



THE COLLIDER

A social hub for industrial designer
focusing on human connection experience



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MILANO 1863

SCUOLA DEL DESIGN

The Collider

A social hub for industrial designer
focusing on human connection experience

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ABSTRACT

The epidemic forced professions to embrace working remotely. Although the post-epidemic is bringing people back, a decent amount of people still prefer a hybrid working model, which allows employees to choose freely for their working spot. The essence of 'office' is gradually converting to a physical space with social significance for collaboration and coherence instead of simply for labor production.

This thesis analyzes the office design and the third place concept throughout the theoretical framework researches and case studies. It explores the physical environment and the specific needs of employees' social space and promotes effective collaboration and interpersonal contact among employees.

The development of the project is a social hub to enhance a new quality space of communication and collaboration through color design. It combines the unique color strategy to strengthen employees' understanding of the spatial attributes and company culture awareness. The main design aspects include open collaboration and independent working areas, a creativity-inspiring graffiti space, and a shared kitchen providing a social connection.

The ultimate achievement is to use those spaces as carriers to strengthen the communication and collaboration between employees, and partners of different ethnic groups, to obtain efficiency meanwhile harmony, and at the same time deepen employees' cultural identity and sense of belonging to the company.

Keywords

Hybrid working, Office design, Human Connection, Social Hub, Color

ABSTRACT

L'epidemia ha favorito la diffusione del lavoro da remoto. Sebbene la riduzione dell'emergenza pandemica tenda a stimolare il ritorno al lavoro in presenza, un discreto numero di lavoratori manifesta la propria preferenza per un modello di lavoro ibrido nel quale sia possibile gestire liberamente le due modalità di lavoro. Lo spazio dell'ufficio sta gradualmente configurandosi come uno spazio fisico dotato di un significato sociale di condivisione e alla collaborazione invece del mero aspetto produttivo del lavoro.

Questa tesi affronta il tema del progetto dello spazio dell'ufficio e del concetto di 'terzo spazio' attraverso lo studio del dibattito contemporaneo sul tema e di casi studio; esplora le caratteristiche dell'ambiente fisico e le esigenze specifiche dello spazio sociale promuovendo un'efficace collaborazione e relazione interpersonale tra i lavoratori.

Il progetto prevede la definizione di un hub sociale, uno spazio di qualità di comunicazione e collaborazione potenziato attraverso il progetto cromatico degli spazi, favorendo la fruizione dell'ambiente e la consapevolezza dei valori del brand aziendale. Le aree principali previste nel progetto prevedono la collaborazione aperta, uno spazio creativo e una cucina condivisa per la connessione sociale.

Il risultato prevede l'uso di tali ambienti come strumenti per rafforzare la comunicazione e la connessione tra i lavoratori, e tra i partner, per ottenere efficienza e armonia, sviluppando la loro identità culturale e senso di appartenenza.

Parole chiave

Lavoro ibrido, Progettazione di uffici, Connessione umana, Centro sociale, Colore

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0

INTRODUCTION

0.1 Introduction

0.2 Objective

0.3 Methodology

0.1 INTRODUCTION

Since the beginning of the pandemic, the world has faced successive challenges. The unprecedented health crisis and the resulting economic consequences continue to have lasting effects. The pandemic has triggered a massive shift in a global working model. More people pursue the hybrid work model of working remotely and working in the office. Employees choose to work from home for convenience and safety. However, collaboration, awareness, problem-solving, and inclusive communication are where the office excels. Collaborating and socializing are the two most important reasons workers want to return to the workplace.

The office is considered the proper place to effectively connect with colleagues and clients and the direct joint between humans and the office environment. In the workplace, color is regarded as an essential design element used to improve the aesthetic qualities of the environment and for a company's branding. Color also plays a vital role in human perception and behavior, which establishes the life quality of employees and the sense of happiness and belonging.

Based on this premise, the development of a social hub in the workplace is proposed. The project is mainly focused on the socializing and collaborating area in the workplace. With the tool of color design to build a reconnect Social Hub which conveys the brand, corporate culture, and values through the physical place and promote the human connection between employees.

0.2 OBJECTIVE

The project's primary purpose is to create a social occasion with the support of color design that promotes communication and cooperation among employees to meet the psychological needs of employees who desire to communicate with others after a long period of isolation.

Increasing the contact experience, combined with the space atmosphere design, creates a full-scale immersive experience space, intervene in employees' experience, and stimulate creativity and production efficiency.

0.3 METHODOLOGY

The work is divided in three main parts.

01 Theoretical framework:

Carry out theoretical research on office space design and third place design, and explore the impact of physical office space and social connection on people and areas. Analyze the characteristics of the social area and infer the space that promotes the social experience

02 Case studies:

Combining a series of survey results and case studies to explore the specific application of color culture in office spaces and social spaces, as well as the experience needs of social occasions

03 Design proposal:

Take the existing project R&D center as a case to create a social hub that meets communication needs

1

BACKGROUND

1.1 The situation of Working during the pandemic

1.2 The impact of Work From Home

1.3 The Hybrid Future of Work



1.1 The statement of Working during the pandemic

Since the outbreak of COVID-19, the social and economic impacts have been heavy and profound for everyone. In this closely connected world, every country is affected by immeasurable influences. When the epidemic spreads around the world, thousands of people face serious health threats, and the only way to stop the spread of the virus is to stop all social and economic activities within the country, [1] which has led many countries to implement compdes. In this case, business activities in all industries have been completely stopped. For individuals, it is necessary to set a safety distance between people to reduce the spread of the virus. People need to change the way they interact with another which is to maintain social distance.

The strict requirements of isolation promoting the **working mode of "work from home (WFH)"**. The spread of the global pandemic has caused many companies to shut down their businesses, and employees are restricted to activities at home. In order to maintain the basic operation of the company and continue its business, companies are forced to start trying to let employees work from home as much as possible. In this difficult situation, although WFH is a limited way, it has also become a necessary business model for enterprises.

[1] Dr. Meenaakshi Kaushik¹* Neha Guleria² (2020), *The Impact of Pandemic COVID -19 in Workplace*

1.2 The impact of Work From Home

For enterprises, the pandemic does impact the global economy and trade in a negative way, but it also **promotes the innovation of digital technology and the application of remote connections** in modern enterprises. For employees, WFH has also given a positive influence. People are more concentrated at home so they could **work in a more efficient way**. Moreover, it is easier to balance daily work and life, especially when family life requires as much attention as possible.

According to Gensler's survey of US work from home 2020, more than 2,300 American workers from 10 different industries have improved their productivity and personal creativity. In addition, a recent McKinsey study declared that around 60% of companies realized that the new online commercial model is as effective as or even more effective than traditional ways.

Although WFH offers a more private environment that allows people to concentrate on work and improve the efficiency of virtual collaboration, most people still want to go back to the office. It showed that only 12% of people want to continue working from home full-time after the pandemic subsides. Most people want to return to full-time working in the workplace or are searching for a dynamic balance between the two different working modes. (Figure 1)

In this special situation, employees who work from home have been forced to live in social isolation and emotional alienation for a long time. The longer they work from home, the more they look forward to returning to the office. The popular reasons employees want to come to the office is meet and socialize with colleagues. (Figure 2) People are **eager to cooperate and collaborate with colleagues** and interact and establish connections with others. [2]

[2] Gensler U.S. Work From Home Survey 2020

DO YOU PREFER TO GO BACK TO THE OFFICE OR CONTINUE TO WORK FROM HOME?

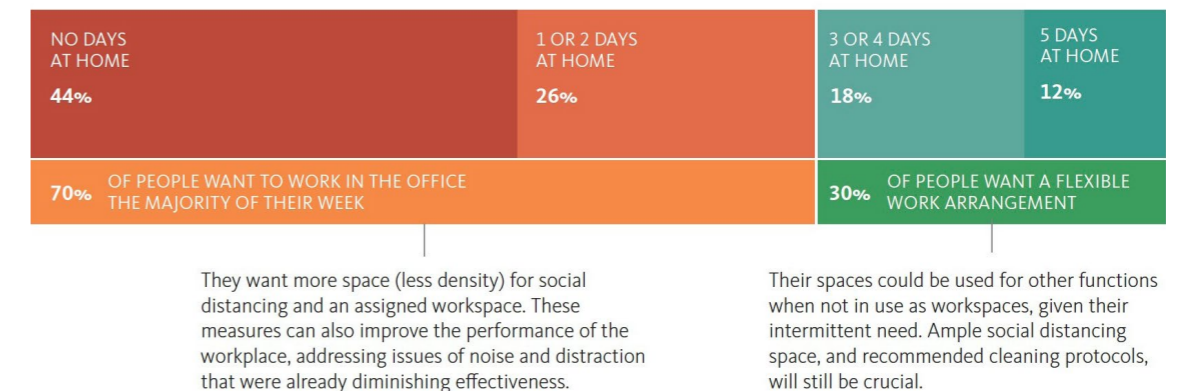


Figure 1: Gensler U.S. Work From Home Survey 2020

The top reason employees want to come to the office: the people.

Respondents were asked to rank what they believe to be the most important reason(s) for coming into the office.

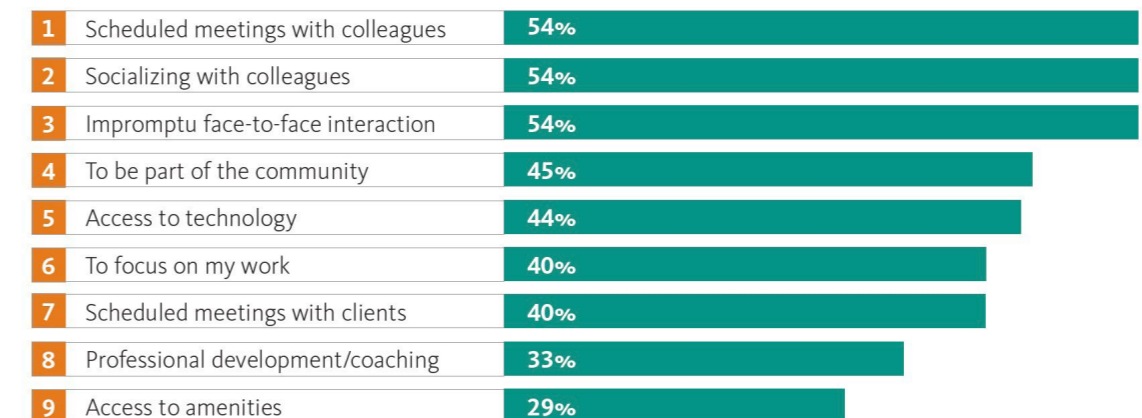


Figure 2: Gensler U.S. Work From Home Survey 2020

1.3 The Hybrid Future of Work

The pandemic has forced employees to start a remote office model, and they have become accustomed to working at home. A familiar and private environment ensures significant work concentration and efficiency, but employees are also aware that the connection between people in the office is the key condition to communication and coordination. Now in the post-epidemic situation, employees are gradually returning to the office. The office has become the most important place for employees to cooperate and socialize. It is a necessary space for face-to-face communication and collaboration with people, which cannot be provided by work from home. So now the majority of workers want to **adopt a hybrid working model** in order to arrange their work freely and independently.

The emergence of this new office model makes people start to think about the role of the physical environment in the office. After several months of remote work, employees realize that a familiar and private environment ensures a high degree of concentration and work efficiency. At the same time, they also deeply understand that contact between people in the office is necessary for communication and coordination. **Cooperation is the most direct and primary connection**, not only the relationship between people but also the connection between people and the office environment. Environmental factors also significantly impact employees, which straightly convey corporate atmosphere and culture.

The office has become the most critical place for employees to cooperate and socialize. Working from home cannot replace the work experience with face-to-face communication and collaboration. This understanding has changed people's expectations of how people work and changed the role of the physical workplace. The post- Covid-19 workplace will shift from where people go to work to where people want to meet, socialize, and collaborate. It will transform from a "work" place for to a **"gathering" area for collective work**.^[3]

[3] Janet Pogue McLauri (2020), *Most People Want to Return to the Office — But They Expect Changes*
<https://www.gensler.com/blog/most-people-want-to-return-to-the-office-but-expect-changes>

2

OFFICE DESIGN

2.1 Defining Workplace Design

2.2. Three different Office Types

2.3 The Influence of Physical Office
Environments on Employees



Designing the best workplace for employees is not a new topic but a widely discussed issue in recent decades (Block & Stokes, 1989; Goodrich, 1986). Office employees spend most of their time in the place where they work, so the physical environment of the office or workplace is essential for establishing a good and healthy working environment.

A good workplace has the most direct correlation with the employees' work experience. The physical work environment has a significant impact on the driving force of employees and the quality of subsequent work.

2.1 Defining Workplace Design

In the BNet Business Dictionary (2008), office design is defined as a "**Workspace** where **conduct task in the most effective way**" (Rising, 2008). Office design refers to arranging the work area in a certain way to work most effectively. Therefore, organizations need to study the work process, so that workplace design could effectively improve employee satisfaction and productivity. Initially, the organization needs to understand the workflow of any department, and then determine how tasks are completed, and finally design the general settings of a specific office as is necessary to support the workflow and employees (Hameed & Amjad, 2009).[4]

The characteristics of office design are office elements, space layout, and space type. The intangible office elements include noise, color, light, temperature, and smell. Tangible office elements include furniture, plants, office equipment, decorative elements, and materials and surfaces.[5]

[4] Sharif, F., & Sharif, S. (2017), *The Relationship of Workplace Design on Employees' Perceived Productivity: A Case of Higher Education Institutions*.

[5] Martin Meinel a,1, Lukas Maier a, Timm F. Wagner a, Kai-Ingo Voigt a(2017), *Designing Creativity-Enhancing Workspaces: A Critical Look at Empirical Evidence*

2.2. Three different Office Types

There are apparent differences in the openness and closedness of different office types, and these differences may have an impact on the perceived level of privacy and the ability to work without interference. Some people define privacy as a dynamic process on the scale of openness and closedness (Altman, 1975; Pedersen, 1997).

According to the most common office environments in The Netherlands, De Been & Beijer (2014) distinguished three types of offices: personal and shared room offices, combined offices, and flexible offices. This **distinction is based on privacy degree, layout, and practical use of workspaces.**[6]

Individual and shared room offices (Figure 3,4)

Individual offices refer to the **cell office** and small shared room office, which connect rooms through corridors. It also has extra space for meetings or other shared facilities. This type of office is more enclosed, leading to higher satisfaction rates for privacy, concentration, and perceived productivity (Sundstrom et al., 1980; Brill and Weideman, 2001).

The combined office (Figure 5,6)

The combined office is an **open or semi-open space**. This type of office has additional **space based on employee activities**, such as concentrated individual work, meetings, telephone calls, and other related activities. Offices often use transparent glass design to create a sense of visual openness and improve collaboration between employees.

Flexible office (Figure 7)

The layout of the flexible office space is similar to that of the combined office, except that the use of workstations is different, and there is **no fixed allocation of workstations**. Therefore, employees can choose any workstation according to

their daily work needs, leading to higher levels of job satisfaction (Bodin-Danielsson and Bodin, 2008). Because of having a flexible workspace, people experience considerable control (Lee and Brand, 2005).[7]



Figure 3: Individual and shared room office environment (assigned workspaces)

Figure 4: Lareau Headquarter, Napierville, Canada

Figure 5: Combined office environment (assigned workspaces; additional spaces for specific activities)

Flexible office environment (no assigned workspaces; all spaces are used activity based)

Figure 6: First Gulf Office, Toronto, Canada

Figure 7: Fullscreen Offices, Los Angeles, US

[6] Iris De Been and Marion Beijer (2014), *The influence of office type on satisfaction and perceived productivity support*

[7] Ajala, Emmanuel Majekodunmi Ph.D. (2012), *The influence of workplace environment on workers' welfare, performance and productivity*. In *The African Symposium*, 12(1), 141-149.

2.3 The Influence of Physical Office Environments on Employees

The physical office environment will affect employees' physical and mental health and directly **influence their work performance and productivity**. Most people spend 50% of their time in the work environment, even longer in the future, which primarily affects their mental state, behavior, ability and performance (Spredominantly, 1994). [8]

Studies have shown that dissatisfaction, ion, disorganization, and other workplace and physical environment are losing employee performance (Carnevale, 1992). Hughes surveyed 2,000 employees from different organizations in 2007. According to the survey results, 90% of employees believe that the quality of the workplace **directly affects employees' attitudes** and **improves work efficiency**. More personnel control and a relaxed environment to meet the needs of employees, and a comfortable office design can motivate employees and improve their performance. (Hughes, 2007).[9]

The degree to which the workplace attracts employees will affect their motivation for performance. The physical environment also affects the employee's error rate, creativity, cooperation with other employees, absenteeism, and work length. Improving the working environment is believed to lead to better results and performance. A better physical office environment will promote employee cooperation and improve their performance.

[8] N.KamarulzamanA.A.SalehS.Z.HashimH.HashimA.A.Abdul-Ghani (2011), *An Overview of the Influence of Physical Office Environments towards Employees*

[9] Imran Naseem, Amna Sikander, Nazish Hameed, Ruqia Khan (2012), *Factors Affecting Employees' Performance: Evidence From Pakistan*

3

SOCIAL HUB

3.1 Why Social Connections Matter

3.2 How to foster Strong Connections in workplace

3.2.1 Introduce the concept of "third place"

3.2.2 The Power of the "Accidental Collision"

3.2.3 Collision in the Workplace

3.3 The features of Social Hub in the Workplace

3.4 Case Studies

Case 04: WeWork San Francisco HQ

Case 05: Axur Cyber Inspection



3.1 Why Social Connections Matter

The feeling of **loneliness and isolation** brought about by home isolation after the outbreak has inspired people to realize that **contact with others is unprecedentedly important**. The greatest expectation of employees for returning to the office is **communication and collaboration with colleagues**. So it is essential to create a social space that can **promote cooperation** among employees, which **connects employees** in this space and supports teamwork.

Social work in the office helps build mutual trust, promotes teamwork, and enables employees to cooperate more effectively. The well-designed design space provides employees with a **tolerant atmosphere**, allowing them to gain inspiration, participation, and connection. These elements are the basis for achieving a **sense of belonging**, thereby strengthening the organization's culture and mission and playing a vital role in attracting and keeping employees.

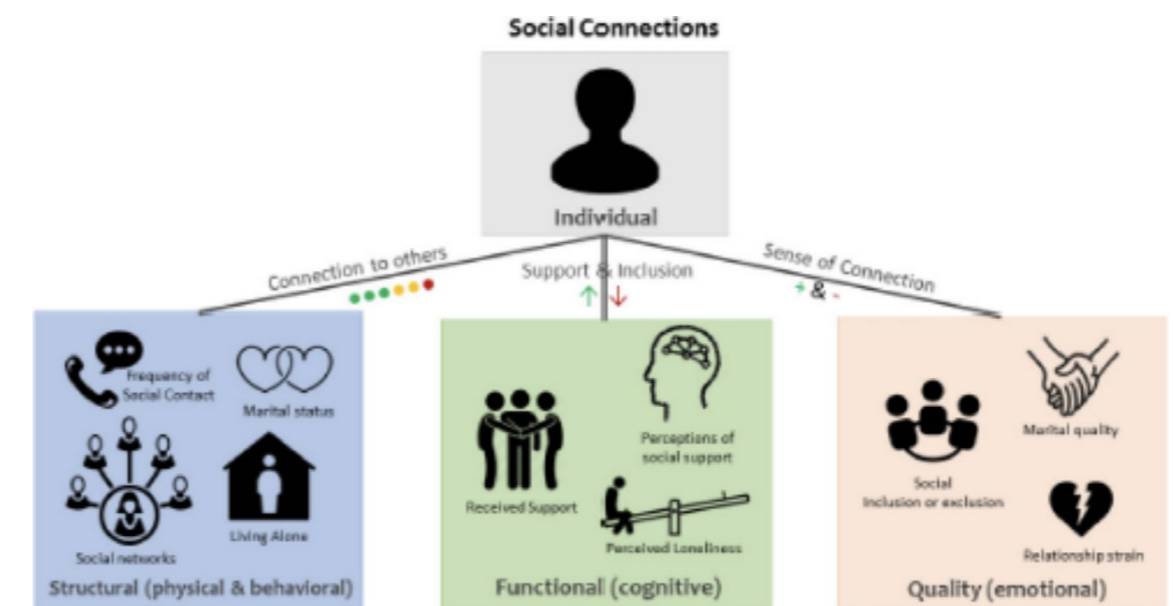


Figure 8: Components of Social Connection

Three major components of social connection(Figure 8):

- (1) structural support by the physical or behavioral presence
- (2) functional support by the resources provided or cognitively perceived
- (3) quality support by the positive and negative emotional[10]

[10] Julianne Holt-Lunstad, PhD1 (2019), *Fostering Social Connection in the Workplace*, American Journal of Health Promotion 32(5)

3.2 How to foster Strong Connections in the workplace



Figure 9: 2 Southbank, Melbourne

3.2.1 Introduce the concept of "third place"

In the 1980s, the American urban sociologist Ray Oldenburg named this term "**third place**". It refers to the social sphere outside the house and the workplace with an unrestrained and welcoming atmosphere where people build relationships. The third place-essentially a public place that helps people spend the day or gathers them. These spaces usually attract employees looking for a comfortable social environment, allowing them to engage in dynamic social interactions at work.

Third parties have been illustrated to play an essential part in **reinforcing community awareness** because they can **balance social class and background** to come together on an equal footing. The third space provides employees with a resting place, allowing them to get rid of the mentality of "only doing business" and participate in leisure activities that help **build relationships and inspire perception**. Different from formal meeting rooms, this kind of place is neutral. The third space attracts workers to enter and encourages them to take a snap from work. The break **allows opportunities for interaction between colleagues and promotes social interaction and connection**. [11]

3.2.2 The power of the accidental collision

When we talk about collisions in the workplace, we are not about interpersonal accidents or personal injuries but accidental collisions between thoughts and people. [12] The term "accidental collision" describes how **employees gather for no specific purpose and propose new jobs or solutions to problems through random social interactions**. [13] It plays a crucial role in **promoting collaboration and encouraging innovation in the workplace**. They are an essential part of a company and team cohesion, job satisfaction, and employee well-being. These occasional meetings encourage employees to assume that they have no plan. **Way to make contact, and can produce unexpected results**. [14]

On the one hand, the collision can **break isolation**, an unavoidable challenge for companies of different scales and backgrounds across industries. The best type of **causal meeting** occurs between people in various departments, locations, or levels. When employees from different teams have **the opportunity to interact**, they understand each other's challenges and contributions better and have a **stronger sense of support**. In this way, colleagues are not isolated components within the company system, but they become **mutual respect and trust**.

