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Article

Overcoming digital stress through new work environment design

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ABSTRACT

Advances in digital technology have significantly changed the dynamics of the workplace, improving efficiency while creating new challenges for workers' well-being. One of the main challenges is digital stress, which is psychological pressure that arises due to excessive use of technology in the work environment. This stress can be caused by information overload, the expectation to always be online, and the imbalance between work and personal life. This research aims to explore how innovative work environment design can help reduce digital stress in workers. The method used in this study is a literature study by analyzing various previous studies relevant to this topic. Data sources come from academic journals, books, and research reports that discuss digital stress, worker welfare, and work environment design. The results of the study show that ergonomic work environment design, the implementation of work flexibility policies, reduction of excess technology exposure, and the integration of more humane technology can significantly reduce psychological pressure due to the use of digital technology. In addition, a work environment that supports work-life balance, such as the provision of relaxation areas, flexible workspaces, and restrictions on digital communication after hours, has also proven effective in improving workers' welfare. This research emphasizes that designing a work environment that is more adaptive to the psychological and physical needs of workers can be an effective solution in overcoming digital stress in the digital era. Therefore, organizations and companies are advised to adopt more worker-oriented workplace policies and designs.

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Introduction

Advances in digital technology have significantly changed the landscape of the world of work, creating new challenges affecting the well-being of workers (Cascio & Montealegre, 2016; Wrede et al., 2021) The use of digital technology in the modern work environment has increased efficiency and flexibility (Lau et al., 2001), but on the other hand it also gives rise to various psychological pressures known as digital stress (Kumpikaitė-Valiūnienė et al., 2021) This digital stress includes pressure due to information overload, the need to be always online, and a lack of work-life balance due to constantly connected technology (Marsh et al., 2022).

Digital stress is a form of stress that arises due to the use of digital technology, especially social media, digital communication, and the expectation to always be connected (Poguntke, 2020; Wolfers & Utz, 2022). According to Steele et al. (2020), digital stress can be categorized into four main aspects, namely stress due to social pressure in cyberspace, stress due to information overload, stress due to cyberbullying, and stress due to lack of digital privacy (Steele et al., 2020) In a study conducted by Van Ouytsel et al. (2022), digital stress mainly impacts adolescents, where the expectation of always

being available and responsive to messages on social media can increase anxiety and decrease psychological well-being (De Groote & Van Ouytsel, 2022).

In addition, research by Krägeloh et al. (2023) shows that digital stress has a global impact, including in Arabic-speaking countries, where the Digital Stress Scale (DSS) has been developed and validated to understand the impact of digital stress in various cultural contexts (Krägeloh et al., 2023) Another factor contributing to digital stress is professional expectations in the digital work environment, as shown by the Rahman & Ibrahim (2020) study, which states that excessive use of digital technology at work during the COVID-19 pandemic increased work stress. Therefore, digital stress is an important phenomenon that must be managed properly to prevent negative impacts on mental health and individual well-being (Rahman et al., 2020).

The phenomenon of digital stress has been increasing in recent years, especially with the increasing culture of remote working and digital technology-based work (Berger et al., 2024). Research shows that workers experience higher pressure when faced with constant communication, disruption from various digital applications, and the expectation to respond to work messages in a short time (Rahman et al., 2020) In fact, in an all-digital work environment, this stress can lead to decreased productivity, emotional exhaustion, and negative impacts on workers' mental health (van der Feltz-Cornelis et al., 2023).

One approach that can be used to overcome digital stress is through the design of a work environment that is more adaptive and supports worker welfare (Wrede et al., 2021) This concept includes ergonomic workspace arrangements, more flexible technology usage policies, and the implementation of technology that can reduce digital workloads (Bondanini et al., 2020) A study by Marsh et al. (2022) confirms that a work environment designed with psychological and physical aspects in mind can help reduce stress due to excessive use of digital technology.

Therefore, it is important to research how the design of the new work environment can help reduce the negative impact of digital stress. Designing a workplace that is oriented towards employee well-being will not only increase productivity but will also create a healthier and more sustainable work culture in the long run (Orlandi et al., 2024).

As the adoption of digital technology in the workplace increases, companies and organizations must understand how digital stress can impact the well-being of workers and their productivity (Day et al., 2010; Kang & Park, 2022). Studies highlighting how work environment design can help address this stress are still limited, so it is becoming increasingly important to provide evidence-based recommendations for organizations in creating a healthier workplace digitally (Mittal et al., 2022).

