

# Employees' Response to Hybrid Work Environment

Chaiwat Riratanaphong\* and Artitaya klongnarong\*\*

Received: September 11, 2023

Revised: April 08, 2024

Accepted: April 09, 2024

## ABSTRACT

As we navigate through the ongoing pandemic, there is growing attention towards the hybrid work environment, which is increasingly seen as the preferred approach for the post-COVID world of work. A thorough examination of existing literature has revealed the diverse effects of hybrid working on employees and their work. This study aims to assess employees' feedback on the hybrid work environment and explore how various aspects of the physical environment are related to factors affecting their work performance. To achieve this, we conducted a case study involving an online news media company based in Thailand, with the objective of investigating the practical application of existing research findings. The research methodology employed for this study included an interview with a general manager and a questionnaire survey designed to evaluate employee satisfaction, perceived support for productivity, and opinions regarding the correlation between physical environment aspects and factors influencing work performance. Descriptive statistics and content analysis were utilized in this research. Our findings clearly indicate that workplace concepts and the arrangement of work environments are significantly influenced by organizational context, including factors such as business type, organizational structure, and staff characteristics. These factors play a crucial role in shaping employee satisfaction and perceived support for productivity. Moreover, we observed that factors contributing to employee satisfaction also have a direct impact on individual and team perceived support for productivity. Notably, physical workplace conditions and the use of information and communication technology (ICT) are closely connected to various factors that affect work performance. Through this study, we have provided insights into the relationship between elements of the physical environment and factors that influence employee performance.

---

\* Faculty of Architecture and Planning Building, Thammasat University Rangsit Campus, Patum Thani, 12120, Thailand

\*\* Facility and Real Estate Management (FREM) Research Unit, Faculty of Architecture and Planning Building, Thammasat University Rangsit Campus, Patum Thani, 12120, Thailand

Corresponding Author E-mail: [chaiwat@tu.ac.th](mailto:chaiwat@tu.ac.th)

## บทคัดย่อ

ในขณะที่เรากำลังก้าวผ่านช่วงเวลาของสถานการณ์โรคระบาด การทำงานแบบไฮบริดได้รับความนิยมสูงขึ้นอย่างมาก ในการเป็นแนวทางการทำงานภายหลังโควิด จากการทบทวนวรรณกรรมได้แสดงให้เห็นถึงผลกระทบด้านต่าง ๆ ของการทำงานแบบไฮบริดที่มีต่อพนักงานและงานที่ทำ การวิจัยนี้มีวัตถุประสงค์เพื่อประเมินความคิดเห็นของพนักงานต่อสภาพแวดล้อมการทำงานแบบไฮบริด และสำรวจความสัมพันธ์ระหว่างสภาพแวดล้อมกายภาพด้านต่าง ๆ กับปัจจัยที่มีผลต่อความสำเร็จในการทำงาน การศึกษานี้ใช้กรณีศึกษาจากบริษัทผลิตข้าวออนไลน์ในประเทศไทย เพื่อสำรวจว่าหลักการต่าง ๆ ที่พบในการทบทวนวรรณกรรมได้มีการประยุกต์ใช้ในทางปฏิบัติอย่างไร วิธีการวิจัยประกอบด้วยการสัมภาษณ์ผู้จัดการทั่วไป และการแจกแบบสอบถามเพื่อประเมินความพึงพอใจของพนักงาน การสนับสนุนผลผลิตภาพในการทำงาน และการรับรู้ความสัมพันธ์ระหว่าง สภาพแวดล้อมกายภาพด้านต่าง ๆ และปัจจัยที่มีผลต่อความสำเร็จในการทำงาน การวิจัยนี้ใช้สถิติเชิงพรรณนาและการวิเคราะห์เนื้อหา ผลการศึกษาพบว่าแนวคิดสถานที่ทำงาน และการจัดวางสภาพแวดล้อมในการทำงาน ที่ได้รับผลกระทบจากบริบทขององค์กร (ได้แก่ ประเภทธุรกิจ โครงสร้างองค์กร และลักษณะของพนักงาน) ส่งผลต่อความพึงพอใจของพนักงานและการสนับสนุนผลผลิตภาพในการทำงาน นอกจากนี้ การสนับสนุนผลผลิตภาพในการทำงานของพนักงานและของทีมงานยังพบว่ามีส่วนช่วยสนับสนุนด้านความพึงพอใจของพนักงาน เงื่อนไขทางสภาพแวดล้อมกายภาพ และเทคโนโลยีสารสนเทศและการสื่อสารยังเชื่อมโยงกับปัจจัยต่าง ๆ ที่มีผลต่อความสำเร็จในการทำงาน การศึกษานี้ได้นำเสนอข้อค้นพบที่เชื่อมโยงความสัมพันธ์ระหว่างปัจจัยด้านสภาพแวดล้อมกายภาพและปัจจัยที่สนับสนุนความสำเร็จในการทำงานของพนักงาน

