The Influence of Remote Work Factors on Project Timeline Completion: Moderating Role of Management Support at Fidelity Bank Ghana

Zachariah BISSAH[1]
Juliana Owusu ANSAH[2]
Cornellius BOTCHWAY[3]

DOI: 10.24818/mer/2025.02-14

ABSTRACT

The swift transition to remote work has brought new challenges in meeting project deadlines. This research explores how three primary factors of remote work – availability of digital tools, quality of internet access, and technology usability – impact the Schedule Performance Index (SPI) among employees at Fidelity Bank Ghana, and investigates whether management support (including budget allocation, employee training, and openness to feedback) influences these relationships. Utilising a quantitative approach, a sample of 169 employees was drawn using stratified random sampling, and data were collected through a structured questionnaire with a five-point Likert scale. Hierarchical regression analysis conducted with SPSS indicated that accessibility ($B = 0.658$, $\beta = 0.643$, $p < 0.001$), connectivity ($B = 0.601$, $\beta = 0.592$, $p < 0.001$), and usability ($B = 0.685$, $\beta = 0.648$, $p < 0.001$) each have significant positive impacts on SPI, explaining up to 42.0% of its variation individually. When management support was added to the model, the explained variance rose by 10.2% ($\Delta R^2 = 0.102$, $p < 0.001$), and the interaction term (Remote Work × Management Support) further improved the model fit ($\Delta R^2 = 0.039$, $p = 0.005$), confirming a moderating role. These results highlight the significance of providing accessible, reliable, and user-friendly digital resources and proactive managerial support to enhance project schedule compliance in remote settings. This study provides practical recommendations for organisations aiming to maintain remote work performance and suggests directions for future research on additional organisational and individual factors.

KEY WORDS: *remote work, management support, Schedule Performance Index.*

JEL CLASSIFICATION: *M41, M48, M49.*

1. INTRODUCTION

The worldwide transition to remote work, driven by advancements in digital technology and the necessity of telecommuting due to the COVID-19 pandemic, has significantly changed how organisations strategize, execute, and oversee projects (Bloom et al., 2024; Capone et al., 2024). While remote work arrangements provide flexibility and reduce costs, they disrupt conventional coordination methods that depend on in-person interactions and centralised resource distribution (Ng et al., 2022). For project-based organisations like Fidelity Bank Ghana – where meeting timelines is crucial – grasping the factors influencing the Schedule Performance Index (SPI) in remote settings is essential. Although existing research has looked into the effects of remote work on organisational performance and employee well-being (Capone et al., 2024; Chatterjee et al., 2022), there has been limited investigation into specific digital factors – such as availability of tools, quality of internet connectivity, and usability of technology – concerning

[1] African University of Communications and Business, Accra, Ghana, zbissah@gmail.com
[2] African University of Communications and Business, Accra, Ghana, jowusu-ansah@aucc.edu.gh
[3] African University of Communications and Business, Accra, Ghana, rorl6992@gmail.com

objective metrics like SPI. Additionally, the role of management support, which manifests as financial backing, focused training sessions, and receptiveness to feedback, has been insufficiently explored (Chatterjee et al., 2022; Putri et al., 2023). This research addresses these gaps by surveying 169 employees at Fidelity Bank Ghana and utilising hierarchical regression analyses to assess (1) the direct impact of digital work elements on SPI and (2) the moderating effect of management support on the relationship between remote work and SPI. The results provide practical recommendations for creating supportive digital work environments and management practices that help maintain adherence to project schedules.

2. LITERATURE REVIEW

2.1. Remote Work

Remote work has become a significant aspect of modern employment, offering opportunities and challenges. Studies indicate that remote work can improve productivity, particularly when employees have the autonomy to manage their schedules. For instance, a study by Bloom et al. (2024) found that employees working from home for two days a week-maintained productivity levels comparable to their fully office-based counterparts. Additionally, remote work can increase job satisfaction and reduce turnover rates. A randomised controlled trial by Bloom et al. (2024) revealed that hybrid working improved job satisfaction and reduced quit rates by one-third among employees in a Chinese technology company.

