

Synchronized Work System Through Digital Media as a Modern Workplace Solution

Marteen Joshe Octavian*, Trisha Narendragarini, J.A Wempi

LSPR Institute of Communication and Business, Indonesia

Email: 24172410009@lspr.edu*, 24172410008@lspr.edu, wempi@lspr.edu

ABSTRACT

Remote and hybrid work models have become essential in today's business environment, especially after the COVID-19 pandemic, as many organizations continue to embrace them as sustainable long-term strategies. In an increasingly dynamic market, these systems help companies remain competitive by fostering effective virtual collaboration. This study aims to understand the implementation of synchronized work systems through digital media and how these tools serve as modern workplace solutions in Indonesia. Guided by the theory of Computer-Mediated Communication, the research analyzes the role of digital platforms in enhancing communication efficiency and productivity. Using a collective case study and literature review method, the study explores the work policies of three Indonesian companies in the technology, education, and health sectors that have adopted hybrid and Work From Anywhere (WFA) models. The findings reveal that tools such as Slack, Trello, Google Workspace, and WhatsApp play a significant role in supporting synchronized work, though their success depends on clear communication strategies and a balance between formal and informal interactions. However, challenges such as unclear work boundaries, burnout risks, and coordination issues persist and require structured management to maintain collaboration and sustainability. The study concludes that to implement flexible work systems effectively, companies must select appropriate digital tools, provide ongoing communication training, and maintain equilibrium between virtual teamwork and face-to-face engagement to ensure productivity and employee well-being.

KEYWORDS



Computer-based communication, digital collaboration, flexible work, modern workplaces, Tech Startups

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International

INTRODUCTION

In recent years, the Flexible Working Arrangement (FWA) work system has emerged as an essential solution to the ever-evolving dynamics of the modern workplace, driven by rapid technological advancements and changing employee expectations (Rubino, 2024; Sultan et al., 2024). The COVID-19 pandemic in early 2020 was a pivotal moment for organizations around the world, where travel restrictions, quarantine policies per region, and social distancing required companies from various industries to move from traditional workplaces such as in the office to remote work arrangements from home or other places outside of the company's office space (Kuhlmann et al., 2021).

Today, remote and hybrid work models have become an essential part of the business world, where many organizations continue to adopt them as a long-term practical option (Gifford, 2022). One of the main reasons is the role of technology that makes remote work practical (Urbaniec et al., 2022). Over the past decade, significant advancements in digital tools have made it easier for employees to work efficiently from multiple locations (Bejinaru & Balan, 2020). The investments companies have made during the pandemic—whether in the form of secure network arrangements, the provision of remote work equipment, or the development of digital workflows—have created a strong foundation to ensure the smooth running of remote work. These efforts allow organizations to maintain high productivity even though their teams are spread across multiple locations (Gifford, 2022).

According to Alimi (2025), technology, one of which is digital media, is a key element in enabling and sustaining a successful FWA system. Digital media plays an important role as a bridge between remote employees and those working in the office, which ensures that communication, collaboration, and productivity can run smoothly (Putro, 2023; Saleem et al., 2023; Yasmin & Tanaka, 2022). Digital media such as video conferencing platforms, cloud-based file-sharing systems, and collaborative software are no longer considered an option but an essential necessity to maintain workflow efficiency and ensure team connectivity, wherever they are located (Holloway, 2024; Singh et al., 2024). This kind of digital media allows employees to collaborate in real-time, access documents simultaneously on their respective devices, and join virtual meetings with ease (Mitchell, 2023; Oyekan et al., 2017). Previous research has also shown that organizations that invest in secure and easy-to-use digital media tend to experience a smoother transition to FWA work systems.

Various external factors also support this shift towards more flexible work policies (Brega et al., 2023; Smith et al., 2019). Previous research has proven that flexible working hours from home, as well as other flexible work arrangements, have been shown to provide a significant improvement in mental health (Mache et al., 2020; Timms et al., 2015). Sultan (2024) also emphasized that the implementation of FWA received a positive response and high enthusiasm, which was accompanied by an increase in productivity through a work system tailored to individual needs. Other benefits of FWA are also seen in various aspects such as efficiency, gender equality, work culture, technology utilization, and reduced transportation burden.