**Keywords:** Physical Environment, Hybrid Working, Work Performance, Employees' Feedback, Online Media

## Introduction

The ever-changing environmental context, which includes economic conditions, technological advancements, and social and environmental factors, has a significant impact on the field of work and employment. Information and communication technologies (ICT) have played a crucial role in facilitating remote work for employees. A survey conducted by the U.S. Bureau of Labor Statistics revealed a staggering 115% increase in telecommuting among workers (Abrams, 2019; Bureau of Labor Statistics, 2020). The Covid-19 pandemic prompted a survey among 317 Chief Financial Officers (CFOs) and financial leaders of major corporations, indicating that 74% of respondents projected a permanent shift to remote work for at least 5% of former in-office employees (Gartner, 2021). As work patterns within organizations evolve and structures become flatter, work processes undergo changes and workplace transformations are influenced accordingly. The 2021 Work Trend Index findings suggest that a combination of remote and office work, known as hybrid work, is likely to become the norm, with over 70% of surveyed workers expressing a preference for flexible remote work options (Microsoft, 2021). In response to the COVID-19 situation, organizations are embracing hybrid work models to optimize productivity and prioritize employee well-being

(Bangkok Post, 2022). For online news media companies, the hybrid work environment holds particular significance as it caters to both in-office and remote employees. It is crucial to gather employee feedback on their work environment to identify areas for improvement in implementing hybrid work in the workplace.

## Research objectives

The objective of this study is to evaluate the feedback provided by employees regarding the hybrid work environment, encompassing their satisfaction levels and perceived support for productivity. Additionally, the study aims to investigate the relationship between various aspects of the physical work environment and the factors that influence employees' work performance.

## Literature Review

### 1. Transformation of News Media Landscape

Graham and Greenhill (2013) highlight the historical stability of traditional newspaper printing operations. However, the rise of the internet and the advent of Web 2.0 technologies have cast a shadow of uncertainty over the future of regional newspapers (Grewal et al., 2010). With the continuous advancement and widespread adoption of internet technology, digital content has surged in popularity (Mangani & Tarrini, 2017). Consequently, news media providers, including newspapers, have had to adapt their formats for news distribution. This adaptation has led to the emergence of online newspapers, digital magazines, e-books, and similar platforms, marking the dawn of a new era in information dissemination, as recognized by experts in the field.

The shift to the digital platform has fundamentally transformed how people consume and utilize information. Furthermore, technological advancements have ushered in a revolution in interpersonal interactions (Mwiya et al., 2015). The advent of online media has significantly impacted the print media industry, prompting operational changes. However, the landscape is fiercely competitive, influenced by social media, and shaped by evolving customer expectations for interaction, crowd-sourcing, and multimedia content (Grubenmann & Meckel, 2014). Huang et al. (2006) noted that the digital environment, the wealth of open data sets, and the prevalence of social media demand journalists to possess expanded skill sets. Grubenmann and Meckel (2014) underscored that the established routines that traditionally defined journalists' professional identities in conventional work settings may no longer be applicable in this evolving landscape. New tasks, requirements, and relationships are emerging. Consequently, journalists must consciously adapt their habits, routines, and attitudes to navigate this dynamic context.

## 2. Hybrid Work Environment

According to Halford (2005), the introduction of technology has drastically changed how we work, manage, and organize. This transformation is driven by new technology, how work is done, and different employment practices. Hybrid work setups now let employees do their jobs from home and the office, using virtual tools to connect both spaces. Hybrid work combines working in the office and remotely, which is a shift from the old way of working. Initially, “telecommuting” was used to describe remote work, where people worked from home and used technology to talk to their office colleagues (Nilles, 1975; Matli, 2020). Shelly et al. (1998) defined telecommuting as working from home with computers and communication tools. Knight and Westbrook (1999) also used the term telecommuting for employees who mainly worked outside their home office but still used a traditional office for some tasks. Kirk and Belovics (2006) introduced “e-workers” to describe those who work away from their office and mainly communicate electronically with colleagues. Remote work, as part of hybrid work, is changing how we work. Matli (2020) mentions this shift is altering the old idea of being physically present at the office.

Regarding social factors, Beyer and Marshall (1981) have put forth a comprehensive set of interconnected elements that shape the interpersonal dynamics among workers. These factors include confidence, trust, mutual assistance, support, friendliness, enjoyment, collaborative teamwork, creativity, open communication, and freedom from threats. Illegems and Verbeke (2004) discovered that teleworkers typically do not experience negative effects on job satisfaction, with the exception of a decline in professional interaction. Kowalski and Swanson (2005) introduced a framework that outlines critical success factors like support, communication, and trust, which play pivotal roles in the successful implementation of telework programs. This framework identifies essential elements for success at the organizational, managerial, and employee levels. In this study, we aim to investigate the impact of the hybrid work environment on employees and assess its influence on various aspects.

## Research Methods

The research steps presented in Figure 1 include conducting an initial literature review, performing a case study, and drawing conclusions. To carry out the research, a field study was conducted using The Standard, an online news media company, as the subject of the case study. This case was selected because of its work environment, which has adopted the hybrid working model. The data collection process involved distributing online questionnaires and conducting interviews. The case study organization’s coordinator distributed the questionnaires to 117 employees, and 36 employees completed them, resulting in a response rate of 31%. The participants in the study were divided into four categories according to their work arrangements:

those who worked from home (3 respondents), those engaged in hybrid work (19 respondents), individuals working on-site (11 respondents), and employees with flexible working arrangements (3 respondents). The primary objective of the questionnaire was to evaluate how employees perceived their work environment across three key aspects: their level of satisfaction, the perceived support for productivity, and the connection between various elements of the physical workspace and factors that influence work performance.

