



DIGITAL HUMAN RESOURCE PRACTICES IN REMOTE WORK SYSTEMS

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Abstract

The shift toward remote work necessitates a fundamental reimagining of human resource management. This study explores the intersection of digital HR practices and remote systems, focusing on their impact on employee engagement and performance through a qualitative literature review. The analysis reveals that digital HR practices when built on user-centered principles, transparency, and flexibility boost employee engagement by fostering positive work experiences. In virtual settings, engagement is primarily functional and cognitive; employees remain connected when they feel supported and understand organizational goals. Employee performance in remote environments is driven by the interaction between individual traits, job design, organizational support, and technology quality. Effective digital HR tools clarify expectations and provide essential development resources. Furthermore, leadership must shift from traditional supervision to empowerment, while organizational culture requires deliberate cultivation to maintain cohesion. Ultimately, balancing flexibility with structure is the critical factor for sustaining long-term productivity and commitment in digitally mediated work environments.

Keywords: remote work, digital HR practices, employee engagement, employee performance, virtual work.

Introduction

The rapid development of information technology has fundamentally changed the organizational landscape, especially in terms of human resource management. Contemporary organizations face pressure to adapt to continuous digital advancements, where business systems and processes that were previously manual or semi-automatic are now transforming into digitally connected ecosystems (Bondarouk & Ruël, 2009). This shift did not occur suddenly but is an accumulation of technological innovations that have continued to evolve over the last two decades, ranging from the adoption of enterprise resource planning systems to the utilization of artificial intelligence in decision-making. In the realm of human resource management, digitalization brings significant changes to how organizations recruit, develop, retain, and manage their workforce (Marler & Fisher, 2013). Human resource information systems that previously functioned as administrative databases have now evolved into platforms capable of providing strategic insights for organizational leaders. The ability to collect, process, and analyze employee data in real time provides a substantial competitive advantage for organizations that are able to utilize it effectively. This transformation demands adjustments not only in technological infrastructure but also in the mindset and competencies of human resource practitioners, who must shift from administrative roles to strategic partners who understand the link between technology and organizational behavior. The speed of digital technology adoption in human resource practices varies across organizations, influenced by factors such as organizational size, industrial sector, resource availability, and the readiness of organizational culture to accept change (Evans-Uzosike & Okatta, 2020) (Stone et al., 2015). Organizations operating in the technology sector tend to be pioneers in the adoption of digital human resource practices, while organizations in traditional sectors often face more complex challenges in carrying out digital transformation within their human resource functions.

Fundamental changes in the world of work occurred when a global pandemic forced organizations worldwide to implement remote work systems on an unprecedented scale. What was previously considered an alternative work arrangement or a facility for a select few employees suddenly became a necessity for almost the entire working population across various

sectors (Venkatesh, 2020). This condition forced organizations to accelerate digital transformations that were previously planned over a period of years into just a matter of weeks or even days. This massive implementation of remote work systems tested the readiness of technological infrastructure, the resilience of management systems, and the adaptability of leaders and employees. Organizations that previously lacked significant experience in managing remote teams had to quickly learn how to maintain productivity, collaboration, and team cohesion without a physical presence (Waizenegger et al., 2020). Human resource practices that had been built on the assumption that employees work in the same physical location as their supervisors suddenly lost relevance when all interactions had to be conducted through digital mediums. The processes of recruitment, orientation, competency development, performance appraisal, and feedback provision had to be redesigned to be executed effectively in a remote work setting. Experience during this period showed that organizations with a higher level of digital maturity tended to be better prepared for the transition to remote work systems compared to organizations that still relied on manual processes and face-to-face interactions. Success in running a remote work system is determined not only by the availability of hardware and software but also by the organization's ability to manage the behavioral and psychological aspects of its workforce, which is now geographically dispersed (Wang et al., 2021).

Remote work systems bring fundamental consequences to the dynamics of the relationship between employees and the organization, especially in terms of engagement and performance (Dluhopolska & Huk, 2021). Employee engagement, which in traditional work settings is often built through informal interactions at the workplace, direct team collaboration, and personal supervision, faces major challenges when all these interactions are mediated by technology. Feelings of isolation, difficulty in building relationships with colleagues, and a diminished sense of belonging to the organization have become common phenomena among employees working remotely for prolonged periods (Golden et al., 2008). On the other hand, remote work systems also offer greater flexibility for employees in managing their work time and location, which can improve work-life balance and ultimately contribute to higher job satisfaction (Gajendran & Harrison, 2007). The variety of

experiences encountered by employees in remote work systems indicates that engagement is not solely determined by work location, but rather by how the organization designs the employee work experience in an environment dominated by digital interaction. Employee performance in remote work systems also shows diverse patterns, where some studies find increased productivity due to reduced distractions and travel time, while other studies find performance declines related to difficulties in collaboration and coordination. The ability of organizations to manage remote work systems effectively becomes a key determining factor in maintaining and even improving employee performance (Belzunegui-Eraso & Erro-Garcés, 2020). Human resource practices specifically designed to support remote work systems become key instruments in bridging the gap between the demands of remote work and the employees' needs for support, recognition, and development.

Digital human resource practices, or what is often referred to as digital HR practices, refer to the application of digital technology in carrying out human resource functions, ranging from planning, recruitment, selection, orientation, development, performance appraisal, compensation, to employee relations management. Technological developments have allowed organizations to automate administrative processes that were previously time-consuming, enabling human resource practitioners to focus more on strategic activities that provide added value to the organization (Meijerink et al., 2021). Artificial intelligence-based applicant tracking systems allow organizations to screen thousands of applications in a short time and identify the candidates who best suit the established criteria. Online learning platforms provide access for employees to develop their competencies independently with materials that can be tailored to individual needs. Digital performance management systems enable the provision of real-time and continuous feedback, replacing the annual performance appraisal model which is often considered ineffective (DeNisi & Murphy, 2017). Human resource analytics provide the ability for organizations to identify patterns and trends related to employee behavior, such as factors affecting retention, productivity, and engagement. In the context of remote work systems, digital human resource practices are no longer an option but a necessity because all interactions between employees and the organization must be

conducted through digital mediums. Organizations that are able to harmoniously integrate digital human resource practices with remote work systems will have a greater ability to attract, develop, and retain top talent (Zaim et al., 2018). Conversely, organizations that fail to build effective integration between these two elements will face difficulties in maintaining their competitiveness amidst the ongoing changes in the work landscape.

The relationship between digital human resource practices, remote work systems, employee engagement, and performance forms a complex system where changes in one element will impact the others (Halid et al., 2020). Well-designed digital human resource practices can serve as a bridge connecting employees with the organization in a remote work setting. Effective internal communication platforms allow for a smooth flow of information between leaders and employees as well as between colleagues, reducing the feelings of isolation often experienced by remote workers. Digital recognition systems enable organizations to provide appreciation for employee contributions quickly and visibly to all members of the organization, strengthening the sense of being valued and the sense of belonging. Digital wellness programs specifically designed for remote workers can help employees manage stress and maintain work-life balance. On the other hand, digital human resource practices that are not designed with employee needs in mind can actually produce negative impacts. Excessive use of employee surveillance technology can create feelings of distrust and reduce the autonomy that is one of the core values of remote work systems. Performance appraisal systems that focus too heavily on quantitative metrics without considering the quality of interactions and collaborative contributions can encourage individualistic behavior that harms teamwork. Excessive reliance on synchronous communication via video conferencing can lead to digital fatigue and reduce the time available for work requiring high concentration. Therefore, a balanced and human-centric approach is required in designing digital human resource practices to support remote work systems, while still prioritizing employee engagement and performance as the ultimate goals.

