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The Effects of Remote and Hybrid Working using AI tools in Human Resource Management on Employee Performance in IT Industries of Malaysia

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ABSTRACT

Objective - The human resources (HR) teams in information technology (IT) organizations have begun adopting AI solutions to enhance workforce management, improve communication, and increase productivity, given the emergence of remote and hybrid working models.
Methodology/Technique – These calls for further research into the effects of artificial intelligence (AI) tools on employee performance in IT firms in Malaysia, particularly in the context of remote and hybrid work. Hence, this study aims to examine how AI-based platforms, such as automated performance appraisals, employee engagement tools, and virtual collaboration services, affect work productivity, job satisfaction, and overall morale.
Findings – The independent variables of work-life balance, communication satisfaction, and organizational support are examined via convenience sampling. The three exogenous variables are linked to a single endogenous variable, employee performance. Moreover, the research investigates the limitations and potential of these resources in remote or hybrid settings by assessing their impact on organizational culture, employee relations, and well-being.
Novelty -This empirical work
aims to aggregate and analysis empirical information on the risks involved in AI-driven hybrid working environments. The elicited data could be used to develop an AI-driven tool to assist workers and employers in recognizing, assessing, and mitigating risks. Existing legislation should be analyzed to determine how HR technology can reinforce guidelines to safeguard remote workers.
Type of Paper: Empirical
JEL Classification: M1, M15
Keywords: Remote and hybrid working, AI tools, Work-life balance, Organizational support, Communication Satisfaction, Employee performance
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1. Introduction

Distance work using AI tools helps personalize tasks to individual needs, thereby making work easier and more manageable while increasing employee performance. When used in work-from-home settings, AI tools are key to mitigating stress and unscheduled interruptions from supervisors and colleagues.

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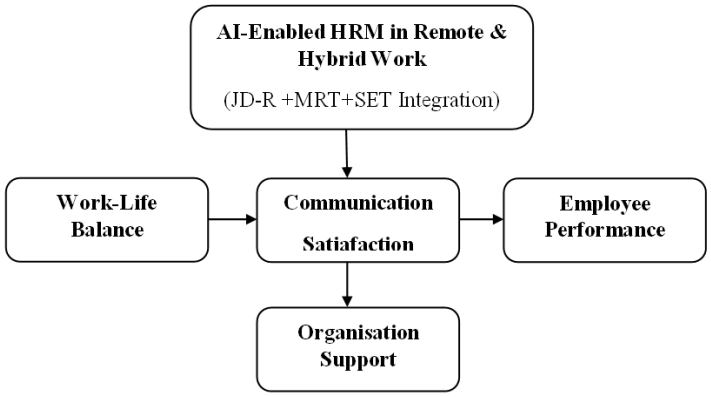
The integration of AI via scheduling, video calls, performance tracking, and task management significantly improves coordination and work processes. Recent works in Malaysia have highlighted the growing benefits of AI tools in remote and hybrid work environments. Based on their Cisco survey, (WeCorporate, 2024) and (Ohsem, 2024) reported that 86% of the workforce experiences increased levels of enthusiasm and productivity when they are supported by AI platforms (Microsoft Viva Insights) during remote work. The AI-powered tools are key catalysts for employee performance and engagement, as they provide insights into productivity and well-being. While 79% of Malaysian workers reported that using hybrid work patterns and schedules has improved their well-being, 60% reported increased overall productivity. This finding could be attributed to the use of AI collaboration software tools, such as Slack AI (Cisco, 2024) (Ohsem, 2024). Likewise, (WeCorporate, 2024) Focus Malaysia - Business & Beyond (2024) reported that 55% of respondents reported improved productivity following the integration of AI into their work routines. These findings suggest that AI tools are effective in improving work-life balance and fostering healthier work environments by reducing employee stress. Approximately 52% of employers surveyed by EY (2024) offer two to three days of remote work flexibility, a direct result of increased efficiency enabled by AI-driven assistants (e.g., Leena AI). Hence, AI tools are crucial for enhancing employee experience and ensuring healthier communication and management, both of which optimize hybrid work patterns.

1.1 Theories

AI tools used for HR management support the workforce by providing job-related resources and performance-management capabilities, such as administrative support and learning. Nevertheless, such tools could lead to technostress and information overload. The Job Demands-Resources Model is extensively applied to examine the drawbacks and benefits of ‘digitization’ in the context of employee well-being and performance. The AI-enhanced conversation structures, such as smart assembly summaries and AI co-pilots in collaboration software, regulate perceived media richness. The AI-mediated channels improve information, coordination, and performance by providing vital cues and adaptiveness. Recent works have examined AI’s function in organizational conversation and management (Florea & Croitoru, 2025). As posited by Social Exchange Theory, ethically driven and supportive AI structures foster organizational support and reciprocity (agreement, commitment, and improved performance). Contemporary studies have linked AI adoption to employee trust, perceived equality, and interpersonal behavior (Xu et al., 2024). Nonetheless, AI is perceived as biased or primarily used for surveillance, both of which can undermine consideration and reciprocity.