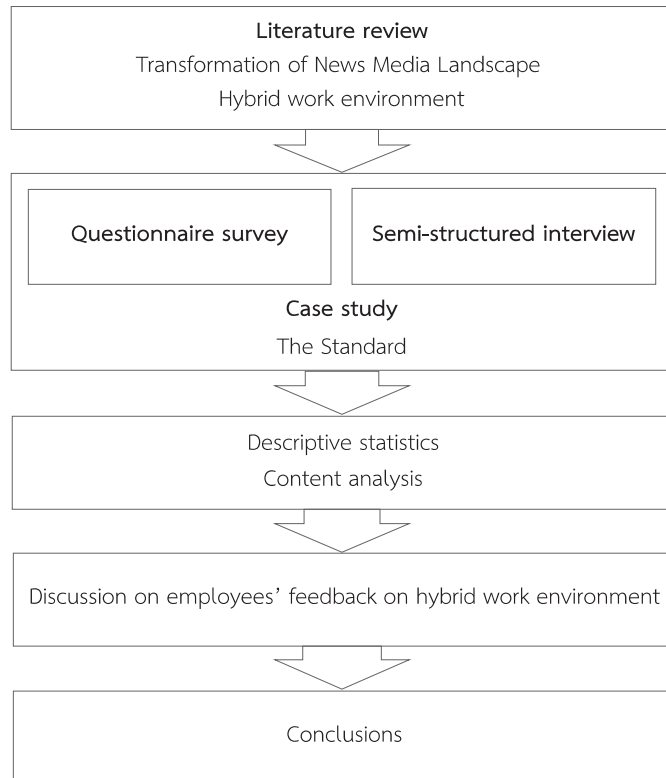
The initial part of the questionnaire focused on assessing employee satisfaction regarding different aspects of the work environment. These aspects included the layout, furniture, and facilities of the workplace, as well as the ICT infrastructure, support spaces, lighting, and acoustics. Employee satisfaction was measured using a five-point scale, ranging from 1 (very dissatisfied) to 5 (very satisfied). The satisfaction percentage was calculated by determining the average percentage of respondents who reported being satisfied or very satisfied.

The following section of the questionnaire aimed to evaluate employees' perceptions of the work environment's support for productivity at both the individual and team levels. A survey was utilized, where respondents self-assessed the level of supportiveness they perceived from the work environment. The assessment was conducted using a five-point scale, ranging from 1 (totally unsupportive) to 5 (totally supportive).

The third section of the questionnaire aimed to gather employees' perceptions regarding the relationship between various aspects of the physical work environment and factors that influence work performance. The factors influencing work performance in this study were derived from the foundational works of Beyer and Marshall (1981) on social dynamics, Illegems and Verbeke (2004) on teleworker job satisfaction, and Kowalski and Swanson (2005) on telework success factors, emphasizing the importance of interpersonal and organizational elements. These factors included creativity, idea sharing, face-to-face communication, collaboration, positive feedback among colleagues, team members' confidence, friendly relationships, ability to work without stress, ability to work with others, amount of working time, and amount of work completed. Respondents were asked to indicate their level of agreement or disagreement with the connections between these variables, using a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). The results from the first two sections of the questionnaire were presented as percentages, while the third section was presented as average scores.

Additionally, apart from the questionnaire, a semi-structured interview was conducted with the general manager. The interview focused on the organization's policy regarding hybrid working, employees' work patterns, and the impact of hybrid working on employees' performance. The selection criteria for the case study included the location, physical characteristics of the hybrid work environment, and organizational size, specifically 50-200 employees. A case in Bangkok was chosen

due to the significant growth rate of the news media industry in the capital city. The study was conducted between February 2021 and May 2021.



**Figure 1** Research steps

## Case Description

Established in 2017, The Standard is an online media production company and news agency that operates across multiple platforms. It offers a wide range of content, including online articles, videos, and podcasts, covering both domestic and international news. The company has a workforce of 117 employees, consisting of both permanent and temporary contracted staff. The organization is divided into four main departments: The Standard POP, The Standard News, The Standard Wealth, and The Standard Podcast. These departments are further supported by additional teams, including video production, art and proofreading, marketing and account management, digital media, administration, and human resources. Located on Rama 9th Road in Bangkok, Thailand, The Standard's office is housed in a four-story building with a total area of 1,000 square meters. The company follows a flexible working policy that allows employees to have flexible working hours and the option to work remotely. However, according to the management

policy, employees are required to work on-site at least once a week. The workspace is arranged according to the activity-based workplace concept, with some degree of fixed desks based on particular job functions. Figure 2 illustrates various settings and the working atmosphere on the 3rd floor.