On the other hand, collision is also very **helpful for innovation**. Some great creative ideas are formed through the need to jump out of conventional thinking or come into contact with a unique perspective. **Random conversations** create opportunities for cooperation with unconnected colleagues. Therefore, the interaction of different roles in the office can **generate new ideas, expand the meaning of creative thinking, and build a stronger community among team members**. [15]

[11] Melissa Spearman, LEED AP BD+C (2019), *Third Spaces: Workplace Design That Draws Employees In*, <https://www.workdesign.com/2019/07/third-spaces-workplace-design-that-draws-employees-in/>, WORK DESIGN MAGAZINE

[12] CARSON DESIGN ASSOCIATES(2018), *When Collisions in the Workplace are a Positive Experience + How to Create More of Them*, <https://www.carsondesign.com/2018/02/when-collisions-in-the-workplace-are-a-positive-experience-how-to-create-more-of-them/>

3.2.3 Collision in the Workplace

Many Silicon Valley technology giants have been redesigning their offices for a long time to promote "accidental collisions" between employees to **enhance collaboration and innovation**. As reported by the Harvard Business Review, Google's new campus aims to maximize chance encounters, Facebook will place thousands of employees in a one-mile-long room, and Yahoo has canceled mobile work privileges. Samsung has also remodeled its new US headquarters to attract employees into public places with a vast outdoor area, hoping to break the hierarchy and encourage intercultural communication among employees. [16]

Although the company cannot force casual meetings and unexpected conversations to happen, it actively **creates a work environment that promotes accidental collisions and promotes more possibilities for social encounters**.

The collision space is where people gather for **brainstorming and collaboration to break the rigid tension of formal meetings and make human connections more attractive with a comfortable and energetic space**. With its random and unconventional meeting opportunities, the collision space **makes collaboration happen organically at any time**. It is a casual meeting space for employees and customer contact, bringing **smoother interaction and more comprehensive workplace collaboration**. [17]

Water pots have been an integral part of office culture for a long time. They have recently been replaced by new design interventions such as **internal cafes, internal planting, and informal seating**. These **informal environments** provide space for accidental collisions and are considered **an indispensable way to establish working relationships**. This kind of space is **a microcosm of a cultural collision space**, an area where **employees** from different fields, departments, and levels **gather in a non-mandatory way**. Provide an **opportunity for spontaneous dialogue and the most significant opportunity for positive collisions**. [18]

According to the Harvard Business Review, author Thomas J. Allen discovered the negative correlation between physical distance and communication frequency nearly 40 years ago. The company has been struggling for decades to find the balance between public and private spaces that best support collaboration.

When the harvest and inspiration in our open environment collide, we need to retreat to the private space to verify our ideas with in-depth concrete practice. This privacy does not harm collaboration but can promote cooperation. This personal space allows employees to eliminate distractions and efficiently focus on the task, enhancing their ability to create value and contribute to the whole. [19]

[13] Sydney Office Fit-Out: *What is a Collision Space?*

<https://nicheprojects.com.au/sydney-office-fit-out-what-is-a-collision-space/>

[14] Ed Nolan, *How To Create More Collisions In Your Workplace*, <https://www.workdesign.com/2017/04/create-collisions-workplace/> WORKDESIGN MAGAZINE

[15] Jamie Nichol(2015), *How & Why to Encourage Culture Collisions in the Workplace*

<https://zerocater.com/blog/2015/09/10/how-why-to-encourage-culture-collisions-in-the-workplace/>

[16] Ben Waber, Jennifer Magnolfi, and Greg Lindsay (2014), *Workspaces That Move People*, <https://hbr.org/2014/10/workspaces-that-move-people>, Harvard Business Review

[17] Smart Furniture Blog (2021), *Collision Spaces:Trend or Revolution?* <https://blog.smartfurniture.com/what-are-collision-spaces/>

[18] *Is Covid-19 stamping out serendipity in the workplace?*

<https://workinmind.org/2020/05/21/is-covid-19-stamping-out-serendipity-in-the-workplace/>

[19] Employers Council Training (2021), *Collision in the Workplace by Employers Council Training*, <https://www.employerscouncil.org/resources/collision-in-the-workplace/>

3.3 The features of social hub in the workplace



Figure 10: Social Space

The social center is an open and relaxing area, which encourages the collaborative use of all company employees. The social space needs to be a neutral but inspiring environment where people can freely share ideas and create connections. The center aims to promote connectivity and productivity. [20]

The following factors should be considered when designing a social workspace:

- Mixed material

Try to combine various colors, textures, and patterns. The rich color stimulation and attractive accessories will encourage creative thinking.

- Comfortable seats

Studies have shown that a more relaxed posture promotes creative thinking and efficient productivity, so people can consider using more ergonomic furniture and a seat suitable for office sitting.

- Natural light

Brightness can improve employees' mood and productivity, so ensure sufficient natural light to promote the production motivation of employees.

- Space

Reasonably plan and arrange space. Employees need a comfortable room and a clean environment to think clearly.

- Tools

Ensure that employees can have everything they may need when working collaboratively. For example, easy access to technology and power access points are essential.

[20] Penkethgroup, Knowledge Centre, *How social spaces improve creativity in the workplace*
<https://penkethgroup.com/knowledge-centre/social-spaces-improve-creativity-workplace/>

3.4 Case Studies

CASE 01

WeWork San Francisco HQ

Location: San Francisco, US

Designer: Adam Kimmel

Year: 2018

Co-working company WeWork has completed a light-filled headquarters in San Francisco's 61-story Salesforce Tower, featuring mid-century furniture, vibrant rugs, and bold artwork.

WeWork's headquarters occupy the 36th and 38th floor, while the 37th floor in between hosts a mix of employees and members of WeWork. A staircase runs up an atrium to connect the three levels. The Salesforce Tower uses curved glass exterior walls to bring plenty of natural light to the headquarters. The floor is mainly open, which is more suitable for cooperation and social interaction, and the glass partitions some areas.

Public Kitchen



Gathering Place



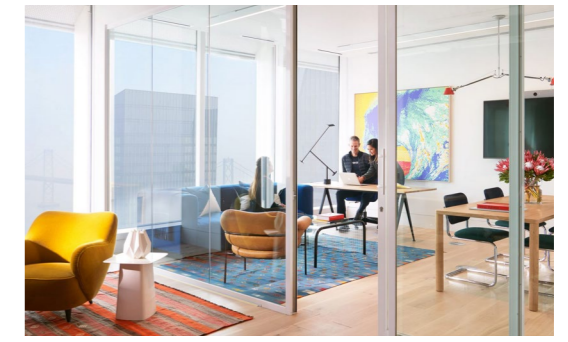
Rest Area



Workstation

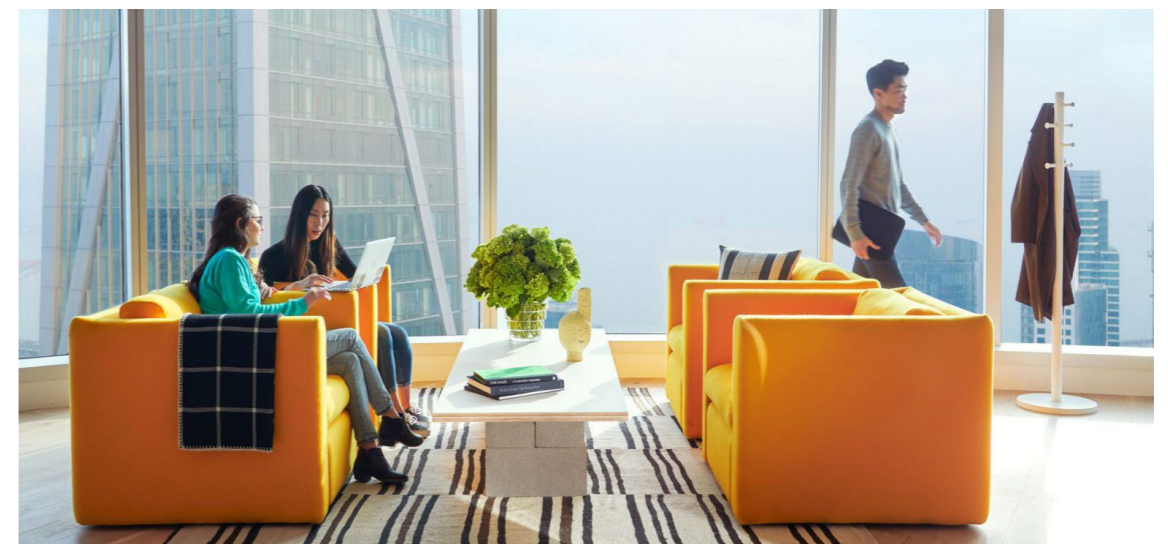


Meeting Room



Colorful furniture is the focal point of interior design. **Pop colors and soft fabrics** create a comfortable and relaxing working atmosphere. There are plenty of areas suitable for social activities in interior design. A group of small dining tables and deep round curved wooden chairs follow the curve of the wall to **create a cafe-like atmosphere**. The lounge is furnished with sofa seats on the carpet. The open kitchen with ample area **makes an excellent social occasion for all employees**.

Lounge



CASE 02

Axur Cyber Inspection

Location: Brazil

Designer: Arquitetura Nacional

Year: 2019



Lounge

The new headquarters in Porto Alegre of the digital security company Axur is an answer to the need to qualify its spaces and increase the number of jobs. On the 15th floor of the building, the new headquarters has privileged views of the city and was born with the premise of not referencing itself in a traditional corporate environment.

The design strategy was to remove the existing plaster lining, leaving the concrete slab and the installations apparent, **renovating a center** in a traditional corporate environment.

Designers use **warm colors and textures** to create plural and comfortable workspaces. The carpeted floor and the paintings by the artist Gusta seek reference in the company's colors. Hanging plastic curtains configure seating areas and direct flows **without blocking the visuals**. The entire perimeter of the floor received fabric curtains, creating a scenic and comfortable ambiance.

Organize in a **fully integrated space**, and **workstations are interspersed** with informal seating and meeting areas. Use **color to highlight the social hub's different atmospheres**, which makes a strong contrast with the workstation.



Coffee Station



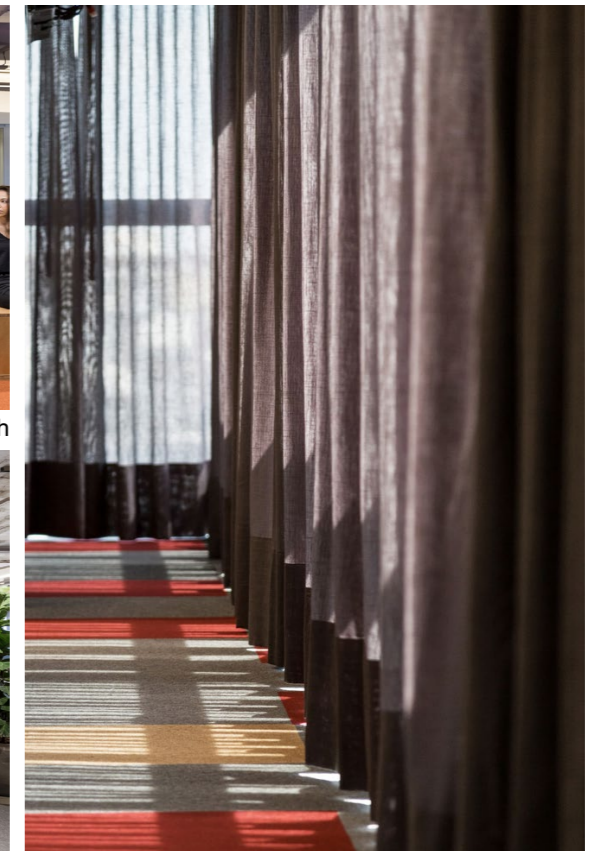
Sofa Area



Bench



Seating



Carpet and Curtain

4

COLOR DESIGN

4.1 The Effects of Color on Human Perspection

4.2 The Effects of color schemes in Physical Environment

4.2.1 Space Perceptionn

Case Study 01: Adidas Home Of Sport

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4.2.3 Reflecting the brand essence

Case 03: Slark Office

4.3 Culture of Color

4.3.1 Color in Theoretical Research

4.3.2 Color In Practice Design

Color is a visual response triggered by a light stimulus. Color is one of the most important and influential elements (Küller, Ballal, Laike, Mikellides, and Tonello, 2006). In interior design, color is regarded as the material that is most likely to change the characteristics of the environment. It is used in workplace design for different purposes of presenting aesthetics and functions. It is to improve the aesthetic quality of the environment and establish the connection between employees and company culture.

It is generally believed that color affects emotions, physiological reactions, and behaviors (Liu, 2016; O'Connor, 2008). A harmonious combination of colors can produce a positive aesthetic experience. An inappropriate color environment may have a negative psychological impact on the staff.

In addition, different people experience color in their way. This response depends on various factors such as their culture, education, and socioeconomic level. Therefore, the color scheme does play an immeasurably important role in the work environment.

4.1 The Effects of Color on Human Perspection

In the work environment, color is a physical factor that affects the perception of space and workers' psychological and physiological feelings.

Research on the impact of color on people focuses on using physiological measurement methods (electroencephalogram and electrocardiogram) to test brain activity and heart rate. It shows that some colors have a more significant influence on heart rate than others (Abbas et al., 2006). The brain is more agitated, and the heart rate slows down when working in a red or colorful room with visual complexity. In the blue environment, the brain is in a stable state, leading to drowsiness and depression (Küller et al., 2009). [20]

The 53 interior designers who voluntarily participated in the study used the questionnaire's aesthetic preference for color schemes to score. This experiment tested four color schemes (Figure 9): two single colors and two similar color schemes. [21]

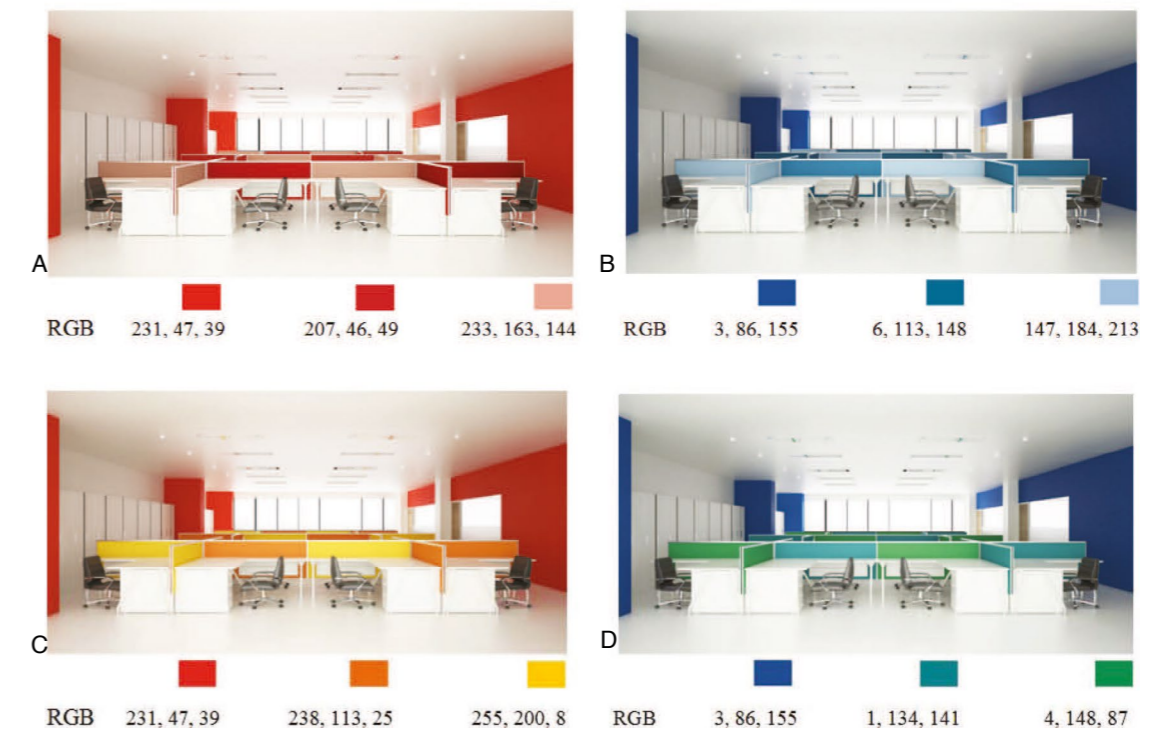


Figure 11: The four simulated working environments: (A) Scene 1 Monochromatic red; (B) Scene 2 Monochromatic purple-blue; (C) Scene 3 Warm analogous color scheme; (D) Scene 4 Cool analogous color scheme

The results show that the purple-blue workplace scores are higher in harmony, calmness, and simplicity. In contrast, red workplaces scores are higher than purple-blue workplaces in brightness, vividness, and warmth. In this survey, the purple-blue environment creates a sense of calm, harmony, and simplicity. The working space of the red scheme is considered to have higher arousal and excitement.

Therefore, Warm colors are considered to have more activating effects than cool colors. On the contrary, cool colors are deemed to create a pleasant and calm atmosphere. Regarding neutrality, too much white can be dull, depressing, and cause visual fatigue (Kamaruzzaman and Zawawi, 2010). A multi-colored workplace can help employees produce more positive emotions (Küller et al., 2006). Still, if too many colors are added and are not harmonious, it will lead to conflict perception (Küller et al., 2009). Reasonable colors Matching can have a positive impact on visual work and increase comfort.

[21] Nattha Savavibool (2016), *The Effects of Colour in Work Environment: A systematic review*
 [22] Nattha Savavibool (2020), *Effects of color schemes on aesthetic response of the work environment*

4.2 The Effects of color schemes in Physical Environment

4.2.1 Space Perception

Color has many uses in office design. It can define the space atmosphere between different company departments, help recognize direction, and shape the character through different colors. (Marberry & Zagon, 1995).

CASE 03

Adidas Home Of Sport
Location: Moscow
Designer: ABD architects
Year: 2016

Adidas HOME OF SPORT is currently located in a new building of Krylatsky Hills Business Park, where it occupies 20,000 sq. m. Three of six floors house offices, two floors accommodate a fitness center, and the Adidas Academy is on the last floor.

The ABD architects were challenged to design a complex of spaces for different functions and purposes, to organize an understandable and comfortable structure and communication for various streams of visitors. In addition, such a brilliant company as Adidas should have a catchy and dynamic office and inspire employees and guests to change everyone's life through sports. While developing the design concept, the architects were guided by the Adidas corporate style and logic of the companies within the Group. The resulted in primary colors and combinations — black and white with bright color accents. Three office floors are made in different colors: orange, green and blue. This facilitates navigation and creates a specific mood and atmosphere on each of the floors.



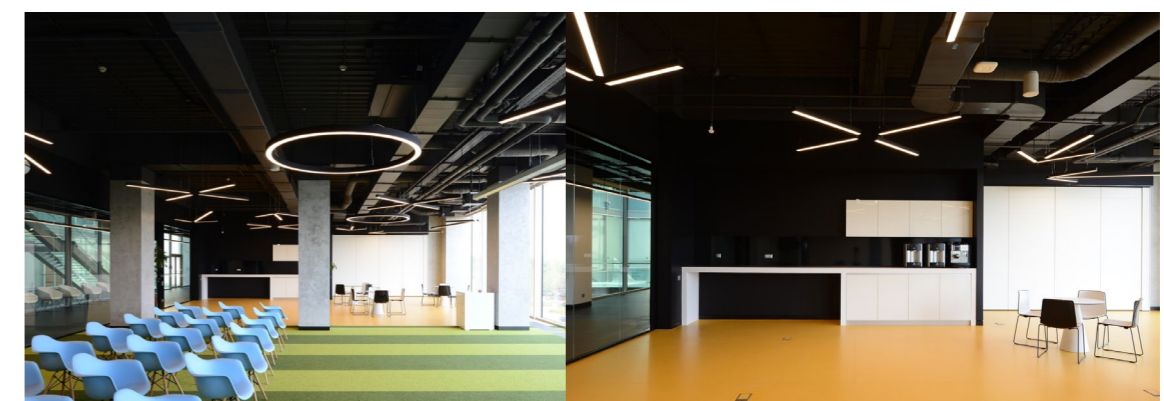
Informal Socializing Area

Corridor



Individual Workstation

Workstation



Meeting Area

Coffee Point

4.2.2 Creating a sense of connection

Due to life background, social experience, and imagination will affect the way people perceive visual stimuli. People have not only different perceptions of colors but also different ways of making connections. Color can also help create the relationship between people and space.[22]

CASE 04

Daniels Spectrum

Location: Toronto, Canada

Designer: Diamond Schmitt Architects

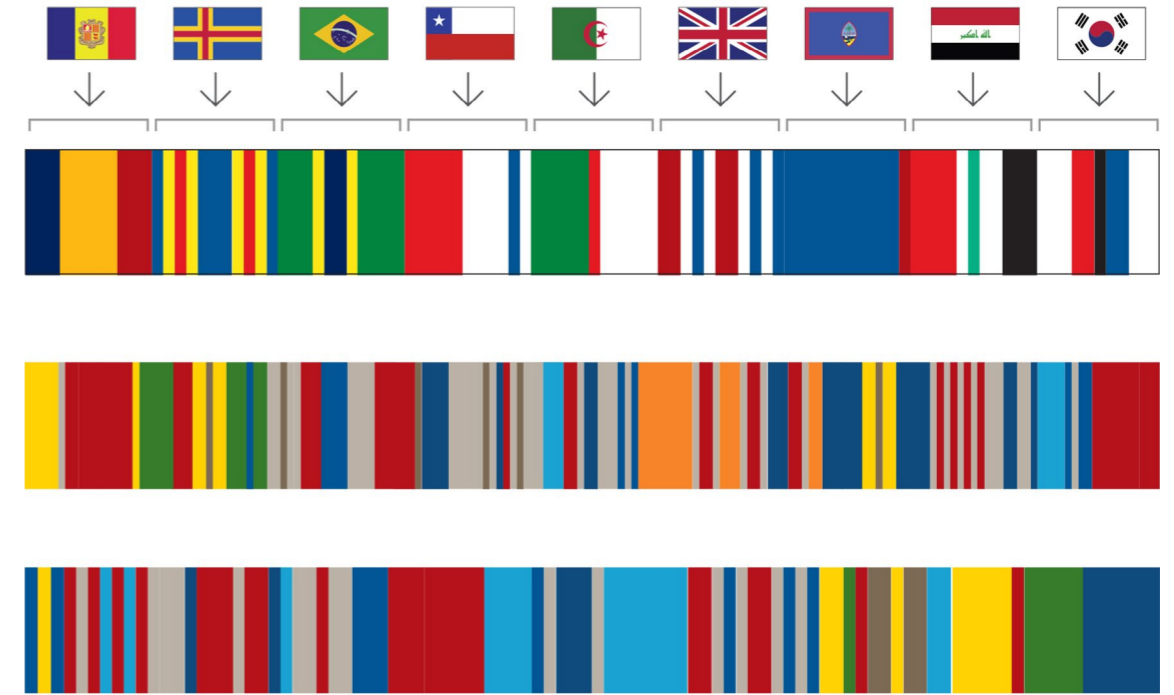
Year: 2012

Daniels Spectrum is one of the most critical initiatives in the revitalization of the Regent Park neighborhood. Dedicated to experience, learning, and innovation, the Centre is becoming the community's artistic, cultural, and social hub. Daniels Spectrum, operated by Artscape, showcases how design helps foster community, cultural expression, and creativity.