A report from Abidin (2025) shows that the adoption of Indonesia's work arrangements between 2022 and 2023 has contributed to a significant decrease in levels of stress, anxiety, and depression among employees. Employees who can work in flexible environments experience lower rates of work-related mental health problems, suggesting that flexible working conditions give individuals more control over their work-life balance (Kotera et al., 2020; Sharma & Kapur, 2022). This better balance reduces stress and prevents burnout, which ultimately improves employee well-being as well as productivity (Speicher & Francis, 2023).

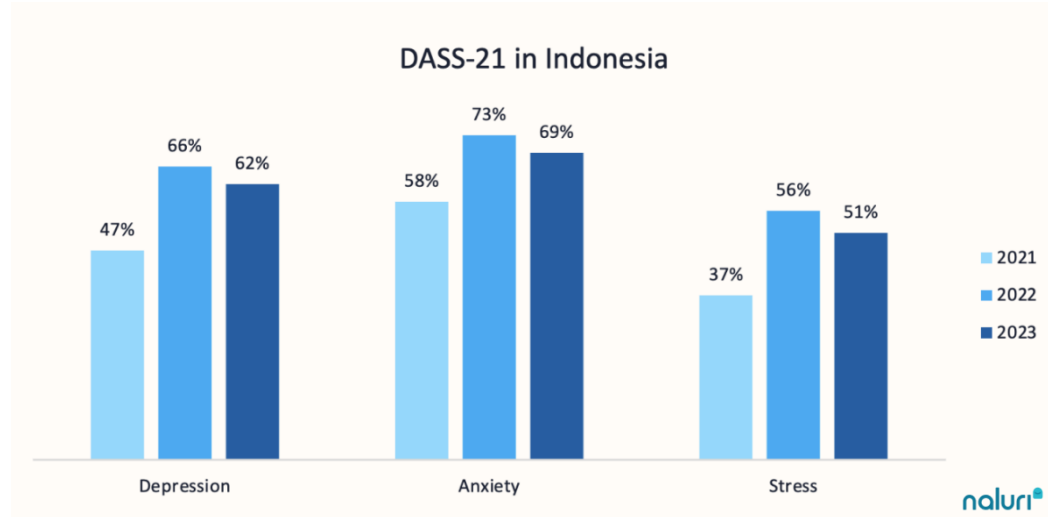


Figure 1. 1st Dass-21 in Indonesia
Source: Naluri

The DASS (Depression, Anxiety, and Stress Scale) data highlights the benefits of remote work on mental health broadly, showing how flexibility helps organizations create a healthier and more resilient workplace. By reducing the daily stress associated with traditional office settings, including travel and rigid schedules, a remote work environment allows employees to manage personal and work responsibilities more effectively (Costin et al., 2023). The decline in mental health challenges in this environment aligns with evidence increasingly supporting remote work as an essential component of a supportive modern workplace culture (Shobana & Siddiq, 2024).

Startup technology companies in Indonesia are among the types of companies that are early adopters of this FWA work system. According to Gregori (2020), startup technology companies are those with less than 10 years of operation that solve social problems with digital products. These companies adapt faster than other types due to evolving trends and opportunities. According to Felisilda(2023), at least 10 companies in Indonesia have implemented the WFA work system, influenced by many other companies adopting the RTO (Return to Office) policy, marking a shift in work habits toward remote systems.

While remote work has many benefits, such as reducing travel time and increasing autonomy, the system also presents challenges, including maintaining team cohesion and managing remote employee performance (Chinyuku & Qutieshat, 2025). Obstacles in implementing FWA can be classified into two main levels per Chua (2023) individual and group or organizational levels. At the individual level, problems include health issues, strained family relationships, personal life conflicts, increased workload, and burnout. At the group or organizational level, challenges include communication barriers, decreased social interaction, reduced visibility among colleagues, supervision difficulties, and leadership problems. Technical infrastructure is also critical; without adequate digital readiness, FWA implementation risks being suboptimal.

Many companies are reconsidering the importance of physical workplace presence while evaluating the most effective working methods. Tarigan et al. (2022) noted that Indonesian companies are increasingly flexible in creating attractive work environments to compete for top talent. Some organizations revert to traditional work modes, but many have adopted remote work policies beneficial to employees. Jakarta has emerged as a tech startup growth hub, with many adopting the FWA system post-pandemic to blend work flexibility and digital innovation. However, various challenges in these implementations remain to be explored. A Cisco survey (2022) indicates that 83.5% of employees in Indonesia prefer a hybrid work model, yet digital and cultural readiness for this transition varies across companies.