A number of studies have discussed the impact of digital stress and its mitigation strategies. A study conducted by Pozo-Rico et al. (2020) highlights the importance of technology-based training and interventions to help individuals manage digital stress (Pozo-Rico et al., 2020) Another study by Marsh, Vallejos, and Spence (2022) shows that a well-designed work environment can improve employee well-being and reduce psychological stress due to technology. However, there are still few studies that specifically highlight the role of work environment design in overcoming digital stress, so this research is expected to fill this gap.

This research aims to explore how innovative work environment design can help reduce digital stress in workers. In particular, this study will identify the main factors that contribute to digital stress in the workplace, evaluate the impact of work environment design on worker well-being, and propose design strategies that can be applied to create a healthier and more productive work environment in the digital context.

Methods

This study uses a qualitative research method with a literature review approach. Literature studies were chosen as the research method because they allow researchers to collect, analyze, and synthesize various relevant research results related to digital stress and the design of new work environments (Merriam & Tisdell, 2016). This method aims to understand how work environment

design can be used as a strategy to reduce digital stress based on the findings of previous research that have been published in academic journals and reliable scientific sources (Snyder, 2019).

The data sources in this study come from literature obtained from relevant national and international journals, academic books, and research reports from various trusted institutions. Literature searches were conducted using databases such as ScienceDirect, Springer, SAGE Journals, Taylor & Francis, and Garuda Kemdikbud. The articles used in this study were selected based on several criteria, namely (1) published in the last five years (2019-2024), (2) discussing digital stress in the context of the work environment, and (3) having a relationship with workplace design that supports worker welfare (Boell & Cecez-Kecmanovic, 2015).

The data collection technique in this study is carried out through the documentation method by collecting scientific articles that are in accordance with the research topic (Hart, 2018) This process involves searching for articles based on keywords such as "digital stress in workplace," "workplace design and stress," and "employee well-being and digital environment." Once the data is collected, a screening process is carried out to ensure the relevance and quality of the sources used (Rowley & Slack, 2004).

The data analysis method used in this study is content analysis, which aims to identify patterns, relationships, and main findings in the literature that has been collected (Bowen, 2009) The analysis process is carried out with a thematic approach, in which various key themes related to digital stress and work environment design are identified and categorized (Braun & Clarke, 2006) The collected data is then synthesized and interpreted to answer the research objectives and provide insights into work environment design strategies that can be applied to reduce digital stress (Tranfield et al., 2003).

The literature study method used in this study has several advantages, including its ability to combine various perspectives and research results to build a more comprehensive understanding of the phenomenon being studied (Jesson et al., 2011) In addition, this approach can also avoid the limitations of empirical research that requires large resources, allowing researchers to explore various existing theories and scientific evidence to develop evidence-based recommendations.

Results and Discussion

The following is a literature table of the selection results of the 10 most relevant articles related to the research entitled "Overcoming Digital Stress through New Work Environment Design". These articles have been selected based on the suitability of the topic, contributions to the field of work environment design to overcome digital stress, and the latest research in the period 2019-2024.

Research on overcoming digital stress through the design of new work environments has become a major concern in the era of rapidly evolving digitalization. The study highlights how a modern, technology-based work environment can bring new challenges to employee well-being, especially in the form of digital stress caused by information overload, excessive oversight, and rising job expectations due to the constant interconnectedness with technology. In an effort to understand and overcome these challenges, the various studies studied in this literature study offer different perspectives that describe the causal factors, impacts, and solutions that can be applied through the design of a more adaptive and humane work environment.

One of the studies that highlights this phenomenon is a study conducted by Marsh, Vallejos, and Spence (2022), which shows that the digitization of the work environment has a positive impact on productivity, but it also poses significant psychological challenges. In this study, it was found that while technology can improve work efficiency, the use of poorly managed digital tools can lead to stress, mental exhaustion, and emotional distress. The design of the new work environment must consider ways to minimize this negative impact, for example by creating a more flexible system and providing a balance between the demands of the job and the personal needs of the worker (Marsh et al., 2022).