Organizations face a major problem in aligning digital human resource practices with the specific needs of remote work systems. Many organizations adopt various human resource technologies in isolation

without having a clear framework regarding how these technologies should interact to support a positive remote work experience. As a result, fragmentation occurs in the employee experience when interacting with the organization through various platforms that are not well-integrated. Employees must switch from one application to another to complete administrative tasks, access development materials, provide performance feedback, or communicate with colleagues and leaders. This fragmentation not only reduces efficiency but also creates confusion regarding the appropriate communication channels for various purposes. Furthermore, organizations often fail to consider the aspect of the digital divide among their workforce when implementing digital human resource practices. Employees with low digital literacy levels or limited access to adequate technological infrastructure face greater difficulties in adjusting to remote work systems that are heavily dependent on technology. This gap can widen the difference in work experience between groups of employees with high digital capabilities and those with low digital capabilities, potentially creating inequities in opportunities for development and career advancement. Organizations also face difficulties in measuring the effectiveness of digital human resource practices in supporting the engagement and performance of employees working remotely. Traditional metrics such as attendance rates and working hours lose their relevance in remote work systems, while new metrics that better reflect employees' actual contributions have not been widely developed or adopted (Darmawan et al., 2020).

The second problem relates to the complexity of building and maintaining employee engagement when the social interactions that serve as the foundation of that engagement must be conducted through digital mediums. Employee engagement has traditionally been built through a series of informal interactions at the workplace, such as conversations between meetings, having lunch together, or simply exchanging stories in office corridors. These interactions create social bonds that strengthen employees' sense of belonging and identification with the organization. In remote work systems, these informal interactions become very limited or even disappear entirely, replaced by interactions that are more structured and task-oriented through various digital platforms (Chopra, 2017). Consequently, employees lose the

opportunity to build personal relationships with colleagues and leaders that transcend mere professional connections. The loss of these social bonds can reduce employees' sense of engagement with the organization, which ultimately impacts decreases in motivation and commitment. Organizations also face difficulties in identifying early signs of declining engagement in employees working remotely. In traditional work settings, leaders can directly observe changes in employee behavior such as decreased participation in discussions, changes in body language, or a reduction in initiative. In remote work systems, these indicators become difficult to observe, so a decline in engagement is often only detected when it has already significantly impacted performance or even when the employee decides to leave the organization. Efforts to build engagement through digital interaction often face obstacles in the form of digital fatigue experienced by employees due to excessive exposure to video conferences and other online communications.

Studies regarding the relationship between digital human resource practices, remote work systems, employee engagement, and performance are increasingly growing alongside the shift in work paradigms toward hybrid models that combine remote work with office-based work. Organizations can no longer view remote work systems as a temporary solution to be abandoned once the situation recovers, but rather as a permanent part of the way of working that requires the design of mature management systems (Gratton, 2021). A comprehensive understanding of how digital human resource practices can be designed to support engagement and performance in remote work systems has become an urgent need for organizations wishing to maintain their competitiveness. Without adequate understanding, organizations risk making misaligned investments in human resource technologies that do not provide a significant impact on employee engagement and performance. This study is necessary to provide a systematic framework for understanding the complex relationships between the variables involved, enabling organizations to make more appropriate decisions in designing digital human resource practices that support remote work systems (Choudhury et al., 2021).

Based on the problem description presented, the research question proposed in this study is how digital human resource practices in remote work systems affect employee engagement and performance. This

problem formulation is designed to direct the study toward exploring the relationship between three main elements: digital human resource practices as the variable designed by the organization, remote work systems as the work environment condition, and engagement and performance as the outcomes of primary concern to the organization. Focusing on the relationship between these elements allows the study to generate a more complete understanding of the mechanisms linking digital human resource practices with engagement and performance in remote work settings.

The objective of this study is to analyze and explain the relationship between digital human resource practices and employee engagement and performance in remote work systems. This study aims to develop a theoretical understanding of how elements within digital human resource practices interact with the characteristics of remote work systems in shaping the employee work experience, which ultimately impacts engagement and performance. The expected theoretical contribution is the formulation of a conceptual framework that can be used as a foundation for subsequent empirical research, while the practical contribution is to provide guidance for organizations in designing effective digital human resource practices to support remote work systems.

Method

This study utilizes a qualitative literature review approach that focuses on the analysis of various written sources relevant to the topic being studied. This approach was chosen because it allows the researcher to conduct an in-depth exploration of theoretical concepts and previous research findings without having to collect primary data through interviews or field observations. As explained by Gomm (2008), a literature review in social research serves to synthesize existing knowledge, identify gaps in the literature, and develop a conceptual framework that can guide future research. May and Perry (2022) add that this approach is particularly useful when the topic under study is developing rapidly, as it allows the researcher to capture various perspectives emerging from different disciplines. In this study, the researcher conducted a literature search from various sources such as textbooks, scientific journal articles, research reports, and organizational documents discussing digital human resource practices,

remote work systems, employee engagement, and performance. The search process was carried out systematically using relevant keywords and following the principles put forward by Baronov (2015) regarding the importance of building a coherent argument in qualitative research based on evidence from various carefully critiqued sources.

The analysis process in this study was conducted through a thematic analysis approach that allows for the identification of major patterns emerging from the reviewed literature. The researcher performed a series of analytical stages starting with a thorough reading of all collected literature sources to gain an initial understanding of the developing key issues. The next stage involved coding important sections in the literature relevant to the research problem, then grouping codes with similar themes into broader categories. As suggested by Gomm (2008), the researcher conducted a critical assessment of the quality and relevance of each literature source before including it in the analysis. May and Perry (2022) emphasize that in literature-based qualitative research, the researcher must be aware of their position as an active interpreter in constructing meaning from the texts being studied. Baronov (2015) also reminds of the importance of maintaining a balance between a synthesis that is too loose, risking the loss of nuances from the original source, and a synthesis that is too rigid, which hinders the emergence of new understanding. In this study, the researcher performed triangulation between literature sources to ensure that the resulting conclusions were based on consistent evidence from various different perspectives. The results of the analysis are presented in a structured narrative form, while maintaining the conceptual richness of the reviewed literature. The entire analysis process was documented systematically to allow for re-tracing if necessary.

Result and Discussion

Current changes in the way of work demand that organizations become more creative in managing the people within them so that the work atmosphere remains comfortable despite not meeting in person (Rojak et al., 2022). Digital human resource practices in remote work systems refer to all employee management policies, procedures, and activities supported by digital technology to enable work coordination without attachment to

a physical location. These practices include the use of online collaboration platforms, cloud-based performance management systems, digital recruitment and selection, e-learning-based training, and organizational communication that takes place through virtual media (Bondarouk & Ruël, 2009). The main key to the success of this system is how every team member can still maintain good communication despite being hindered by differences in background or distance (Sajjapong & Irfan, 2022). Within this framework, the HRM function undergoes a shift from a conventional administrative approach toward an approach based on data, connectivity, and work flexibility. Its scope includes managing the employee lifecycle digitally, from recruitment to career development, including managing the employee work experience within a virtual environment. Furthermore, these practices also encompass strengthening digital work culture, managing employee engagement online, and performance monitoring that is no longer based on physical presence, but rather on output and the achievement of work targets (Strohmeier, 2020). Just as society must constantly adjust to changes in the environment around them, companies also need to have a strong adaptation strategy to remain viable (Oluwatoyin & Mardikaningsih, 2022).