Previous studies on digital media use in FWA contexts mostly employ quantitative methods focusing on technology effectiveness, productivity, and work system efficiency. Additionally, prior research has centered on large or multinational organizations, whereas local startups feature flatter structures, small multitasking teams, and rapidly evolving cultures. Thus, understanding how digital media is used and interpreted in these startups is crucial, especially for coordinating and synchronizing cross-location teamwork.

Considering the benefits of flexible work and strategic digital media use, Indonesian companies are reassessing physical presence importance and work effectiveness. Advances in communication technology enable employees to work nearly anywhere using tools like video

conferencing, online collaboration platforms, and project management software. This research aims to understand the implementation of synchronized work systems through digital media as a modern workplace solution, focusing on: (1) how Indonesian tech startups use digital communication tools to support synchronized work; (2) challenges in implementing flexible systems; and (3) strategies for maintaining effective collaboration in hybrid and remote setups. The research benefits include theoretical contributions to Computer-Mediated Communication theory in the Indonesian context, practical insights for optimizing flexible work, and empirical findings addressing gaps in qualitative studies on digital media in local startups, informing workplace policies and digital transformation strategies in Southeast Asia's emerging markets.

METHOD

This study employed a descriptive qualitative case study approach to explore the implementation of synchronized work systems through digital media in Indonesian tech startups.

Primary data were collected through semi-structured interviews with four purposively selected informants who had direct experience with synchronized work systems in their companies. The informants represented technology, education, mental health, and digital solution sectors, all working in organizations with hybrid or Work From Anywhere (WFA) policies. Interviews were conducted both in person and online via Google Meet, lasting about one hour, and focused on perspectives, experiences, and practices related to synchronized work implementation.

Secondary data were collected through a systematic literature review of scientific journals, books, research reports, and online media articles from academic databases. The literature was analyzed thematically to identify patterns relevant to the study and to triangulate primary data.

Data analysis followed thematic analysis based on Braun and Clarke. It involved three stages: (1) Familiarization—transcribing interviews, repeatedly reading transcripts, and making reflective notes; (2) Coding—labeling salient information in transcripts with descriptive and interpretive codes; (3) Theme identification—grouping codes to reveal patterns related to the research problem. Literature data were also thematically analyzed to enhance validity through triangulation.

RESULTS AND DISCUSSION

The collected data were analyzed according to the descriptive qualitative case study method. This study explores the implementation of synchronized work systems through digital media in the modern workplace, especially in four Jakarta-based startup companies that implement a hybrid work system or Work From Anywhere (WFA). Semi-structured interviews were conducted with four professional resource persons from the education technology sector, startup consulting, mental health, and digital solution development.

The data was obtained through in-depth interviews with four resource persons from various startup companies in Jakarta (education, technology, health), who used hybrid or remote work systems. Each session lasts about 1 hour, recording the experience of using digital

platforms (Google Workspace, WhatsApp, Slack, Zoom, Trello, Notion, GCP) for communication and collaboration.

A summary of the resource person's profile and company context is presented in Table 1.

Table 1. Summary of Resource Person Profiles and Company Context

Sources	Role	Company Type	Applied System	Work	Company Focus
A	Project Manager	Educational Technology (Edtech)	Hybrid/Remote		Language Learning Services (including English)
B	Project Officer	Startup Consultant Management	Work Anywhere (WFA)	From	Startup Consulting, Strategic Project Owner
C	Business Development Associate	Tech Startup (Mental Health)	Work Anywhere (WFA)	From	Mental & Physical Health (Corporate Services)
D	Branding Attraction Engagement Lead	Technology (Scalable Digital Solutions)	Hybrid (WFA 2x/week)		Development of Digital Solutions (e.g. Jago App, People Xperience)

Data Analysis

Based on interviews, various approaches were found in the use of digital tools to support synchronized work systems. Key findings related to communication, collaboration, and project management tools are summarized in Table 2.

Table 2. Key Digital Tools and Their Use by Resource Persons

Sources	Main Communication Tools (Internal/External)	Key Collaboration/Project Management Tools	Tool-specific advantages/notes	Challenges/Lack of Tools (if any)
Project Manager	Google Chat (Internal), Google Meet, Telegram, WhatsApp (External)	Google Workspace (Drive, Docs, Sheets, Calendar)	Google Workspace integration, structured data-driven communication	Project management features are less than Notion
Project Officer	WhatsApp (Utama)	Zoom, Trello	Quick & Accessible (WhatsApp), Visual Tracking (Trello), Deep Meetings (Zoom)	-
Business Development Associate	Slack (Internal), Zoom (Klien)	Concept	Real-time Communication (Slack), In-Depth Discussions (Zoom), Efficient Project Management (Notion)	-
Branding Attraction Engagement Lead	Slack (Utama)	Google Cloud Platform (GCP) (Utama), Miro, Notion, Google Drive	Fast & Structured Communication (Slack), Work Activity Center (GCP), Platform Integration	-

The implementation of a flexible work system and its impact on productivity and work-life balance is also an important point of the interview. Details on the working system and its impact are presented in Table 3.