Conceptual Framework

2. Literature Review

2.1 Remote and hybrid work in the usage of AI tool

The widespread use of AI tools has significantly altered the dynamics of remote and hybrid work models in organizations. Following the advent of digital technologies, remote and hybrid (partially in-person and partially outside the traditional office) work are among the most popular forms of flexible work (Choudhury et al., 2023). Smart AI-based work management systems also benefit hybrid work trends. In a more recent EY (2024) poll, 52% of respondents in Malaysia support two- to three-day remote-work flexibility due to perceived gains in productivity. Most administrative HR processes, including leave approvals, employee inquiries, and performance monitoring, are automated, thereby freeing managers to focus on strategic decision-making.

2.2 Employee performance in the usage of AI tool

Employee performance has significantly influenced the overall success of organizations, particularly in the modern AI era. Fundamentally, AI tools are being used to increase employee productivity by automating administrative operations, providing feedback, and enhancing employee well-being (Zhao & Liang, 2023). As evidenced by (Sharma & Singh, 2023), AI applications assist managers in making decisions that improve productivity and alleviate workload for remote teams via performance tracking and predictive analytics.

2.3 Work-life balance of remote and hybrid work using AI tools

Microsoft Viva Insights, Time Doctor, and Clockwise are AI-powered scheduling and productivity software that aim to promote optimal work-life balance for employees working in telecommuting and hybrid schedules. These software tools detect periods of focused work, identify overtime patterns, and recommend optimal pause durations using machine-learning algorithms. In other words, these technologies play a pivotal role in preventing burnout. Microsoft Viva Insights, which offers recommendations for mental breaks and focused time without meetings, is key to maintaining an optimal workload and increasing work performance. This idea reflects the Job Demands-Resources Model. As stated by Haar et al. (2014) and (Kossek et al., 2021), employee performance levels are enhanced by reducing employee demands and increasing employee resources. (Wang et al., 2021) asserted that AI-driven tools, when used for efficiently using the scheduled times, enhance productivity and reduce burnout for professional well-being. In this vein, AI-driven tools have made key contributions to increasing employee performance.

H1: *There is a significant relationship between work-life balance in the usage of AI tools and employee performance.*

2.4 Communication satisfaction of remote and hybrid work using AI tools

Effective communication is a key determinant of employee performance, especially for virtual teams. Slack AI, Microsoft Teams, Copilot, and Zoom AI Companion are AI-powered communication tools that enhance communication quality through features such as meeting summary generation, simultaneous translation, and insight generation, thereby supporting effective discussions. Teamwork is thus enhanced, with potential misconceptions avoided and the decision-making process optimized. The relationship between communication and performance is well-delineated in the Media Richness Theory. In theory, the certainty and accuracy of information are achieved in various tasks with an increase in the richness and interactive nature of the communication medium (Madlock, 2008) (Purvanova, 2014). (Cheng & Chao, 2022) reinforced that AI-enhanced tools for communications improve teamwork by enhancing message certainty and collaboration.

H2: *There is a significant relationship between communication satisfaction in the usage of AI tools and employee performance.*

2.5 Organizational support of remote and hybrid work using AI tools

AI-driven HR management platforms, such as Workday People Experience, Oracle HCM Cloud AI Assistant, and Lena AI, are increasingly used as intermediaries in perceptions of organizational support, particularly in the context of remote and hybrid work arrangements. As posited by the Social Exchange Theory, levels of employee commitment, engagement, and performance increase with perceived organizational support (Eisenberger et al., 2017) (Courtesy et al., 2017). This perception of support is amplified by AI-driven HR platforms that provide support and tailor career suggestions based on employee needs (Meijerink et al., 2021). As such, increased feelings of support and value lead to amplified levels of job satisfaction, employee retention, and performance.