According to Nicolás-Agustín et al. (2022), indicators for measuring digital human resource practices in remote work systems can be seen through several main dimensions that reflect the effectiveness of their implementation. First is the technology dimension, which includes the availability, ease of use, and integration of the digital systems used to support work activities. Second is the performance dimension, measured through target achievement, individual productivity, and the quality of work results in a remote environment. The application of an appropriate appraisal system is very important here to ensure that everyone's work results are assessed fairly and accurately according to their abilities (Putra, 2021). Third is the employee involvement dimension, which reflects the level of participation, communication, and social connectivity among organizational members. Fourth is the competency development dimension, demonstrated through access to and participation in digital training as well as the improvement of skills relevant to modern work demands. Fifth is the job satisfaction dimension, which relates to employee perceptions of work flexibility, work-life balance, and

organizational support in a digital work environment. Ultimately, a company's attention to the welfare and happiness of its employees will significantly determine how productive the resulting work will be (Darmawan et al., 2022). Through these indicators, organizations can evaluate the extent to which digital HRM practices are able to support the effectiveness of remote work sustainably.

Digital human resource practices in remote work systems are essentially an organization's effort to transform human resource management functions so they remain relevant and effective when interactions between the organization and employees are no longer conducted through direct physical meetings. This transformation covers all aspects of the employee work cycle, from recruitment to the termination of the employment relationship, utilizing digital technology as the primary medium. In the context of recruitment, organizations implementing remote work systems rely on digital recruitment platforms that allow the selection process to be conducted online, ranging from application screening and interviews to job offers (Woods et al., 2020). The use of artificial intelligence in the application screening process enables organizations to handle a large volume of applicants with much higher efficiency compared to manual processes. Competency assessments can also be conducted through digital platforms designed to measure various dimensions of a candidate's abilities, including technical skills, problem-solving abilities, and organizational culture fit. Orientation for new employees joining a remote work system requires a different approach from conventional orientation because new employees do not have the opportunity to learn informally by observing more senior colleagues at the workplace. Organizations need to design comprehensive digital orientation programs that cover not only the technical aspects of the job but also the introduction to organizational values, norms, and culture that have traditionally been transmitted through face-to-face interaction. The use of online learning platforms with materials that can be accessed independently allows new employees to learn various necessary things at a pace that suits their individual needs (Vardarlier, 2020).

Performance management systems in remote work settings demand a fundamental shift from an approach focused on monitoring attendance and activity to one focused on results and tangible contributions (Bristol-

Alagbariya et al., 2022). Organizations that still utilize traditional metrics such as working hours and attendance in remote work systems tend to face resistance from employees because these metrics are considered not to reflect actual contributions toward achieving organizational goals. In this regard, appropriate management techniques are highly necessary to ensure every task remains efficient and yields maximal results (Amri & Putra, 2022). Effective digital performance management systems enable continuous feedback through various mechanisms such as online peer reviews, 360-degree feedback collected via digital platforms, and periodic evaluations conducted through video conferences.

In addition to a good system, the role of a leader is vital in bringing about positive changes in the organizational work culture (Rojak et al., 2022). Setting performance goals in a remote work system requires higher clarity than in traditional work settings because employees do not have the opportunity to obtain informal clarification through daily interaction with leaders. The use of goal-setting methods like Objectives and Key Results, which can be tracked digitally, allows alignment between individual, team, and organizational goals to be maintained even though all team members work from different locations. Work environment conditions and the ability of employees to adapt also become key factors in determining how well performance can be generated (Arifin & Mardikaningsih, 2021). Performance documentation conducted digitally also facilitates the evaluation process because all evidence of employee contributions is recorded systematically and can be accessed at any time. A transparent performance appraisal system becomes increasingly important in remote work systems because employees lose the opportunity to directly observe how their colleagues are assessed and rewarded by the organization.

Employee competency development in remote work systems utilizes various digital learning platforms that offer flexibility in terms of time, place, and learning pace (Baykal, 2020). Ease of access to technology and digital skills has now become an important bridge for anyone to obtain better job opportunities (Arifin & Darmawan, 2021). Employees can access learning materials at any time according to their availability, which is highly beneficial for those who must balance work demands with family responsibilities. Digital learning platforms also

allow for the personalization of development paths according to the specific needs of each employee, distinct from conventional training programs that tend to be uniform for all participants. The way we interact and form our identity in the digital world also influences how we learn and work together with others (Darmawan & de Jesus Isaac, 2022). The use of micro-learning, which presents material in short segments, makes it easier for employees to learn new competencies without having to set aside long periods of time in a single session. Organizations can also utilize artificial intelligence technology to recommend relevant learning materials based on employee competency profiles and chosen career paths. Collaborative learning in remote work systems can be facilitated through the use of digital workspaces that allow employees to share knowledge, discuss work challenges, and learn from the experiences of their colleagues. The main challenge in competency development through digital platforms is ensuring that the learning taking place is not only cognitive but also tangibly changes work behavior. Organizations need to design mechanisms to encourage the application of knowledge gained through digital learning into daily work, for example, through applicative projects evaluated by leaders or mentors.

Compensation and reward management in remote work systems faces new complexities regarding how organizations measure and reward employee contributions that are no longer tied to a specific location or work time. Clarity regarding work agreements and social contracts between parties serves as an important foundation for conducting healthy business practices (Da Silva et al., 2022). Well-designed performance-based compensation systems can be effective instruments for motivating employees in remote work systems, as they provide clarity regarding the relationship between the effort exerted and the rewards received. Non-financial rewards, such as public recognition of employee achievements, can be provided through internal communication platforms that allow all members of the organization to see and appreciate their colleagues' contributions. Digital reward management systems enable the provision of rewards in real time, unlike annual reward programs that often lose relevance due to an excessively long time gap between the achievement and the granting of the award. Organizations also need to consider adjusting compensation structures

to accommodate variations in the cost of living between locations where employees work, as well as providing specific allowances to support remote work, such as subsidies for hardware, internet access, and home office facilities. Fairness in compensation systems becomes a primary concern in remote work systems because employees have a more limited ability to observe and compare the compensation received by their peers. Transparency regarding compensation policies and the mechanisms for determining compensation amounts can help reduce perceptions of unfairness that may arise due to the limited information available to employees (Wenzel et al., 2019).

Employee relations management in remote work systems requires organizations to intentionally design various mechanisms that facilitate the formation of social bonds among organizational members (Tsareva & Omelyanenko, 2020). It is very important for us to understand how communication plays a major role in maintaining quality relationships, even when separated by distance (Gardi et al., 2021). In traditional work settings, social bonds form naturally through daily interactions at the workplace; however, in a remote work system, these bonds must be created through planned interventions. Virtual spaces for informal interaction, such as communication channels dedicated to non-work topics, periodic online social activities, and casual conversation sessions at the beginning or end of meetings, can help create a sense of togetherness among geographically dispersed team members. In addition to communication, an employee's sense of loyalty and devotion to their workplace is also influenced by the existing work culture (Hariyani & Irfan, 2022). Mentorship programs that connect senior employees with junior employees through regular online meetings can facilitate the transfer of knowledge and organizational values that have traditionally occurred through observation and direct interaction. Organizations also need to pay special attention to the psychological well-being of remote workers, as feelings of isolation and difficulty separating work life from private life can negatively impact mental health. Balancing work matters with home matters is indeed a unique challenge that needs to be understood by all parties (Eddine & Darmawan, 2022). Employee assistance programs accessible online, virtual counseling sessions, and the provision of resources to manage stress and maintain work-life balance

are becoming increasingly important in remote work systems. Transparent communication from organizational leaders regarding various decisions and organizational developments also plays a vital role in building employee trust and engagement, because in a remote work system, employees lose the opportunity to obtain information through the informal networks that exist at the physical workplace.