Colored bands are central to the design schema. Designers used a unique algorithm to distill the flags of the countries where residents and community members had originated into simplified colored bands to **celebrate this sense of diversity and provide a welcoming atmosphere.**

These bands served to ignite a welcoming feeling and the familiarity of home while also speaking to the community's vibrancy and the arts center.

[23] Udo Schliemann(2020), *The Importance Of Color In The Workplace*
Workdesign Magazine, <https://www.workdesign.com/2017/04/importance-color-workplace/>



Colored Bands



Building Facade



Detail of Facade



Interior Space



Charactor on the wall

4.2.3 Reflecting the brand essence

Color also has the powerful ability to connect people to an organization's brand or vision through ideas, feelings, and associations. Many companies and organizations put a lot of effort into using the built environment as a tool to cultivate the brand awareness of their employees. As a physical space, the working environment visually reflects the brand and company culture through the integration of color experience, graphic design, and other functions.

CASE 05

Slack Office

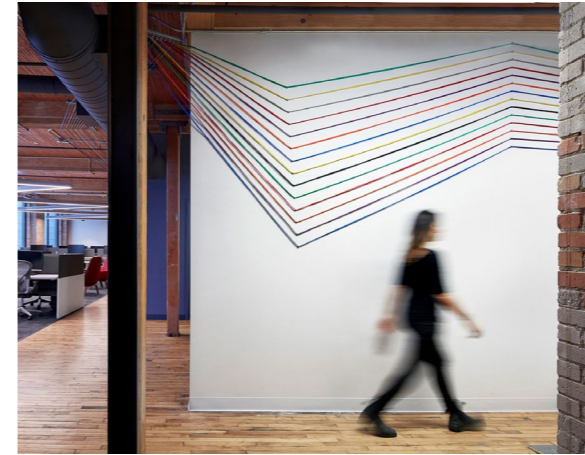
Location: Toronto, Canada

Designer: Dubbeldam Architecture + Design

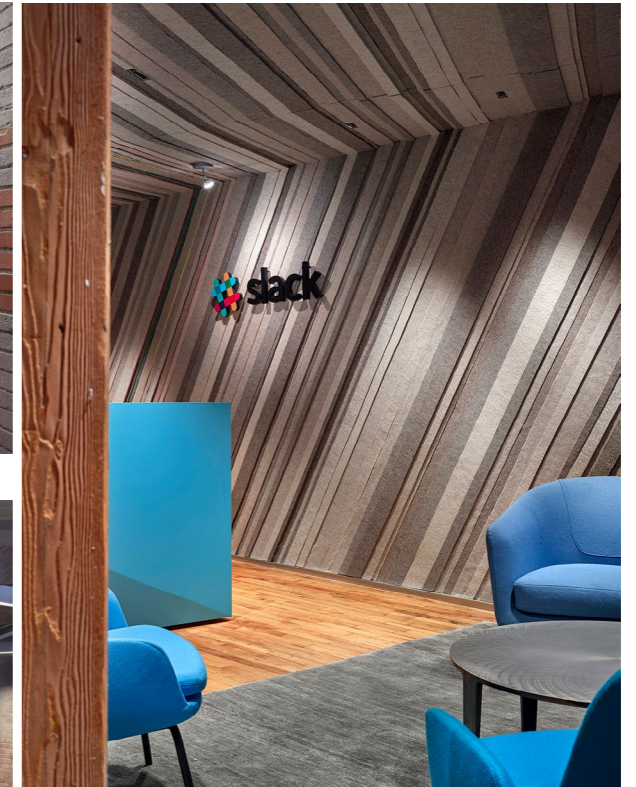
Year: 2018

Slack sought to create an imaginative space that **reflected their company culture** and its relationship with craft and technology for their Toronto location. This mid-rise brick and beam building's interior was redesigned to meet all the needs of a twenty-first-century tech company, inspired by the building's heritage and work culture.

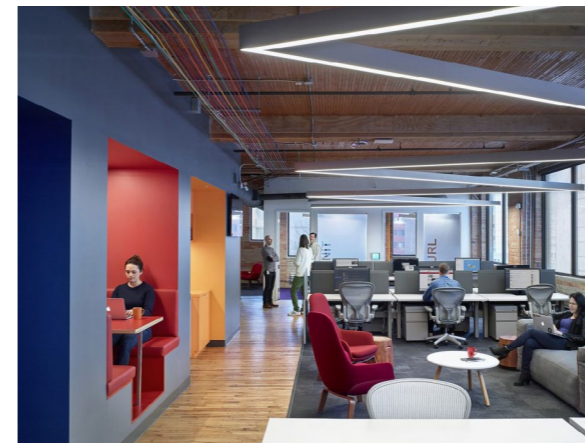
The project team drew from a "threads of communication" concept **using linear geometries** throughout the space. A feature characteristic of the interior is **the bold, contrasting pops of color that demarcate distinct areas**, including solitary work stations, phone booths, break-out meeting rooms, a staff lounge, and a sleek executive boardroom. **Each zone corresponds to a single color that comprises Slack's branding, reinforcing company identity while also providing visual interest and relief to the otherwise yellow tones of the brick and wood interiors.**



Linear geometries



Reception



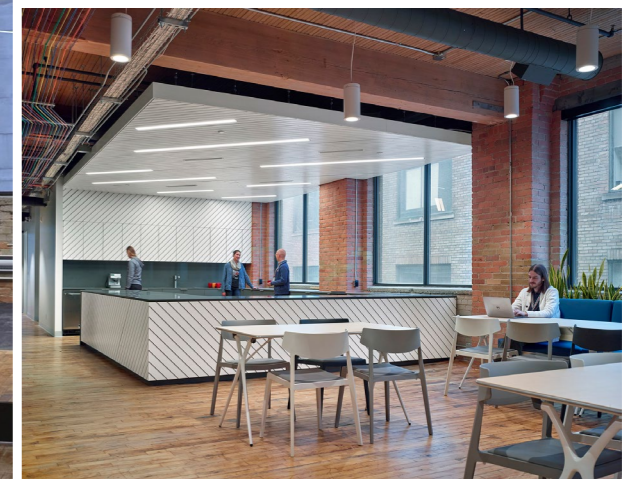
Workstation



Meeting room



Brand Display



Coffee Area

4.3 Exploring the Culture of Color in Workplace

For centuries, color has been the subject of many reflections, one after another combined with social, cultural, economic, and technological changes over time. From the middle of this century, color began to undergo essential changes in industrialized society. Since the end of the 1950s, color has gradually played a vital role in mass communication. With the gradual transfer of interests from production to the market, it has become one of the attractive languages of commodities..(Birren, F. 1956)

Ettore Sottsass put forward a new definition of color design. "For an imaginalist Bauhaus against an imaginary Bauhaus," published in Casa e Turismo in 1956, showed that color is an intangible design factor and actively participates in environmental perception. Shift people's attention to all non-material parameters of space. In this sense, they reveal the need to reflect on the possibility of tracing new ways of intervening in the quality of artificial space.

Color as a design function(Figure 10)

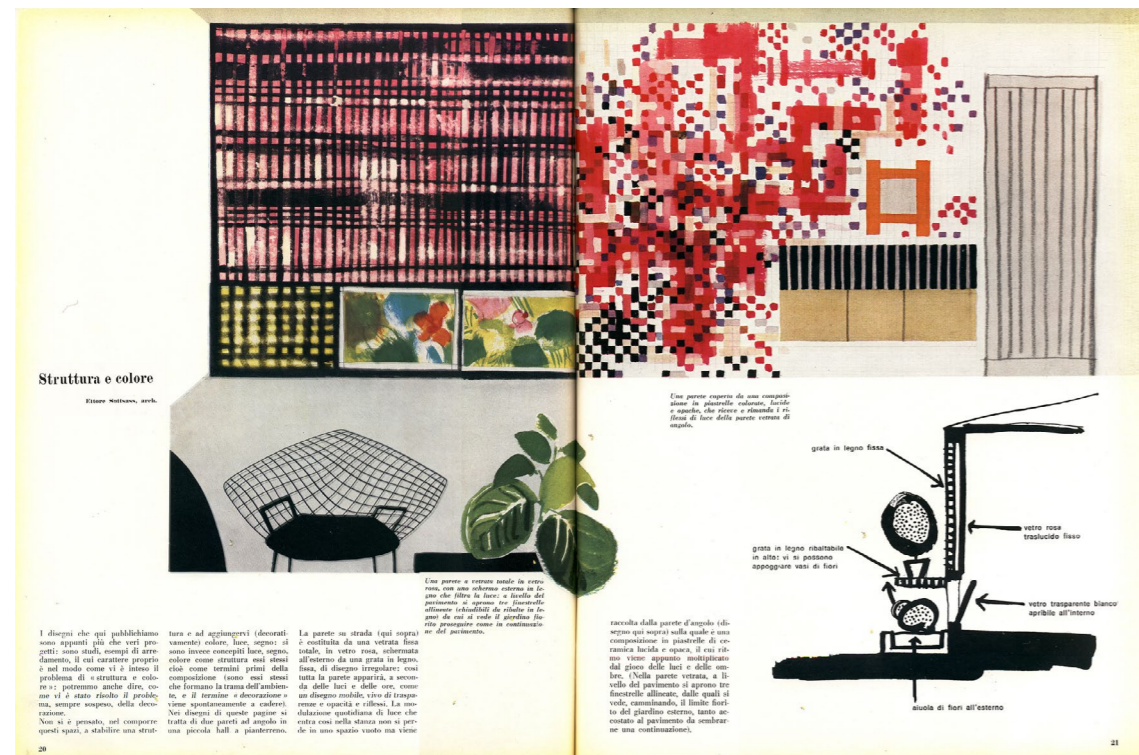


Figure 12 : Ettore Sottsass jr., "Structure and color", article published in 1957 in Domus, 327

4.3.1 Color in Theoretical Research

In the early seventies, other forms of narrative on color promoted a new chromatic culture. Not only through theoretical or ideological assumptions but also by describing the objective implications. The use of color in design practice describes its ability to intervene in reality actively.

Monte Fiber Design Center (CDM)

In 1973, Montefiber, a synthetic fiber manufacturer of the Montedison Group and an Italian chemical leader, established the Montefiber Design Center (CDM) to conceive in the textile field and develop innovative products and services. CDM research is oriented to **identify the non-material** factors related to the different perception levels of the space, tools, and codes. Which controls the origin of prevised design, including information, semi-finished objects, reference manuals, and new issues, which can guide the designer, and the industry produce. (CDM, 1975, p. 41).

Primary designs

The design is intended as a service provided by **producing raw materials** for the processing industry market. They define these studies as "primary designs." The primary design **shifts the focus from form and function to perception of the environment**. It considers the influence of **intangible elements** related to the **physical perspective** for the first time and distinguishes them from the complex phenomena of the structure.

The work of developing a culture of spatial sensory quality starts with color. Among the intangible quality factors, it becomes a priority and strategic element.



Figure 13: pages and tools from the manual for professional use Colordinamo by Andrea Branzi, Clino Trini Castelli and Massimo Morozzi, 1976. The pre-synthetic color, published by CDM-Centro design Montefibre

Publications and manuals on color in primary design

To spread the color culture in the industry, CDM rethinks the design method, aiming to **provide guidance, service, and support for selecting color code**. The plan intends to provide tools and instructions to coordinate the furniture industry with the chemical industry to solve color problems. These manuals (Figure 11) are considered “**color design**” as **working tools** created by Branzi, Morozzi, and Trini Castelli, with Alessandro De Gregori and Franco Brunello (Branzi, Trini Castelli & Morozzi, 1976) published as a guide for industry operators and designers.

It starts by analyzing the social, cultural, psychological, and physiological effects color can have on any product. It is not intended to provide solutions or constitute predictive tools for specific ergonomics or psychological problems. Each manual is supplemented with the treatment of particular topics, describing different periods’ trends and color performances.

4.3.2 Color In Practice Design

Olivetti synthesis by Ettore Sottsass

In 1958, as Italy’s most crucial typewriter and computer manufacturer, and computer manufacturer, hired Ettore Sottsass as a design consultant. He developed the first Italian mainframe computer and several different typewriters, office equipment, and furniture. His style became clearer at Olivetti, which brought bold colors, forms, and shapes to office equipment. He boldly combines industrial design and pop culture to surpass traditional functions and structures as a creative designer.



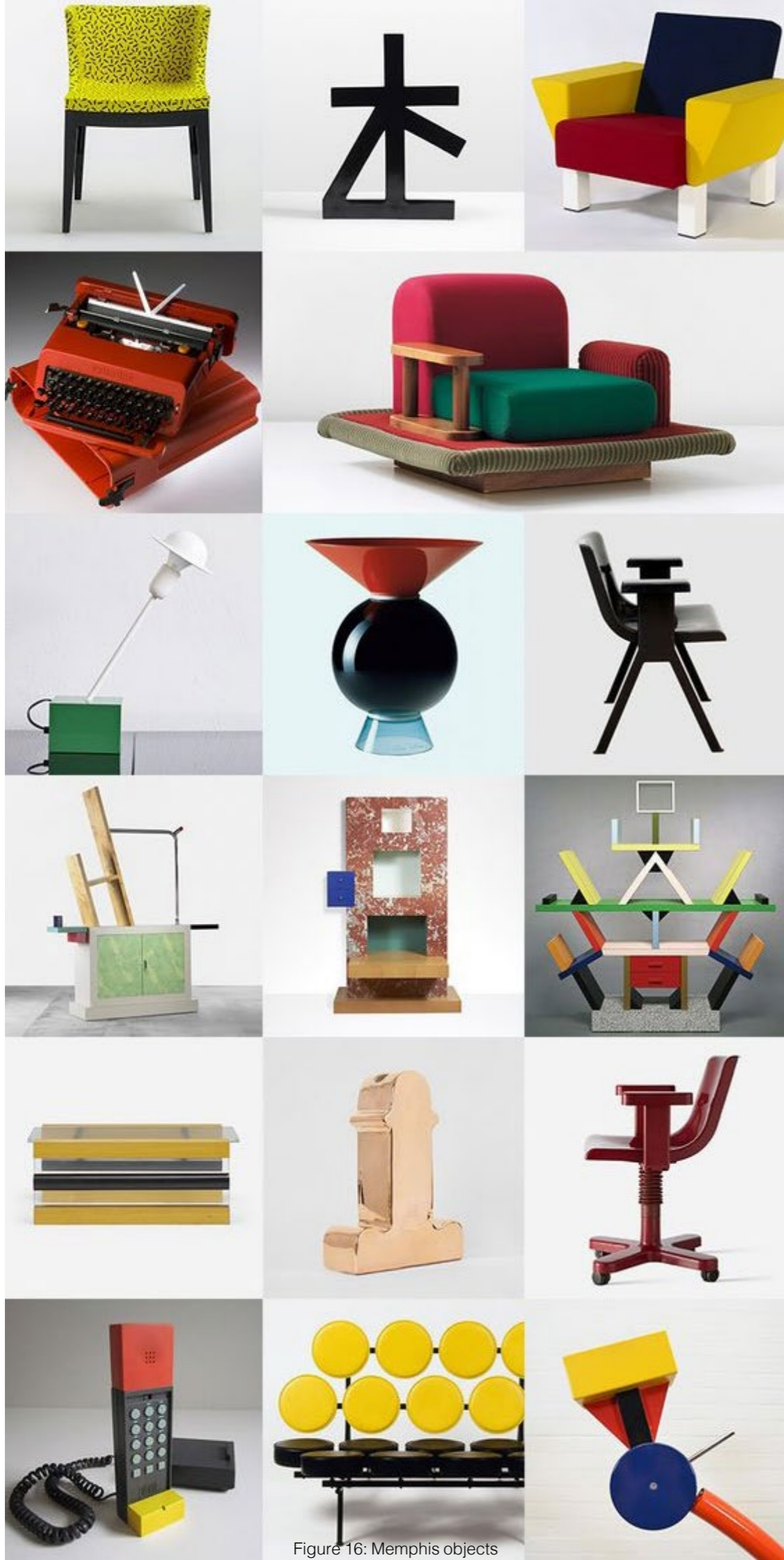
Figure 14: Olivetti synthesis

Figure 15: Olivetti Synthesis Combinations

In the 1970s, Ettore Sottsass designed a new complete furniture system named **Olivetti Synthesis** (Figure 12). According to the system, **modular components can be freely combined** (Figure 13). **The color scheme is one of its most influential and innovative features**. The entire marketing activities of Sottsass and Olivetti are based on color, using color schemes to introduce the many innovations of the system [23].

In this way, the innovative application of colors and materials significantly **improved the relationship between users and indoor working spaces**. This expression explores how colors and materials affect the relationship between products, indoor spaces, and users.

[24] Enrico Morteo. (2016), *System 45 From the conceptual work to the concept of work*, <http://kvadratinterwoven.com/sistema-45>.



Ettore Sottsass and Memphis Group

In the 1980s, people began to use the latest technology to improve product quality and enhance aesthetic effects by placing innovative color items. The color is no longer strictly related to the product's life and is distinguished from the characteristics of the material, and its autonomous expressiveness is recognized.

In that period, Ettore Sottsass became the leader of the Memphis design collective using bright colors, solid forms, and patterns created a postmodern aesthetic (Figure 14). The Memphis team expanded a new way of thinking about colors by using a range of colors with a strong visual impact to suggest objects. Identifying color trends becomes a tool for predicting product expectations because it can reconcile personal and objective needs.

Action Office by Herman Miller

During the same period, Herman Miller also carried out a series of innovations in office design.



Figure 17: Action Office 1

Action Office 1 (Figure 15)

In 1964, Herman Miller introduced Action Office, a flexible combination of desks, countertops, and partitions. It is the creation of **Robert Propst** in collaboration with George Nelson. Propst was one of the first designers who believed that office work is mental work and that mental work and the environment enhance a person's physical ability.

Action Office is not a piece of furniture or a group of furniture, but a **proposal for a brand new space**. Action Office I is **ideal for small professional offices** where employees often interact with the same furniture. It features desks and working areas of different heights, **allowing employees to move freely and flexibly to assume the most suitable working position for the task**. Most importantly, it is colorful: green, bright blue, navy blue, black, and yellow. This **kind of office is brightly colored, generous and straightforward, and aims to enhance the freedom of movement of employees, enhance privacy, and liberate employees**.

In this sense, Action Office may be the **first modern concept to enter the office**. The first one truly combines design aesthetics with progressive ideas about human needs.

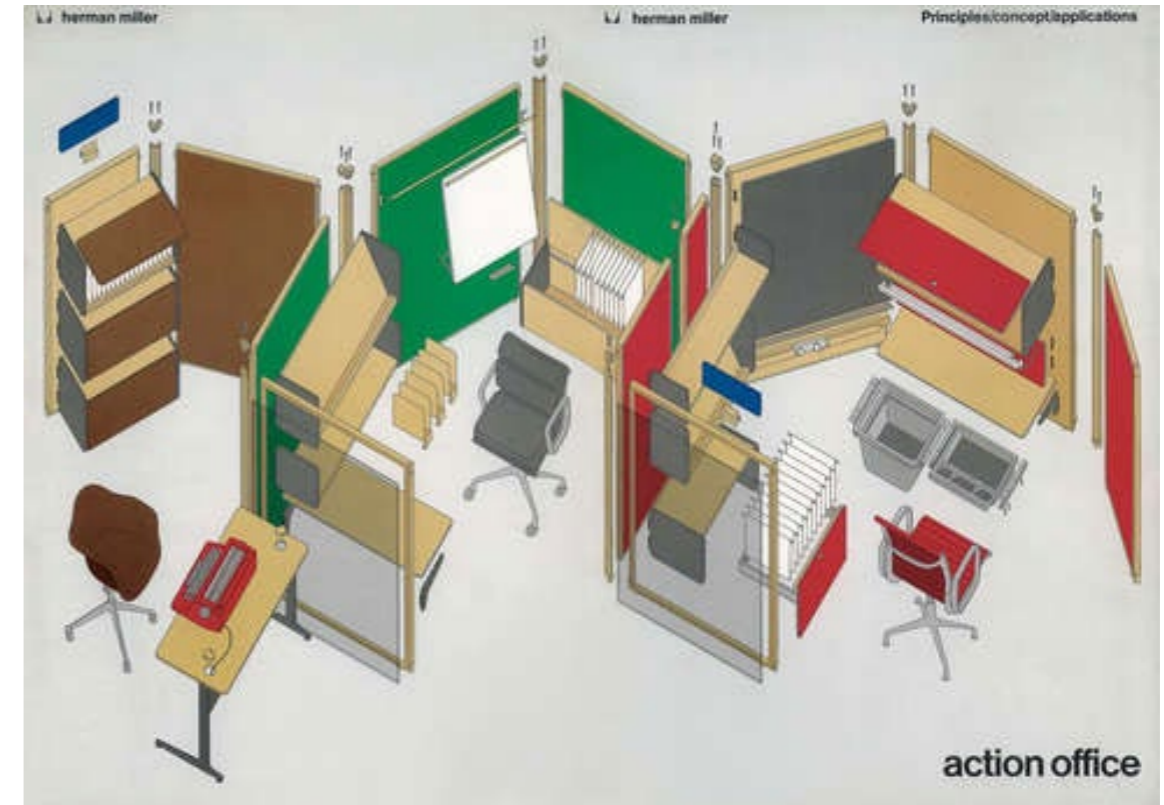


Figure 18: Action Office 2

Action Office 2 (Figure 16)

However, from the late 1960s to the 1970s, the demand for office space increased rapidly, and companies needed cheaper, more flexible, and smaller office appliances. So Herman Miller redesigned the busy office to make it smaller and lighter. The second-generation Action office aims to enhance privacy further.