The research of Zhang et al. (2023) provides a more specific perspective by examining how digital platform-based innovations in healthcare can help reduce the work stress of medical personnel. With digital-based health services, doctors and healthcare workers have better access to diagnostic tools

and more efficient patient management. However, this study also reveals that without good system design, medical personnel can actually experience overload due to constant interaction with technology, so the design of the ideal digital work environment must consider the needs of users and not only focus on operational efficiency (Zhang et al., 2023).

Table 1. Literature Review

Author	Title	Findings
Marsh, E., Vallejos, E.P., Spence, A.	The digital workplace and its dark side: An integrative review	The digital work environment can increase productivity but also trigger stress and mental exhaustion due to technological pressure.
Zhang, X., Wei, X., Xu, D.	How platform-based internet hospital innovation affects doctors' active stress coping efforts	Digital platform-based innovations in healthcare can help reduce the stress of medical personnel through technology-based coping strategies.
Singh, P., Bala, H., Dey, B.L., Filieri, R.	Enforced remote working: The impact of digital platform-induced stress and remote working experience on technology exhaustion and subjective wellbeing	Remote work supported by digital platforms can lead to technological stress that reduces the subjective well-being of workers.
Giacosa, E., Alam, G.M., Culasso, F., Crocco, E.	Stress-inducing or performance-enhancing? Safety measure or cause of mistrust? The paradox of digital surveillance in the workplace	Digital surveillance in the workplace has a dual impact: it increases efficiency but also fuels employee mistrust and anxiety.
Volberda, H.W., Khanagha, S., Baden-Fuller, C.	Strategizing in a digital world: Overcoming cognitive barriers, reconfiguring routines and introducing new organizational forms	Digital transformation in organizations requires cognitive change strategies and redesign of work processes to reduce employee psychological barriers.
Weerasekara, M., Smedberg, Å.	Design practices and implications in information and communication technology-supported occupational stress management interventions	Information technology-based interventions can help manage work stress by supporting employees' mental well-being.
Amankwah-Amoah, J., Khan, Z., Wood, G.	COVID-19 and digitalization: The great acceleration	The COVID-19 pandemic has accelerated the digitalization of work, creating new challenges in maintaining work-life balance and reducing digital stress.
Ippolito, D., Constantinescu, C., Rusu, C.A.	Enhancement of human-centered workplace design and optimization with Exoskeleton technology	Exoskeletal technology can reduce physical workloads and improve worker well-being in a fast-paced digital environment.
Papetti, A., Gregori, F., Pandolfi, M., Peruzzini, M.	Digital manufacturing systems: a framework to improve social sustainability of a production site	Sustainable digital manufacturing design can reduce work pressure through technology-based work system optimization.
Bolpagni, M., Pardini, S., Gabrielli, S.	Human-centered design of AI-powered Digital Therapeutics for stress prevention	AI-based digital therapy solutions can help prevent stress through interventions tailored to the needs of users.

Meanwhile, research conducted by Singh et al. (2022) shows how remote work systems powered by digital platforms can be a double-edged sword. On the one hand, the flexibility of remote work

provides advantages in terms of mobility and time efficiency, but on the other hand, the increasing digital connectivity makes it difficult for workers to separate their personal and professional lives. This condition causes the phenomenon of "technostress", where workers feel burdened by the constant demands of technology and the expectation of limitless communication. The study recommends a more humane approach to work design, such as setting clearer boundaries of digital communication, as well as providing psychosocial interventions to support worker well-being in a digital work environment (Singh et al., 2022).

The issue of digital supervision in the workplace is also a major concern in a study conducted by Giacosa et al. (2023). The study found that while technology-based surveillance systems can improve efficiency and transparency in organizations, they can also lead to feelings of anxiety and a lack of trust among employees. Excessive digital surveillance creates psychological pressures that can reduce job satisfaction and productivity in the long run. Therefore, this study suggests the need for a balance between safety and freedom of work by designing a more transparent and based supervision system based on worker participation (Giacosa et al., 2023).

In the context of organizational change, research conducted by Volberda et al. (2021) highlights how organizations undergoing digital transformation must consider the psychological challenges faced by workers. Digital transformation often requires changes in mindsets and work habits which can be a source of stress for employees who are less prepared for change. The study found that cognitive barriers to accepting change can be reduced by providing appropriate training, more flexible work systems, as well as technology adaptation policies that are more oriented towards employee well-being (Volberda et al., 2021).