However, remote work also presents challenges. Emanuel and Harrington (2021) observed that while productivity rose when transitioning to remote work, average productivity was lower for remote workers than office workers, suggesting that more productive employees may prefer in-office environments. Moreover, remote work can lead to feelings of isolation and loneliness, negatively impacting well-being (Capone et al., 2024).

2.1.1. Accessibility of Tools by Employees in Remote Work

Making digital tools accessible is crucial for remote employees, significantly affecting their productivity and engagement. Studies show that tools lacking accessibility can increase cognitive load and impede effective communication, especially for neurodivergent individuals (Das et al., 2021). Additionally, inaccessible design in remote working tools can lead to feelings of exclusion, negatively impacting employees' overall well-being and performance (Ginley, 2020). Research has also demonstrated that organisations focusing on digital accessibility enjoy higher employee satisfaction and retention (Maitraye et al., 2021). Moreover, adopting accessible tools is a legal requirement and a strategic benefit that promotes inclusivity and improves organisational efficiency (Pereira & Duarte, 2025). Consequently, ensuring that remote work tools are accessible is vital to fostering a productive and inclusive workplace.

2.1.2. Internet Connectivity in Remote Work Environments

Dependable Internet connectivity is essential for employees working remotely, as it directly affects their productivity and level of engagement. Research has indicated that strong Internet access allows employees to complete tasks effectively, collaborate successfully, and maintain ongoing communication with their coworkers. For example, a study by Buhari and Athithan (2024) revealed that employees with high-quality Internet connections reported enhanced productivity and job satisfaction. Likewise, research by Adomako et al. (2024) emphasised that organisational support, such as providing reliable internet access, positively influenced employee performance in remote work settings. Additionally, the U.S. Bureau of Labor Statistics (2022) noted a positive relationship between the rise in remote work and productivity improvement, indicating that dependable Internet access significantly contributes to increased

work efficiency. Furthermore, a report from the Office of Personnel Management (2022) showed that employees with steady Internet connectivity experienced greater job satisfaction and were less inclined to leave their organisations. These insights highlight the necessity of ensuring reliable Internet access to support remote work and enhance employee performance.

2.1.3. Usability of Technology

Usability plays a vital role in determining the effectiveness of technological systems, especially within fields such as education, healthcare, and e-government. Research conducted by Solomon (2024) demonstrated that usability in technology significantly affects the success of e-learning systems, explaining 82% of the variation in system effectiveness at Muni University in Uganda. Likewise, Dahri et al. (2022) assessed a mobile application aimed at teachers' professional growth, revealing that it achieved a 100% completion rate for tasks and an 84.1% satisfaction rating, showcasing its high level of usability. In the context of e-government, Samuel (2023) pointed out that enhancing the usability of digital interactive systems can lead to increased user acceptance and performance among middle-aged individuals in Ghana. A systematic review by Bunt et al. (2023) highlighted the value of using mixed-method strategies, including eye-tracking, to evaluate usability in digital health tools, ensuring thorough assessments. These findings emphasise the importance of usability when designing and implementing technological systems to satisfy user needs and expectations effectively.