Action Office II is based on mobile wall units that define spaces. The unit also supports **multiple workstation furniture** that benefits from vertically oriented workspaces. These components are interchangeable, standardized, and easy to assemble and install. More importantly, they are very flexible, allowing employees to **adjust the work environment according to changes in needs**. Action Office II is Propst's attempt to turn the wishes of office workers into reality. "A workstation," which consists of three walls, is obtuse and movable, and the employees can arrange to create any workspace they want.

The Action Office II series has achieved unprecedented success and is often referred to as **the birth of the modern cubicle**.



Figure 19: Masterpieces of Eames

When it comes to the creative use of color, it has to mention the contributions of Charles and Ray Eames. Ray Kaiser Eames worked mainly as a painter before marriage. For her, color is an aesthetic technique and a communication tool that conveys information about objects, spaces, and volumes. They inject color into the design, and their unique creations bring a whole new look to the furniture (Figure 17). Vitra still manufactures their furniture and home furnishings in Europe and Herman Miller in the United States.

Designs for life

This motto shaped the transformation of design in the 1940s and 1950s. It means a revolution in form, an exciting visual language, and its two leading promoters are Charles and Reims. They use a modern and sustainable concept of “providing the best service to the most people at the least cost.” They have adopted this idea in every work, especially the famous **single-shell form** in 1950 with the Molded Fiberglass Chairs (Figure 18).



Figure 20: Charles and Ray Eames with Eames Molded Fiberglass Chairs

Because of the use of this material, they discovered the characteristics that completely **changed the aesthetics of the furniture industry**: on the one hand, it is malleable. On the other hand, it is solid and durable. Charles and Ray Eames used **curved plywood chairs and molded fiberglass chairs** to create more than just the “appearance.” They are about creating a better idea. The design is to **meet the real needs** of ordinary people and bring simple pleasures to exquisite life.

Charles and Ray Eames combined design concepts with artistic aesthetics, imagination, and rational thinking to create some of the most influential lean, modern and practical furniture of the 20th century[24].

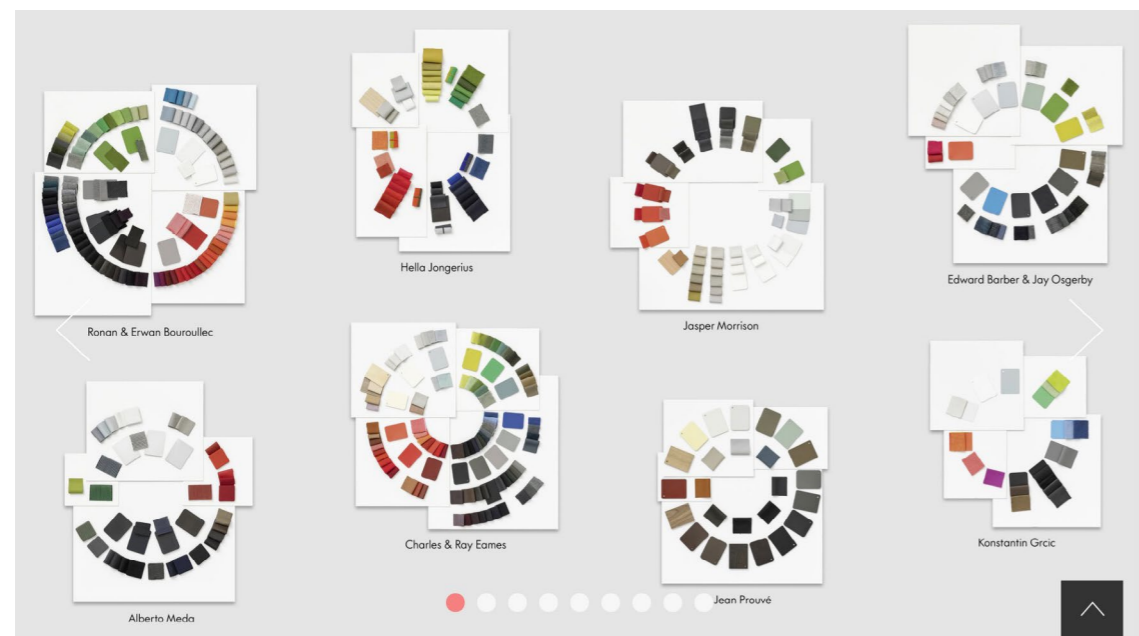


Figure 21: Designer Color Palettes

Vitra Color & Material Library

The connection of Charles and Ray Eames with Vitra starts from the corporation, which lays the company’s foundation as a furniture manufacturer. In the decades of cooperation, Charles and Ray Eames left behind classic products circulating in Vitra and a profound and lasting influence. Even today, their design philosophy has dramatically shaped the company’s values, direction, and goals.

Vitra has reached friendly cooperation with a series of well-known designers. Each designer has developed their color palette(Figure 19) in the Vitra color and material library according to their aesthetics, design methods, and furniture shapes. The library guarantees that almost all shades, surfaces, and textiles can easily combine or provide a matching color pattern.

The color and material library(Figure 20) include textiles, leather, and the colors and textures of solid materials such as wood, metal, and plastic. All the elements constitute a system, through free selection and matching, to create countless related combinations. This setting has typical brand recognition, making a distinctive Vitra characteristic.



Figure 22: Vitra color& Material Library

[25] DESIGNN WITHIN RESEARCH, *Charles and Ray Eames*, https://www.dwr.com/designer-charles-and-ray-eames?lang=en_US

5

PROJECT

5.1 The case of previous project

5.2 The design inspiration

5.2.1 De Stijl

5.2.2 Case Studies

Case Study 06: HOGOSO design commune studio

Case Study 07: ALIBABA Changping Offica

Case Study 08: Schoeller SI, Reutlingen

5.3 Project development and detail

5.3.1 The concept of social hub

Moodboard

5.3.2 Spatial Design

Layout

Technical Drawing

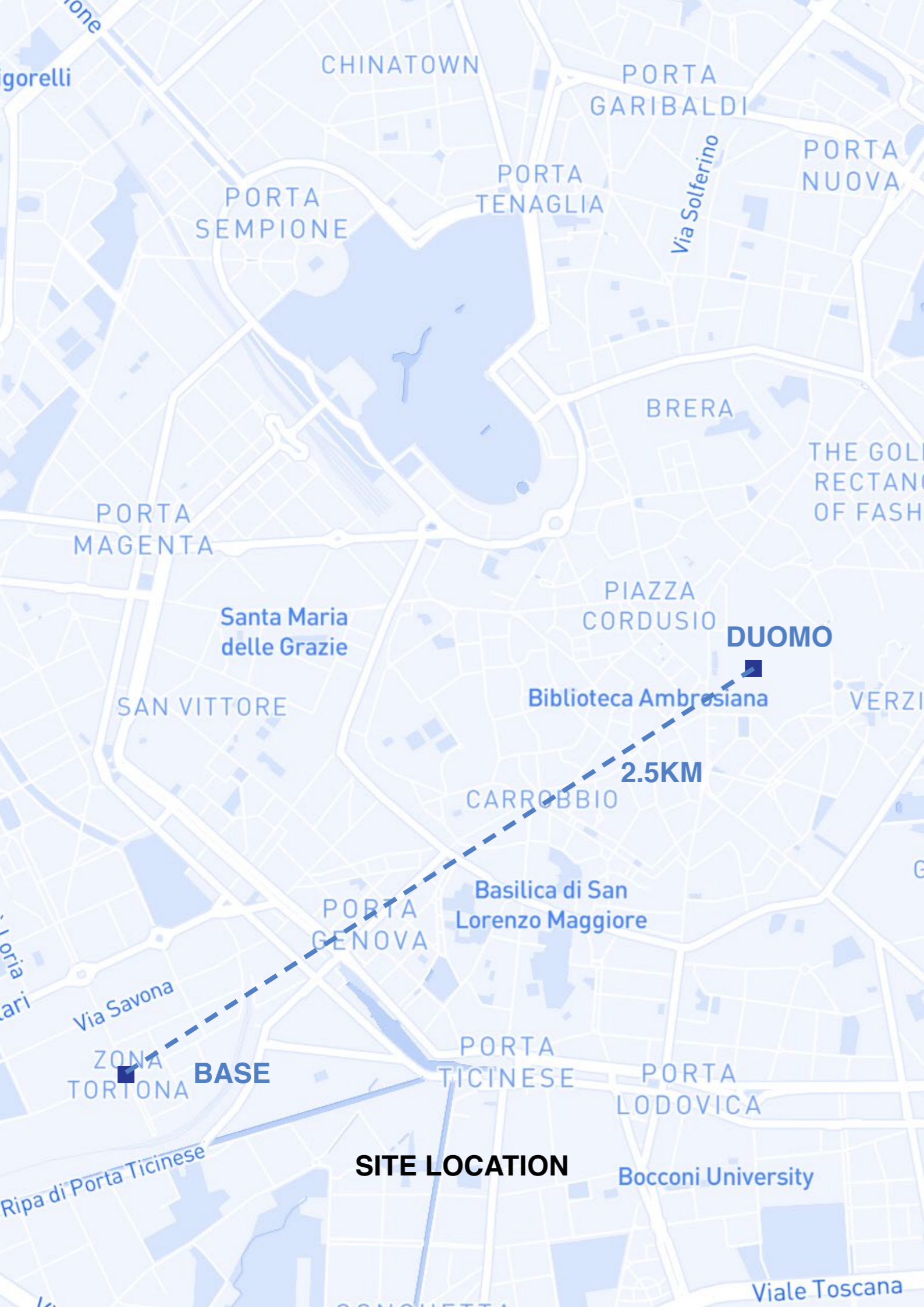
Activities

Space Strategy

5.3.3 Space Experience

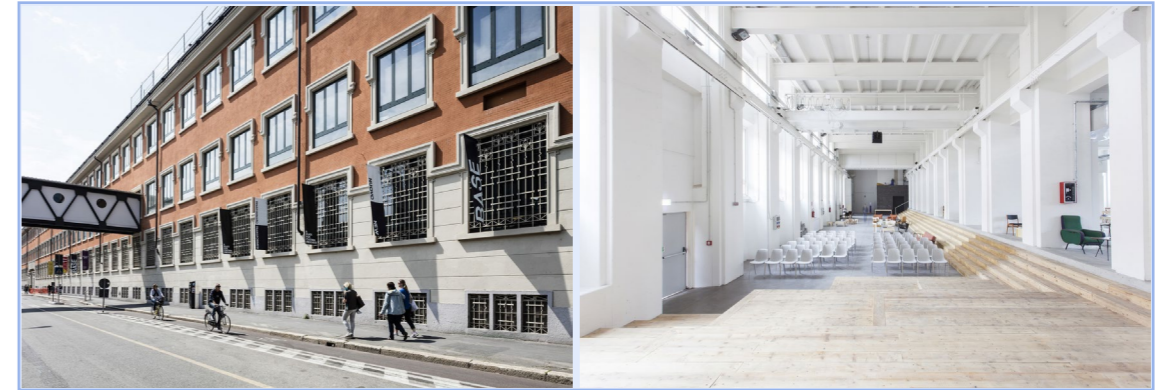
Material Board

Lighting Solution



5.1 The Case of Previous Project

Site - BASE MILANO

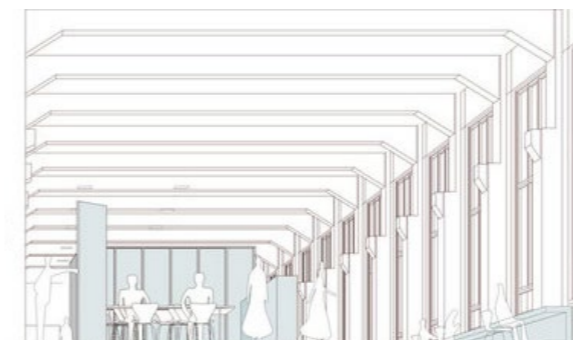


Exterior view

Interior view

BASE is located in a post-industrial zone Tortona, known as zone Solari before. It is a project for cross-pollination between the arts, enterprises, technology, and social innovation.

Today the project is manifested in a 12,000m² space dedicated to exhibitions, performances, workshops, and conferences, with a large studio and artists' residence. In the mission to generate new reflections for 21st-century cities, establish new connections between different arts, disciplines, and languages, and boost Milan's status among the great capitals of creative production.W



INSIGHT

- LARGE SCALE OPEN SPACE
- SUFFICIENT NATURAL LIGHT
- ELEGANCE ATMOSPHERE



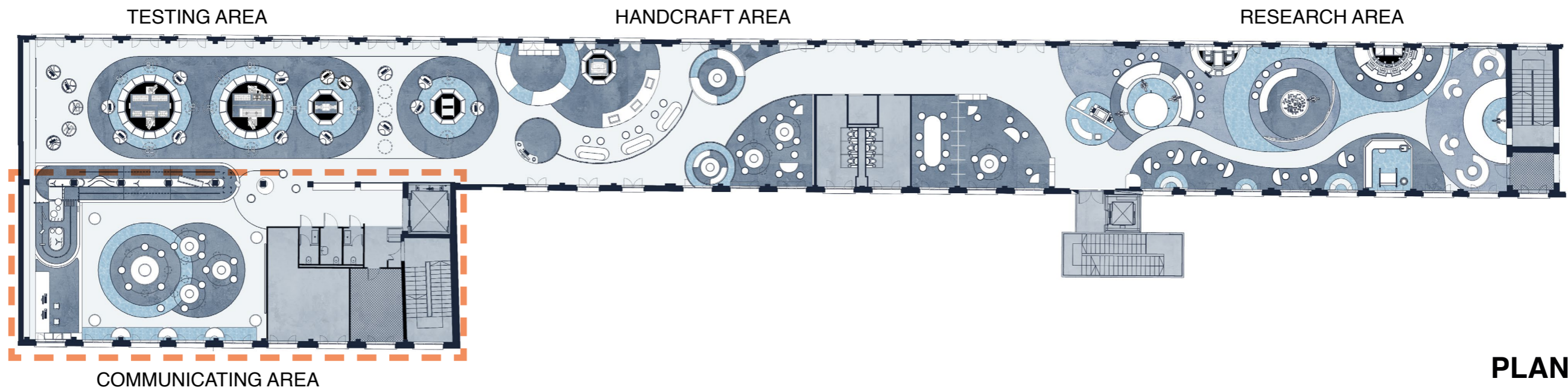
Previous Project - Return to Earth

The topic of the design proposal is Mechatronics and Engineering and the project called Return to Earth. It is a design center for car models. The project sets the employees to be star chasers who compare the process of creating products to galaxy exploration and the workplace like the spaceship.

This space contains a research area, model-making area, testing area, and communication area. Based on activities, different working settings are applied to meet the specific needs of employees. The plan form adopts the concept of galaxies and sets up a layered surround-placed functional space to connect various areas.

This project chooses white and blue as the primary colors to create a pure and clean atmosphere. Many solid materials, like metal and plastic, have been selected to highlight the high-tech and calmness of the office space.

Expanding Design - Social Hub



PLAN

Reason for choice

The area selected for the deepening of the design is the communication space of the office space. With this ample open space, the original proposal is only a centralized display and assembly area. Its single function cannot meet the needs of employees who returning to the office after the pandemic. In addition, the fixed organizational form of the space cannot be effective in promoting collaboration among employees.

Combining the strong emotional and spatial perspective needs of employees that connect with others, the new proposal transforms it into a social hub for employees.

5.2 The design inspiration

The avant-garde art movement has had enormous influence since the 19th century. Boldness, innovation, progress, experimentation are closely related to this movement. Such a group of artists break precedents and boundaries, challenge existing popular aesthetic standards, and create new art forms. These art movements have an important influence, among which De Stijl and Plasticism have special significance on my design development.

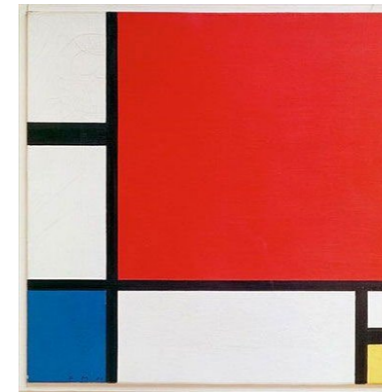
De Stijl

De Stijl movement promotes an essential aesthetic centered on geometric forms and primary colors. It is a highly rational expression and is keen on the composition effects of geometric shapes, spaces, and colors.

Artists expounded neo-plasticism relies on color, line, and form to convey universal and absolute truth. Neo-Plastic compositions juxtapose horizontal and vertical lines and the primary colors of red, yellow, and blue against the non-colors of black, white, and grey to produce timeless balance, convey the harmony behind reality, and simulate the opposing forces that constitute nature and reality.

Design approach

Use geometric forms and primary colors as the essential design elements to express the abstract and simple beauty and change the way people see the world and experience the environment through highly rational art expressions.



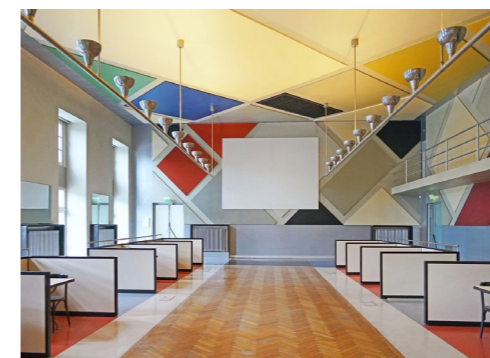
Composition with Red Blue and Yellow
Artist: Piet Mondria



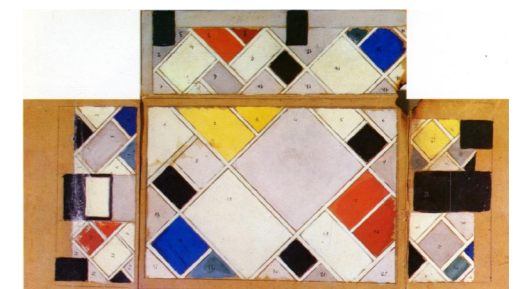
Red and Blue Chair
Artist: Gerrit Rietveld



Rietveld Schröder House Artist: Gerrit Rietveld



Cinema-dance Hall Artist: Theo van Doesburg



Insight

- Geometric forms
- Primary color and noncolors
- Composition juxtaposes of horizontal or vertical volumes
- A legible expression of the interior



CASE 06

HOGOSO design commune studio

Location: Ningbo, China

Designer: HOGOSO DESIGN

Year: 2020

This project is Homoso's office space in Ningbo, with a total area of 317 square meters, inspired by Mondrian, exploring the geometric beauty of the room.

The overall space adopts a minimalist design, highlighting the human sensory experience. It is mainly composed of various simple design elements, such as vertical and horizontal volumes, rectangles, and squares, to create "beauty in the form" with geometric shapes. Bold and bright color embellishments are also the characteristics of this space. The general area chooses white to create a clean and pure environment, and the furniture chooses bright colors to create a visual focus. The form and spatial geometry are more prominent with the exaggerated color contrast and collision, looking for the resonance between concrete things and abstract emotions.





CASE 07

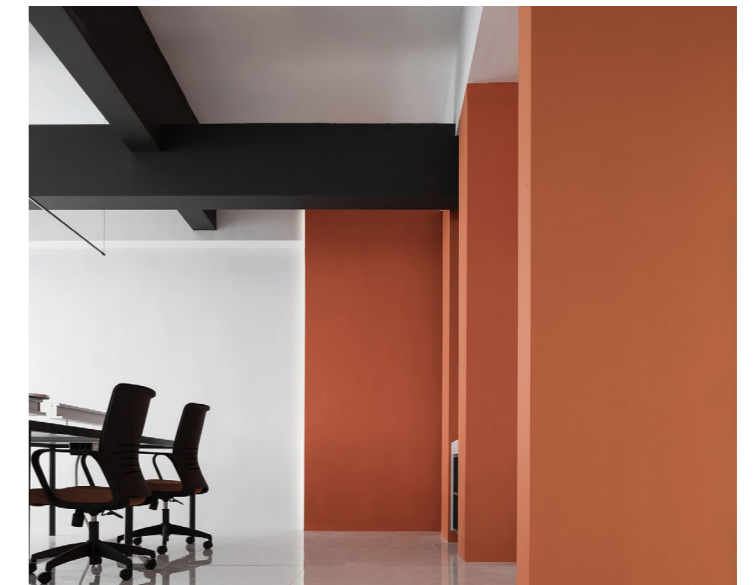
ALIBABA Changping Office
Location: Dongguan, China
Designer: ONE DESIGN
Year: 2019



This project is a 200m² workplace of Alibaba in Changping. The design tries to use color to create emotions and spatial experiences to make a relationship with users.

Orange is the standard color of Alibaba enterprise. The use of orange and white to construct spatial senses and visual impact creates a relaxed and energetic, scattered order. Using the interspersed and arranged blocks and fresh colors to create a stylish, relaxed atmosphere, within the work rhythm is comfortable, and the work pressure is decomposed.