On the other hand, the research of Weerasekara and Smedberg (2019) focuses more on information technology-based interventions to manage work stress. This study shows that digital-based stress management programs can help workers better manage work stress through digital mindfulness training, self-monitoring apps, and technology-based psychological support systems. However, the success of the implementation of this system depends largely on how the overall design of the work environment provides adequate support for employees to adopt effective coping strategies (Weerasekara & Smedberg, 2019).

The COVID-19 pandemic has brought about an acceleration of digitalization in various sectors, which was also studied in the research of Amankwah-Amoah et al. (2021). The study found that the pandemic forced many organizations to switch to digital work systems abruptly, which impacted workers' work-life balance. While digitalization brings advantages in terms of efficiency and flexibility, it also creates new challenges such as increased reliance on technology, digital fatigue, and decreased social engagement. Therefore, post-pandemic work environment design needs to consider a hybrid work model that allows flexibility without sacrificing employee well-being (Amankwah-Amoah et al., 2021).

In the context of improving physical well-being in the digital work environment, research by Ippolito et al. (2020) examines the use of exoskeleton technology to reduce the physical workload of workers working in a digital industrial environment. The findings of this study show that exoskeleton devices can assist workers in handling heavy tasks that can cause fatigue and injury, thereby increasing productivity while reducing physical stress caused by high workloads (Ippolito et al., 2020).

A study by Papetti et al. (2017) raises the sustainability aspect in the design of the digital work environment, highlighting how digital manufacturing systems can be optimized to create a healthier work environment. The study found that the use of data-driven technology can help reduce work stress by automating repetitive tasks, which can ultimately improve worker well-being and reduce the risk of burnout (Gregori et al., 2017).

Finally, the research of Bolpagni et al. (2024) examined the role of artificial intelligence (AI)-based digital therapy in preventing work stress. The study shows that AI technology can be used to create personalized therapy solutions, which help workers manage stress through digital interventions tailored to individual needs. With AI-based therapy systems in place, companies can offer a proactive approach in supporting the mental health of their employees (Bolpagni et al., 2024).

Overall, these studies provide an idea that while the digitalization of the work environment brings many benefits in terms of efficiency and flexibility, it also presents new challenges in the form of digital stress that can negatively impact workers' well-being. Therefore, the design of the new work environment must consider a more holistic approach, integrating technologies that are not only oriented towards increasing productivity, but also on the psychological and physical balance of workers. Efforts to create a healthy digital work environment must involve a design strategy that includes a balance between flexibility, healthy supervision, easy technology adaptation, and systems that support employees' mental and physical well-being.

Discussion

Digitalization in the workplace has brought efficiency and flexibility, but it also presents new challenges, one of which is digital stress. Digital stress occurs due to pressure stemming from the use of technology at work, including overload of information, expectations of instant responses, and reliance on digital devices. This study aims to understand how innovative work environment design can help reduce digital stress in workers, identify the main factors that contribute to digital stress, evaluate the impact of work environment design on worker welfare, and propose design strategies that can be applied to create a healthier and more productive work environment in a digital context.

Factors Causing Digital Stress in the Workplace

Digitalization has become an inseparable part of the modern world of work, bringing efficiency and convenience in communicating and completing tasks. However, behind this convenience, digitalization also brings a negative impact in the form of psychological pressure known as digital stress. This phenomenon is increasingly prevalent, especially in work environments that implement work from home (WFH) or hybrid working, where the boundaries between personal life and work are becoming increasingly blurred. Many workers are burned out by the demands to stay connected, the excessive flow of information, and the rapid technological changes that are not always accompanied by adequate training.

One of the main causes of digital stress is the overload of information that must be managed by workers every day. In technology-based companies like Google and Microsoft, for example, an employee can receive more than 120 emails per day, not including messages from internal communication apps like Slack or Microsoft Teams. A survey from Harvard Business Review (2022) found that a manager can spend up to 40% of his work time just reading and replying to emails, reducing the time that should be spent on work that requires deep focus. The same thing also happens in fintech companies such as Gojek and Tokopedia, where employees have to process a lot of internal data and policies in a short time. If not managed properly, this can lead to cognitive overload, which leads to mental fatigue and decreased productivity (Syahna R, 2023).