Figure 2 Working environment on the 3rd Floor

## Findings

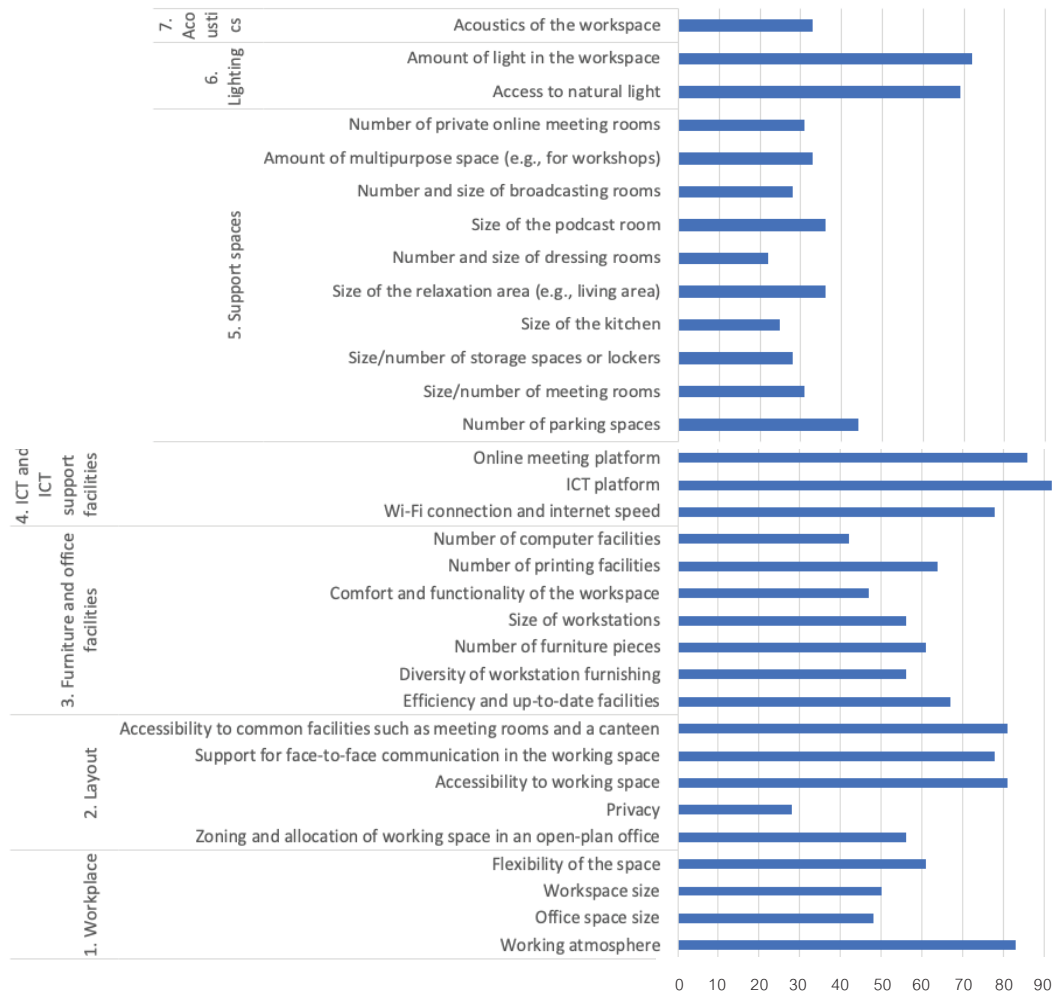
Based on the questionnaire survey, the findings provide insights into the impact of physical environment aspects on employee satisfaction and work performance. This section presents the results obtained from the three questionnaires, along with an overview of the organization's policy regarding the hybrid working approach and the influence of Covid-19 on work practices. The respondents included 11 males, 22 females, and 3 individuals who did not specify their gender. Out of the total employee count of 117, the 36 respondents represent a response rate of 31%.

### 1. Employee satisfaction with the work environment

The questionnaire surveys produced diverse responses regarding the satisfaction levels related to various aspects of the working environment. Figure 3 displays the percentages of satisfied employees in seven categories of physical environment aspects, encompassing the workplace,



layout, furniture and office facilities, ICT and ICT support facilities, support spaces, lighting, and acoustics.



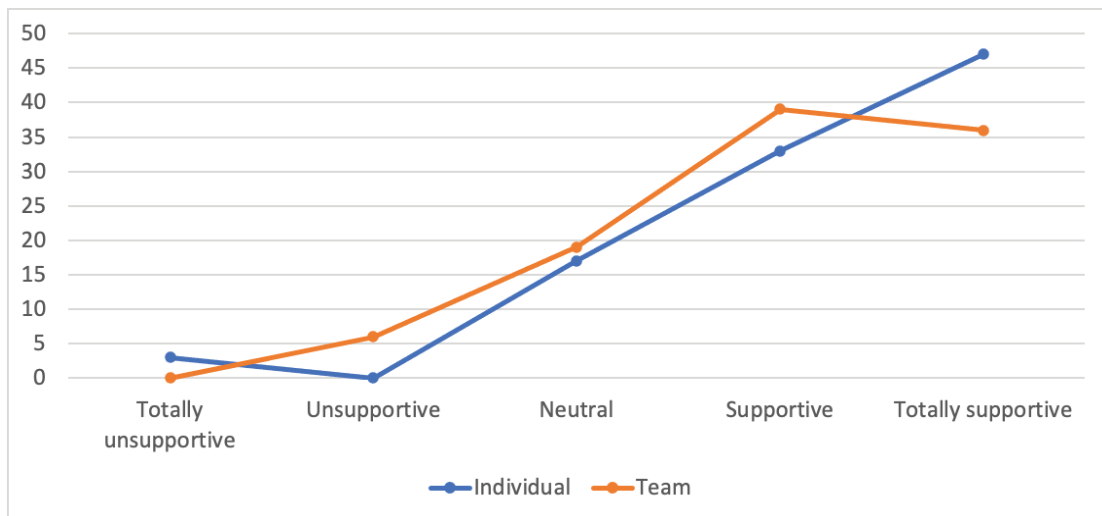
**Figure 3** Percentage of satisfied respondents on different aspects of the physical environment

