

Mapping workplace characteristics against a backdrop of hybrid work life – An explorative comparison between office workplaces & home workplaces

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Abstract:

Digital transformation and a development coupled with effects on work from the pandemic has led to a work life with remote and distributed work and workplaces with employees dividing their work between a primary office and other places like the home, and sometimes also other locations, a so called "third place" or "hub". Although this model of hybrid working is considered the definite future work structure it is debated. We find today a large group of office employees working at several locations, and of which one is their home. This being said, our study sets out to investigate: a) the effect of workplace design variations on employee performance, well-being and comfort, b) how design empowerment can utilize sense of control of the work environment as a motivator, and c) the balance between the acceptance for home workplace, and the back-to-the-office drivers.

Method

Investigating office employees' notion of their workplace/workplaces, we use a mapping tool that discern between functional and measurable effects, symbolic and metaphoric qualities, and the user's own categorization. This is done by having office employees describe the characteristics of their different workplaces by marking them in a triangle model between nodes for the three different characteristics. Our analysis is based on interviews with office employees ($n=17$) of both genders from four organisations (two private, two public). The sample includes both regular employees, middle managers and people at higher position ($n=2$). Since most of the participants had only one external workplace—a home workplace, we focus on the comparison between this and the office workplace.

Findings

Office employees' preference for the home office is highly dependent on its ability to support practicalities in everyday life. At first glance this overshadows many other aspects of the home workplace, but when scrutinized a more complex picture emerges. In summary, our results indicate that the home workplace is mostly dependent on the user's personal considerations and wishes. Wellbeing associated to home workplaces appears to relate to aspects like ownership, self-expression and control of the environment manifested in the varying designs of the home workplace applied by the users.

These preliminary findings suggest that understanding aspects of the design of workplaces and systemizing them could contribute to empowerment also in the organisation's actual office workplace and hereby contribute to a more sustainable office working life.

Key words: *hybrid office working; home workplace; office workplace; workplace design; sense of control; empowerment*

1. Worklife and office work

The corona pandemic led to significant changes in the way work is executed and organised and increased development of digital applications and systems. This enabled and sanctioned work outside the office with a variety of organisational and spatial settings (Futorion 2021). It initiated a shift in work attitudes among employees and in the development of work routines, forms of employment and workplaces (Bodin Danielsson 2024). Continuing with a hybrid solution working partly from home and partly at the office or anywhere else, e.g., on travel, at the library, in a café or at a book-in workplace in the neighbourhood, is optional but also attractive to many, but not for all and not always. The hybrid workplace has come to stay, and in an era where severe cuts in global greenhouse gas emissions are of vital importance, it is crucial to understand its potential as a contributor for a greener urban development that includes social durability (health, well-being, and inclusion).

To understand the function of the future office workplace, and what it means out of a sustainable development perspective, knowledge of what consequences this may have for employees, organisations and society is needed. There has been little research on effects of home offices and businesses run with this as a spatial approach and this results in a gap underlying decision making on organisation and workspace design. More knowledge about the conditions for a successful implementation of a home office is necessary to be able to integrate it on the overall work situation for employees. After the pandemic the work at home option has been one solution to work life balance and planning (Flövik et.al. 2021). However, several companies consider ending remote work, citing the need to build culture, train newcomers and share knowledge. However, what impact the type of work, degree of collaboration, and workspace design or location have for employee satisfaction with hybrid solutions is still largely unknown.

There are also large knowledge gaps about to how extensive use of home offices affect employee health and well-being, work environment, comfort and productivity. Likewise, knowledge is sparse about what role the physical work environment of employee different workplaces in hybrid working life play for this specifically. We know when working from home aspects like commuting time, working life balance play are important, but what role the physical work environment plays for described factors as well as choice of workplace is not well-researched to our knowledge.