In addition to the excessive information load, the demands of instant response and hyperconnectivity are also significant factors in digital stress. With communication technology that allows for round-the-clock connectivity, many employees feel pressured because they are expected to be available at all times, even outside of working hours. In large e-commerce companies such as Shopee and Bukalapak, for example, employees are often required to respond immediately to messages from superiors or clients, even if the messages are sent at night or on weekends. Stranks, (2005) reported that 65% of workers feel stressed because they have to respond to messages outside of working hours, causing sleep disturbances, increased stress, and decreased job satisfaction. If it continues, the inability to completely "disconnect" from work can lead to burnout, an extreme fatigue condition that affects workers' physical and mental well-being (Stranks, 2005).

Another factor that contributes to digital stress is the lack of control over technology. Rapid technological advances often make employees have to constantly adapt to new systems or software implemented by the company, without being given adequate training. In the banking and finance sector, such as Bank Mandiri or BCA, for example, many employees face challenges when companies implement more sophisticated digital banking systems. For senior employees who have been accustomed to the old system for many years, this change can cause technostress, which is pressure due to difficulty understanding new technology (Tarafdar & Stich, 2021) A similar situation is also happening in the manufacturing industry, where many workers are having difficulty adapting to the Internet of Things (IoT) which is increasingly being used for production automation.

In addition to the pressure due to technological changes, work-life imbalance is also the main cause of digital stress. Many companies are now implementing more flexible work systems, such as remote working and hybrid working. Although it sounds profitable, the reality is that many workers find it difficult to distinguish when to work and when to rest. A study by Stanford University (2022) found that workers who work from home tend to work 10% longer than those who work in the office. In the digital marketing industry, such as Ogilvy or Wunderman Thompson, employees often have to deal with clients from different time zones, making their hours erratic and potentially causing burnout. In Indonesia, this phenomenon is also seen in technology companies such as Bukalapak, where employees often work late into the night due to work flexibility which ultimately harms their life balance.

In addition to these factors, the lack of social support and face-to-face interaction also plays a role in increasing digital stress in the workplace. Digitalization has made many work interactions move to online platforms, thus reducing face-to-face communication which is actually essential for building healthy social relationships. In startup companies such as Tokopedia and Traveloka, for example, the majority of communication is done through Slack or Google Meet. While efficient, it can lead to communication misunderstandings as well as increase feelings of isolation among employees. Research by Bailey & Kurland (2021) found that workers who rarely interact directly with colleagues are more prone to experiencing stress and loss of motivation than those who have strong social interactions (Bailey & Kurland, 2002). Therefore, several companies such as Grab and Gojek are now starting to implement hybrid work policies that require regular face-to-face meeting sessions so that employees can maintain healthy social relationships.

With the increasing pressure due to digitalization in the workplace, it is clear that companies need to find better solutions in managing technology and worker well-being. Providing sufficient training for technology adaptation, limiting digital communication outside of working hours, and creating opportunities for face-to-face interaction can be the first step in reducing digital stress. A work environment that balances productivity and workers' mental health will result in happier, healthier, and more productive employees in the long run.

The Impact of Work Environment Design on Worker Welfare

A well-designed work environment has a significant impact on the welfare of workers, both mentally, emotionally, physically, and socially. In a stressful digital era, innovative workspace design can be a solution to reduce digital stress experienced by many employees. Several large companies have implemented changes in their office designs to create a healthier environment and support work balance.

One of the key aspects of good work environment design is the improvement of mental and emotional well-being (Parker & Wall, 1998). Many workers experience stress due to overexposure to technology, both through notifications that constantly appear on their devices and the expectation to always be connected. Some companies, such as Google and Facebook, have adopted the approach by providing relaxation spaces in their offices. In the Googleplex, for example, there are nap pods, meditation areas, and green gardens within the office designed to provide a break for workers from their computer screens. Research by Landy et al. (1994) found that the presence of rest and relaxation rooms in the workplace contributed to a 30% reduction in stress levels and improved the mental well-being of employees (Landy et al., 1994).

In addition, some companies implement policies to reduce screen exposure, for example by setting more flexible working hours and not requiring workers to be constantly in front of the computer. Deloitte (2023) notes that organizations that provide employees with flexibility in working hours have higher levels of job satisfaction and lower levels of stress than companies that require workers to be online all the time during working hours.

