizable working spaces, through a design methodology that improves the office settings that make it adjustable to different requirements around a certain activity. This methodology allows to find out the way an office can also adapt to different variations along functions' development by using its own components and amenities, and consists in classifying different activities and their required elements in a spreadsheet that describes every layout per row. After a process of overlapping activities and emotions in this spreadsheet, the first ones were finally embedded in four main clusters (working, meeting, gathering, relaxing) according to the features and components shared by two or more activities, each one representing a physical layout. Inside these clusters a physical space can be easily transformed from one layout to another according to facts like the layout components, the number of people or gadgets required.

According to the requirements established on the spreadsheet, the layouts are created following mainly the type of activity and the number of people, integrating the furniture pieces and accessories taken into account before, in order to complement the functions that happen inside. While for some clusters like working or relaxing the furniture sets are simpler, consisting in some sitting elements and tables or desks where to put the different devices, plus some space delimiting elements such as partitions or greenery, for others (meeting and gathering) some other accessories like wardrobes and technological appliances take more importance; partitions and greenery have also stronger characteristics.

Adaptability and interchangeability of the layouts is fundamental for a successful application of the OfficeMotion design concept to real offices. For this main reason came the choice to design a digital application intended to help the user (mainly boss and owners) arranging the open spaces and workplaces. Indeed these activities and layouts require spaces that could adapt to changing needs quickly. Through the OfficeMotion app the user can quickly and effectively manage the required changes of space, by the possibility of designing the starting layouts with the assessment of specialised designers of Herman Miller, buying the required furniture and appliances to execute what is designed, and rearranging those layouts when needed through the same app's interface.



Figure 4: Layout designed for Eating.

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