Table 3. Flexible Work Systems and Their Implications

Sources	Flexible System Implemented	Work From Anywhere	Positive Impact of Flexibility	Notes/Challenges Related to Flexibility
Project Manager	Hybrid/Remote		Increase productivity, reduce distractions	Face-to-face interactions are more effective for in-depth discussions
Project Officer	Work Anywhere (WFA)	From	Supporting balance, productivity, morale	-
Business Development Associate	Work Anywhere (WFA)	From	Improves balance, productivity, creativity	-
Branding Attraction Engagement Lead	Hybrid (2x/week)	(WFA)	Flexibility	Changes in work culture to become more dynamic, open, interactive

Discussion

The Effectiveness of Digital Tools in Collaboration

The use of cloud-based digital media such as Google Workspace as the primary collaboration tool by Project Managers in educational technology companies is highly effective in synchronizing team communication and collaboration. This is in line with research that shows that digital collaboration tools can improve work efficiency (Ramadhina). Project Managers emphasize the importance of structured and data-driven communication, which supports better decision-making. This reflects findings from previous studies that stated that clear and organized communication can increase team productivity (Smith).

Interviews with Business Development Associates from mental health technology startups and Branding Attraction Engagement Leads from digital solutions specialist technology companies show that adapting digital tools to fit the specific needs of the team is essential. The use of tools such as Slack, Zoom, and Notion facilitates real-time communication and efficient project management, consistent with research by Brown on increased collaboration and innovation within teams.

Work Flexibility and Productivity

The implementation of flexible work systems, such as those adopted by educational technology companies and startup consulting management firms, shows that flexibility can improve work-life balance. A Project Officer from a startup consulting management company highlighted that the Work From Anywhere (WFA) policy gives employees the freedom to work from anywhere, which supports a better work-life balance. Research by Jones supports these findings by stating that work flexibility can increase job satisfaction and reduce stress levels.

However, it is important to note that face-to-face interaction is still necessary for more in-depth discussions, as noted by the Project Manager of an educational technology company.

This shows that while flexible work systems offer many advantages, challenges remain in maintaining effective communication and collaboration between team members.

Challenges and Implications

Nonetheless, the challenge of ensuring all team members is trained and comfortable using the tool remains a concern. To ensure the smooth use of digital media to work synchronously and asynchronously, companies must have an onboarding system or a good process for introducing and integrating new employees into the company. This can also be complemented by regular training that can be done monthly for team upskilling so that they can continue to adapt to the latest digital media used.

Interpretation of Results

In the increasingly growing digital era, many companies are starting to adopt flexible working models, both in hybrid and remote form. From the interviews conducted, it was found that companies use various digital communication tools to support their team's operations and collaboration. WhatsApp has become the main platform for quick and informal communication, mainly because of its easily accessible nature and familiar to most employees. However, for more structured and formal communication needs, many companies also rely on platforms such as Slack, Microsoft Teams, and Google Workspace, which allow for centralized data storage as well as integration with various other productivity tools.

Although digitalization has supported remote work more efficiently, interviews reveal that face-to-face interactions still have a significant role in improving work effectiveness. Some speakers highlighted that face-to-face meetings can reduce misunderstandings and improve decision-making speed compared to text-based communication or video calls. In this context, the hybrid work model is considered an ideal solution because it combines the flexibility of working from home with the opportunity to meet in person in the office to strengthen team coordination and build better interpersonal relationships.

In addition to formal communication and team collaboration aspects, interviews also highlight the importance of informal interactions in the workplace, which is often a supporting factor in creating creative ideas. One example that is widely cited is "pantry talk," which is a casual conversation that usually takes place in the office break area. This kind of interaction, even if it seems trivial, can encourage the emergence of new ideas and increase a sense of community within the team. Some speakers even stated that in the creative industry, the best ideas often come from spontaneous conversations between team members, something that is difficult to replicate in a remote work environment.