Employee engagement in remote work systems is a multidimensional construct encompassing the cognitive, emotional, and behavioral aspects of the relationship between the employee and the organization (Larney & Randall, 2022). To remain competitive in this modern era, companies need to carry out various innovations in managing the people within them (Abdulah et al., 2021). The cognitive dimension relates to the employee's belief regarding the alignment between personal values and organizational values, as well as an understanding of their role in achieving organizational goals. In a remote work system, organizations need to work harder to ensure that employees have a clear understanding of how their individual contributions connect to the achievement of the organization's overall goals. Strategic communication carried out consistently through various digital channels can help build employee awareness of the organization's direction and the role expected of them. Differences in conditions and challenges faced by each person can sometimes create injustices that must be realized immediately (Gani, 2022). The emotional dimension of engagement includes positive feelings such as pride in being part of the organization, a sense of belonging, and emotional connectivity with colleagues and leaders. Building the emotional dimension in a remote work system requires a more personal and authentic approach in every interaction, as the absence of physical presence reduces the ability to convey emotional nuances through body language and facial expressions. Leaders need to develop better interpersonal communication skills through digital mediums, including the ability to convey empathy and concern for the employee's condition through carefully chosen words. The behavioral dimension of engagement is reflected in the employee's willingness to exert extra effort beyond formal responsibilities, participate actively in various organizational initiatives, and recommend the organization to others. In remote work systems, these behaviors become

more difficult to observe and may require different incentives to encourage their emergence.

Employee performance in remote work systems is influenced by a complex series of factors, ranging from individual characteristics and job design to organizational support and the quality of the technology used (Darmawan et al., 2020). Workplace comfort and a positive organizational culture have been proven to significantly help individuals perform at their maximum potential (Putra et al., 2020). Individual characteristics, such as the ability to manage time independently, comfort with technology, and the ability to communicate effectively through digital mediums, are important predictors of performance in remote work systems. Employees who have sufficient autonomy in organizing their way of working tend to demonstrate better performance because they can adjust their work approach to their personal preferences and conditions. Furthermore, work-from-home policies must also be evaluated for their effectiveness to ensure company goals are achieved properly (Mendrika et al., 2021). Clear job design with firm responsibility boundaries helps employees focus on priorities without needing to spend time seeking clarity on what is expected of them (Franken et al., 2021). Perceived organizational support, including support from leaders and colleagues, also plays a vital role in determining performance as it helps employees overcome obstacles that may arise while working remotely. The quality of the technology used, regarding hardware, software, and network connectivity, serves as the foundation that enables employees to carry out their tasks without significant disruption. Performance in remote work systems is also heavily influenced by the employee's ability to maintain a balance between work life and private life, as an inability to separate the two can lead to burnout, which ultimately lowers productivity. Organizations need to realize that performance in a remote work system is not solely determined by internal organizational factors but is also influenced by the home environment conditions of employees, which vary greatly between individuals.

The relationship between digital human resource practices and employee engagement in remote work systems is mediated by the work experience perceived by employees when interacting with the organization (Alfes et al., 2013). However, we must also note that not

everyone has the same ease in accessing and operating such technology (Ramle & Mardikaningsih, 2022). Digital human resource practices designed with attention to ease of use, accessibility, and personalization tend to generate a positive work experience that ultimately increases employee engagement. Conversely, digital human resource practices that are complicated, difficult to access, and fail to consider the individual needs of employees can lead to frustration and the perception that the organization does not care about employee comfort. A positive experience in the digital recruitment and orientation process can form a good initial perception of the organization, serving as the foundation for building future engagement. Ease of access to required information through digital human resource portals also contributes to the employee's sense of security and trust in the organization. Digital performance management systems that provide constructive and timely feedback help employees feel that their efforts are noticed and valued by the organization. Digital learning platforms that provide materials relevant to employee development needs demonstrate the organization's commitment to employee career growth, which is one of the important factors in building engagement. Digital reward programs that provide open recognition for employee contributions reinforce the sense that the organization values every member of its team. Digital internal communication channels that allow employees to voice their opinions and receive responses from leadership create a sense of belonging and involvement in the organizational decision-making process (Men, 2014).

The relationship between digital human resource practices and employee performance in remote work systems is more direct than its relationship with engagement, as digital human resource practices directly affect an employee's ability to execute their tasks (Swaroop & Sharma, 2022). Furthermore, learning systems that can adapt to individual needs are vital so that everyone can learn more effectively (Kurniawan & Darmawan, 2021). Effective digital performance management systems help employees clearly understand what is expected of them, how their performance will be measured, and what feedback is necessary to improve performance. This clarity is crucial in remote work systems because employees lack the opportunity to obtain informal clarification through daily interactions with leaders. Digital learning

platforms that provide access to relevant competency development materials allow employees to continuously improve their abilities in line with ever-changing job demands. In remote work systems where employees must operate with a higher level of autonomy, access to learning resources becomes increasingly important because employees cannot rely on direct guidance from senior colleagues or leaders. Integrated human resource information systems make it easier for employees to access various information needed to perform their jobs, ranging from organizational policies and work procedures to data relevant to their tasks. The time efficiency resulting from the automation of administrative processes through digital human resource practices allows employees to allocate more time and energy to work that provides added value to the organization. Transparent and fair digital compensation systems also contribute to performance by motivating employees to give their best effort due to the belief that such effort will be rewarded proportionately (Brown et al., 2022).

Each employee has a different background and type of work, so the way they maintain their life balance will also differ (Eddine & Darmawan, 2021). The influence of remote work systems on employee engagement is not linear because it is influenced by various individual and situational factors that can strengthen or weaken the relationship (Prasad & Mangipudi, 2021). Employees with introverted tendencies may feel more comfortable with remote work systems due to reduced pressure to engage in intensive social interaction, such that their engagement actually increases in this work arrangement. Conversely, employees with extroverted tendencies who gain energy from social interaction may experience a decrease in engagement because they lose the opportunity to interact directly with colleagues. The social support employees receive from environments outside the organization, such as family and friends, also influences how they respond to remote work systems. Employees with strong social support from their families tend to be better able to overcome the challenges that arise in remote work systems compared to employees who lack such support. An employee's life stage also influences the impact of remote work systems on engagement, where employees with childcare responsibilities may appreciate the flexibility offered by remote work, while early-career employees may feel they are missing out on opportunities to

build professional networks essential for their career development. This is where the role of a leader is greatly needed to utilize appropriate strategies in guiding their team through change (Mardikaningsih & Darmawan, 2022). The quality of leadership in a remote work system becomes a highly decisive factor in how much the negative impact of physical separation can be minimized. Leaders who can communicate effectively through digital mediums, provide the necessary support, and create a sense of togetherness even though their team is geographically dispersed can maintain employee engagement at a high level despite working remotely.