Workers can break down into rest and negotiate areas in the office area and communicate or read here in their spare time. The whole area tries to break the rigid and severe image of traditional office space, giving the most significant degree of autonomy to the office of the people, which releases the office experience and inspires different office cultures and appeals.



CASE 08

Schoeller SI, Reutlingen

Location: Reutlingen, Deutschland

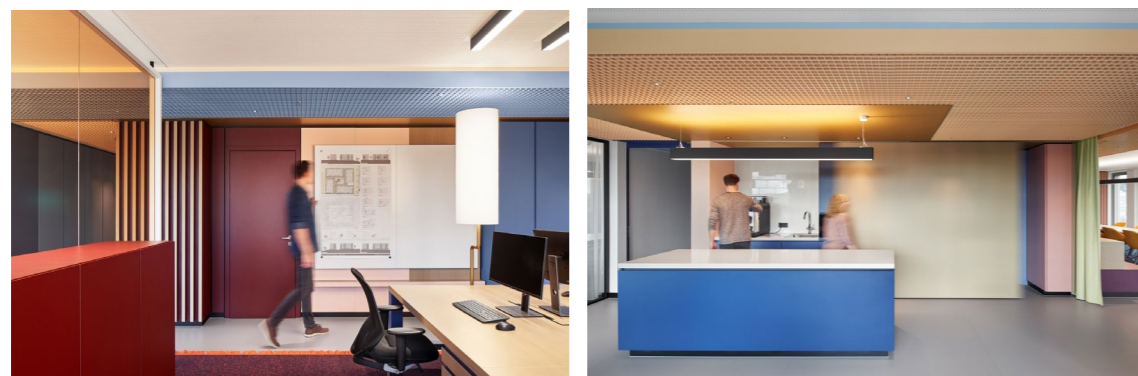
Designer: Ippolito Fleitz Group, Stuttgart

Year: 2020

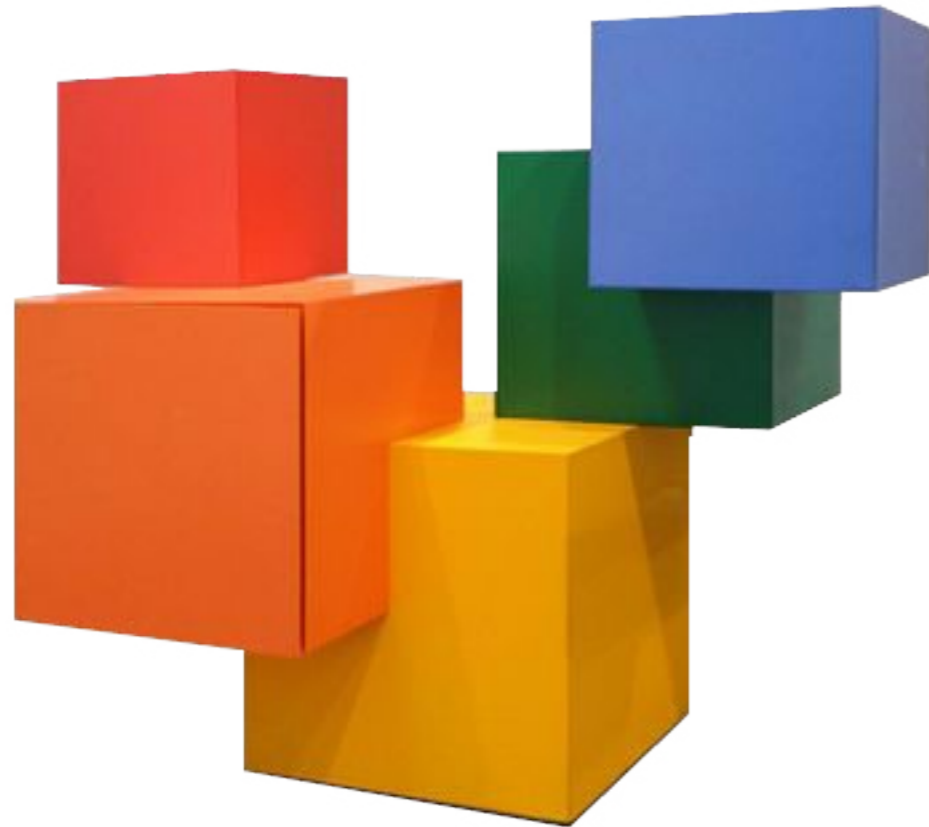
After months of working from home, Schöller SI reimagined their workplace as a space for co-creation, collaboration, and communication for the real estate developer employees in Reutlingen.

Warm colors, an exciting materials mix, and a natural look define this two-story office. It not only creates a pleasant working atmosphere but also reflects the values of an innovative project developer. The clarity of the interior is multifaceted: Tinted glass partition walls, pale curtains, linear storage units, and fringed carpets zone the different areas, giving the space a rhythm characterized by overlays, reflections, transparency, but also by density. Accordingly, both open-plan and more intimate sections can arise depending on different work situations.

The color tone depends on the field of work and forms an optical unit with carpet, ceiling, and a wall section in the hallway. In this way, employees at their workstations are taken on a visual journey to create individual connections, discover new things time and time again, make the space their bit by bit, and identify with it properly.



5.3 Project development and detail



5.3.1 The concept of the collider

“Composition of volumes”

The collider is a social hub to promote interaction and collaboration between employees. The objective is a social center for workers who return to the office after the epidemic. The purpose is to enhance human connections and interactions to increase employee communication and collaboration and strengthen employees' sense of belonging and happiness. At the same time, it conveys the company's corporate culture and reinforces the link between the individual and the company.

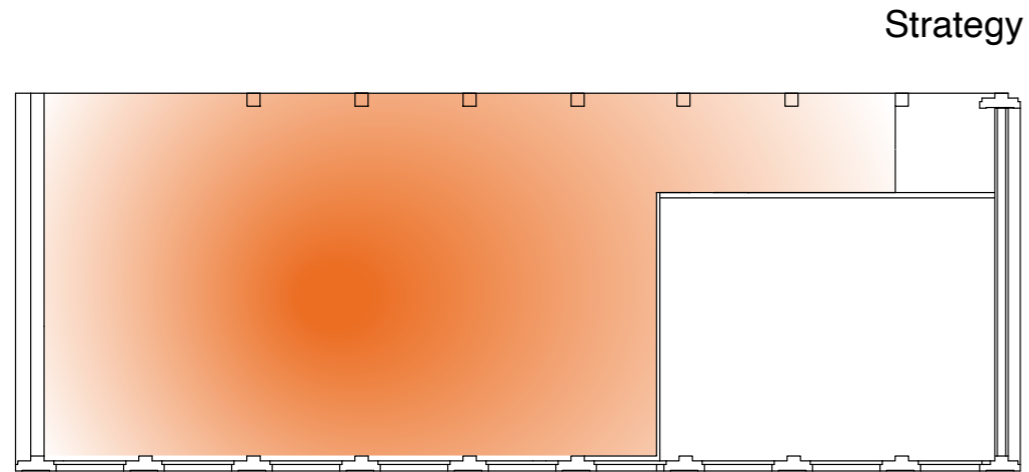
The primary design approach is to use simple volume to divide the space and form function zones. The method of the juxtaposition of objects creates the overall continuity and internal harmony of the space. At the same time, placing volumes one piece upon another creates height differences in the room which adds practical use and spatial interest. In addition, the use of color also strengthens the perception and clarifies the identity of the area. Interest and rich interior experiences create opportunities for collaboration and cooperation to enhance human connections.

Moodboard

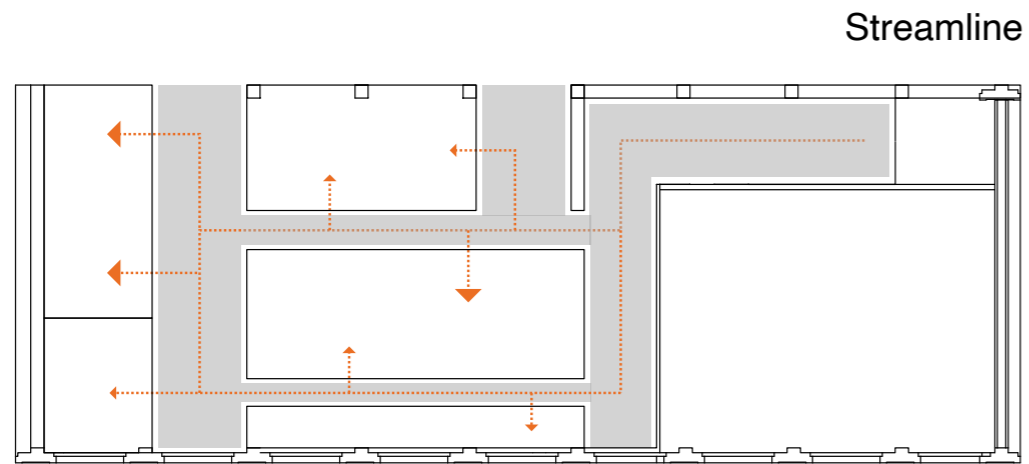


5.3.2 Spatial Design

Layout



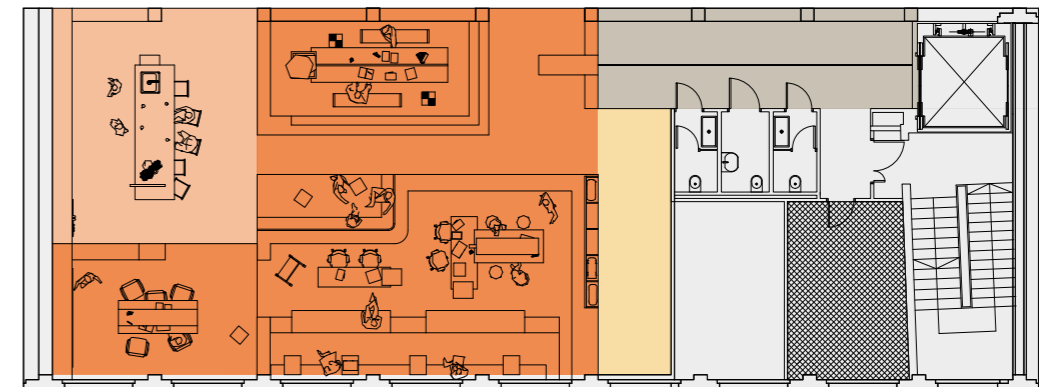
Dispersion Gather Dispersion



Main Streamline Secondary Streamline

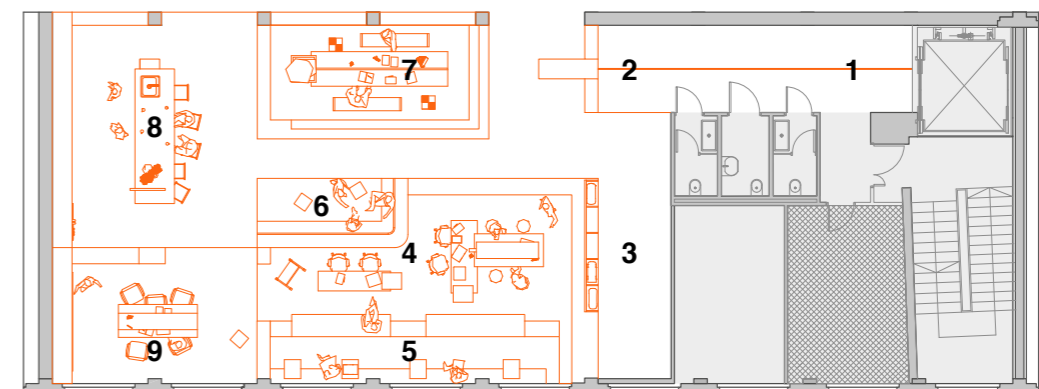
The layout is based on the gathering situation of employees. Place the most crowded area in the center and surrounded by other function zones. And the streamline spread in the whole area to guarantee the connection of different zones. The interior space is divided into the co-working area, leisure area, and corporate culture presenting area, and the activities distinguish the function zones.

Functional Area



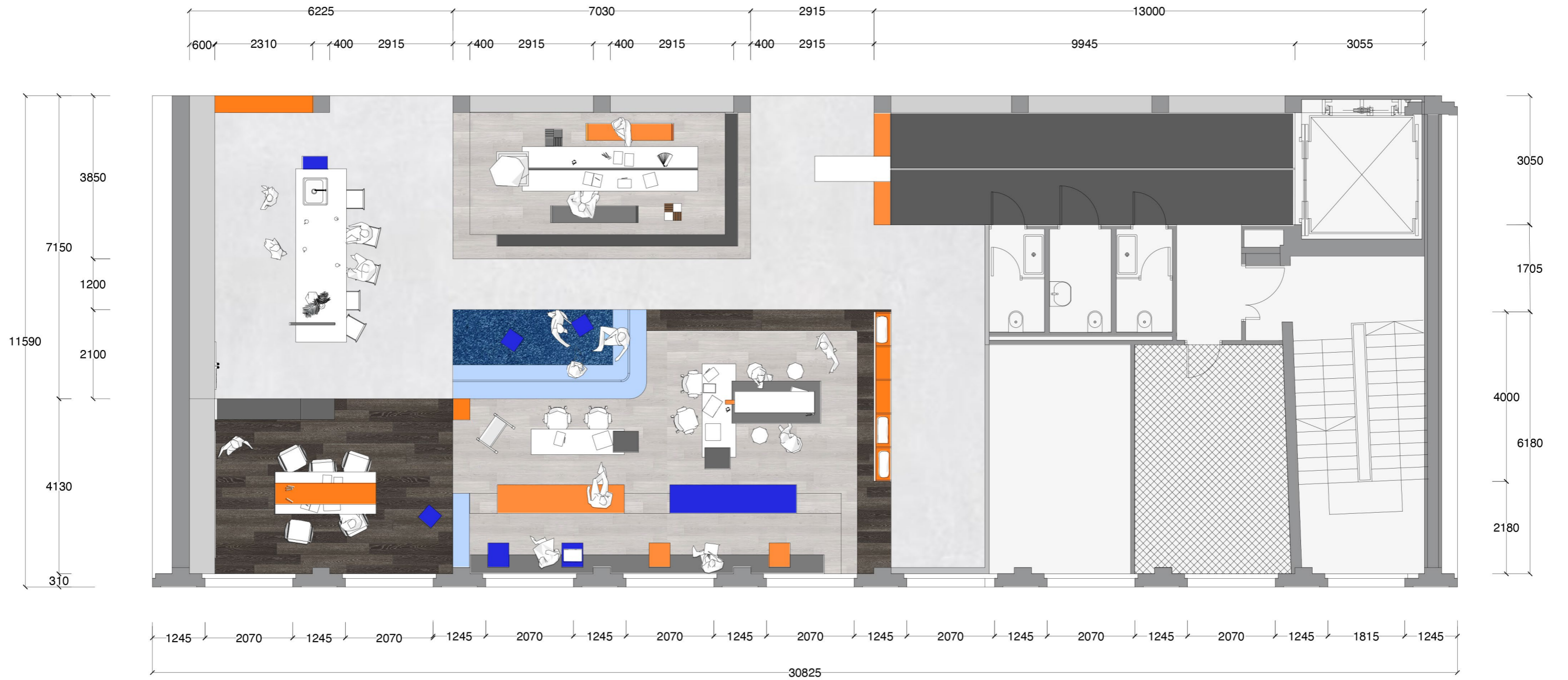
Leisure Co-working Corporate Culture Welcoming

Capacity

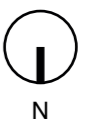


1 Entrance
2 Reception
3 Brand Display
4 Collaborating Space
5 Individual Area
6 Sofa area
7 Casual Meeting
8 Kitchen
9 Grafitti Place

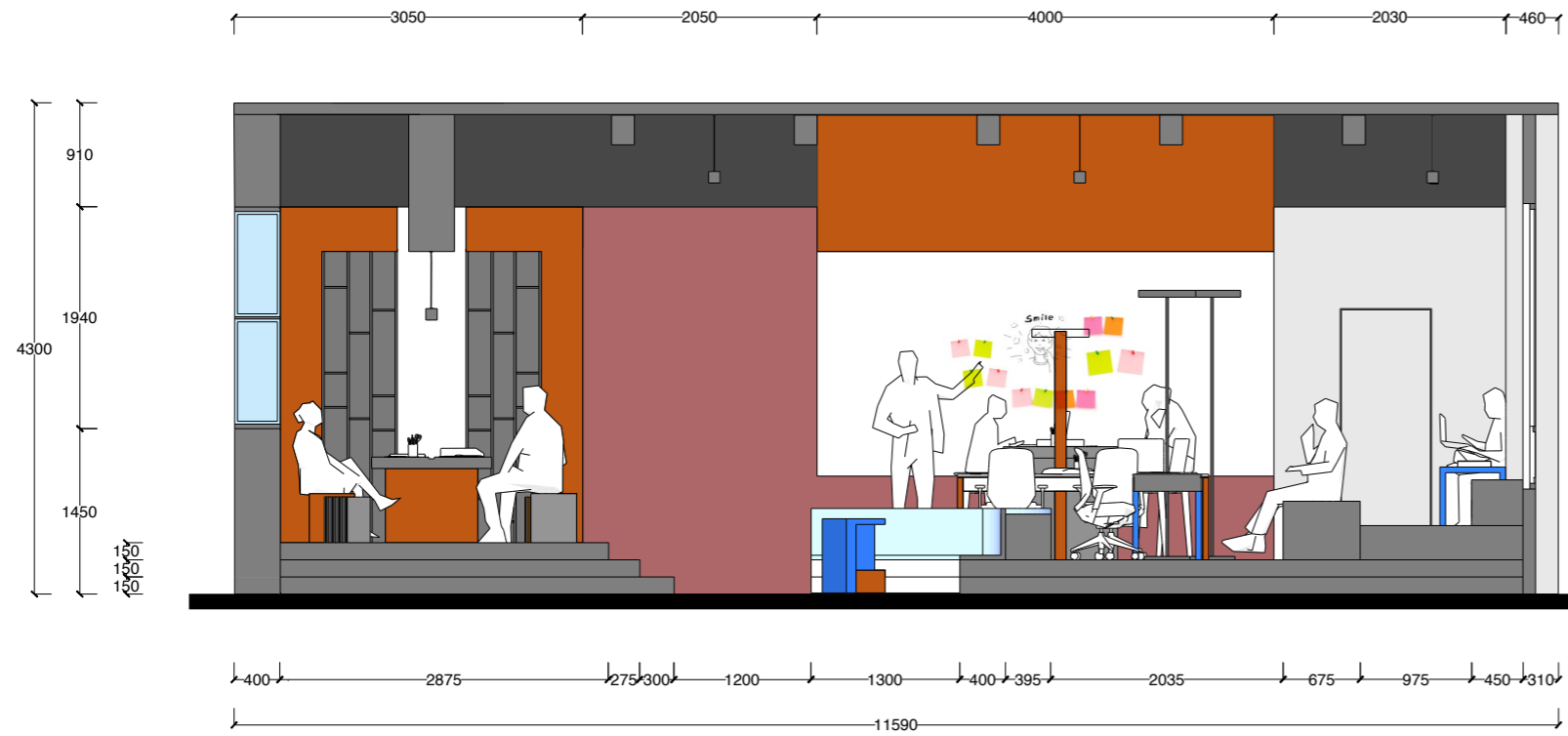
Plan



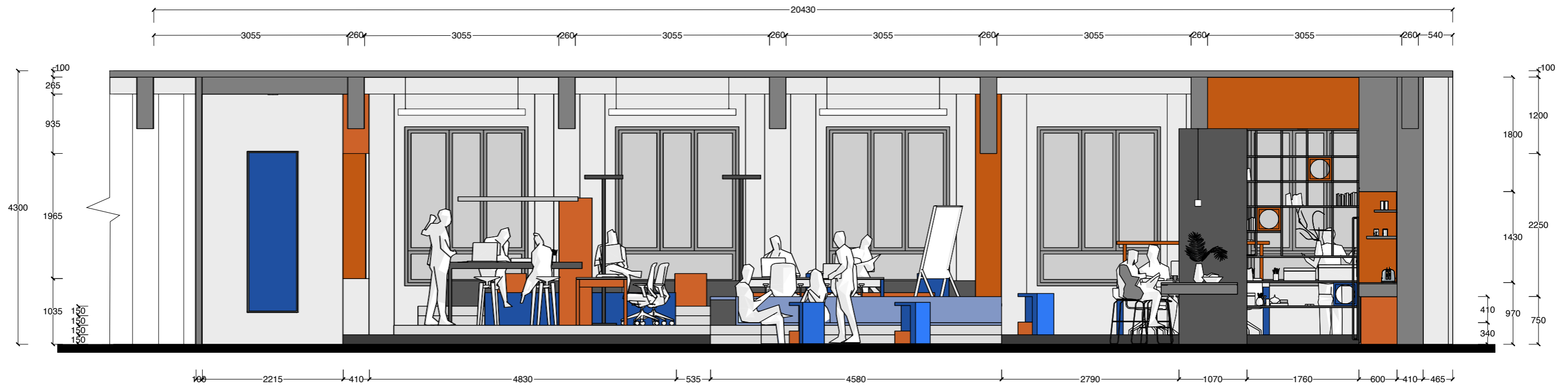
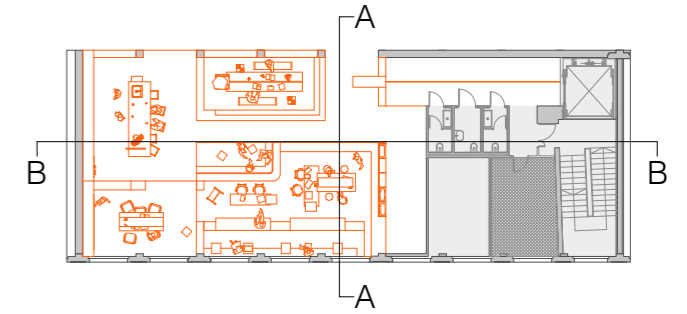
Scale 1:100