2.2. Management Support

Support from management – encompassing both perceived organisational assistance and supervisory encouragement – plays a crucial moderating role in the relationship between remote work and the completion of project timelines by providing employees with necessary resources, feedback, and a sense of psychosocial safety to remain on track (Ferreira & Gomes, 2023). A strong sense of perceived organisational support diminishes feelings of isolation and promotes resilience, enhancing the ability of remote workers to meet project deadlines (Wiesenfeld et al., 2021). Supervisor support – defined by well-defined goal setting, prompt feedback, and appreciation – further enhances engagement and dedication, resulting in fewer schedule delays (Errichiello & Pianese, 2021). Organisational practices such as offering a solid technology framework, establishing formal remote work policies, and implementing blended training programs increase job satisfaction and lower turnover intentions, improving schedule performance (Errichiello & Pianese, 2021). During times of transition, managerial support is a strong predictor of work engagement and organisational performance, highlighting the significance of executive commitment in sustaining project progress in remote settings (Katsaros, 2024). Through appropriate resource provision and clear communication, strategic backing from management alleviates the specific difficulties of remote work environments, leading to greater adherence to project timelines (Ng et al., 2022).

2.2.1. Budget support

Budget support is an essential element that affects the achievement of project schedules, especially in remote work settings. Proper budgeting facilitates accurate resource distribution, ensuring that financial assets are allocated effectively across different project areas, which helps reduce delays and improve overall productivity (Eyibio & Daniel, 2020). In remote work environments, the importance of budget support increases due to specific challenges like providing digital communication tools, setting up home offices, and implementing virtual training programs. These aspects require meticulous financial planning to guarantee remote teams possess the necessary resources to work effectively without facing unanticipated expenses (Munthali & Kandasamy, 2024). Additionally, integrating contingency funds into the budget is crucial to manage unexpected costs that may emerge during project implementation.

This forward-thinking strategy promotes adaptability and aids in sustaining project timelines by offering a financial cushion against possible interruptions (Khan et al., 2023). Communicating budget constraints and goals transparently to all stakeholders is also vital. Involving stakeholders in the budgeting process fosters a sense of ownership and ensures alignment regarding the project's financial parameters, which is essential for on-time project completion (Rajhans, 2018).

2.2.2. Employee Training

In remote work environments, employee training is a crucial management tool for ensuring projects are completed on schedule by equipping employees with essential digital and soft skills. Pham et al. (2023) discovered that training programs focused on digital skills significantly improve employees' perceptions of organisational support, thereby decreasing work-to-family conflict and enhancing job satisfaction and performance in remote work situations. Aruldoss et al. (2022) showed that training and development influence the relationship between work-life balance and job satisfaction, emphasising the importance of training for sustaining employee well-being and loyalty. Abdullahi and Jarma (2023) found that well-rounded training programs are associated with increased employee retention rates, highlighting the role of training in maintaining workforce stability in remote settings. Patiño and Naffi (2023) pointed out that ongoing and digital training methods are essential for fostering sustainable workforce skills in increasingly digital remote work. Furthermore, Lemmetty (2024) highlighted both immediate and long-term challenges of remote learning and stressed the necessity of continuous, pedagogically sound training strategies to bridge skill gaps and encourage innovation. These studies affirm that effective employee training is essential for allowing remote teams to meet project deadlines effectively.

2.2.3. Openness to feedback

The readiness to seek, obtain, and act upon performance-related feedback is crucial for remote teams aiming to meet project deadlines. Feedback that combines outcome and process details assists virtual teams in adjusting their work and trajectories quickly, thereby minimising rework and delays (Handke et al., 2022; Krauß & Pöhlmann, 2024). Daily feedback exchanges between leaders and remote team members enhance understanding of expectations and allow for real-time adjustments, creating a supportive atmosphere that promotes schedule adherence (Jansson & Kangas, 2024). Continuous systems for performance feedback – particularly those involving interpersonal communication – further enhance task involvement and motivation, leading to improved time management and timely deliverables (Giamos et al., 2023). Employees who prioritise feedback actively seek input and utilise constructive criticism to refine their workflows, which is linked to increased performance and less timeline slippage (Steel & König, 2023; Su & Jiang, 2023). Strategies for peer feedback also enhance coordination and collective accountability, directly contributing to the fulfillment of project objectives (McLarnon et al., 2019). Integrating feedback loops into performance management processes in hybrid and remote environments ensures that resource limitations and workflow bottlenecks are identified and resolved quickly, helping to avoid schedule overruns (Mabaso & Manuel, 2024). Foundational research on feedback intervention theory highlights that the effectiveness of feedback relies on its content, the credibility of the source, and the timing, all of which must be optimised to ensure timely project completion (Gabelica et al., 2012; Kluger & DeNisi, 1996).