Remote work systems affect employee performance through various interconnected mechanisms, including changes in work methods, team dynamics, and work-life balance (Grant et al., 2013). The reduction in commute time previously used to travel to the workplace provides additional time that can be allocated to work or personal activities, which can potentially increase productivity. Employees also have greater control over their work environment, allowing them to create conditions most conducive to their productivity. However, remote work systems also bring challenges in the form of increased distractions from the home environment that can disrupt concentration and reduce work efficiency. Collaboration in remote teams often faces obstacles because communication no longer occurs as spontaneously as it does when working in the same location. Decisions that could previously be resolved in short discussions between tasks now require scheduled meetings that take longer. Innovation, which often arises from informal interactions and unstructured idea exchanges, becomes more difficult to occur in a remote work system. The ability of employees to separate work time from personal time becomes a critical factor affecting long-term performance. Employees who are unable to separate the two tend to experience burnout, which ultimately lowers productivity. Conversely, employees who can leverage the flexibility offered by remote work systems to create a better work-life balance tend to demonstrate more stable performance in the long run.

Successful digital human resource practices in supporting remote work systems are those designed with user-centered design principles in mind, where employee needs and preferences become the primary consideration in every design decision (Rahman & Jyoti, 2022). A user-

centered design approach ensures that developed technology truly facilitates employee work, rather than adding to the cognitive load they must handle. Employee involvement in the design and evaluation process of digital human resource practices can help identify potential issues early before the technology is implemented broadly. The principle of simplicity in user interface design becomes very important considering that employees must interact with various digital platforms in performing their jobs. Complex and non-intuitive interfaces can cause frustration and lower productivity, while simultaneously reducing employee motivation to use the system. Accessibility is another vital consideration, where digital human resource practices must be accessible to all employees without exception, including those with physical limitations or limited access to technology (Botelho, 2021). Flexibility in digital human resource practices allows for adjustments to diverse employee preferences and conditions, including options to use different devices, choices to access information through various channels, and options to determine when and how they interact with the system. Consistency in the user experience across various digital platforms used by the organization helps reduce the learning burden on employees and creates a smoother experience in interacting with the organization.

Employee engagement built through digital human resource practices in remote work systems possesses different characteristics compared to engagement built in traditional work settings (Maheshwari, 2022). Engagement in remote work systems is based more on functional and transactional relationships between employees and the organization, rather than on affective relationships built through intensive personal interaction. Employees may feel engaged with the organization because it provides the support they need to perform their jobs remotely, not because they have strong emotional bonds with colleagues or leaders. Engagement based on the perception that the organization cares about employee well-being manifested through policies and practices that support remote work can be a more sustainable form of engagement compared to engagement based on personal relationships that may change over time. Digital human resource practices that emphasize transparency and fairness can build employee trust in the organization, which is an essential foundation for engagement in a work environment

dominated by digital interaction. Employees who feel that the organization treats them fairly, provides the information they need, and values their contributions tend to develop a strong sense of engagement even though interactions with the organization are conducted remotely. Engagement in remote work systems is also more cognitive than affective in nature, where employees are engaged with the organization because they understand and believe in the organization's vision and mission, rather than simply because they like their colleagues or the workplace atmosphere. Cognitive engagement based on understanding and belief in organizational goals tends to be more stable and less easily influenced by changes in external conditions (Staples et al., 1998).

Employee performance in remote work systems requires a different evaluation approach than those used in traditional work settings (Ferrara et al., 2022). Performance evaluation approaches that focus on observing work behavior lose their relevance in remote work systems because leaders lack visual access to employees' daily work activities. Performance evaluation approaches that focus on the achievement of measurable results and outputs become more suitable for the characteristics of remote work systems, as results are tangible evidence of employee contributions that do not depend on work location. However, an excessive focus on measurable results can encourage undesirable behavior, such as neglecting aspects of work that are difficult to measure or emphasizing quantity over quality. Performance evaluation approaches in remote work systems need to balance output measures with process measures, including how employees collaborate with colleagues, how they contribute to team learning, and how they demonstrate organizational values in their work. Performance evaluation in remote work systems also requires input from various different sources to obtain a more comprehensive picture of employee performance. Feedback from colleagues working together on projects, feedback from internal parties served, and feedback from leaders can provide different perspectives on an employee's contribution. The frequency of performance evaluations in remote work systems needs to be increased compared to the annual evaluations commonly used in traditional work settings, as more frequent feedback helps employees make necessary adjustments before problems become too large. Performance evaluations

conducted continuously also allow for faster recognition of employee achievements, which can maintain motivation in remote work systems (Yarberry & Sims, 2021).

The role of leadership in remote work systems undergoes a significant transformation compared to leadership roles in traditional work settings (Terkamo-Moisio et al., 2022). Leaders in remote work systems are required to develop better communication skills through digital mediums, including the ability to convey messages clearly, the ability to read situations and emotions through written or video communication, and the ability to provide constructive feedback without physical presence. Leaders also need to develop leadership approaches that are more oriented toward empowerment rather than supervision, as they lack the ability to directly oversee how employees perform their tasks. Employee empowerment through delegation of authority, granting autonomy in determining work methods, and supporting independent decision-making becomes increasingly important in remote work systems. Leaders also serve as connectors who maintain team cohesion in a work environment where spontaneous interaction is very limited. Organizing regular team meetings, creating space for informal interaction, and ensuring that every team member feels heard and valued are crucial leadership functions in a remote work system. Leaders are also responsible for ensuring that the resources required by the team to perform remote work are well available, including hardware, software, and access to necessary information. The presence of a leader in a remote work system is not measured by how often they are seen in the office, but by how responsive they are to the team's needs and how effective they are in creating a work environment that supports the productivity and well-being of team members. Leaders who are able to demonstrate empathy and concern for the personal conditions of team members tend to be more successful in building engagement and maintaining team performance in remote work systems (Wittmer & Hopkins, 2022).

Organizational culture in remote work systems requires intentional adjustment to ensure that the values and norms that have historically characterized the organization are maintained, even though interactions between organizational members are conducted remotely (Sutherland & Janene-Nelson, 2020). Organizational culture, which has traditionally been

transmitted through observation, imitation, and direct interaction, must now be transmitted through digital mediums that have limitations in conveying subtler nuances and meanings. Organizations need to explicitly articulate expected values and provide concrete examples of how those values are manifested in daily work behavior within a remote work system. The creation of organizational rituals and traditions that can be implemented digitally, such as celebrations of shared achievements, virtual social activities, or regular knowledge-sharing sessions, can help build a sense of togetherness and collective identity among geographically dispersed organizational members. Recognition of behaviors that reflect organizational values, provided openly through digital platforms, can reinforce expected norms and provide examples for other organizational members. Organizational culture in remote work systems also needs to emphasize values such as trust, transparency, and accountability, as these values become the foundation for effective work relationships when direct supervision is not possible. Organizations that succeed in building a culture that supports remote work systems tend to have higher levels of employee engagement and performance compared to organizations that still maintain a culture designed for traditional work settings. Building organizational culture in a remote work system is an ongoing process that requires consistent attention from all levels of the organization, from top leadership to line supervisors (Asatiani et al., 2021).