The findings highlighted significant satisfaction in various areas, with the workplace category showing notably high satisfaction percentages. Specifically, the working atmosphere received a high satisfaction rating of 83%. Similarly, positive satisfaction ratings were observed in the layout category, with 81% of respondents expressing satisfaction regarding the accessibility to the working space and common facilities. Additionally, the ICT and ICT support facilities category also received high satisfaction ratings, including a 92% satisfaction rate for the ICT platform, an 86% satisfaction rate for the online meeting platform, and a 78% satisfaction rate for the Wi-Fi connection and internet speed.



## 2. Perceived productivity support

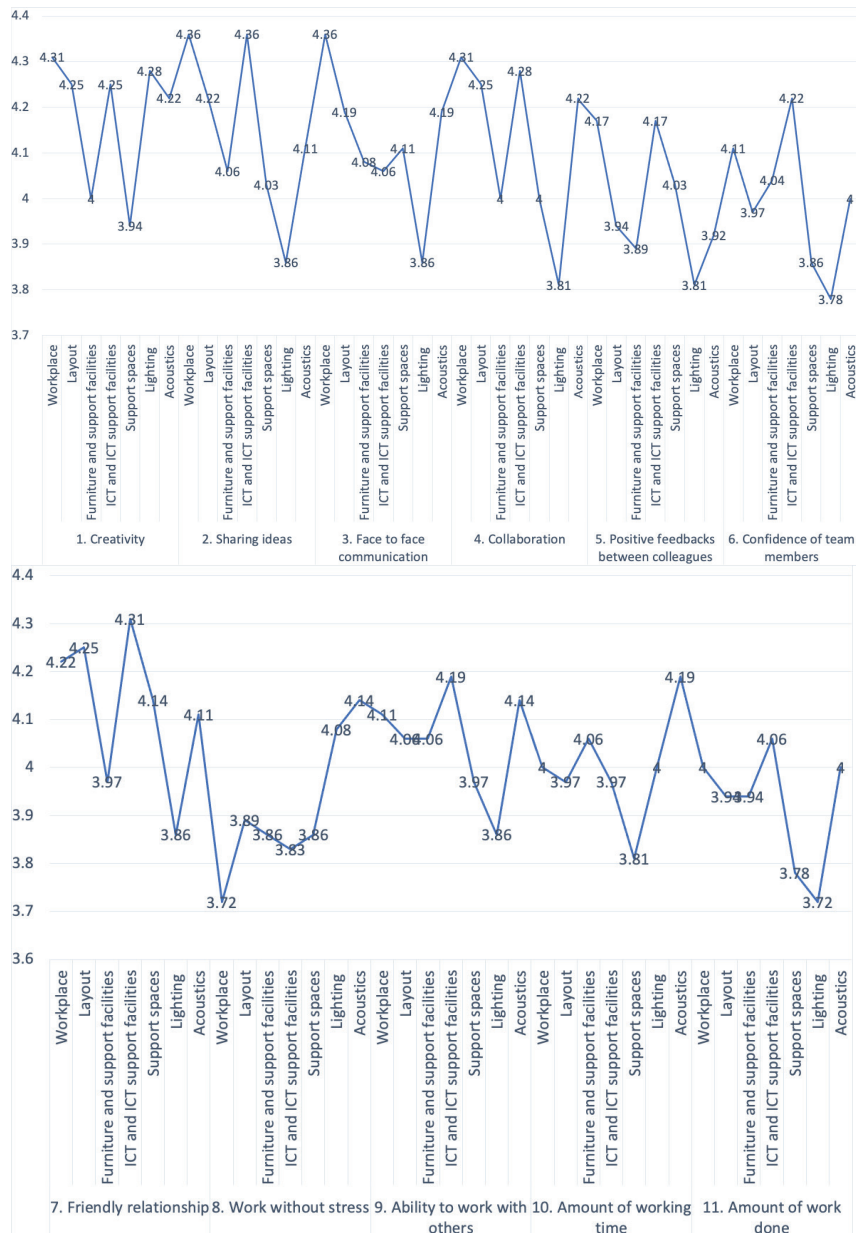
Based on the findings, the majority of employees recognize the importance of their physical environment in enhancing both individual and team productivity. Figure 4 presents the level of support provided by the physical environment for individual productivity, with 80% of respondents indicating support (33% as supportive and 47% as totally supportive). Additionally, the physical environment was reported to support team productivity at a rate of 75% (39% as supportive and 36% as totally supportive).