Well-being is closely linked to mental health, and WHO defines a healthy workplace as one which employees and managers collaborate to use a continual improvement process to protect and promote the health, safety, and well-being of all employees as well as the sustainability of the workplace. What this mean in a hybrid working life context when office employees spend a great deal of their working days away from the organisation´s office is not well researched. International Labor Organisation (ILO) has a broad understanding of workplace wellbeing; "(it) relates to all aspects of working life, from the quality and safety of the physical environment, to how employees feel about their work, their working environment, the climate at work and work organisation" (ILO 2022). Nevertheless, employee health and well-being in a hybrid office working life still today not well-researched, a few years (three years) after pandemic restrictions lifted in the Western countries. We do know that functional, aesthetical, and technical qualities of the workplace may have a preventive effect on stress and mental difficulties. Predictable working conditions, a sense of control over social interaction, light, temperature, noise, workstation design, views, and accessibility to green restorative environments outside the office are of great benefit to both employees and employers, benefits the home workplace potentially can offer more easily than most office workplaces. Office environments that prevent stress and promote mental health should be given greater attention by the parties in working life, because the prevalence of mental disorders is high in the population and is associated with large societal costs due to sick leave (Bodin Danielsson et.al. 2014.). Also, regarding other outcomes of relevance for a healthy, sustainable hybrid working life when focusing on the importance of the physical workplaces issues such as productivity and comfort are not researched in depth. The literature points to a lack of structured evidence-based knowledge about human-environment interaction to support decision making in office design in a hybrid work life context (Gjerland, Søliland, Thuen, 2019).

Given the knowledge gaps regarding the importance of the physical workplace for employees in a hybrid office work life, this exploratory study sets out to investigate different aspects important to the quality of workplaces, and do so with a focus on well-being, productivity and comfort.

2. Method

Data gathering

Interview responses were collected through group interviews and individual interviews. The group interviews were done at the companies and did also include a walk around the office/workplaces. All interviews were recorded and transcribed verbatim. The marking on the mapping model, the diagrammatic triangle, was done in conjunction with the individual interview. When the interviews were done digitally the respondent had printed versions of the mapping tool that they filled in and then scanned and sent to the researchers.

Study design with regard to the mapping tool and approach

In the present study a mapping tool for understanding aspects of design was used that originally was developed as a support in designing (Lindahl, 2001). The aim was to test if it also could have a descriptive use in a participative design process with end-users, in this context office employees

Sample

The mapping tool was used in studying workplaces in four organisations (two private, two public) from different line of business:

- A major international bank (Nordic and Baltic region)
- A computer game developer
- A municipal real estate owner, a municipal company
- A municipal planning unit, a municipal authority

All organisations in our study had so so-called activity-based flex-offices (AFO) (Wohlers & Hertel 2017, Bodin Danielsson 2008). Our sample consists of sixteen office employees (n=17, 9 men and 8 women) from the participating organisations. The sample includes both regular employees, middle managers (n=5) and staff at higher/managerial positions (n=2). Since most of the participants had only on external workplace—a home workplace the comparison in this exploratory study is between the home workplace and the office workplace, and not on other external workplaces.

The approach that was applied was the testing of an mapping model (triangle model) capable of describing the interdependencies between different aspects important to the quality of workplaces (henceforth model and mapping model will be used

synonymously). In Lindahl (2001) such a model is presented based on three aspects that were identified in workplace design research. They are as follows:

- (1) The work environment aspects that have mainly to do with health and safety.
- (2) The metaphoric and symbolic aspects of space.
- (3) The personal configuration, which concerns an individual's, often unarticulated, preferences

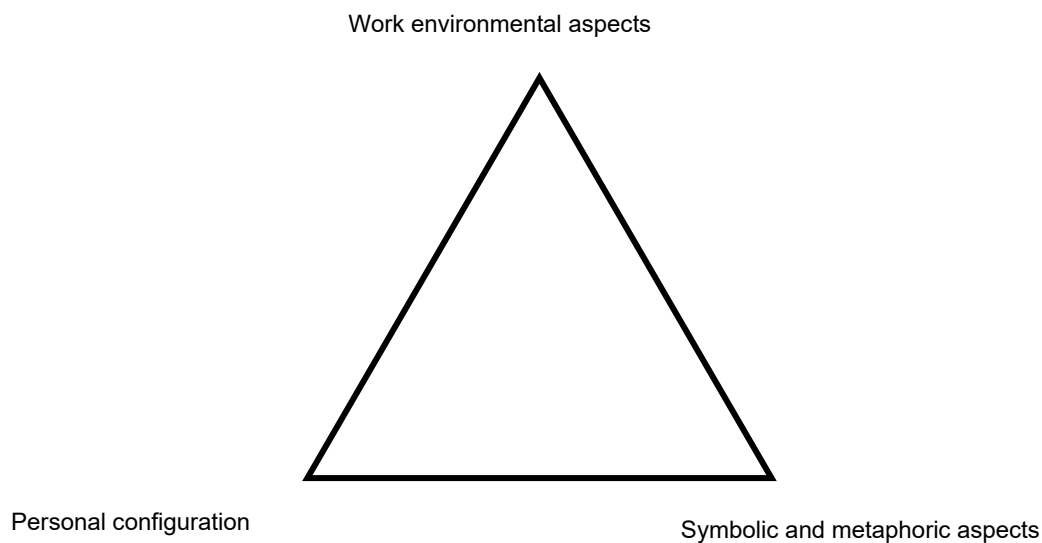


Figure 1. The mapping tool with the three aspects.