Technology that supports digital human resource practices in remote work systems should not be viewed merely as a neutral tool, but as a medium that shapes how employees interact and relate to the organization (Donnelly & Johns, 2021). The development of social media and digital literacy among today's youth also influences how we communicate in the workplace (Kurniawan et al., 2021). Every decision regarding what technology is used, how that technology is designed, and how it is implemented has consequences for the employee work experience and, ultimately, for engagement and performance. Technology designed with ease of use and accessibility in mind tends to encourage broader adoption and more effective use compared to technology implemented without considering user needs. Technology that prioritizes surveillance and control tends to create resistance and negative perceptions from employees, while technology that empowers

employees by providing access to information and autonomy in working tends to increase satisfaction and engagement. To ensure employees feel comfortable and satisfied, companies need to pay attention to providing fair rewards and a supportive work environment (Putra et al., 2022). Integration between various technological platforms used by the organization is an important factor in creating a seamless work experience for employees. Employees who must switch between non-integrated applications to complete various administrative tasks tend to experience frustration and waste valuable time. Technology also brings the risk of digital fatigue that needs to be managed wisely by the organization, for example, through policies that limit the use of synchronous communication outside of working hours or by providing breaks between virtual meetings to prevent cognitive exhaustion. Organizations need to periodically evaluate the technology used to ensure that it remains relevant to evolving needs and does not create an unnecessary burden for employees (Arunprasad et al., 2022).

Balancing the flexibility offered by remote work systems with the need for structure and clarity in work is a major challenge that must be managed by the organization (Franken et al., 2021). Appropriate strategies are needed so that every employee continues to feel supported even though they work in different environments (Hariani et al., 2021). Excessive flexibility without adequate structure can lead to confusion regarding priorities, coordination difficulties, and a decrease in accountability. Conversely, an overly rigid structure without sufficient flexibility can eliminate the primary benefits of remote work systems and create frustration for employees who value autonomy. Organizations need to design work structures that provide clarity regarding goals, roles, and responsibilities, while still providing space for employees to determine the best way to achieve those goals. Establishing core schedules where all team members are expected to be available for collaboration, combined with flexibility outside of those schedules, is one approach that can balance the need for coordination with the need for individual flexibility. Clear standard operating procedures for various work processes, while still allowing room for adjustments according to specific conditions, also help create a balance between structure and flexibility. Clear communication regarding expectations and boundaries in remote work systems helps

employees understand what is expected of them without feeling constrained by overly strict rules (Eddleston & Mulki, 2017). A leader who is responsible and possesses good ethics will always ensure that work rules are made for the common interest (Rojak & Darmawan, 2021). Organizations also need to provide space for employees to give input on how existing work structures can be adjusted to improve their effectiveness and comfort. A collaborative approach in designing work structures for remote work systems can increase employee ownership and commitment to the mutually agreed-upon way of working.

The time dimension in remote work systems brings significant implications for how work is organized and how performance is evaluated (Ng et al., 2022). Current lifestyle changes in urban society have indeed caused patterns of human relationships to shift as well (Irfan & Al Hakim, 2022). Remote work systems blur the boundaries between work time and personal time, which can lead to a tendency to work outside normal working hours or difficulty in truly disconnecting from work. Organizations need to establish clear norms regarding availability and communication outside of working hours to prevent unrealistic expectations and protect employee well-being. The use of technology that enables asynchronous work, where employees can complete their tasks at different times without being tied to the same schedule, can be a solution to accommodate variations in time preferences and different time zones (Rysavy & Michalak, 2020). Asynchronous work allows employees to work when they are most productive and rest when they need to, which can ultimately improve work quality and work-life balance. However, asynchronous work also requires higher discipline in communication and coordination because feedback is not obtained immediately. Organizations need to develop communication practices that support asynchronous work, such as the use of good documentation, clarity in message writing, and setting expectations regarding response times. Performance evaluation in remote work systems also needs to consider the time aspect more carefully, for example, by focusing on the output generated within a certain period rather than on the working hours spent. Evaluation approaches that value efficiency and effectiveness, rather than mere attendance or working hours, are more suited to the

characteristics of remote work systems that provide flexibility in managing work time.

Conclusion

This study shows that digital human resource practices play a central role in shaping employee engagement and performance within remote work systems. Digital human resource practices designed with user-centered design principles, transparency, fairness, and flexibility in mind contribute positively to employee engagement by creating a positive work experience. Engagement in remote work systems is largely based on functional and cognitive relationships, where employees feel connected because the organization provides the necessary support and because they understand and believe in organizational goals. Employee performance in remote work systems is influenced by the interaction between individual characteristics, job design, organizational support, and the quality of the technology used. Effective digital human resource practices help employees understand performance expectations, access required development resources, and receive constructive feedback, which ultimately supports the achievement of optimal performance. The success of implementing a remote work system heavily depends on the organization's ability to balance the flexibility offered by this work arrangement with the need for structure, clarity, and social cohesion within the team. Leaders play a vital role in transforming their leadership approach from supervision to empowerment, as well as in creating an organizational culture that supports productivity and well-being in a work environment dominated by digital interaction.

The implications of this study for human resource management practice highlight the importance of a systematic and integrated approach in designing digital human resource practices to support remote work systems. Organizations are advised to involve employees in the design and evaluation process of digital human resource practices to ensure that the developed technology truly meets user needs and does not create an unnecessary burden. Investment in digital competency development for all employees, including leaders, should be a priority to ensure that all members of the organization can utilize available technology optimally. Organizations are also encouraged to develop performance evaluation

metrics that suit the characteristics of remote work systems, balancing outcome measures and process measures while considering contributions to team collaboration and overall organizational development. Future research is recommended to conduct empirical testing of the conceptual framework developed in this study, considering contextual variations such as industry type, organizational size, and different workforce characteristics. Longitudinal studies are needed to understand how the relationship between digital human resource practices, remote work systems, engagement, and performance evolves over time, especially as the implementation of hybrid work systems combining remote work with office-based work becomes more mature.

References

- Abdulah, M. H. A. B., Gardi, B., & Darmawan, D. 2021. Innovation in Human Resource Management to enhance Organizational Competitiveness in the Era of Globalization. *Journal of Social Science Studies*, 1(1), 51-58.
- Alfes, K., Shantz, A. D., Truss, C., & Soane, E. C. 2013. The link between perceived human resource management practices, engagement and employee behaviour: a moderated mediation model. *The international journal of human resource management*, 24(2), 330-351.
- Amri, M. W., & Putra, A. R. 2022. Project Management Techniques to Improve Construction Workers' Efficiency and Productivity. *Journal of Social Science Studies*, 2(2), 177-182.
- Arifin, S., & Darmawan, D. 2021. Technology Access and Digital Skills: Bridging the Gaps in Education and Employment Opportunities in the Age of Technology 4.0. *Journal of Social Science Studies*, 1(1), 163-168.
- Arifin, S., & Mardikaningsih, R. 2021. The Effect of Employability, and Organizational Climate on Employee Performance. *Studi Ilmu Sosial Indonesia*, 1(2), 33-42.
- Arunprasad, P., Dey, C., Jebli, F., Manimuthu, A., & El Hathat, Z. 2022. Exploring the remote work challenges in the era of COVID-19 pandemic: review and application model. *Benchmarking: An International Journal*, 29(10), 3333-3355.
- Asatiani, A., Hämmäläinen, J., Penttinen, E., & Rossi, M. 2021. Constructing continuity across the organisational culture boundary in a highly virtual work environment. *Information systems journal*, 31(1), 62-93.
- Baronov, D. 2015. *Conceptual Foundations of Social Research Methods*. Routledge, New York.
- Baykal, E. 2020. Digitalization of Human Resources: e-HR. 268-286. <https://doi.org/10.4018/978-1-7998-0035-4.CH013>