However, while hybrid and remote work offer greater flexibility, there are challenges that still need to be overcome. One of the main challenges is maintaining a work-life balance. With communication taking place digitally, the boundaries between work and personal life have become increasingly blurred, especially when work communication is done through applications that are also used for personal purposes, such as WhatsApp. This can lead to an irregular workload and an increased risk of burnout. Therefore, some companies are starting to consider clearer policies regarding working hours as well as restrictions on the use of digital communication tools outside of working hours.

In addition, another challenge is ensuring that communication remains structured and information is not interrupted in the middle of the project. Some interviewees noted that in a

highly flexible work environment, there is still a risk of inaccuracy in providing project updates or relaying important information to other team members. In certain cases, reliance on text-based communication without a good project management system can lead to miscommunication and a lack of accountability. Therefore, while communication tools like WhatsApp are helpful, companies are also aware of the importance of using more systematic project management platforms like Notion, Trello, or Monday.com to keep workflows well-organized.

Overall, interviews show that hybrid and remote work have a variety of benefits, including increased flexibility, productivity, and work-life balance. However, the implementation of this model still requires a mature strategy to ensure effective communication, clear monitoring of work, and a balance between formal and informal interactions within the team. Companies that are able to manage these challenges well can create a more adaptive, innovative, and collaborative work environment, which ultimately improves employee satisfaction and performance.

CONCLUSION

The study found that digital media tools like Google Workspace, Slack, and Trello are vital for synchronizing communication and collaboration in tech startups, but success depends not only on access to these tools but also on effective onboarding, ongoing training, clear SOPs, and appropriate platform subscriptions. Implementing synchronized work systems and Work From Anywhere (WFA) policies improved work-life balance and job satisfaction by offering flexible work arrangements that support mental and physical health. However, challenges remain in maintaining deep communication and team connection, as face-to-face interactions are still needed for creativity and relationship building. Companies that balance digital tools with in-person engagement tend to achieve better coordination and effectiveness. Future research should explore the long-term effects of flexible work on productivity and well-being, the development of more integrated collaboration platforms, and policy frameworks that support employee mental health across diverse sectors and conditions.

REFERENCES

- Abidin, F. A., Prathama, A. G., Fitriana, E., Mayangsari, A., Syam, R. S. P., Hakim, S. A. L., & Tijdink, J. K. (2025). Depression, anxiety, and stress levels during the COVID-19 pandemic: A longitudinal study among Indonesian psychologists. *PLoS One*, 20(10), e0315584.
- Alimi, I. (2025). 5G FWA Technological Improvements. In *5G Fixed Wireless Access: Revolutionizing Connectivity in the Digital Age* (pp. 61–71). Springer.
- Bejinaru, R., & Balan, I. (2020). IT tools for managers to streamline employees' work in the digital age. *The USV Annals of Economics and Public Administration*, 20(1 (31)), 120–130.
- Brega, C., Briones, S., Javornik, J., León, M., & Yerkes, M. (2023). Flexible work arrangements for work-life balance: a cross-national policy evaluation from a capabilities perspective. *International Journal of Sociology and Social Policy*, 43(13/14), 278–294.
- Chinyuku, C., & Qutieshat, A. (2025). The Impact of Remote Work on Building Effective