The three aspects all have different implications for workspace design.

1) *The work environment aspects* primarily affect health and safety. They also influence possible spatial designs and the functionality of workplaces. These are aspects of the work environment important for interaction and performance. Work environment qualities have received attention from researchers for several years, and there is a well-developed legislation regarding health and safety issues in working life. If, however, the work environment qualities are very poor, the focus at the place of work will predominantly be on carrying out the working tasks at their most basic level. This is likely to prevent the employees from contributing to the development of the organisation.

2) *The metaphoric and symbolic aspects* of space are a part of what is called “corporate image” and the identity of the company.

Branding by design is the use of a unique design, sign, symbol, or a combination of these, employed in creating an image that identifies an organisation/workplace, distinguishing it from others (Bodin Danielsson 2019). This aspect is about architectural design but also has input from other professional fields. The metaphoric aspects are supposed to direct thought and the symbolic qualities to direct action (Hatch, 1990). A metaphor such as the flexible office aims to engender a sense of flexibility among office occupants. Symbols of the flexible office such as equipment on wheels should make people act differently, e.g. in the daily use of workstations and workplaces within the premises. The starting point when discussing this aspect is that it must be related to use and appropriateness.

If a specific design has been found to be inappropriate in its context it will be regarded as “styling” and not related to the tasks that must be carried out in the specific workspace. Both the work environment qualities and the symbolic and metaphoric qualities of space are aspects that belong to the traditional work of architects, although the awareness of their effects and implications on design concepts is not always articulated or explicit (Lindahl, 2001).

3) The term *personal configuration* is used to describe the dynamic and contextual interdependence between the spatial setting, and the everyday actions carried out in the organisation. Individual configuration as it is used in the paper is an aspect that is developed within the organisation. It is rooted in the daily work. It cannot be articulated without participation from the individuals in the organisation. When discussing individual’s configuration, the experience of meaning and usefulness is important. Action is central to configuration. It is the action that creates meaning and relationships between individuals at work.

Although the workplace is a whole that to different degree holds the three aspects the figure can also be used to illustrate the relationships between the aspects, e.g. the more you focus the metaphoric and symbolic aspects the less you focus the work environmental issues. However, the relationships are not reciprocal, and the scales are different. The work environmental qualities are to a higher degree measurable than metaphoric and symbolic qualities, which are related to whether they are accepted or understood by the users or not. This is also true of the relationship between work environmental qualities and personal configuration. If the focus is on work environmental issues, it is likely that measurements of different qualities will be in

focus. If what is contextually understood as appropriate has been articulated by the users involved, the focus is likely to be on those qualities instead of the work environmental qualities. The relationship between configuration and metaphoric/symbolic qualities is one of correspondence. If the metaphoric/symbolic aspects correspond with what contextually is understood as appropriate configuration the two aspects will correspond. Furthermore, the aspects are not fixed. The aspects have a dynamic relationship to each other. It is important to note that there are no specific types of space, or qualities of these, that are connected to only one aspect. It is not a normative model where casual relationships are in focus. A good work environment can be aesthetically well designed or not. A supporting and satisfying workplace might be nor a good work environment or a stylish one.

3. Study focus

Our study investigates office employee's notion of their workplace/workplaces focusing on three themes and how they support or hinder the employees. These are:

1. Productivity
2. Well-being
3. Comfort

The respondents were asked at the interviews to mark in their answers to five questions, see below, in the mapping model. The first two were general questions and the three last ones related to the themes above. The questions were:

- A. What is the focus of your workplace design today
- B. What should the focus of your workplace design ought to have been
- C. Where in the mapping tool should the focus be to support productivity
- D. Where in the mapping tool should the focus be to support well being
- E. Where in the mapping tool should the focus be when designing to support comfort

The form can be seen in figure 2 below.