Section

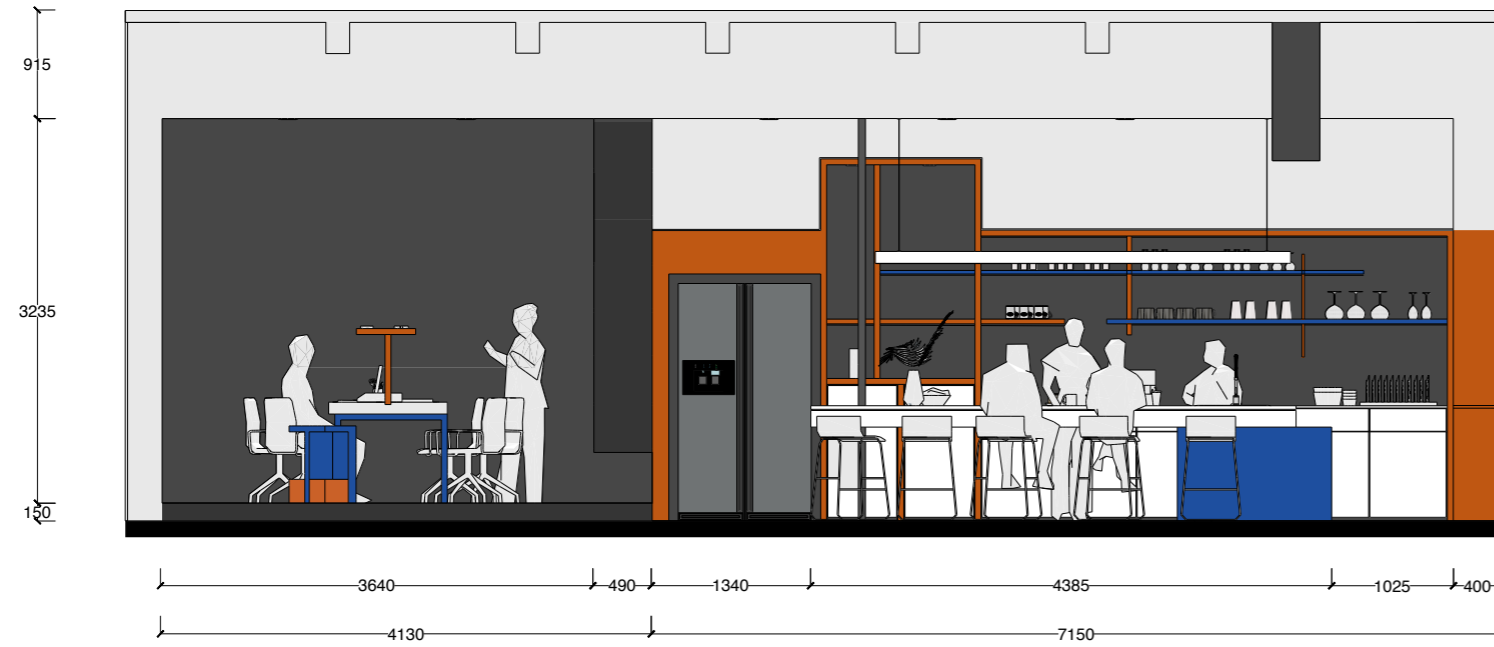


Section A-A 1:50

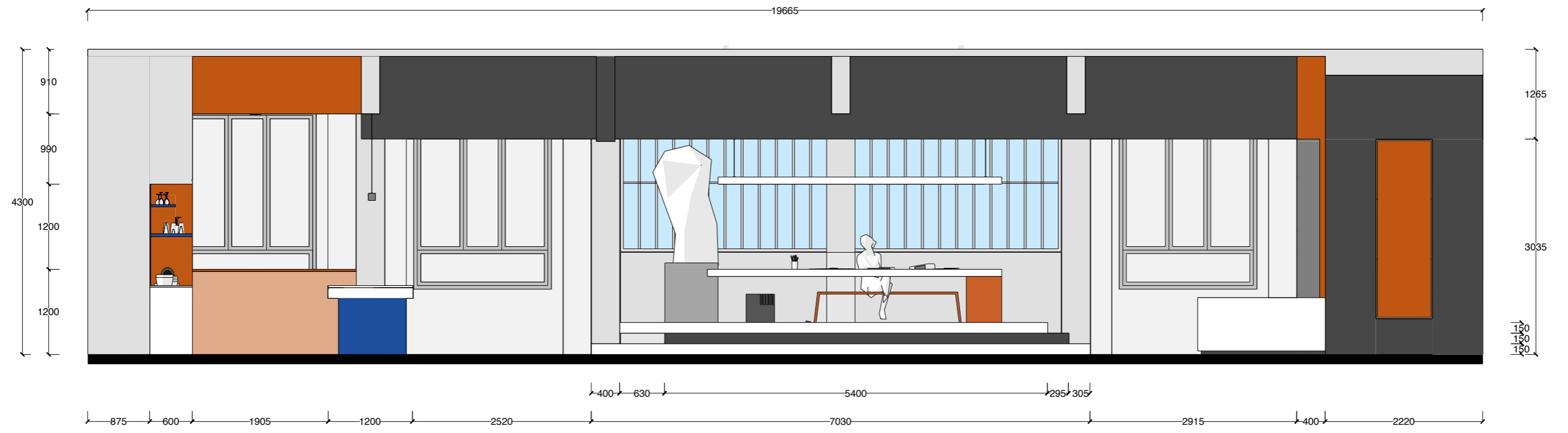
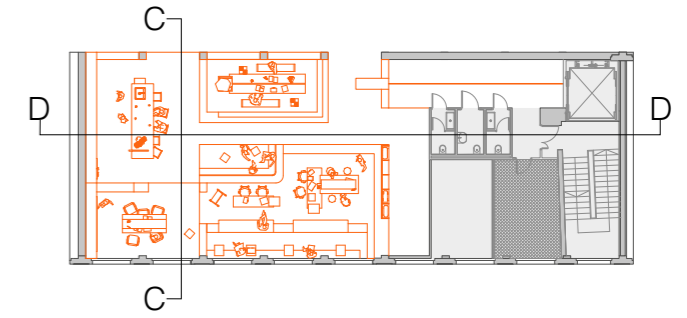


Section B-B 1:50

Elevation



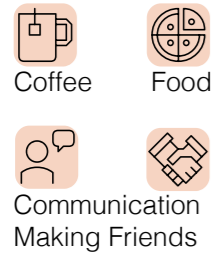
Elevation C-C 1:50



Elevation D-D 1:50

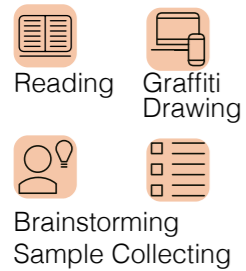
Activities

Public Kitchen



This kitchen is designed for coffee and lunch breach. It provides a good opportunity for accidental collisions. And it also supports casual communications between employees.

Graffiti Space



In this area, workers process the inspiration work. It is designed for exchanging ideas and allowing people to share their primary opinions and develop concept drawings.

Collaboration Area



This area is the central place for co-working. Collaboration happens in this area. Employees can develop their idea in groups, cooperate and assist each other.

Individual Area



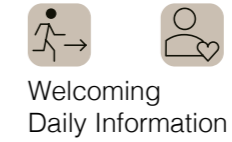
The individual Area is designed for focus work and independent thinking. But it is closely connected to the collaboration area. So it is easy to communicate with others.

Open Meeting Space



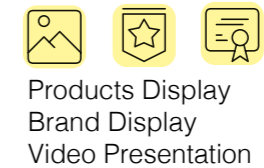
The open meeting area is an area where employees gather and communicate. Employees can have free group discussions and hold some casual meetings.

Entrance

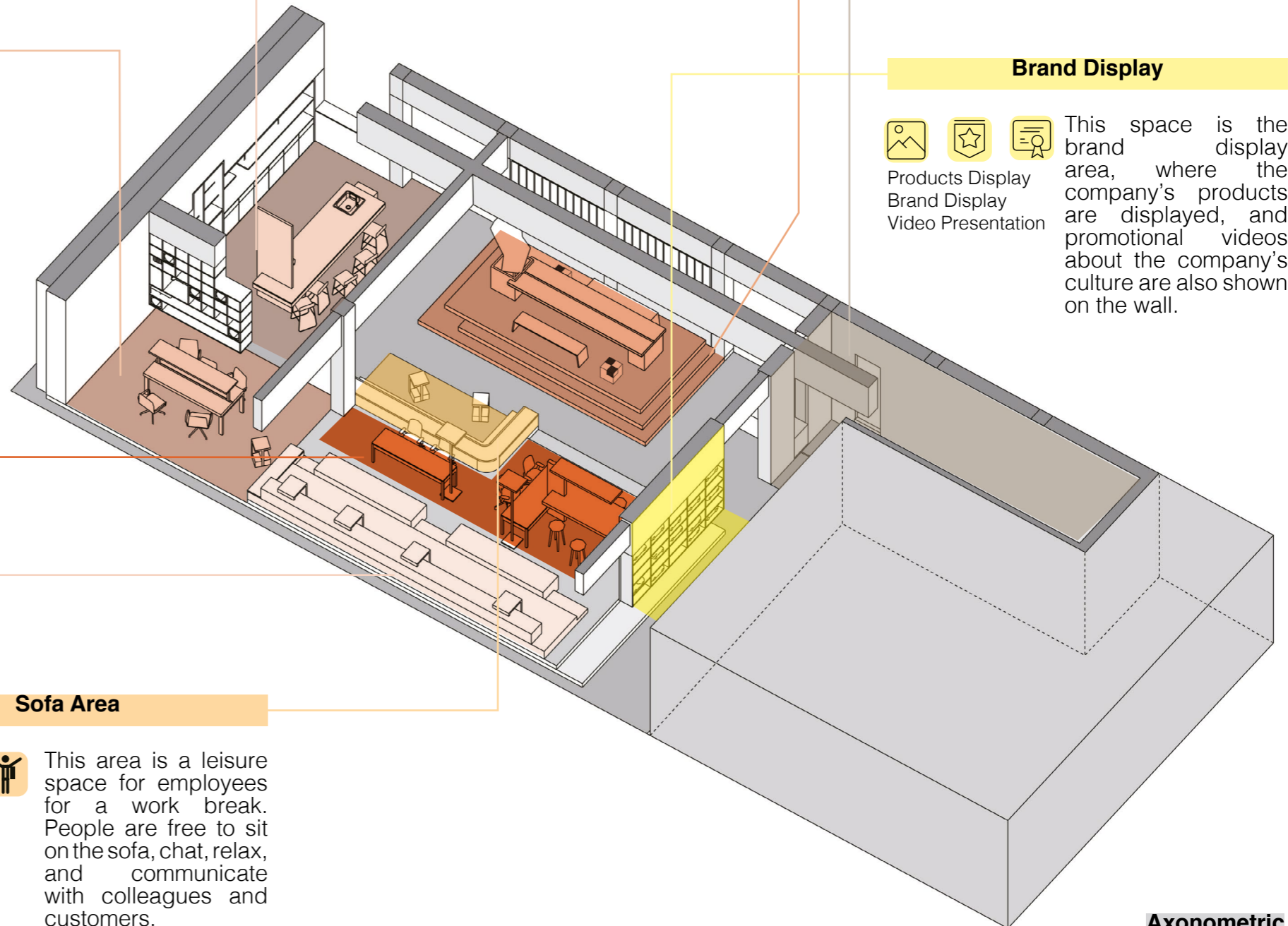


The entrance is a vital traffic space, and at the end of the hall is the reception. People are very welcome to enter this office space and get an overview of the company in this area.

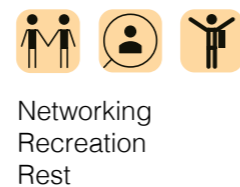
Brand Display



This space is the brand display area, where the company's products are displayed, and promotional videos about the company's culture are also shown on the wall.

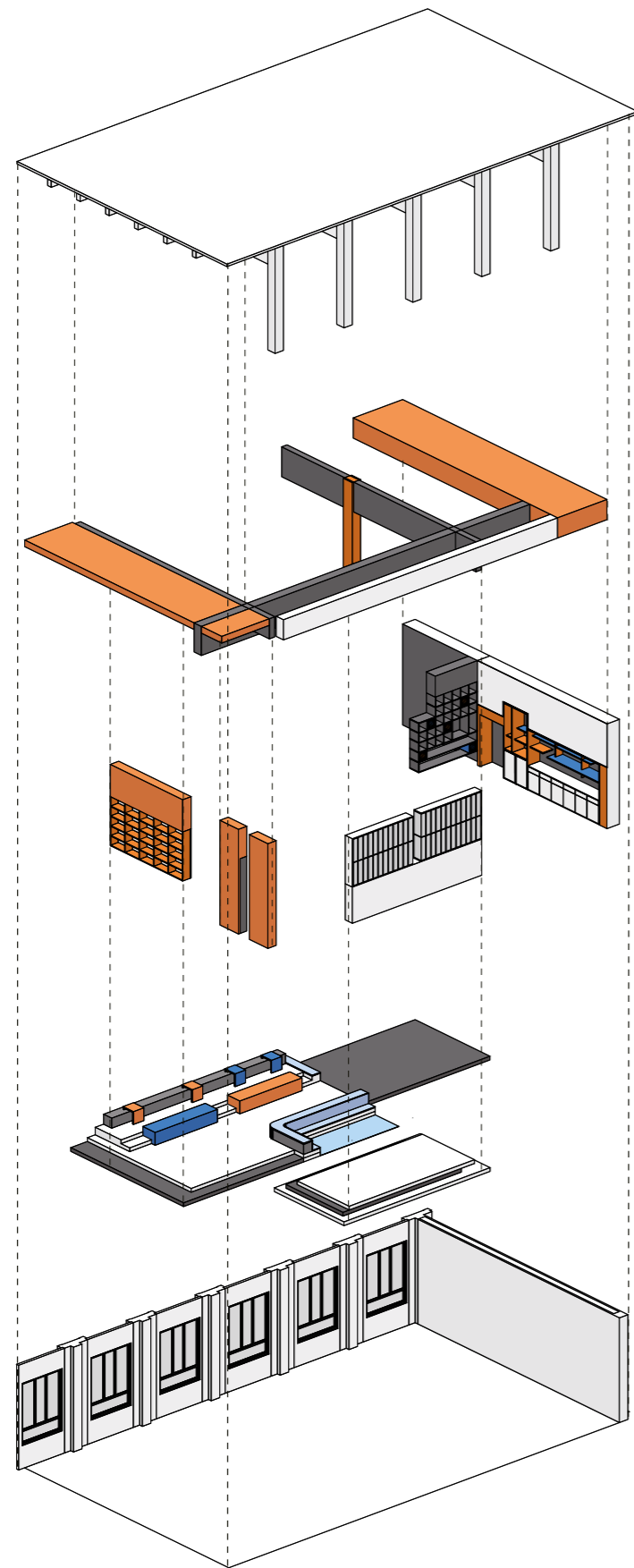


Sofa Area



This area is a leisure space for employees for a work break. People are free to sit on the sofa, chat, relax, and communicate with colleagues and customers.

Axonometric



Explosion

Original Structure

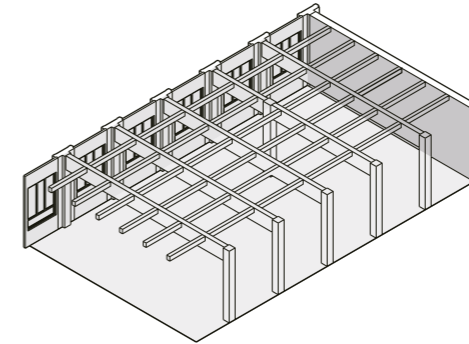
New Beans & Column Composition

Insert Wall

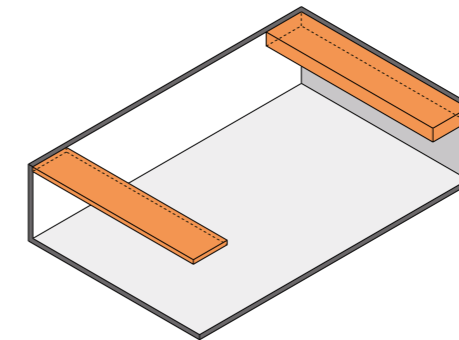
Steps composition

Original Structure

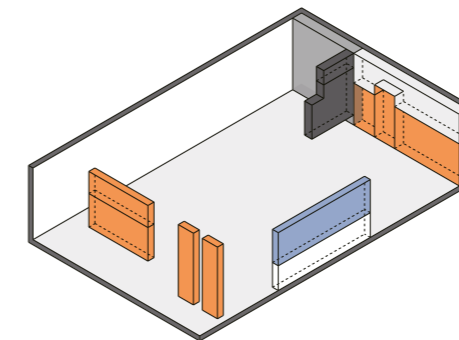
Space Strategy



Keep the original structure of the workplace.

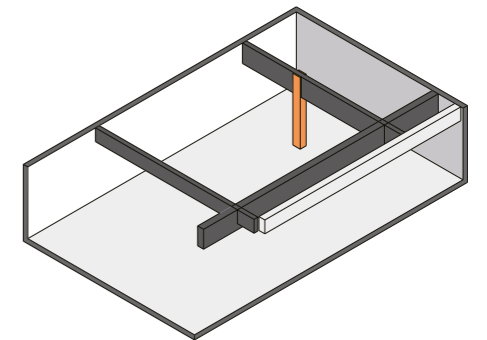


Insert colored blocks into the ceiling system to emphasize the function zones and experience the space atmosphere visually.

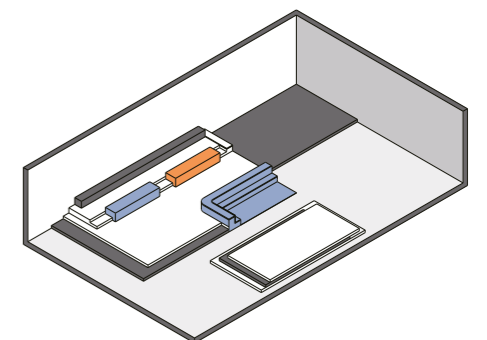


Apply contrast color into the fixed furniture and insert all volumes into the wall to make continuity of the concept of composition.

The whole space is composed of different size volumes and highlights the concept of juxtaposition. Insert spatial elements into the ceiling, column, walls, and floor to create an entire experience of the composition of volumes. And using the combination of warm and cold colors to emphasize the visual contrast to rich human perspective and absorb people into the social hub.

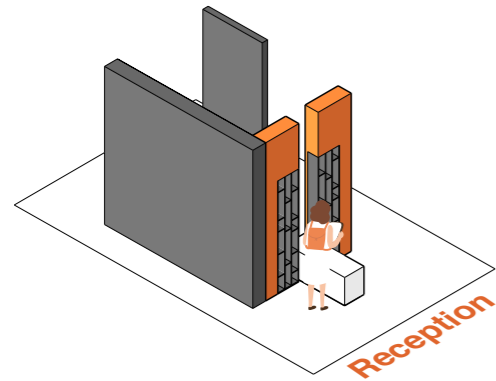


Use black, white beans, and orange columns into the interior space to arrange areas and form functions division.

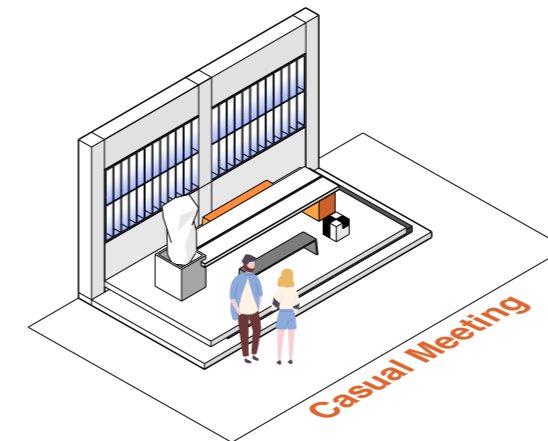


Place steps one piece upon another to create different height experiences and form the connection of varying function zones.

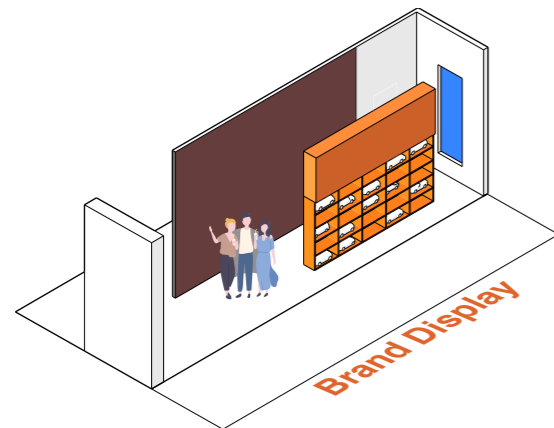
Space Function



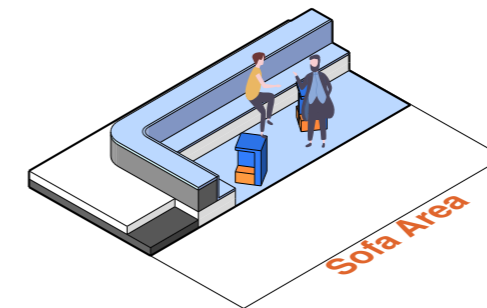
The **reception** is located in the entrance space and comprises a table and a book. There is a gap in the middle of the reception desk, so visitors have no line of sight, and the continuous interior space can be seen through the opening.



The **casual meeting area** is a combination of a long table and green plants. It is a place where employees can gather and discuss freely or hold informal meetings. At the same time, discussions with customers also take place here.



The **brand display place** consists of a giant LED screen and a hanging rack connected through the top. Here will play videos about the company and display brand products, so visitors can understand the corporate culture the first time when they enter the space.



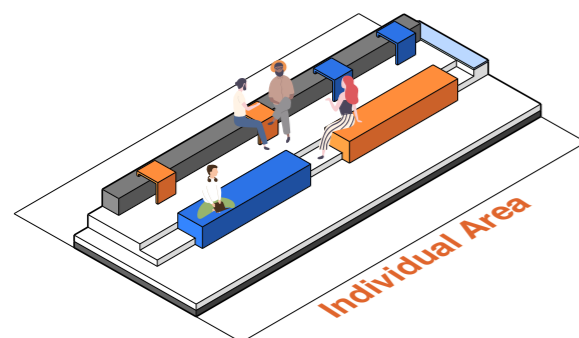
The **sofa area** is a semi-enclosed environment that provides employees with a relaxing and leisure place. This area offers a good space atmosphere for employees to socialize. Workers can communicate with colleagues from different aspects and contact customers in this area.