2.3. Project Timeline Completion

Ensuring that projects are completed on schedule and within scope is vital for effective project timeline management. A well-organised project timeline acts as a guide, leading teams through each project stage, from start to finish. A study by Lorko et al. (2024) indicates that leveraging

historical data from previous projects can significantly enhance the precision of project timeline predictions, thereby increasing the chances of meeting deadlines. Moreover, employing time management techniques, such as creating a comprehensive project plan and regularly tracking progress, can assist in identifying potential setbacks early and managing them efficiently (Bolick, 2020). Using tools like Gantt charts and Critical Path Method (CPM) analysis also supports the visualisation of project schedules and interdependencies, making decision-making more effective (Kerzner, 2022). Furthermore, maintaining effective communication among team members and stakeholders is crucial for synchronising expectations and quickly resolving issues, which contributes to the achievement of project timelines.

2.3.1. Schedule Performance Index

The Schedule Performance Index (SPI) is an essential measure in project management, particularly within the Earned Value Management (EVM) framework, utilised to evaluate schedule effectiveness by comparing the earned value (EV) of work completed with the planned value (PV) of scheduled work, calculated using SPI = EV / PV. An SPI value of 1 reflects that the project is on track, a value exceeding 1 indicates performance ahead of schedule, while a value below 1 signifies a delay in the project timeline (PMI, 2021). Nonetheless, SPI has its drawbacks; for example, as a project approaches completion, SPI often nears 1, regardless of the actual schedule performance, which can obscure delays. To overcome this limitation, the Earned Schedule (ES) method was introduced, incorporating time-based metrics such as SPI(t), which offers a more precise representation of schedule performance throughout the project lifecycle (Lipke et al., 2009).

SPI has been employed in practical settings to evaluate risk levels in construction projects. Research by Santos and Jungles (2016) indicated that SPI could effectively signal the possibility of project delays, making it a valuable asset for risk assessment in project management. Furthermore, combining SPI with other project management techniques increases its effectiveness. For instance, merging SPI with the Critical Path Method (CPM) facilitates a more thorough evaluation of schedule performance, allowing project managers to identify and address potential delays proactively (Kerzner, 2017). Table 1 briefly presents studies related to the research theme and the addressed research gap. At the same time, Figure 1 graphically shows the conceptual framework of this research paper.

Table 1. Empirical Review and Research Gaps

No.	Major Studies	Explanation of the Gap	Gap Addressal Initiative	Research Gap Type
1	Chatterjee et al., (2022)	Examined overall organisational performance under remote work, but did not isolate its effect on project schedule metrics such as SPI.	This study measures explicitly the accessibility of tools and their direct impact on the Schedule Performance Index.	Empirical Gap
2	Bloom et al., (2024)	Focused on retention and broad performance outcomes, without using earned-value metrics or schedule-specific indices.	The study adopts the SPI from earned-value management to quantify project timeline adherence under remote/hybrid work.	Methodological Gap
3	Mbonigaba et al., (2024)	Investigated general productivity and	This research independently	Measurement Gap