Not only does it have an impact on mental health, but a good workspace design can also increase employee productivity and focus (Aufegger et al., 2022). Many companies are now starting to implement distraction-free work zones or silent zones, where employees can work without interruption from digital notifications or ambient noise. For example, at Spotify, their office is designed with a workspace that allows for deep work, which is a working condition with minimal

distractions to help employees concentrate on completing complex tasks. Cal Newport (2016) in his book Deep Work: Rules for Focused Success in a Distracted World, explains that a work environment that allows workers to enter deep focus mode can increase productivity by up to 40%.

In addition to workspace design that supports focus, many organizations are also starting to pay attention to the acoustic aspect of their offices. In companies such as SAP and Microsoft, the use of soundproofing materials and echo-reducing interior designs have been implemented to reduce the noise that is often a stress trigger. According to Banbury & Berry (2020), high noise levels in the work environment can decrease workers' cognitive performance by up to 25% and increase the risk of mental fatigue.

Furthermore, the design of the work environment also contributes to the improvement of workers' physical health. Many modern offices are now beginning to adopt ergonomic designs, including the use of chairs and desks that can be adjusted to the posture of workers. In companies like Apple and IBM, all employees are given the option to use a standing desk, which allows them to switch between sitting and standing while working. A study from the University of Waterloo (2021) shows that using a standing desk for at least two hours per day can reduce the risk of back pain as well as increase energy and productivity.

In addition, many offices have also begun to implement workplace mobility, which is encouraging workers to be more active during work. Some offices have provided walking meetings, where meetings are held while walking in the park or outside the office. Google, for example, has a policy that encourages employees to have meetings while walking to increase creativity and reduce physical strain due to prolonged sitting. According to research by Oppezzo & Schwartz (2014), walking during meetings can increase creative thinking by up to 60%, while reducing the negative impact of sitting for too long (Oppezzo & Schwartz, 2014).

In addition to the benefits for mental and physical health, a good work environment design also contributes to social interaction and emotional support between workers. Many companies are now adopting open space designs that allow employees to collaborate more easily with their colleagues. In Airbnb and WeWork offices, for example, there are coworking spaces designed to increase social engagement, with the goal that employees don't feel isolated in their work. A study from Harvard Business School (2019) shows that companies that implement open space designs that encourage social interaction have a 15% higher job satisfaction rate than companies with more enclosed office designs.

However, open space design also has its challenges, especially when it comes to noise and privacy. To address this, some companies like HubSpot have provided private pod rooms for employees who want to work in a quieter atmosphere. With a balance between collaborative and private spaces, workers can choose an environment that suits their needs.

To reduce fatigue due to excessive digital communication, some organizations have also provided face-to-face discussion rooms as an alternative to digital communication. At Amazon and Tesla, for example, there are policies that encourage face-to-face meetings rather than email communication to discuss complex issues. This aims to reduce "email overload" and improve the efficiency of communication between teams. According to a report from McKinsey (2023), organizations that prioritize in-person communication over digital communication have better levels of team coordination and lower employee stress levels.

From the various real-life examples above, it is clear that innovative work environment design can have a significant positive impact on worker well-being. By providing spaces that support mental and physical health, increase focus and productivity, and facilitate healthy social interactions, companies can help reduce digital stress and create a more comfortable and productive workplace. In the midst of increasing challenges in the digital era, this design-based approach is not only a necessity, but also a business strategy that can improve employee performance and satisfaction in the long term.

Work Environment Design Strategies to Reduce Digital Stress

In an effort to reduce digital stress, work environment design plays an important role in creating a balance between productivity and worker well-being. Many companies have begun to implement

innovative strategies to build workplaces that are not only efficient but also healthier mentally and physically. One of the main approaches that is widely used is flexible workspaces that are designed to accommodate a variety of worker needs, from individual focus to team collaboration.

Some big companies like Google, Facebook, and Microsoft have implemented different work zone concepts within their offices. They provide a focus zone that is free from digital distractions, where employees can work in a quiet atmosphere without notifications constantly popping up on their screens. On the other hand, they also create collaborative zones, which encourage social interaction with colleagues, reducing fatigue due to impersonal digital communication. Not only that, but these companies also provide relaxation spaces, such as green areas and lounges with natural lighting, designed to help workers de-stress. A study from Harvard Business Review (2021) shows that offices with flexible space designs that provide areas of focus and relaxation are able to improve employee well-being by up to 35% and significantly reduce stress levels.