H3: *There is a significant relationship between organizational support in the usage of AI tools and employee performance.*

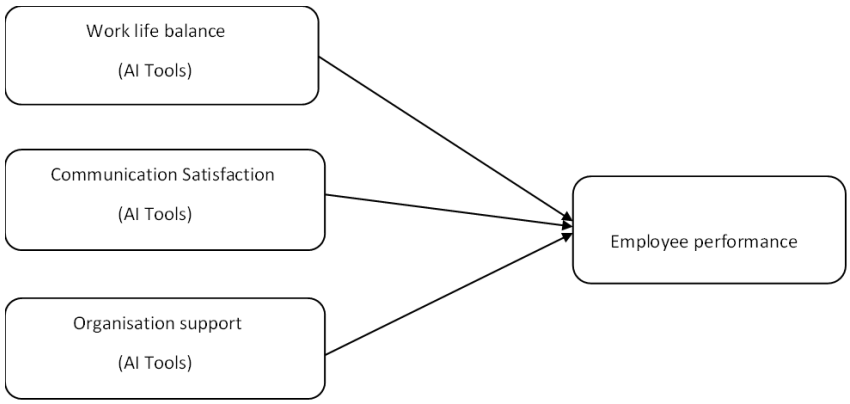


Figure 1 Research Framework

3. Research Methodology

A quantitative design was applied in this study to assess the effects of remote and hybrid work schedules, as well as the use of AI tools, on the performance of IT professionals. Work-life balance, communication satisfaction, and perceived support were chosen as the three mediating variables that could either enhance or limit employee performance. The present study focused on IT professionals in Selangor, where AI tools are widely used. Sekaran and Bougie's (2016) non-probability sampling technique was used for sample selection. In this study, 200 IT professionals who used remote or hybrid schedules were selected for participation. Various sampling procedures, including the basic power calculation for G*Power, justified the adequacy of the sample size.

Using standard parameters (medium effect size, $F^2 = 0.15$; alpha = 0.05; desired power = 0.80) and four predictors yields an estimated sample size of 85 for studies employing multiple regression or covariance paths in SEM. Because the current sample of 200 exceeds the minimum, it provides a comfortable margin for detecting medium-sized effects and improving the precision of estimates. This study employed a descriptive, cross-sectional design to collect data at a single point in time. Responses were collected using a structured questionnaire developed to assess perceptions of the application of AI tools, work-life balance,

communication satisfaction, organizational support, and overall performance. Notably, the responses were scored using a 5-point Likert scale. Microsoft Viva Insights, Slack AI, and Lena AI are among the tools commonly used to enhance collaboration and efficiency in remote and hybrid work settings. Descriptive statistics were integrated with inferential tests in SPSS to analyze relationships among variables and to examine how AI-driven remote and hybrid work affects the performance of IT employees in Malaysia.

4. Results

3.1 T-test results

Table 1. T-test results

Variables	Male	Female	t-value
Employee performance	2.6573	2.6760	1.045

If $p > .05$ → no significant difference.
If $p < .05$ → significant difference.

With t = 1.045, the difference between male and female employee performance was not statistically significant.

Gender did not influence employee performance under remote and hybrid work using AI tools.

3.2 Cronbach's Alpha

Table 2. Cronbach's alpha of independent and dependent variables

Variables	Cronbach Alpha	N of Items
Work-life balance of remote and hybrid working under AI tools	0.722	3
Communication satisfaction of remote and hybrid working under AI tools	0.830	3
Organizational support of remote and hybrid working under AI tools	0.745	3
Employee performance of remote and hybrid working under AI tools	0.802	3

Given that Cronbach's alpha > 0.70, all the study constructs were found to demonstrate acceptable-to-high reliability. Communication satisfaction ($\alpha = 0.830$) reflected the highest internal consistency. Employee performance ($\alpha = 0.802$) also demonstrated strong reliability, confirming that the items consistently measure this construction. Overall, the measurement scales are deemed reliable and suitable for hypothesis testing.

4.3 Hypothesis Testing

Table 2. Hypothesis testing result

Hypothesis Testing	P-value	Decision
(1) There is a significant relationship between work-life balance in the usage of the AI tool and employee performance.	0.002	Supported
(2) There is a significant relationship between communication satisfaction in the usage of the AI tool and employee performance.	0.000	Supported
(3) There is a significant relationship between organizational support in the usage of the AI tool and employee performance.	0.003	Supported

H1: Work-life balance is significantly related to employee performance ($p = 0.002$).

H2: Communication satisfaction is significantly related to employee performance ($p = 0.000$).

H3: Organization support is significantly related to employee performance ($p = 0.003$).

With all p-values < 0.05, AI-supported HRM practices (work-life balance, communication satisfaction, and organizational support) significantly enhanced employee performance in the IT sector in Malaysia.