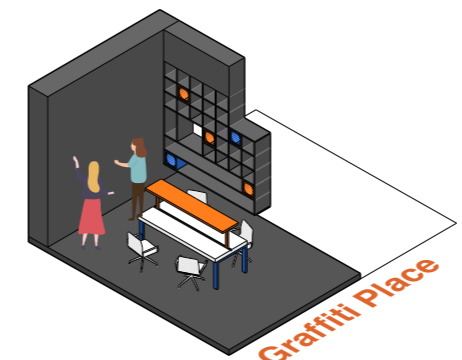
The **collaboration area** is equipped with office furniture that promotes the gathering of employees. The combination of blocks inspires the form of the table. At the same time, it is also placed with the same type of lamps. The furniture arranges to allow employees to cooperate in groups.



The **public kitchen** is the most relaxing location in the entire office. It provides refrigerators, coffee machines, and other facilities so that employees can enjoy lunch and coffee here, and it is a gathering place for leisure after work. It also provides opportunities for employees to collide accidentally.



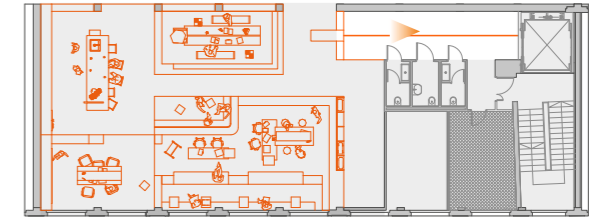
The **individual area** is placed in two rows of benches. Employees in this area can freely choose from work independently or cooperate with other people. The middle bench connects the particular area and the collaboration area, and workers can freely choose the sitting direction to suit people in different positions.



The **graffiti space** has large painting walls and bookshelves suspended on the roof and can be shared with the kitchen. The place provides creative graffiti space and an extensive collection of books and materials. It is very suitable for employees to brainstorm and create, A space to exchange ideas.



5.3.3 Space Experience



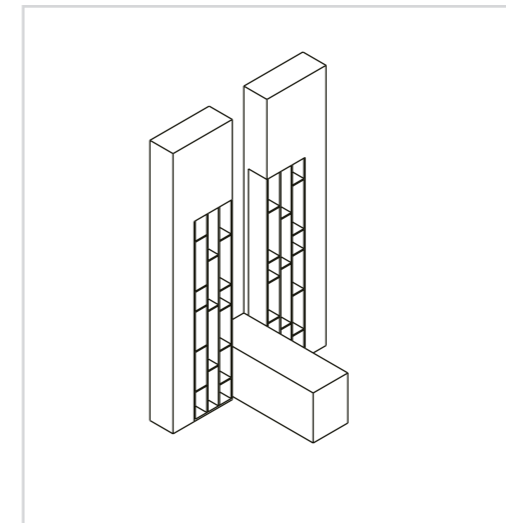
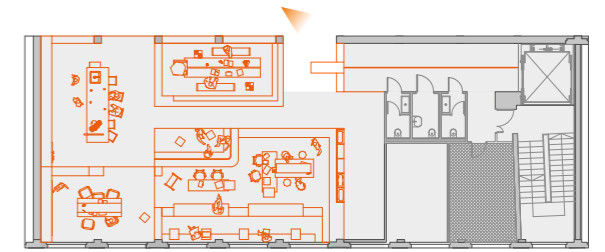
Entrance

The entrance is the area that gives visitors the first impression. Linear light is designed in the middle of the floor to guide people into the room. A wall with a gap in the middle to ensure will not wholly block human sight in this area. So when people arrive in this area, they will have an understanding of the interior space.

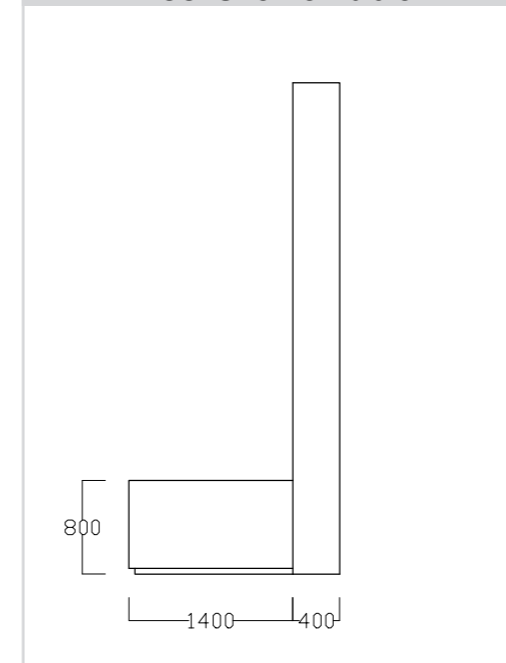


Reception

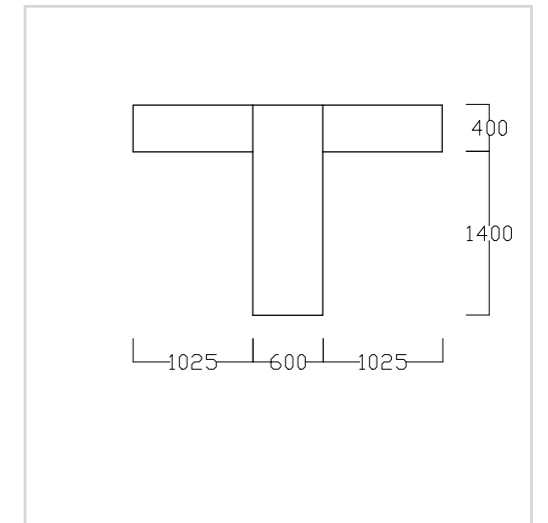
The reception desk is located at the end of the entrance hall. It consists of two bookshelves and a table which provides employees with daily information. The combination of furniture embodies the concept of the juxtaposition of volumes.



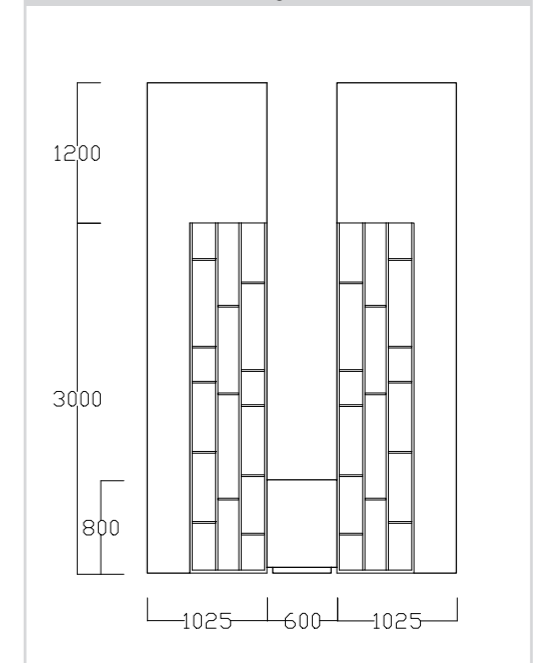
Bookshelf & Table



Elevation

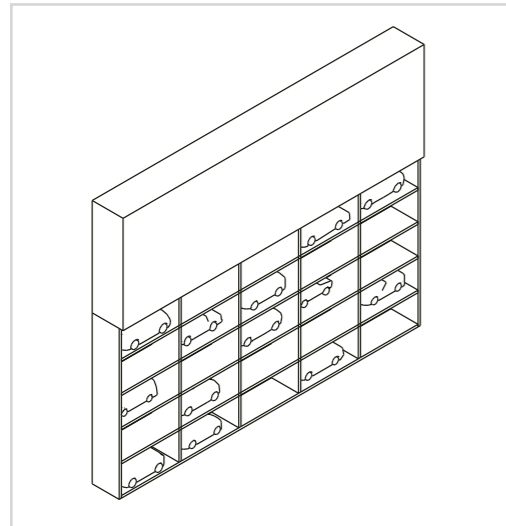


Plan

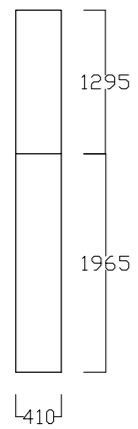


Elevation

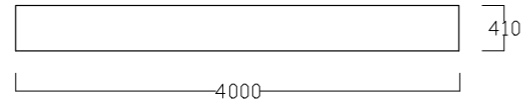
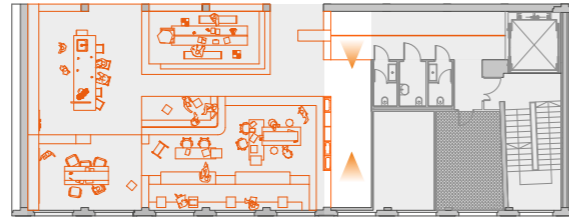
Brand Display Area



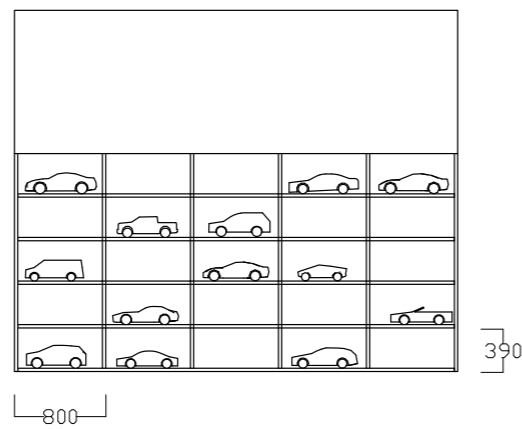
Display Shelf



Elevation



Plan



Elevation

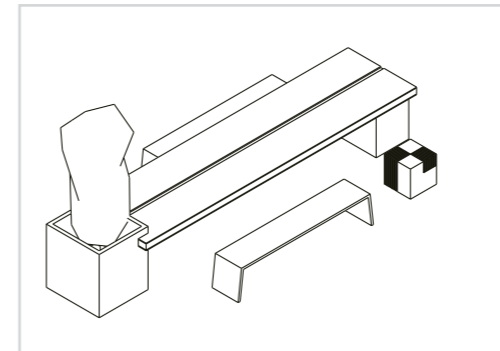
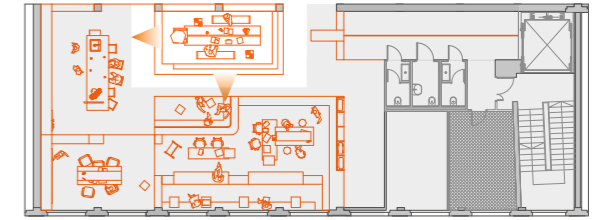
The brand display is the beginning of the work experience. It shows the **different space perspectives of warm and cold colors**. From this view, employees can understand how color affects the physical environment. The hanging shelf presents the products made by the company, and the distance between the rack and floor makes a connection between the display area and the interior place. The large LED screen presents the company video, which strongly links visitors and the corporate culture.



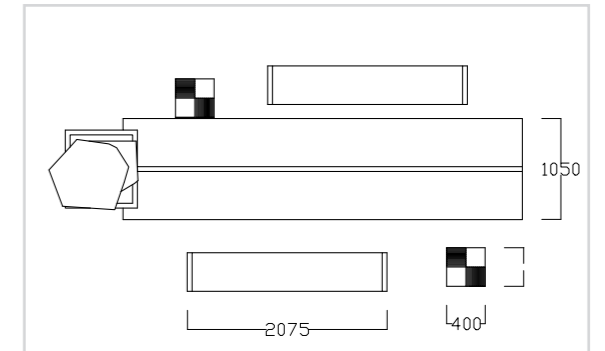


Casual Meeting Area

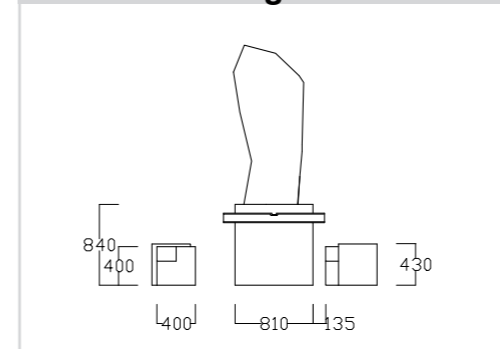
This area is where employees gather to discuss or hold casual meetings. It is composed of a desktop, a landscape box and the support block of the table.



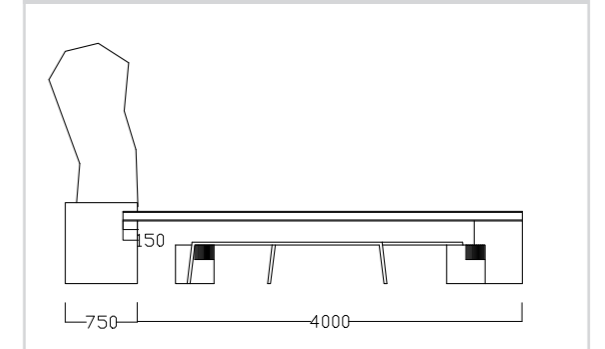
Meeting Table



Plan



Elevation



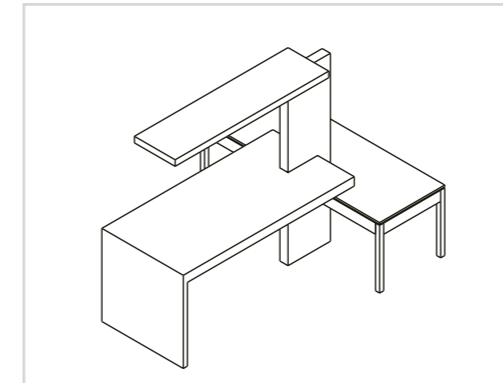
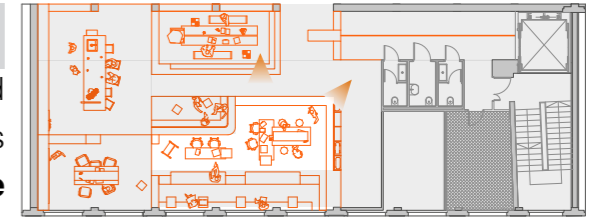
Elevation



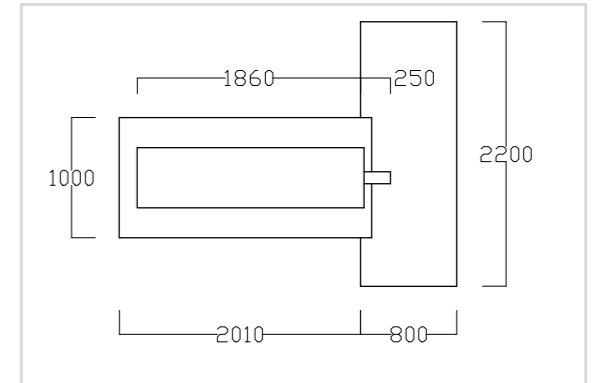


Collaboration Area

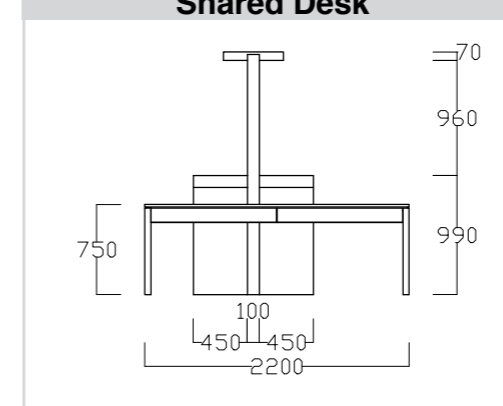
The collaboration area place shared tables, which is provided for employees to collaborate. **The furniture assembling by several pieces of component** and contains lamps and two vertical combined desks.



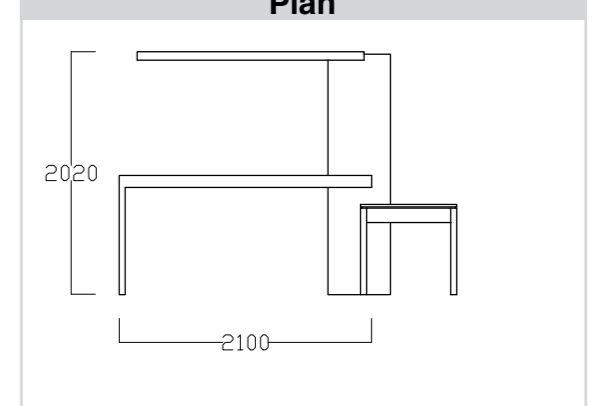
Shared Desk



Plan



Elevation

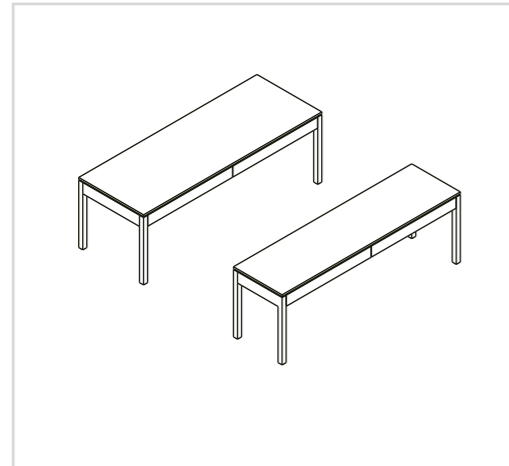
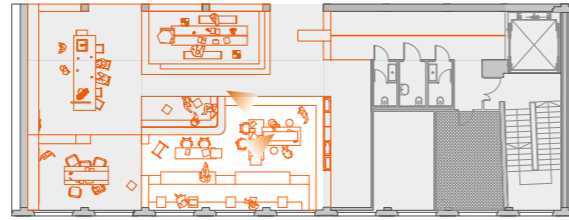


Elevation

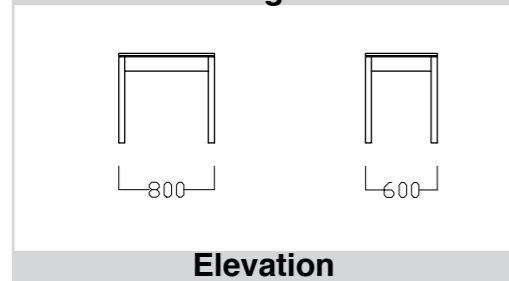


Collaboration Area

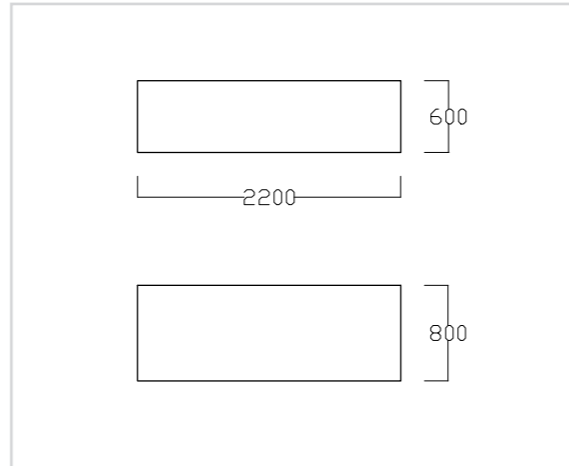
The tables and floor lamp also reflect **the composition of the volumes**. The **warm and cold colors** are also applied to the furniture.



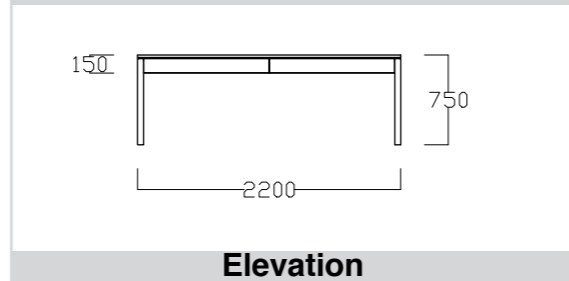
Working Table



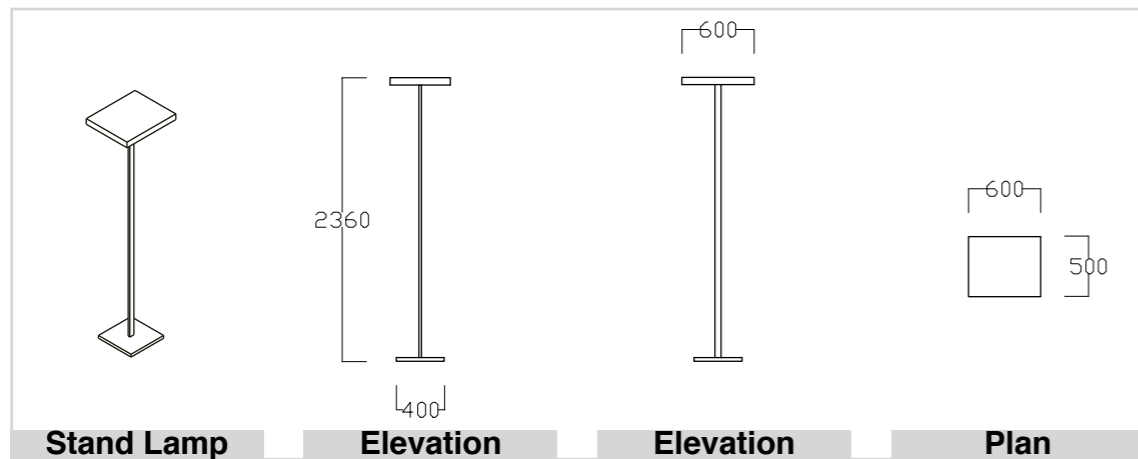
Elevation



Plan



Elevation



Stand Lamp

Elevation

Elevation

Plan

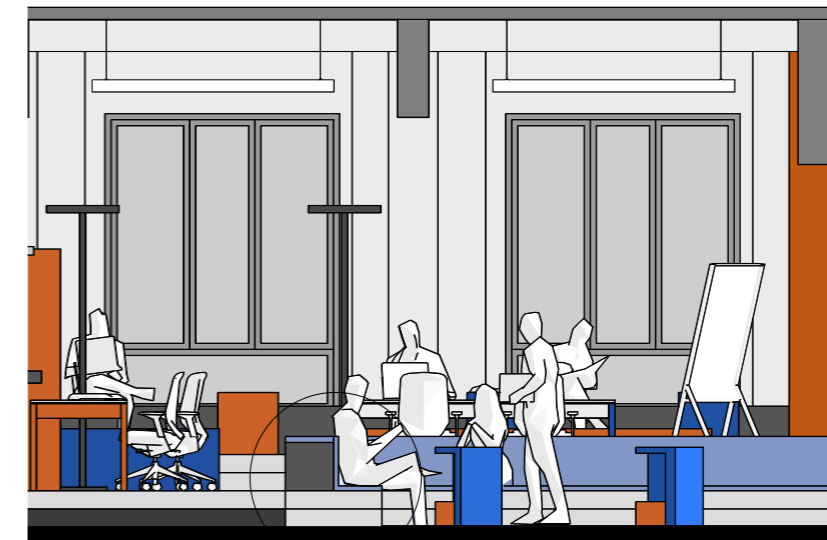
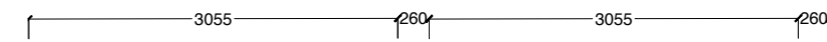
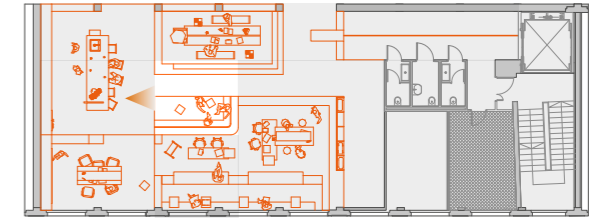
Individual Area

The individual area is located on the steps. The long blocks in this area allow handling personal work or gathering in small groups. At the same time, the middle volumes is connected with the collaboration area, so it can also ensure collaboration between employees and other people.