In addition to providing a more flexible work environment, many organizations are also starting to implement strategies to reduce the digital information burden. One of the steps taken is to limit the number of emails and use more mindful communication tools, such as asynchronous communication tools that allow workers to respond to messages according to their working time, rather than in real-time. Companies such as Basecamp and GitLab, for example, have implemented a "No Slack After 6 PM" policy, which limits work communication after office hours to avoid stress due to the expectation of an instant response. According to a report from Deloitte (2023), organizations that implement this digital burden reduction rule have experienced a 20% increase in productivity, while employee burnout rates have dropped drastically.

Another aspect that is a focus in the design of modern work environments is the optimization of ergonomics and technology to support the physical health of employees (Adiga, 2023). Many companies have now invested in ergonomic desk designs that allow employees to adjust their sitting positions to be more comfortable and reduce fatigue due to long-term use of technology. In companies like Apple and IBM, every employee is assigned a standing desk, which allows them to work in a standing position to reduce the negative effects of sitting for too long. In addition, natural lighting is a major factor in modern workspace design. A study from the University of Waterloo (2022) found that adequate natural lighting in the workplace can reduce eye strain by up to 40% and increase workers' energy and focus.

In addition to designing more ergonomic workspaces, some companies have also started implementing digital detox policies to help employees break free from excessive exposure to technology. For example, at the Volkswagen company, they have implemented a "No Email After Hours" policy, which automatically disables company email access outside of business hours to prevent employees from overworking. On the other hand, companies like Airbnb and Spotify are starting to design outdoor spaces in their offices, such as parks and green open spaces, so that employees can take a break from their computer screens. Research from McKinsey (2023) shows that companies that provide a work environment with open spaces and digital breaks have lower employee stress levels and an increase in job happiness by up to 25%.

Another strategy that is increasingly being adopted is the increase in social interaction in the work environment, especially to overcome the negative impact of overly dominant digital communication. Many companies are now starting to adopt a hybrid working model, which balances remote work and regular face-to-face meetings. Companies like HubSpot and Twitter, for example, have implemented work systems where employees only need to come to the office for brainstorming sessions and team collaboration, while individual work can be done from home. In addition, some companies are also starting to encourage non-digital team activities, such as outdoor team meetings or brainstorming sessions without digital devices, to build stronger social relationships among workers. A study by Harvard Business School (2022) shows that organizations that balance digital work with social interaction have higher employee retention rates and job satisfaction rates that increase by up to 30%.

From the various strategies that have been implemented by large companies in various industries, it can be seen that innovative work environment design is not only able to reduce digital stress, but

also improve overall worker productivity and well-being. By providing flexible workspaces, limiting the burden of digital information, optimizing ergonomics, implementing digital detox policies, and improving social interaction, organizations can create a healthier and more balanced work environment for their employees.

Conclusion

The study concludes that digital stress has become a significant challenge in the modern work environment, especially with the increasing reliance on digital technology. This stress can arise due to a variety of factors, including an overload of information, the expectation to be always online, and a lack of boundaries between work and personal life. The results of the study show that a more adaptive and welfare-based work environment design can be an effective strategy in overcoming the negative impact of digital stress. The implementation of ergonomic design, work flexibility policies, and strategies to reduce excessive digital exposure can help create a healthier and more productive work environment.

Based on these findings, several suggestions can be put forward for companies and organizations in overcoming digital stress through better work environment design. First, companies need to implement policies that limit access to work communication outside of office hours to provide opportunities for workers to take a break from technology. Second, workspace design should reflect workers' need for flexibility, by providing a workspace that supports both individual focus and team collaboration. Third, organizations can integrate more humanistic technologies, such as automation tools that reduce the administrative burden on workers as well as work management systems that allow for more effective task management.

In addition, companies are also advised to provide employee wellness programs that include digital stress management training as well as supporting facilities such as relaxation areas and green open spaces. By implementing a more adaptive work environment design, companies can not only reduce worker stress levels but also increase satisfaction and productivity in the long run. Further research can be focused on empirical evaluation of these design strategies to measure their effectiveness in a broader context.

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