- Teams: Exploring the Challenges of Fostering Team Cohesion in Remote Work Environments, A brief review of literature. *International Journal of Advanced Business Studies*, 4(2), 133–148.
- Chua, S. J. L., Myeda, N. E., & Teo, Y. X. (2023). Facilities management: towards flexible work arrangement (FWA) implementation during Covid-19. *Journal of Facilities Management*, 21(5), 697–716.
- Cisco. (2022). *Employees are ready for hybrid work, are you?* https://www.cisco.com/c/dam/m/en_us/solutions/global-hybrid-work-study/reports/cisco-global-hybrid-work-study-2022.pdf
- Costin, A., Roman, A. F., & Balica, R.-S. (2023). Remote work burnout, professional job stress, and employee emotional exhaustion during the COVID-19 pandemic. *Frontiers in Psychology*, 14, 1193854.
- Felisilda, K. F. L. (2023). *Work-From-Home to Return-to-Office: Understanding the Work Transition Experiences Among the Business Process Outsourcing (BPO) Employees in the Philippines*. National Taiwan Normal University (Taiwan).
- Gifford, J. (2022). Remote working: unprecedented increase and a developing research agenda. In *Human Resource Development International* (Vol. 25, Issue 2, pp. 105–113). Taylor & Francis.
- Gregori, P., & Holzmann, P. (2020). Digital sustainable entrepreneurship: A business model perspective on embedding digital technologies for social and environmental value creation. *Journal of Cleaner Production*, 272, 122817.
- Holloway, S. (2024). *The Impact of Cloud-Based Information Systems on Collaboration and Productivity in Remote Teams*.
- Kotera, Y., Green, P., & Sheffield, D. (2020). Work-life balance of UK construction workers: Relationship with mental health. *Construction Management and Economics*, 38(3), 291–303.
- Kuhlmann, S., Bouckaert, G., Galli, D., Reiter, R., & Hecke, S. Van. (2021). Opportunity management of the COVID-19 pandemic: testing the crisis from a global perspective. *International Review of Administrative Sciences*, 87(3), 497–517.
- Mache, S., Servaty, R., & Harth, V. (2020). Flexible work arrangements in open workspaces and relations to occupational stress, need for recovery and psychological detachment from work. *Journal of Occupational Medicine and Toxicology*, 15(1), 5.
- Mitchell, A. (2023). Collaboration technology affordances from virtual collaboration in the time of COVID-19 and post-pandemic strategies. *Information Technology & People*, 36(5), 1982–2008.
- Oyekan, J., Prabhu, V., Tiwari, A., Baskaran, V., Burgess, M., & McNally, R. (2017). Remote real-time collaboration through synchronous exchange of digitised human–workpiece interactions. *Future Generation Computer Systems*, 67, 83–93.
- Putro, H. P. (2023). Digital communication as a tool for improving organizational performance. *Jurnal Info Sains: Informatika Dan Sains*, 13(03), 941–947.
- Rubino, L. E. (2024). *Analyzing the Influence of Gender Biases on College Students' Attitudes Towards Flexible Work Arrangements*.
- Saleem, Z., Hanif, A. M., Sumayya, U., Vohra, M. S., & Raza, H. (2023). Productivity in the

- virtual office: Unpacking the role of digital tools and work-life harmony. *International Journal of Social Science & Entrepreneurship*, 3(4), 1–19.
- Sharma, M., & Kapur, S. (2022). Mental health linked with work life balance of working women. *International Journal of Health Sciences*, 6(S4), 1887–1899.
- Shobana, D., & Siddiq, I. (2024). Navigating Work-Life Harmony: The Effects of Corporate Culture on Mental Health. *International Journal of Advanced Research in Science, Communication and Technology*, 364–371.
- Singh, A. P., Rahi, P., Singh, I., & Yadav, V. (2024). *Revolutionizing Remote Collaboration: A Comprehensive Review of Cloud-Based Real-Time Platforms to Secure Teams*.
- Smith, E. F., Gilmer, D. O., & Stockdale, M. S. (2019). The importance of culture and support for workplace flexibility: An ecological framework for understanding flexibility support structures. *Business Horizons*, 62(5), 557–566.
- Speicher, L. L., & Francis, D. (2023). Improving employee experience: reducing burnout, decreasing turnover and building well-being. *Clinical Gastroenterology and Hepatology*, 21(1), 11–14.
- Sultan, Z., Fachmi, M., & Klimko, R. (2024). Flexible working arrangement (FWA) model: Reducing congestion levels and work stress and increasing work productivity. *Jurnal Manajemen Bisnis*, 15(2), 295–313.
- Tarigan, S. G., Mannan, K. A., & Uddin, N. (2022). A study of work-culture changes at post Covid-19 pandemic in greater Jakarta. *IOP Conference Series: Earth and Environmental Science*, 1098(1), 012028. <https://doi.org/10.1088/1755-1315/1098/1/012028>
- Timms, C., Brough, P., O'Driscoll, M., Kalliath, T., Siu, O. L., Sit, C., & Lo, D. (2015). Flexible work arrangements, work engagement, turnover intentions and psychological health. *Asia Pacific Journal of Human Resources*, 53(1), 83–103.
- Urbaniec, M., Małkowska, A., & Włodarkiewicz-Klimek, H. (2022). The impact of technological developments on remote working: insights from the polish managers' perspective. *Sustainability*, 14(1), 552.
- Yasmin, L., & Tanaka, H. (2022). The future of work: Remote collaboration and digital transformation. *Journal of Emerging Technology and Digital Transformation*, 1(2), 136–145.