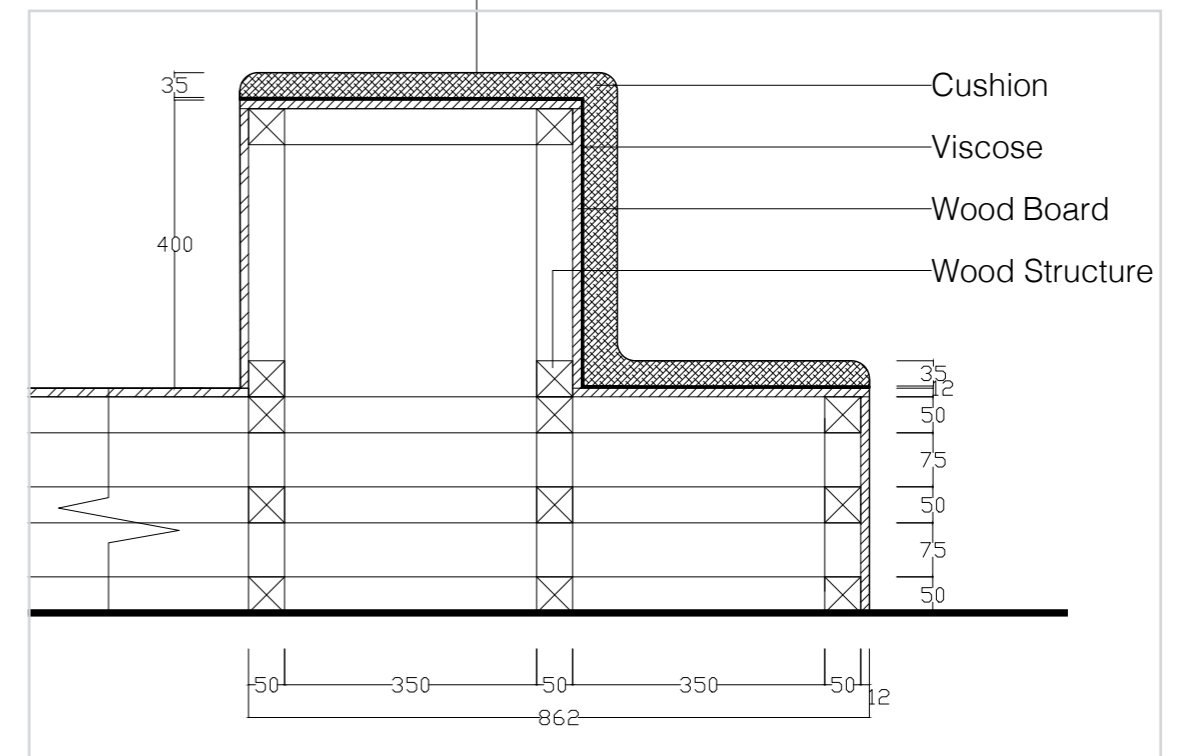




Sofa Area



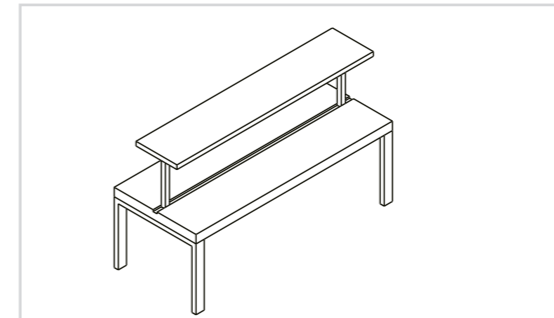
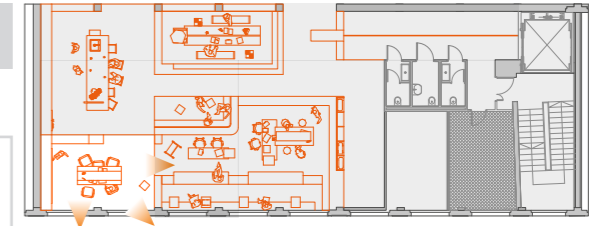
The sofa area is custom-made furniture and uses the height difference of the steps to enclose a naturally divided area. The base layer is a wooden structure, a wooden cover, and the surface is a soft cushion.



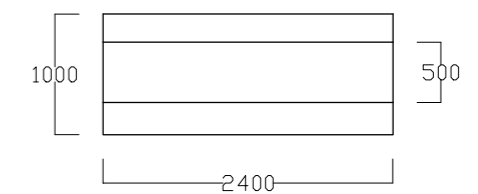
Sofa Structure Detail



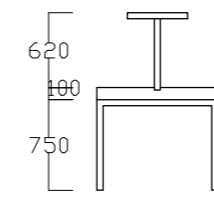
Graffiti Place



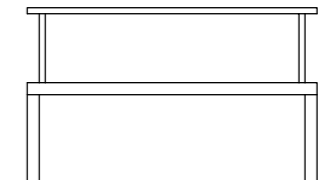
Shared Table



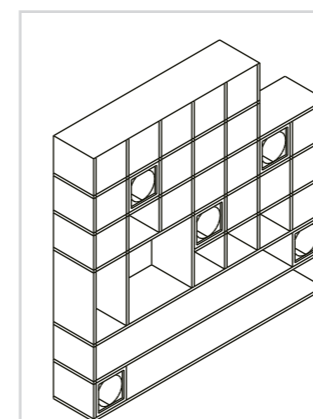
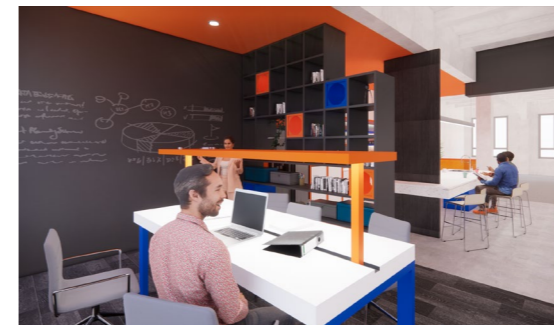
Plan



Elevation



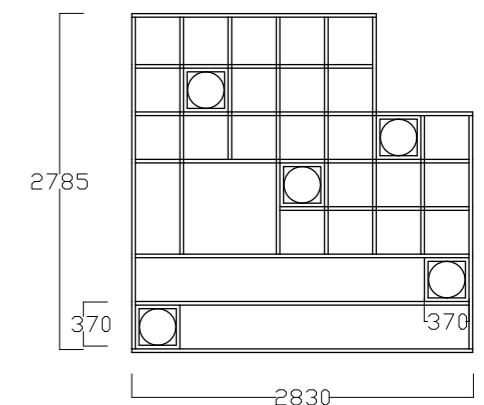
Elevation



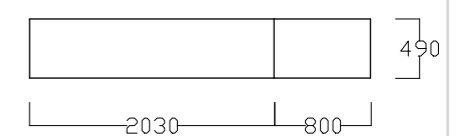
BookShelf



Elevation



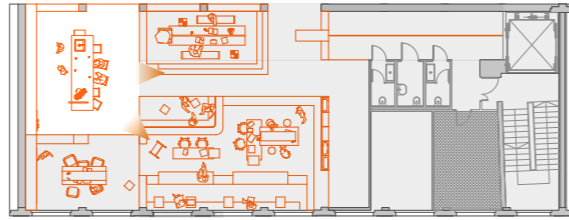
Elevation



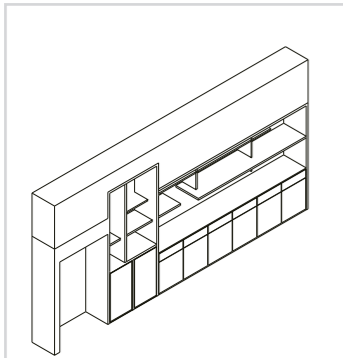
Plan

The graffiti space also presents the concept of volume composition and color design. The lamps are placed on the tabletop, and the bookshelves are inserted into the ceiling.

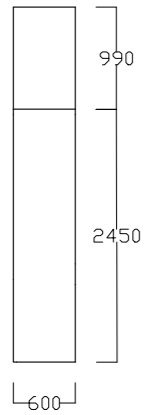
Kitchen



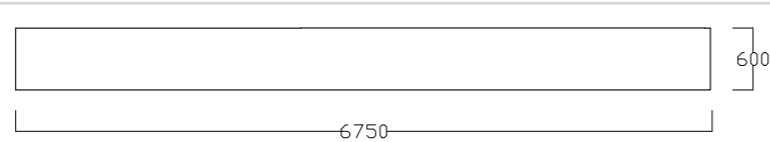
Orange and blue plywoods are inserted horizontally and vertically in the cabinet to recall the concept of composition.



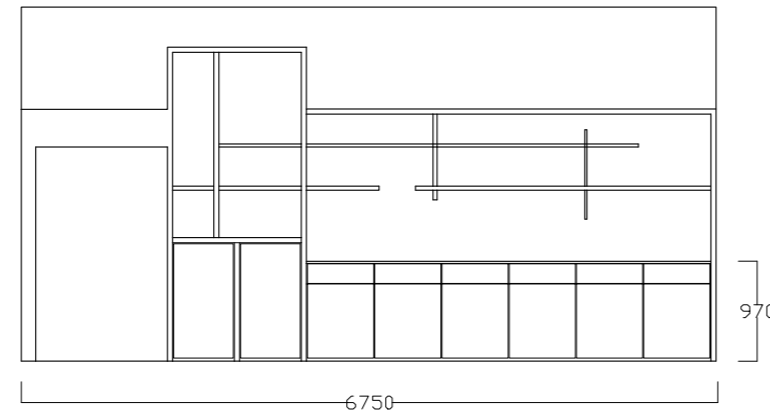
Shelf



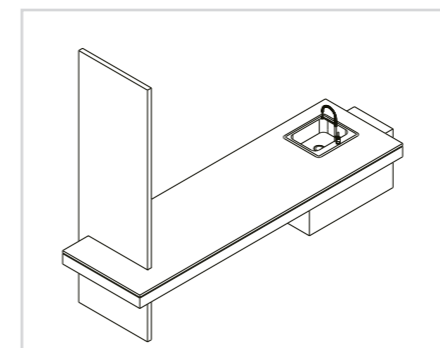
Elevation



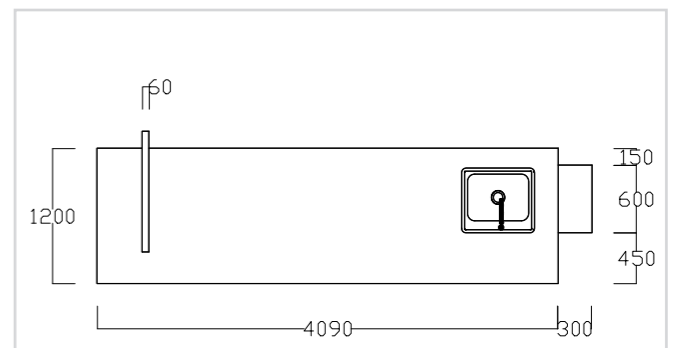
Plan



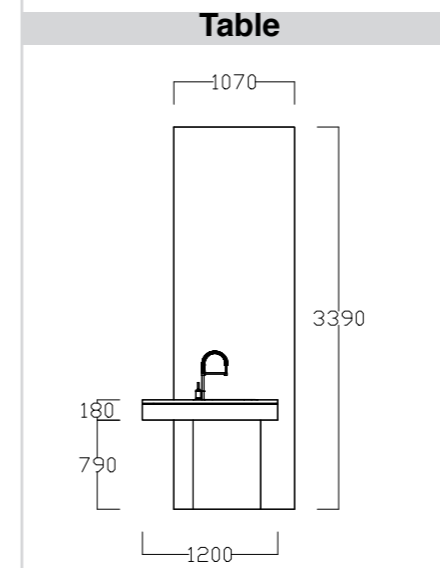
Elevation



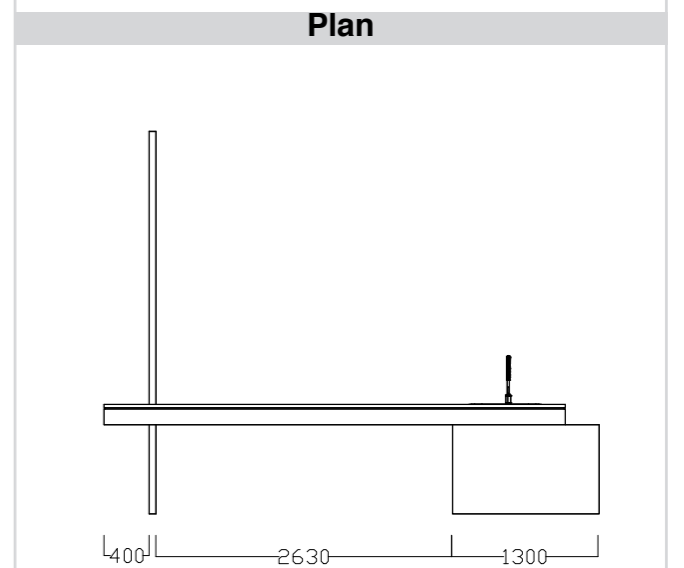
Table



Plan



Elevation



Elevation



The dining table comprises three volumes juxtaposed horizontally and vertically, forming a place where employees gather to promote communication and increase human connections.



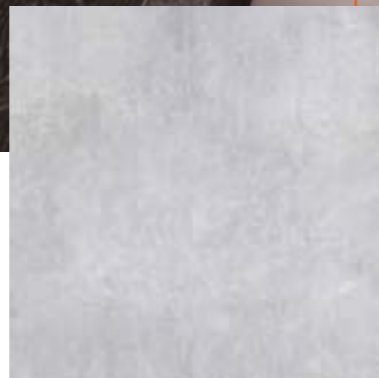
Kitchen



White wooden floor



Black wooden floor



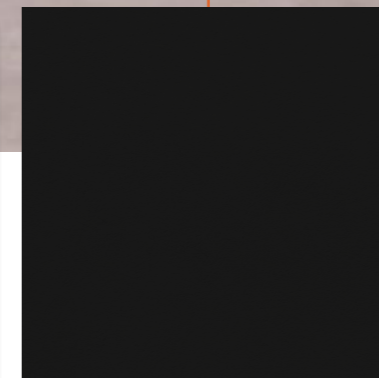
Concrete floor



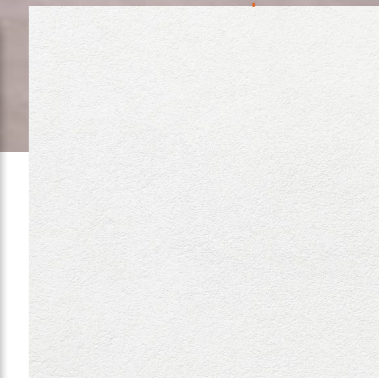
Terrazzo desktop



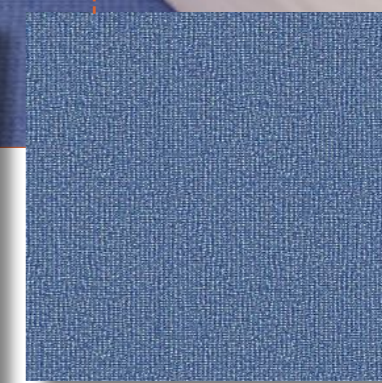
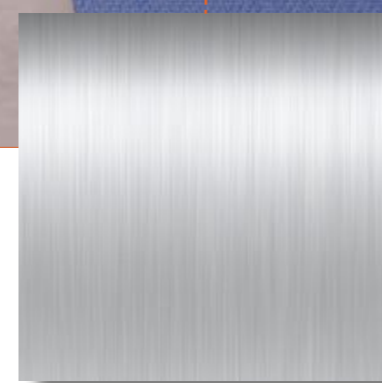
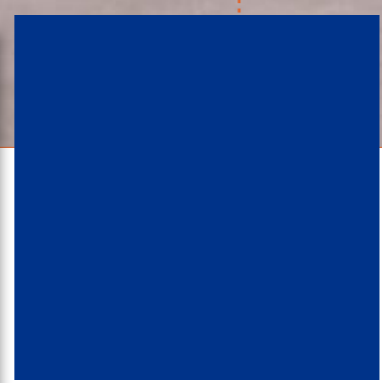
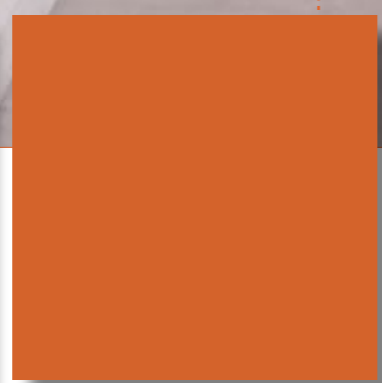
Orange wall painting
#d4632b



Black wall painting
#272221



White wall painting
#eacea



Blue glass

Black plywood board

Orange plywood board
#d4632b

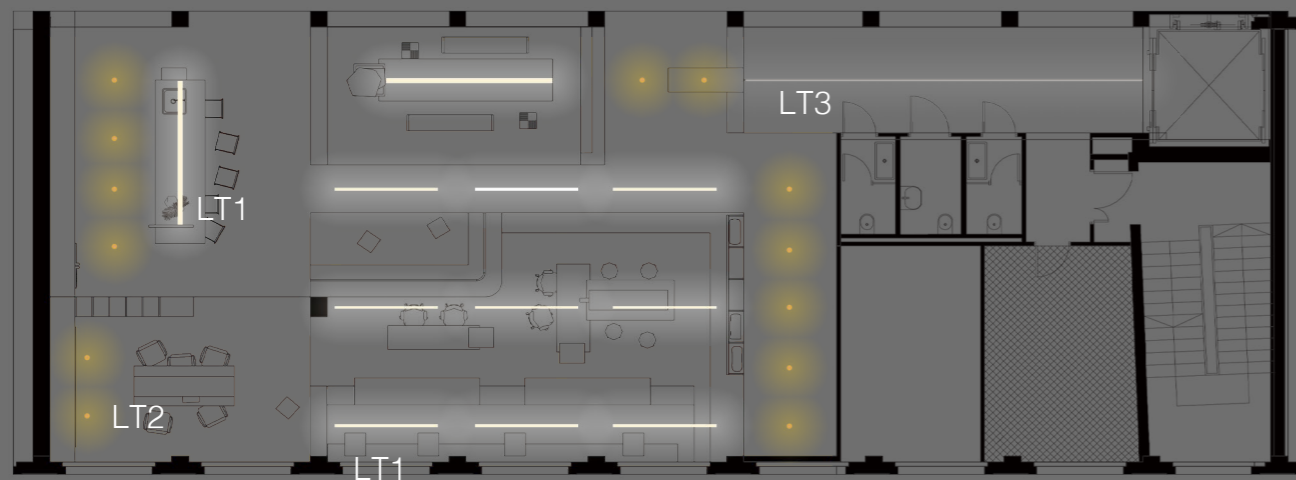
Blue plywood board
#003389

Stainless metal

Black metal

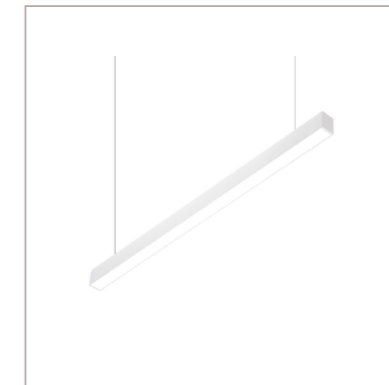
Blue carpet

Blue fabric



Lighting Solution

The lighting design is set according to the activities of the employees. Long pendant lights are placed in the areas where people are concentrated, spotlights are arranged in the traffic space, and detailed decorated lighting is matched with linear light.



1 Pendant Lamp



2 Spotlight



3 LED Strip Light

6 CONCLUSION

In conclusion, the study investigated the epidemic's impact on office design, emphasizing the significance of the social space in the office space and the solid emotional needs of employees for the connection between people.

Through the research of the third space in the workplace, the study understands the social connection between people matters and how it affects work efficiency and employees' relationship with the workplace and corporate culture. It will verify the necessary significance of the social field for collaboration and cooperation.

In addition, through the study of historical experience, the role of color design in the workplace and the profound impact on human perception are explored to quest how color can deeply intervene in indoor office spaces.

Overall, the expectation is that this thesis can reflect changes in the office environment and an attempt to benefit employees in combination with practical significance.

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