**Figure 4** Percentage of respondents that perceive their physical environment as being supportive

## 3. Physical environment and its impact on work performance factors

According to the findings, a majority of employees recognize the connection between various aspects of the physical environment and factors that influence their work performance. Figure 5 illustrates the level of agreement among employees regarding the influence of different physical environment aspects on work performance factors. Among the seven aspects examined, two received higher scores in terms of their impact on work performance factors: the workplace (including the working atmosphere, size of office space and workspace, and flexibility of the space), and ICT and ICT support facilities (including Wi-Fi connection, internet speed, and online meeting platforms).



**Figure 5** Employees' perceptions on relationship of physical environment and work performance

Employees perceived that the size and functionality of the workspace were associated with factors such as creativity, sharing ideas, face to face communication, collaboration, and positive feedback between colleagues. Additionally, they believed that ICT and its support facilities played a role in fostering positive feedback, team members' confidence, friendly relationships, the ability to work with others, and the overall amount of work accomplished.

#### 4. Findings from the interview

Based on the interview conducted with the general manager, the findings highlight the company's prior implementation of remote working even before the onset of the Covid-19 pandemic. During the pandemic, the company fully transitioned to a work-from-home arrangement. To adapt to the changes brought about by the 'new normal,' the organization has embraced the hybrid working model as a long-term approach. To support employees working from home, the company has implemented various policies, including providing a monetary allowance for internet packages and application programs. Additionally, employees are encouraged to use their own computers and office equipment to facilitate remote work. Regarding the hybrid work environment, there is a recognized need for additional spaces and facilities, including designated working areas, meeting rooms, and ergonomic furniture. The availability and functionality of ICT and ICT support facilities, such as software and network speed and stability, are also deemed crucial components. While the workspace is designed based on an activity-based workplace concept, employees express the desire for more diverse settings that cater to both focused work and collaborative activities.

#### Discussions

The structure at The Standard is notably flat, encompassing a workforce of 117 individuals. This setup fosters open lines of communication among various functional teams and encourages interaction between upper management and those at the operational level. The company's business model aligns with modern news media services, particularly within the digital newspaper sector, which are becoming increasingly common. As digital journalism continues to evolve, incorporating improved web page designs and layouts, it becomes increasingly imperative for the company to enhance its efficiency in producing news content and adapt to the rising trends in blogging software and citizen journalism. To meet these evolving needs, The Standard has adopted a flexible hybrid work model, allowing employees to work both remotely and on-site. This approach prioritizes work-life balance and reduces the necessity for extensive commuting, facilitating a harmonious blend of remote work and in-person collaboration.

The results of the study revealed a significantly high level of satisfaction (83%) with the working atmosphere at The Standard. The workplace has been thoughtfully designed to incorporate informal work settings and an office interior that demonstrates a homely ambiance, as depicted in Figure 2. This design approach has helped create a comfortable and friendly work environment that employees appreciate. Furthermore, satisfaction levels, including accessibility to working space (81%) and common facilities (81%), were also high. Within the open-plan office, workspaces have been organized in a straightforward manner, which features clearly delineated functional units. This arrangement ensures easy accessibility to support spaces, such as the kitchen and photocopying area.

The study's findings further indicate a significantly elevated level of satisfaction among employees regarding the ICT and related support facilities. Specifically, the ICT platform achieved an impressive satisfaction rate of 92%, while the online meeting platform achieved an 86% satisfaction rate. These technological resources have been strategically integrated into the operations of The Standard, an online news media company, to facilitate the complex processes involved in online news production, communication, and collaboration among team members. It is noteworthy that a substantial majority of the employees (72.2% of the total) fall within the age range of 20 to 35 years, categorizing them as Generation Y and Generation Z office workers. This demographic alignment is particularly harmonious with the requirements and tendencies of online work, underscoring the synergy between the workforce composition and the organization's operational needs.

The findings of the study underscore the pivotal role that the working environment plays in enhancing both individual and team productivity. This phenomenon can be attributed to a variety of aspects within the physical environment that contribute significantly to employee satisfaction. These aspects encompass the quality of the working atmosphere, the accessibility of workspaces and common facilities, as well as the availability of ICT resources and online meeting platforms. By promoting effective communication and fostering a culture of collaboration, these elements create a conducive atmosphere for productive work dynamics among team members, regardless of whether they are operating remotely or within the office setting. Significantly, prior research has established a direct link between employee satisfaction with their workplace and their overall health and productivity (Kamaruzzaman et al., 2015). This finding highlights the importance of nurturing a satisfying work environment that has a positive impact on both employee well-being and job performance.