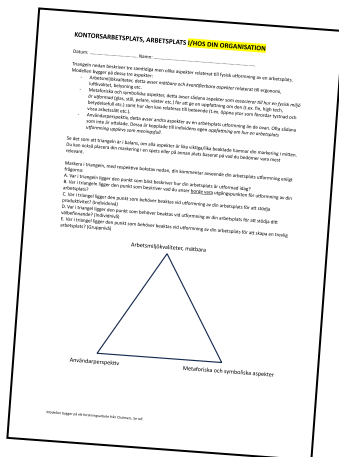


Figure 2. The actual document each person filled in and marked on [in Swedish, showed here as an illustration] This one concerns the workplace in the organisation. The one for the workplace in people’s homes was identical.

The respondent’s markings in the mapping tool were complemented by individual in-depth interviews with the participants.

4. Findings

Studying the distribution of comments/answers on the questions in the mapping tool, and focussing the three themes above, each theme can be illustrated/described in the mapping tool. The findings section describe distribution of markings as illustrated in the below figures. These illustrations represent the main office workplace and the home workplace. The colours represent different individuals, which is not analysed or discussed here.

Productivity

The mapping tool gives this illustration that visualizes that the office workplace, with more markings in the center, is designed with all three aspects in mind. While the office at home gets a more distributed illustration for the theme productivity. This can be seen as an indication and a confirmation of the requirement, also noticed in interviews, to allow for more individual applications and designs at home. In this case also the personal configuration is noticeable.

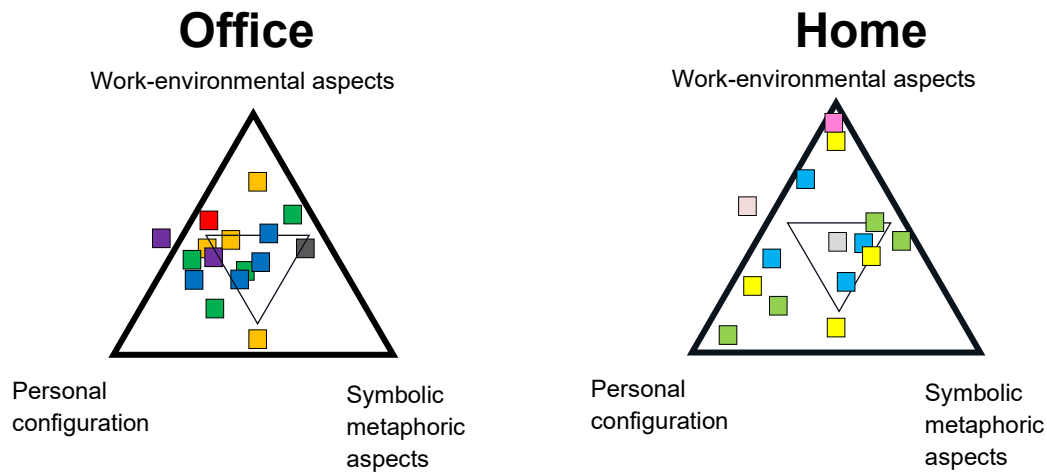


Figure 3. Productivity, theme 1, as illustrated in the mapping tool.

Quotations from the interviews describe the office as “a cleaner place with coffee and toilets” and that there are proper desks, chairs etc. In contrast to the home workplace where this is one’s own responsibility to organise and arrange for coffee and breaks. A recurring comment on the office is that one is thrown out of “task context” [manager at the bank] and need to start over again. At the same time the office is a good place to get to know colleagues so that one then can work together remotely [designer of computer games].

Well-being

Well-being associated to home workplaces appears to relate to aspects like ownership, self-expression and control of the environment manifested in the varying designs of the home workplace applied by the interviewees. The possibility to sit where one like is an important aspect, an important daily choice.

The mapping tool gives the illustration below where it can be seen that symbolic and metaphoric qualities are more present in the home workplace. It also shows a somewhat higher focus on personal configuration and symbolic and metaphoric aspects than concerning theme 1, productivity. This can also be seen as an indication of the importance of correspondence, as mentioned above, between individual configuration and symbolic and metaphoric aspects.