No.	Major Studies	Explanation of the Gap	Gap Addressal Initiative	Research Gap Type
		technology use, but did not disaggregate how connectivity and usability separately influence schedule outcomes.	measures Internet connectivity and technology usability, linking each to SPI.	
4	Handke et al., (2022)	Explored feedback processes in virtual teams but did not tie feedback to tangible project timeline metrics.	This study incorporates openness to feedback as part of management support and tests its moderation on SPI.	Conceptual Gap
5	Prasad et al., (2024)	Provides a literature synthesis but lacks primary empirical testing of remote-work factors against schedule performance indices.	This study conducted an original survey and regression analyses using SPI as a dependent variable.	Empirical Gap
6	Giamos et al., (2023)	Studied continuous feedback effects on motivation and engagement, without examining project schedule adherence.	This study links continuous feedback (openness to feedback) to SPI, assessing both direct and moderating effects.	Conceptual Gap
7	Singh, A. et al., (2024)	Focused on individual performance outcomes, not on structured schedule performance indices.	This model uses SPI as a performance metric, integrating feedback orientation within management support.	Empirical Gap
8	Steel et al., (2023)	Aggregated feedback-orientation effects across contexts but did not assess remote project timelines specifically.	This tested feedback orientation and broader management support directly in the context of remote project timeline completion (SPI).	Contextual Gap
9	Patiño & Naffi, (2023)	Reviewed training methods but did not quantify how training frequency impacts specific project metrics like SPI.	This study includes the frequency of training as a management support measure and examines its effect on SPI.	Theoretical Gap
10	Putri et al., (2023)	Analysed organisational support qualitatively but did not empirically test its moderating effect on remote work–project timeline links.	This study empirically models management support as a moderator between remote work factors and SPI.	Conceptual Gap