Employee perceptions reveal a connection between various aspects of the physical work environment and the factors influencing their work performance. Of particular importance are two prominent aspects: the physical conditions of the workplace and the availability of ICT and ICT support facilities, both closely connected to various factors influencing work performance. The functionality of a building relies on the degree to which its spatial and physical attributes support climatic, cultural, and economic functionalities (Van der Voordt & Van Wegen, 2005). In this case study, employees perceive a clear connection between the dimensions and functionality of the workspace, including the working atmosphere, office size, individual workspace, and spatial flexibility, and various critical factors. These factors include creativity, the sharing of ideas, face-to-face communication, collaborative efforts, and the fostering of positive collaborative feedback. Similarly, the effectiveness of ICT and ICT support facilities, such as Wi-Fi connectivity, internet speed, the ICT platform, and online meeting tools, is directly linked to positive collaboration feed-

back, the confidence of team members, the development of friendly interpersonal relationships, the ability to collaborate effectively, and the overall work output. These observations clearly illustrate how the blending of work patterns, spatial utilization, and ICT utilization within the hybrid working environment has a significant impact on its usability. Usability, or functional usability, refers to how well a system can be employed by designated users to accomplish specific objectives efficiently, effectively, and with satisfaction, all within a specified context of use (Fenker, 2008). In the built environment, the emphasis should be on how users perceive the ease and efficiency of utilizing workplaces (Windlinger et al., 2016).

Nevertheless, the findings also revealed the significance of other aspects of the physical environment in relation to factors that influence employees' work performance. These aspects include office space layout (e.g., zoning, allocation of workspace in an open-plan office, privacy, accessibility to workspace, workspace support for face-to-face communication, and accessibility to common facilities) and the acoustics of the workspace, which received among the top three highest average scores (see Figure 5). These factors received high average ratings, highlighting their significant role in promoting effective work performance. As stated by Hillier and Leaman (1976), the spatial organization of activities is a fundamental function of a building. It should ideally provide optimal support for desired activities through the careful arrangement of available space. Previous research studies have consistently indicated that employee satisfaction with office layout, thermal comfort, air quality, lighting, and noise levels exerts a significantly positive influence on overall satisfaction levels. Higher levels of satisfaction with these factors correspond to increased overall satisfaction levels among employees. Furthermore, it is well-established that enhanced overall satisfaction has a direct and positive impact on productivity (Freihoefer et al., 2015).

## Conclusions

1. The findings suggest that the specific context of the case study organization, including its business type, organizational structure, and staff characteristics, influences the concept of the workplace and the arrangement of the work environment. These, in turn, impact employee satisfaction and perceived productivity support. Key factors identified in this context include the working atmosphere, accessibility to working space and common facilities, as well as the availability of ICT and online meeting platforms. These aspects play significant roles in enhancing employee satisfaction and perceived productivity support at both the individual and team levels.
2. Employees have identified four key aspects of the physical environment: the workplace, ICT and ICT support facilities, office space layout, and acoustics. These aspects are closely associated with factors that influence their work performance.

3. The empirical findings provide evidence supporting the link between employee satisfaction and perceived productivity support within the work environment. They align with previous research conducted by Kamaruzzaman et al. (2015) and Budie et al. (2019), reinforcing the notion that employee satisfaction plays a crucial role in facilitating productivity and performance.

## Recommendations

When implementing hybrid working models, workplace managers should carefully consider workplace utilization to provide employees with flexibility in choosing where and how they work. Offering diverse types of work settings that cater to both focused work and collaborative activities aligns with the principles of an activity-based workplace concept. These measures are particularly significant in the context of the remote work environment.

The results highlight that various aspects of the physical environment collectively influence employees' work performance, including office space layout and workspace acoustics. To accommodate diverse employee needs and preferences, corporate real estate and workplace managers should provide a range of work settings that incorporate an appropriate mix of these physical environment aspects.

## Limitations

While this research showcases the successful implementation of a hybrid working model, it is essential to acknowledge certain limitations. The number of respondents and the scope of the interviews were constrained by the challenges posed by the pandemic, affecting both individuals' ability and willingness to participate. Moreover, the study is based on a single case, potentially limiting the generalizability of the findings. Additionally, the study did not qualitatively assess the influence of architectural quality and style, which are crucial during the programming stage and affect the overall workplace experience that make it difficult to provide concluding remarks related to workplace design.

## Methodological reflections and future research

This study employed a case study approach to qualitatively investigate the relationships among employee feedback on the work environment, workplace concept, organizational structure, and staff characteristics. The questionnaire data collected, which encompassed employee satisfaction, perceived productivity support, and perceptions of the link between physical environment aspects and factors influencing work performance, hold potential for further quantitative exploration. By subjecting the existing questionnaire data, along with data from additional case studies, to statistical analysis, we can enhance our understanding of the intricate relationships among intercon-

nected variables. This approach would provide insights into the factors that impact employees' feedback on the hybrid work environment.