- Belzunegui-Eraso, A., & Erro-Garcés, A. 2020. Teleworking in the Context of the Covid-19 Crisis. *Sustainability*, 12(9), 3662.
- Bondarouk, T. V., & Ruël, H. J. 2009. Electronic Human Resource Management: challenges in the digital era. *International Journal of Human Resource Management*, 20(3), 505-514.
- Botelho, F. H. 2021. Accessibility to digital technology: Virtual barriers, real opportunities. *Assistive Technology*, 33(sup1), 27-34.
- Bristol-Alagbariya, B., Ayanponle, O. L., & Ogedengbe, D. E. 2022. Developing and implementing advanced performance management systems for enhanced organizational productivity. *World Journal of Advanced Science and Technology*, 2(1), 39-46.
- Brown, M., Nyberg, A. J., Weller, I., & Strizver, S. D. 2022. Pay information disclosure: Review and recommendations for research spanning the pay secrecy-pay transparency continuum. *Journal of Management*, 48(6), 1661-1694.
- Chopra, Prof. R. 2017. Navigating the Shift: Challenges in Transitioning from Hrm to E-Hrm. *Innovative Research Thoughts*, 3(2), 133-138.
- Choudhury, P., Foroughi, C., & Larson, B. 2021. Work-from-anywhere: The productivity effects of geographic flexibility. *Strategic Management Journal*, 42(4), 655-683.
- Da Silva, E. B., Darmawan, D., & Irfan, M. 2022. Understanding Social Contracts: Formal Agreements in Business Practice. *Studi Ilmu Sosial Indonesia*, 2(1), 127-144.
- Darmawan, D., Mardikaningsih, R., Sinambela, E. A., Arifin, S., Putra, A. R., Hariani, M., Irfan, M., Al Hakim, Y. R., & Issalillah, F. 2020. The Quality of Human Resources, Job Performance and Employee Loyalty. *International Journal of Psychosocial Rehabilitation*, 24(3), 2580-2592.
- Darmawan, D., & de Jesus Isaac, A. 2022. Self-identity formation and social perception of individuals through interaction on social media in a digital world. *Journal of Social Science Studies*, 2(2), 273-278.
- Darmawan, D., Irfan, M., & Al Hakim, Y. R. 2022. Leadership and Employee Welfare in Improving Organizational Productivity. *Journal of Social Science Studies*, 2(2), 173-176.
- DeNisi, A. S., & Murphy, K. R. 2017. Performance appraisal and performance management: 100 years of progress?. *Journal of applied psychology*, 102(3), 421.
- Dluhopolska, T., & Y. Huk. 2021. Digital Transformation in HR Sphere: Directions, Problems and Opportunities. *Prychornomorski Ekonomichni Studii*, 65, 13-18.
- Donnelly, R., & Johns, J. 2021. Recontextualising remote working and its HRM in the digital economy: An integrated framework for theory and practice. *The International Journal of Human Resource Management*, 32(1), 84-105.

- Eddine, B. A. S. & D. Darmawan. 2021. Professional Employees, Manual Workers, and Informal Workers in Achieving Work Life Balance, *Studi Ilmu Sosial Indonesia*, 1(1), 209-226.
- Eddine, B. A. S. & D. Darmawan. 2022. Social Construction of Work Life Balance in Cultural and Organizational Norms, *Studi Ilmu Sosial Indonesia*, 2(1), 213-234.
- Eddleston, K. A., & Mulki, J. 2017. Toward understanding remote workers' management of work-family boundaries: The complexity of workplace embeddedness. *Group & Organization Management*, 42(3), 346-387.
- Evans-Uzozike, I. O., & C. G. Okatta. 2020. The Digital Transformation of HR: Tools, Challenges, and Future Directions. *International Journal of Multidisciplinary Research and Growth Evaluation*, 1(2), 135-142.
- Ferrara, B., Pansini, M., De Vincenzi, C., Buonomo, I., & Benevene, P. 2022. Investigating the role of remote working on employees' performance and well-being: an evidence-based systematic review. *International Journal of Environmental Research and Public Health*, 19(19), 12373.
- Franken, E., Bentley, T., Shafaei, A., Farr-Wharton, B., Onnis, L. A., & Omari, M. 2021. Forced flexibility and remote working: Opportunities and challenges in the new normal. *Journal of management & organization*, 27(6), 1131-1149.
- Gajendran, R. S., & Harrison, D. A. 2007. The good, the bad, and the unknown about telecommuting: meta-analysis of psychological mediators and individual consequences. *Journal of applied psychology*, 92(6), 1524.
- Gani, A. 2022. The Colonialism-Vulnerability Nexus: A Political Ecology Study of Structural Inequality in Climate Change. *Studi Ilmu Sosial Indonesia*, 2(1), 85-108.
- Gardi, B., Udjari, H., & Darmawan, D. 2021. Understanding the Function of Communication in Building and Sustaining Quality Relationships Across Organizational Boundaries. *Journal of Social Science Studies*, 1(2), 245-252.
- Golden, T. D., Veiga, J. F., & Dino, R. N. 2008. The impact of professional isolation on teleworker job performance and turnover intentions: does time spent teleworking, interacting face-to-face, or having access to communication-enhancing technology matter?. *Journal of applied psychology*, 93(6), 1412.
- Gomm, R. 2008. *Social Research Methodology: A Critical Introduction*. Bloomsbury Publishing, Basingstoke.
- Grant, C. A., Wallace, L. M., & Spurgeon, P. C. 2013. An exploration of the psychological factors affecting remote e-worker's job effectiveness, well-being and work-life balance. *Employee relations*, 35(5), 527-546.
- Gratton, L. 2021. Four principles to ensure hybrid work is productive work. *MIT Sloan management review*, 62(2), 11A-16A.
- Halid, H., Y. M. Yusoff., & H. Somu. 2020. The Relationship between Digital Human Resource Management and Organizational Performance. In *First ASEAN Business, Environment, and Technology Symposium (ABEATS 2019)*, 96-99.

- Hariani, M., Mardikaningsih, R., Darmawan, D., & Irfan, M. 2021. Strategies for Developing Perceived Support for Employees in Diverse Work Environments. *Journal of Social Science Studies*, 1(2), 81-88.
- Hariani, M., & Irfan, M. 2022. The Influence of Leadership and Work Culture on Employee Work Loyalty. *Studi Ilmu Sosial Indonesia*, 2(1), 39-48.
- Irfan, M. & Y. R. Al Hakim. 2022. Changing Patterns of Human Relations in Contemporary Urban Society, *Studi Ilmu Sosial Indonesia*, 2(1), 333-356.
- Kurniawan, Y, D. Darmawan, & R. K. Khayru. 2021. Social Media and Contemporary Youth Digital Literature, *Studi Ilmu Sosial Indonesia*, 1(2), 109-124.
- Kurniawan, Y., & Darmawan, D. 2021. The Adaptive Learning Effect on Individual and Collective Learning. *Journal of Social Science Studies*, 1(1), 93-98.
- Lartey, F. M., & Randall, P. M. 2022. Enhanced Engagement Nurtured by Determination, Efficacy, and Exchange Dimensions (EENDEED): A nine-item instrument for measuring traditional workplace and remote employee engagement. *International Business Research*, 15(2), 1-23.
- Maheshwari, A. 2022. Understanding organizational remote engagement and employee social transformation in post-COVID times with special reference to startups in India. *European Journal of Human Resource Management Studies*, 5(4).
- Mardikaningsih, R., & Darmawan, D. 2022. Situational Leadership Strategies to Improve Change Management and Team Performance. *Journal of Social Science Studies*, 2(1), 247-252.
- Marler, J. H., & Fisher, S. L. 2013. An evidence-based review of e-HRM and strategic human resource management. *Human Resource Management Review*, 23(1), 18-36.
- May, T., & B. Perry. 2022. *Social Research: Issues, Methods and Process*. McGraw-Hill Education (UK), Maidenhead.
- Meijerink, J., Boons, M., Keegan, A., & Marler, J. 2021. Algorithmic human resource management: Synthesizing developments and cross-disciplinary insights on digital HRM. *The International Journal of human resource management*, 32(12), 2545-2562.
- Men, L. R. 2014. Strategic internal communication: Transformational leadership, communication channels, and employee satisfaction. *Management communication quarterly*, 28(2), 264-284.
- Mendrika, V., Darmawan, D., Anjanarko, T. S., Shaleh, M., & Handayani, B. 2021. The effectiveness of the work from home (WFH) program during the Covid-19 pandemic. *Journal of Social Science Studies*, 1(2), 44-46.
- Ng, P. M., Lit, K. K., & Cheung, C. T. 2022. Remote work as a new normal? The technology-organization-environment (TOE) context. *Technology in Society*, 70, 102022.
- Nicolás-Agustín, Á., Jiménez-Jiménez, D., & Maeso-Fernandez, F. 2022. The role of human resource practices in the implementation of digital transformation. *International Journal of Manpower*, 43(2), 395-410.