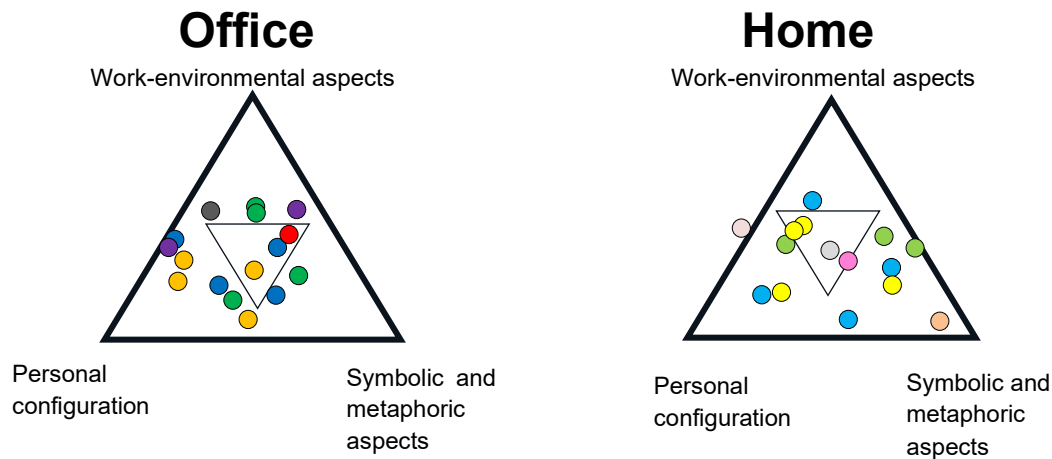


Figure 4. Well-being, theme 2, as illustrated in the mapping tool.

Quotations from the interviews describe well-being at the office related to environmental factors and elements like noise, sound, furniture and glass walls, aspects that are also relevant for work environmental aspects. The latter, glass walls, a common design feature in contemporary offices design, independent of applied office type, is commented with regard to well-being as that it is “not useful at all to fight noise”. But also, the possibility to choose where to sit is noted here in relationship to well-being, one respondent stated that being able to use a two-person room by oneself room was desirable. One comment was that this also indicates the need among staff for single person rooms. We see here a combination of comments on actual work environmental factors with factors related to status, how one visualises oneself in the organisation etc. Also, the possibility to exercise was mentioned here as a quality. This comment though, was related to the larger bank that incorporate training facilities and rather reflects size of organisation. Comments in the interviews on the workplace at home concern that “I can also relax and recuperate during the workday” [computer game company] and “I can be more spontaneous and go for lunch walks” [bank], but also that one can be “distracted by domestic responsibilities” [municipal real estate organisation].

Comfort

The mapping tool gives this illustration, indicating that the office should consider all aspects in a balanced way whereas the home context is very distributed, and probably reflects to a high degree individual preferences.

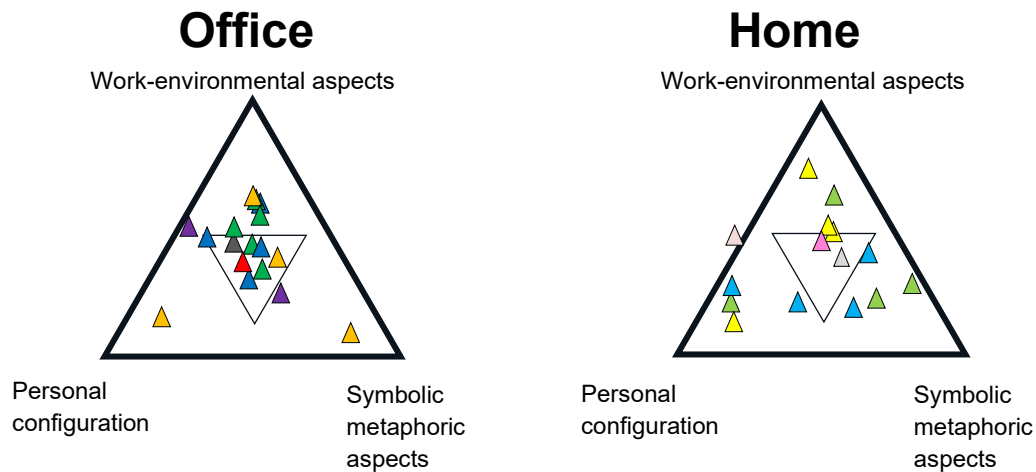


Figure 5. Comfort, theme 3, as illustrated in the mapping tool.

Quotations from the interviews describe freshness, coffee and social areas at the office. One respondent, however, stated that “there is nothing I like with the office” commenting that there were a lot of nice features like cafés, playrooms etc but not enough desks for the actual work. Also noted was what was called “social stress”. The home workplaces on the other hand were generally not commented with regard to comfort, they were accepted as they were.