## References

- Abrams, Z. (2019). The future of remote work. American Psychological Association. Retrieved September 3, 2021, from <http://apa.org/monitor/2019/10/cover-remote-work>
- Bangkok Post (2022). The best of both world. Retrieved October 6, 2021, from <http://bangkokpost.com/life/social-and-lifestyle/2229795/the-best-of-both-worlds>
- Beyer, J. E., & Marshall, J. (1981). The Interpersonal Dimension of Collegiality. *Nursing Outlook*, 1981, 29(11): 662-665
- Budie, B., Appel-Meulenbroek, R., Kemperman, A., & Weijs-Perree, M. (2019). Employee satisfaction with the physical work environment: the importance of a need based approach. *International Journal of Strategic Property Management*, 23(1), pp. 36-49
- Bureau of Labor Statistics (2020). Employed persons working at home, workplace, and time spent working at each location. Retrieved October 15, 2021, from <http://bls.gov/news.release/atus.t06.htm>
- Fenker, M. (2008). Towards a theoretical framework for usability of buildings, in Alexander, K. (Ed.) *Usability of Workplaces: Phase 2*, International Council for Research and Innovation in Building and Construction, Rotterdam
- Freihoefer, K., Guerin, D., Martin, C., Kim, H.Y., & Brigham, J.K. (2015). Occupants' satisfaction with, and physical readings of, thermal, acoustic, and lighting conditions of sustainable office workspaces. *Indoor and Built Environment*, 24(4), pp. 457-472
- Gartner (2021). Gartner CFO Survey. Retrieved December 6, 2021, from <https://www.gartner.com/en/newsroom/press-releases/2020-04-03-gartner-cfo-surey-reveals-74-percent-of-organizations-to-shift-some-employees-to-remote-work-permanently2>
- Graham, G., & Greenhill, A. (2013). Exploring interaction: print and online news media synergies. *Internet Research*, 23(1). pp. 89-108
- Grewal, D., Janakiraman, R., Kalyanam, K., Kanan, P.K., Ratchford, B., Song, R., & Tolerico, S. (2010). Strategic online and offline retailing pricing: a review and research agenda. *Journal of Interactive Marketing*, 24(2), pp. 138-54
- Grubenmann, S., & Meckel, M. (2014). Metaphors of occupational identity: traces of a changeable workplace in journalism. The 74th Annual Meeting of the Academy of Management, Philadelphia, PA, USA. August 4 - 5, 2014
- Halford, S. (2005). Hybrid workspace: re-spatialisations of work, organisation and management. *New Technology, Work and Employment*, 20(1), pp. 19-33



- Hillier, B., & Leaman, B. (1976). Architecture as a discipline. *Journal of Architectural Research*, 5(1), pp. 28-32
- Huang, E., Davison, K., Shreve, S., Davis, T., Bettendorf, E., & Nair, A. (2006). Bridging Newsrooms and Classrooms: Preparing the Next Generation of Journalists for Converged Media. *Journalism & Communication Monographs*, 8(3), pp. 221-262
- Illegems, V., & Verbeke, A. (2004). Telework: What does it mean for management. *Long Range Planning*, 37(4), pp. 319-334
- Kamaruzzaman, S.N., Egbu, C.O., Zawawi, E.M.A., Karim, S.B.A., & Woon, C.J. (2015). Occupants' satisfaction toward building environmental quality: structural equation modeling approach. *Environmental Monitoring and Assessment*, 187(5), pp. 1-21
- Kirk, J. & Belovics, R. (2006). Making e-working work. *Journal of Employment Counseling*, 43(1), pp. 2039-4606
- Knight, P.J., & Westbrook, J.D. (1999). Comparing Employees in Traditional Job Structures vs Telecommuting Jobs Using Herzberg's Hygiene & Motivators. *Engineering Management Journal*, 11, pp. 15-20
- Kowalski, K.B., & Swanson, J.A. (2005). Critical success factors in developing teleworking programs. *Benchmarking: An International Journal*, 12, pp. 236-249
- Mangani, A., & Tarrini, E. (2017). Who survives a recession? Specialization against diversification in the digital publishing industry. *Online Information Review*, 41(1), pp. 19-34
- Matli, W. (2020). The changing work landscape as a result of the Covid-19 pandemic: insights from remote workers life situations in South Africa. *International Journal of Sociology and Social Policy*, 40(9/10), pp. 1237-1256
- Microsoft (2021). The Work Trend Index: The next great disruption is hybrid work - are we ready? Retrieved October 6 2021, from <http://microsoft.com/en-us/worklab/work-trend-index/hybrid-work>
- Mwiya, M., Phiri, J., & Lyoko, G. (2015). Public Crime Reporting and Monitoring System Model Using GSM and GIS Technologies: A Case of Zambia Police Service. *International Journal of Computer Science and Mobile Computing*, 4(11), pp. 207-226
- Nilles, J. (1975). Telecommunications and organizational decentralization", *IEEE Transactions on Communications*, 23, (10), pp. 1142-1147
- Shelly, G.B., Cashman, T.J., Waggoner, Gloria, A.W., & Waggoner, W.C. (1998). *Discovering Computers 98: A Link to the Future: World Wide Web Enhanced*, Course Technology, Massachusetts
- Van der Voordt, D. J. M., & Van Wegen, H. B. R. (2005). *Architecture in use: an introduction to the programming, design and evaluation of buildings*. UK: Architectural Press
- Windlinger, L., Nenonen, S., & Airo, K. (2016). Specification and empirical exploration of a usability concept in the workplace. *Facilities*, 34 (11/12), pp. 649-661