Source: Empirical Review Matrix, 2025

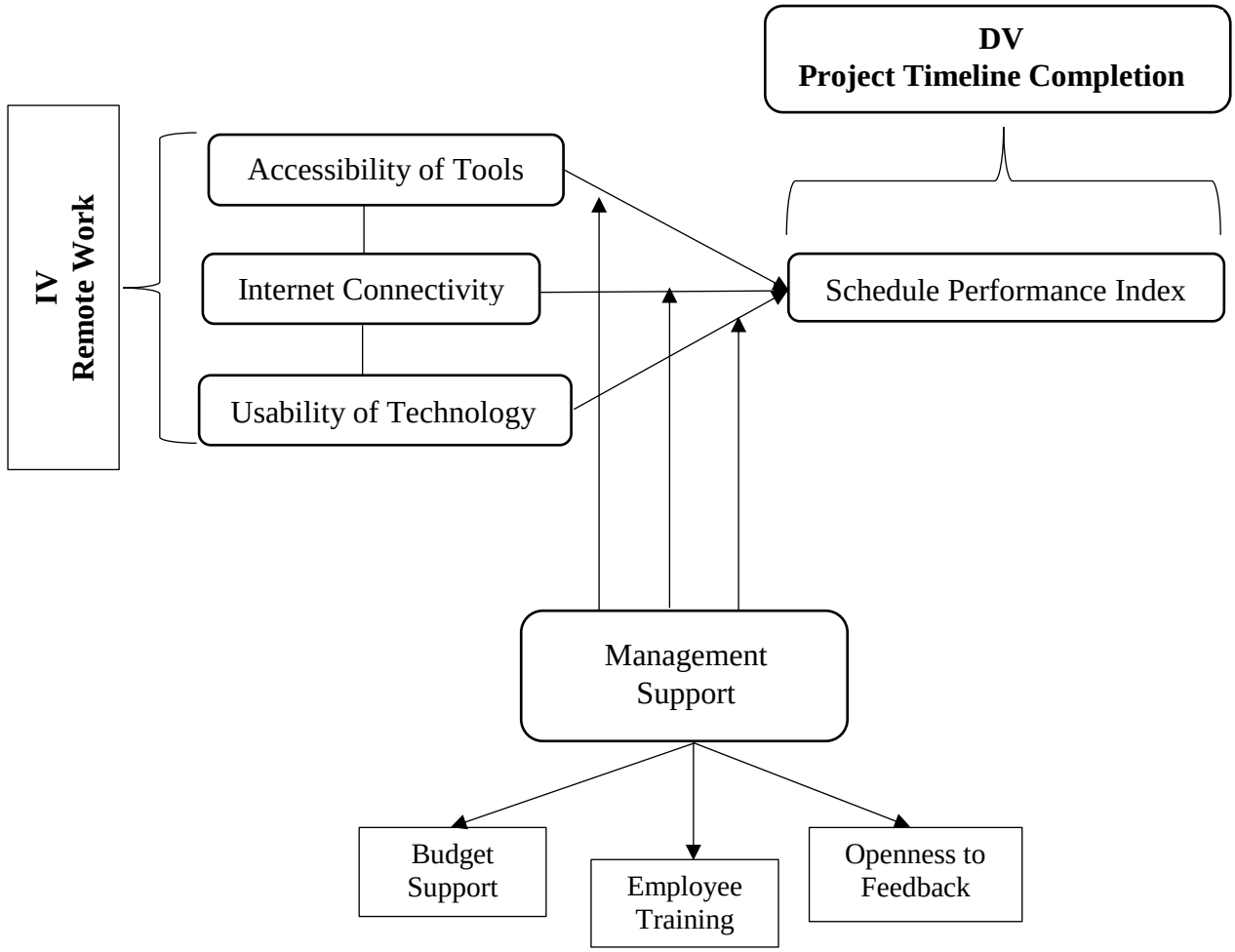

Figure 1. Conceptual Framework
Source: authors

2.4. Theories underpinning the objectives

In addressing the first objective of this study, which evaluates the impact of the accessibility of tools on the schedule performance index, the Task–Technology Fit (TTF) theory emerges as the most suitable theoretical framework. Developed by Goodhue and Thompson (1995), the TTF theory asserts that the alignment between task requirements and technology characteristics influences performance outcomes. In this context, accessibility refers to how easily project team members can obtain and use digital tools required for task execution. The TTF model suggests that when tools are readily accessible and their features match the tasks required in project execution, users are more likely to apply them efficiently, thus improving the schedule performance index. For instance, if team members can quickly access scheduling software or data-sharing platforms, they can better manage timelines and respond to changes promptly. Therefore, applying TTF in this study helps explain how tool accessibility contributes to efficient project scheduling, as effective task-tool alignment leads to better productivity and adherence to project timelines.

OBJ 1: *To evaluate the impact of the accessibility of tools on the schedule performance index*

The Unified Theory of Acceptance and Use of Technology (UTAUT) is the most appropriate theoretical framework to address the second objective, which examines how Internet

connectivity influences the schedule performance index. Proposed by Venkatesh et al. (2003), UTAUT identifies key constructs such as Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions as determinants of technology use and behavioral intention. In this study, Internet connectivity falls under Facilitating Conditions, which refers to the degree to which individuals believe that organisational and technical infrastructure exists to support system use. A stable and strong Internet connection facilitates real-time communication, file sharing, remote task coordination, and access to project scheduling platforms – all vital for timely project completion. Thus, with reliable Internet connectivity, team members can collaborate more effectively, update project milestones in real time, and resolve issues without delay, ultimately enhancing the schedule performance index.

OBJ 2: *To examine how Internet connectivity influences the schedule performance index*

In addressing the third objective of this study, which evaluates the effect of usability of technology on the schedule performance index, the DeLone and McLean Information Systems (IS) Success Model emerges as the most suitable theoretical framework. Developed by DeLone and McLean (2003), this model identifies System Quality – including usability factors such as ease of navigation, response time, and reliability – as a primary driver of System Use and User Satisfaction, generating Net Benefits such as improved performance metrics. In this context, usability refers to how intuitively and efficiently project team members interact with Internet-based scheduling and collaboration tools. According to the IS Success Model, higher system usability fosters greater use of these tools. It enhances user satisfaction, improving the schedule performance index by reducing task completion times and minimising errors. Therefore, applying the DeLone and McLean IS Success Model provides a robust framework for understanding how technology usability influences schedule adherence, emphasising the interplay between System Quality, tool use, and user satisfaction.