5. Interpretation of the results

Based on interviews and markings in the mapping tool we were curious to see if we could understand better office employee’s notion of their different workplaces in hybrid working life – with access to at least two workplaces- the home and office workplace. And if this notion is possible to describe by a mapping tool that investigates different aspects of the workplace as a whole made up by: 1) work environment aspects, 2) symbolic and metaphoric aspects, and 3) personal configuration. If so, is a certain aspect more represented in the notion of one or the other workplaces, i.e. the home workplace or office workplace with regard to support or hindrance for the three themes investigated - productivity, well-being and comfort.

When we study the mapping tool and the three aspects alongside each other we see that the theme productivity has an emphasis on the left side of the tool, i.e. along the side between work environmental aspects and personal configuration. This applies to both the office workplace and the home workplace, although a lesser concentration (less markings in the center of the mapping tool) can be noted for the office.

The theme well-being has a focus closer to the aspect personal configuration when mapping the office workplace. For the home workplace the markings in the tool are distributed between personal configuration and symbolic/metaphoric aspects.

With regards to the theme comfort there is a clear focus in the middle of the tool, interpreted as a more neutral stance, implying that this theme is balanced. Looking at the office workplace, this theme is clearly in the center and looking at the home workplace it can be noted that the markings are slightly more positioned between personal configuration and symbolic/metaphoric aspects.

The interviews showed that employee notion of their different workplaces and preferences is today, after the pandemic, highly dependent on the workplace's ability to support practicalities in everyday life. In this regard the home office was preferred over the office workplace by most of the participants. At first glance the home workplace support of daily practicalities overshadows many other aspects of the home workplace, but when scrutinized a more complex picture emerges. A picture where the ability to express oneself and to have a workplace one controls is shown to be of importance. The workplace at home is one's own creation and that overrides many other requirements of a safe and well-designed workplace.

Office employees' considerations regarding their office workplaces had environmental demands at focus, primarily disturbances by noise and colleagues interrupting. The offices, all being activity-based flex-offices (AFOs), were designed for flexible use with non-personal workstations, required employees to plan ahead, e.g. to be sure to find an available room for focused work when needed. However, open workspaces were not always used as intended. Effective use of participants' offices required certain behaviours, which only became a negative factor, when compared to working from home—a situation that was once considered an exception.

Focusing on the physical workplace and the comparison of employees' home and office workplace—findings based on the mapping tool suggest that understanding aspects of the design of workplaces and systemizing them could contribute to empowerment also in the organisation's office workplace and not only the individual employee's home workplace. Our findings suggests that personal control plays a central role. To challenge this self-control may be formally legitimate but also entails a risk of framing work life in a way that affects long term outcomes on productivity and

staffing. Thus, we need to understand office workers' perceptions of workplace qualities at their various workplaces, and hereby preferred choices. This may contribute to a more sustainable balance between different workplaces in a hybrid context. For the purpose of this exploratory study, we have found the utilization of the mapping tool interesting and useful. This being said, the mapping tool is foremost useful in the design process — rather than after implementation—to design more attractive and supporting workplaces.

It is clear that controlling to what degree one can be allowed to be disturbed is crucial, this is commented recurrently. Both with regard to actual noise etc. but also related to social interaction and hindrance of task focus.

As noted by Tuzcuoglu et.al (2025) staff seems to be less critical of actual workplace design when there is a choice between an office and a workplace at home. Again, the importance of being able to choose becomes evident. This is something observed also in this study.

It is clear from the analysis of the data underlying this paper that being able to choose qualities of one's workplace, to be able to be a person with identity reflected in the workplace, whether at the office or at home, is important. The office workplace is not just a functional support.

6. Conclusion

With the dramatic shift toward hybrid working, studying these new patterns is essential for informed decision-making and workplace design. Ongoing resource and staffing challenges, along with pressures on the office real estate market affecting commuting and urban planning, make understanding the future of workspaces increasingly important—not just for the real estate sector, but for society as a whole, including public policy and labour market regulations.

Given this, we investigated how office employees experienced support of productivity, well-being, and comfort across different workplaces in a hybrid working, through in-depth interviews on the subject and with the support of a mapping tool that describe employee perception of work environment, symbolic and metaphorical and personal configuration at their home and office workplace.

To conclude, our exploratory findings suggest that understanding aspects of the design of workplaces and systemizing them could contribute to empowerment also in the organisation's actual office workplace and hereby contribute to a more sustainable office working life. Or a more sustainable balance between different workplaces in a hybrid context. This is important not just to employees but also to management and HR when aiming to support output and business objectives.

For architects and designers, it implies a need to further understand drivers related to business, and working life. Not as a style but as an expression of a hybrid work approach.

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