5. Discussion

The current outcomes demonstrate statistically significant relationships among AI-driven HR tools in remote and hybrid working environments. Key elements such as work-life balance, communication satisfaction, and perceived organizational support have been positively associated with employee performance. Several contextual causes inform these findings. For example, Malaysia's IT industry has adopted advanced communication platforms, including Microsoft Teams, Zoom, Slack, and AI-integrated chatbots, for HR service delivery. The implementation of AI tools provides automated responses to HR inquiries and enhanced collaboration tools (e.g., record sharing and scheduling assistants). According to the Media Richness Theory, communication channels that reduce ambiguity and enhance clarity increase satisfaction with verbal exchanges. This holds true in remote and hybrid settings, where physical presence is minimal. Furthermore, the use of AI tools in IT companies (where teamwork, technical coordination, and speed are important) significantly reduces misunderstanding, project delays, and technical friction. Hence, AI-powered HR communication is essential for productivity and teamwork in Malaysia's digital IT landscape. In Malaysia's cultural context, the importance of work-life balance is heightened by family orientation and a collectivist culture. Employees appreciate the personalization offered by the AI tools (health nudges and flexible scheduling) amidst the extensive commutes to and from Kuala Lumpur. Consistent with the JD-R Theory, employees are given greater autonomy and control; job strain and motivation are reduced and increased, respectively, with an adequate number of task-oriented resources. The AI-powered tools enable a hybrid arrangement that directly supports Malaysia's cultural expectations regarding family commitments, thereby increasing work performance. Given the high demand for technology talent in Malaysia's competitive IT sector, employees expect their employers to adopt virtual tools and provide more opportunities to enhance employee development and retention. The Social Exchange Theory posits that

employees who perceive that the organization prioritizes their growth and welfare will reciprocate with greater engagement and loyalty.

6. Conclusion

This study examined the significance of integrating AI and HR management techniques to improve employee performance in remote and hybrid work arrangements. A more committed and efficient workforce can be established by integrating AI to improve work-life balance, communication, and support. Based on the study results, AI is a key catalyst for efficient HR management practices. The present study offered a novel theoretical contribution by combining three models and proving their joint effects, which are relevant to digitized work environments. The AI-driven HR transformation has yielded promising results in the Malaysian IT industry, which exhibits technological readiness and maturity, and in a society that values harmony and strong workplace support.

In practice, the study highlighted the need for IT organizations to adopt AI to automate processes, enhance efficiency, and improve employee engagement and well-being. Organizations that implement digital HR tools and technologies can ensure effective communication, fair treatment, and optimal work distribution, thereby increasing workforce performance in remote and hybrid work settings. Notwithstanding these limitations, several limitations were encountered in this study. For example, reliance on self-reporting and industry-specific observations could limit the generalizability of outcomes globally. This study advanced the theoretical and practical applications of AI in HR management to inform and guide companies and key stakeholders.

References

Cheng, Y., & Chao, C. (2022). AI-enhanced communication and collaboration in virtual teams: Implications for performance and satisfaction. *Journal of Business Communication and Technology*, *59*(3), 245–262.

Choudhury, P., Foroughi, C., & Larson, B. Z. (2023). The future of remote and hybrid work: Managing productivity and collaboration in the digital era. *Harvard Business Review*, *101*(2), 58–67.

Cisco. (2024). The future of work: How AI empowers hybrid and remote teams in Malaysia. *Cisco Systems*.

Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., & Adis, C. S. (2017). Perceived organizational support: A meta-analytic evaluation of organizational support theory. *Journal of Management*, *43*(6), 1854–1884.

Florea, N. V., & Croitoru, G. (2025). The impact of artificial intelligence on communication dynamics and performance in organizational leadership. *Administrative Sciences*, *15*(2), 33.

Kossek, E. E., Valcour, M., & Lirio, P. (2021). The sustainable work-life balance: Integrating individual, organizational, and social perspectives. *Annual Review of Organizational Psychology and Organizational Behavior*, *8*(1), 37–60.

Madlock, P. E. (2008). The link between leadership style, communicator competence, and employee satisfaction. *The Journal of Business Communication (1973)*, *45*(1), 61–78.

Meijerink, J., Bondarouk, T., & Lepak, D. P. (2021). When HRM systems become too complex: A review and research agenda on digital HRM complexity. *Human Resource Management Review*, *31*(2), 100764.

Ohsem. (2024). Cisco survey: 86% of Malaysian employees feel happier working remotely with AI tools. *Ohsem.Me*.

Sharma, R., & Singh, A. (2023). Artificial intelligence in human resource management: Enhancing employee engagement and productivity in hybrid work models. *International Journal of Human Resource Studies*, *13*(1), 45–62.

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.

WeCorporate. (2024). Cisco survey: AI tools enhance happiness and productivity among Malaysian hybrid workers. *WeCorporate Malaysia*.

Xu, Y., Huang, Y., Wang, J., & Zhou, D. (2024). How do employees form initial trust in artificial intelligence: hard to explain but leaders help. *Asia Pacific Journal of Human Resources*, *62*(3), e12402.

Zhao, Y., & Liang, X. (2023). Artificial intelligence in remote work: Implications for employee performance and digital collaboration. *Computers in Human Behavior*, *145*, 107785.