OBJ 3: *To evaluate the effect of usability of technology on the schedule performance index*

In addressing the fourth objective, which seeks to identify the moderating role of management support in the relationship between remote work and project timeline completion, the Job Demands–Resources (JD-R) model is the most appropriate theoretical framework. The JD-R model, developed by Demerouti et al. (2001), categorises all job aspects into demands (aspects that require sustained effort) and resources (aspects that help achieve work goals, reduce demands, or stimulate growth). Challenges such as isolation, communication breakdowns, and work-life imbalance in remote work settings increase job demands. However, management support – measured in budget allocation, employee training, and feedback openness – is a critical job resource. It helps employees overcome remote work challenges, maintain productivity, and stay aligned with project timelines. Therefore, through the lens of the JD-R model, this study explains how effective management support can moderate and mitigate the negative effects of remote work on project schedule completion.

OBJ 4: *To identify the moderating role of management support in the connection between remote work and the completion of the project timeline*

3. METHODOLOGY

The study employed a quantitative research methodology to assess the influence of remote work factors – namely accessibility of tools, Internet connectivity, and usability of technology – on project timeline completion, and to examine the moderating effects of management support

(budget, training, feedback) at Fidelity Bank Ghana. The population comprised all 300 employees of Fidelity Bank Ghana engaged in remote or hybrid work arrangements. An up-to-date employee roster obtained from the Human Resources department served as the sampling frame, from which a stratified random sample was drawn to ensure proportional representation across IT, Operations, Marketing, and Other departments. The unit of analysis was the individual employee.

To determine the appropriate sample size, the Yamane (1967) formula was applied – $n = N / (1 + N \cdot e^2)$ – resulting in a calculated sample of 169 respondents (Yamane, 1967). Data were collected over seven days via an online questionnaire (Google Forms) featuring five-point Likert scales. Completed questionnaires were exported, cleaned, edited, and coded for analysis.

The Statistical Package for Social Sciences (SPSS) version 24 was used to perform descriptive statistics (means, standard deviations, frequency distributions) and inferential analyses. Multiple regression assessed the direct effects of remote work factors on the Schedule Performance Index, while mediation analyses examined the moderating role of management support. Results are presented in tables and figures to provide a clear and comprehensive overview of the findings.

4. DATA ANALYSIS

4.1. Analysis for Objective 1

Table 2. Model Summary for the accessibility of tools and Schedule Performance Index

Model Summary	
R	0.643
R Square	0.414
Adjusted R Square	0.409
Std. Error of the Estimate	0.497

Source: Field Data, 2025

Table 2 summarises the effectiveness of the regression model in fitting the data. It illustrates the connection between the independent variable, accessibility of Internet tools, and the dependent variable, Schedule Performance Index (SPI). The R value of 0.643 indicates a moderate positive correlation between the two variables, suggesting that an increase in the availability of digital tools corresponds with better schedule performance. The R^2 value of 0.414 indicates that roughly 41.4% of the variation in the Schedule Performance Index can be attributed to the accessibility of Internet tools. Although this represents a relatively strong explanatory power, it also suggests that other factors, not included in the model, may affect the SPI. The Adjusted R^2 value of 0.409, which closely aligns with R^2, further confirms the model's validity and suitability for making predictions. Moreover, the Standard Error of the Estimate of 0.497 implies that, on average, the model's predictions deviate from the actual Schedule Performance Index values by approximately 0.497 units. This reflects a relatively high degree of accuracy in the predictions made by the model, although some variability is present.