- Oluwatoyin, F., & Mardikaningsih, R. 2022. Community adaptation strategy to climate change based on socio-cultural perspective. *Journal of Social Science Studies*, 2(1), 167-172.
- Prasad, K. D. V., & Mangipudi, M. R. 2021. A general linear model approach: development of psychological well-being, remote working, employee engagement, job satisfaction, scales, data analysis and reporting concerning to information technology sector. *Journal of Contemporary Issues in Business and Government Vol*, 27(1), 1006-1033.
- Putra, A. R., Hariani, M., Nurmalasari, D., Irfan, M., & Al Hakim, Y. R. 2020. Role of Work Environment and Organizational Culture to Job Performance. *Journal of Islamic Economics Perspectives*, 1(2), 1-13.
- Putra, A. R. 2021. Implementation of Competency-Based Performance Appraisal System to Ensure Accuracy and Effectiveness of Employee Evaluation. *Journal of Social Science Studies*, 1(1), 59-66.
- Putra, A. R., Anjanarko, T. S., Darmawan, D., Jahroni, J., Arifin, S., & Munir, M. 2022. The Role of Remuneration, Leadership Behaviour, and Working Conditions on Job Satisfaction. *Studi Ilmu Sosial Indonesia*, 2(1), 61-74.
- Rahman, M. A., & Jyoti, S. N. 2022. A Systematic Literature Review of User-Centric Design In Digital Business Systems: Enhancing Accessibility, Adoption, And Organizational Impact. *Review of Applied Science and Technology*, 1(04), 01-25.
- Ramle, N. L. B., & Mardikaningsih, R. 2022. Inclusivity in Technology-Based Services: Access and Skills Challenges. *Journal of Social Science Studies*, 2(2), 225-230.
- Rojak, J. A., & Darmawan, D. 2021. Ethical Leadership and Social Responsibility in Organisational Managerial Practice. *Studi Ilmu Sosial Indonesia*, 1(2), 187-204.
- Rojak, J. A., D. Darmawan, & R. K. Khayru. 2022. Transformational Leadership as an Agent of Social Change in Organizational Value Systems, *Studi Ilmu Sosial Indonesia*, 2(1), 191-212.
- Rojak, J. A., Irfan, M., & Putra, A. R. 2022. HRM Strategies in Creating a Conducive Work Environment and Increasing Organizational Commitment. *Journal of Social Science Studies*, 2(2), 145-150.
- Rysavy, M. D., & Michalak, R. 2020. Working from home: How we managed our team remotely with technology. *Journal of Library Administration*, 60(5), 532-542.
- Sajjapong, T., & Irfan, M. 2022. Understanding Communication Practices for Managing Global Teams Across Diverse Cultural Frameworks. *Journal of Social Science Studies*, 2(2), 267-272.
- Staples, D. S., Hulland, J. S., & Higgins, C. A. 1998. A self-efficacy theory explanation for the management of remote workers in virtual organizations. *Journal of computer-mediated communication*, 3(4), JCMC342.
- Stone, D. L., Deadrick, D. L., Lukaszewski, K. M., & Johnson, R. 2015. The influence of technology on the future of human resource management. *Human Resource Management Review*, 25(2), 216-231.

- Strohmeier, S. 2020. Digital human resource management: A conceptual clarification. *German Journal of Human Resource Management*, 34(3), 345-365.
- Sutherland, L., & Janene-Nelson, K. 2020. *Work together anywhere: A handbook on working remotely-successfully-for individuals, teams, and managers*. John Wiley & Sons.
- Swaroop, S., & Sharma, L. 2022. Employee engagement in the era of remote workforce: role of human resource managers. *Cardiometry*, (23), 619-628.
- Terkamo-Moisio, A., Karki, S., Kangasniemi, M., Lammintakanen, J., & Häggman-Laitila, A. 2022. Towards remote leadership in health care: Lessons learned from an integrative review. *Journal of advanced nursing*, 78(3), 595-608.
- Tsareva, N. A., & Omelyanenko, S. Yu. 2020. Remote work: development of employee digital competence. *Revista de La Universidad Del Zulia*, 11(31), 131-140. <https://doi.org/10.46925//RDLUZ.31.10>
- Vardarlier, P. 2020. *Digital Transformation of Human Resource Management: Digital Applications and Strategic Tools in HRM*. 239-264. https://doi.org/10.1007/978-3-030-29739-8_11
- Venkatesh, V. 2020. Impacts of COVID-19: A research agenda to support people in their fight. *International journal of information management*, 55, 102197.
- Waizenegger, L., McKenna, B., Cai, W., & Bendz, T. 2020. An affordance perspective of team collaboration and enforced working from home during COVID-19. *European journal of information systems*, 29(4), 429-442.
- Wang, B., Liu, Y., Qian, J., & Parker, S. K. 2021. Achieving effective remote working during the COVID-19 pandemic: A work design perspective. *Applied psychology*, 70(1), 16-59.
- Wenzel, A. K., Krause, T. A., & Vogel, D. 2019. Making performance pay work: The impact of transparency, participation, and fairness on controlling perception and intrinsic motivation. *Review of public personnel administration*, 39(2), 232-255.
- Wittmer, J. L., & Hopkins, M. M. 2022. Leading remotely in a time of crisis: relationships with emotional intelligence. *Journal of leadership & organizational studies*, 29(2), 176-189.
- Woods, S. A., Ahmed, S., Nikolaou, I., Costa, A. C., & Anderson, N. R. 2020. Personnel selection in the digital age: A review of validity and applicant reactions, and future research challenges. *European Journal of Work and Organizational Psychology*, 29(1), 64-77.
- Yarberry, S., & Sims, C. 2021. The impact of COVID-19-prompted virtual/remote work environments on employees' career development: Social learning theory, belongingness, and self-empowerment. *Advances in Developing Human Resources*, 23(3), 237-252.
- Zaim, H., Keceli, Y., Jaradat, A., & Kastrati, S. 2018. The effects of knowledge management processes on human resource management: Mediating role of knowledge utilization. *Journal of Science and Technology Policy Management*, 9(3), 310-328.