Table 3. ANOVA Results for the accessibility of tools and Schedule Performance Index

ANOVA	
F	117.620
Sig.	0.000

Source: Field Data, 2025

Table 3 evaluates whether the overall regression model significantly accounts for the variation in the Schedule Performance Index. The F-value of 117.620 is notably high, indicating that the model substantially enhances our understanding of SPI when compared to a model without any predictors. This implies that incorporating Internet tool accessibility as a predictor variable is significant. The Sig. value of 0.000 shows that the model is statistically significant since the p-value is far below the conventional threshold of 0.05. This finding verifies that the association between tool accessibility and SPI is unlikely to be a random occurrence, reinforcing the reliability of the regression analysis.

Table 4. Coefficients for the accessibility of tools and Schedule Performance Index Predictors

Coefficients	B Unstandardized	Std. Error	Beta Standardized	t	Sig.
Schedule Performance Index	1.215	0.211	-	5.759	0.000
Accessibility of Tools	0.658	0.061	0.643	10.846	0.000

Source: Field Data, 2025

Table 4 offers the Coefficients and in-depth insights into the correlation between tool accessibility and the Schedule Performance Index. The unstandardized coefficient (B = 1.215) for the Schedule Performance Index implies that for every unit increase in SPI, the dependent variable (SPI) will likely increase by 1.215 units, with all other factors held constant. This indicates that SPI itself significantly contributes to improved schedule performance. Regarding tool accessibility, the unstandardized coefficient (B = 0.658) indicates that with each one-unit rise in tool accessibility, the SPI is expected to grow by 0.658 units. This supports the notion that improving access to digital resources, such as the Internet, enhances schedule performance. The standardized Beta coefficient of 0.643 reflects the relative strength of this connection, indicating that tool accessibility has a considerable impact on SPI. The t-values of 5.759 for SPI and 10.846 for tool accessibility are both high, suggesting that these variables are statistically significant. Lastly, both variables have a Sig. value of 0.000, indicates that SPI and tool accessibility are statistically significant predictors of schedule performance, further validating the strength of these findings.

4.2. Analysis for Objective 2

Table 5. Model Summary for the Internet Connectivity and Schedule Performance Index

Model Summary	
R	0.592
R Square	0.351
Adjusted R Square	0.346
Std. Error of the Estimate	0.529

Source: Field Data, 2025

Table 5 reveals that the correlation coefficient (R) is 0.592, indicating a moderate positive association between Internet connectivity and schedule performance in project execution. The R Square value of 0.351 suggests that around 35.1% of the variability in the Schedule Performance Index can be accounted for by Internet connectivity. The Adjusted R Square of 0.346 reinforces the model's suitability after accounting for the number of predictors. The standard error of the estimate (0.529) indicates the average deviation of the observed values from the regression line, reflecting a reasonably acceptable level of prediction accuracy.

Table 6. ANOVA Results for the Internet Connectivity and Schedule Performance Index

ANOVA	
F	89.385
Sig.	0.000

Source: Field Data, 2025

Table 6 indicates that the overall regression model is statistically significant. An F-statistic of 89.385 along with a p-value (Sig.) of 0.000 shows that the model accounts for a noteworthy amount of the variability in the schedule performance index. This suggests that Internet connectivity plays a significant role in predicting SPI within the model.

Table 7. Coefficients for the Internet Connectivity and Schedule Performance Index Predictors

Coefficients	**B Unstandardized**	**Std. Error**	**Beta Standardized**	**t**	**Sig.**
Schedule Performance Index	1.351	0.224	-	6.028	0.000
Internet Connectivity	0.601	0.064	0.592	9.452	0.000

Source: Field Data, 2025

Table 7 presents the unstandardized coefficient (B) for Internet Connectivity, which is 0.601, indicating that the schedule performance index increases by 0.601 units for every one-unit rise in Internet connectivity while keeping other factors constant. The t-value of 9.452 and a p-value of 0.000 demonstrate that this association is statistically significant. The standardized beta coefficient (0.592) highlights the strong relative impact of Internet connectivity within the model. The intercept (1.351) signifies the predicted SPI when Internet connectivity is at zero, which, though theoretical, assists in outlining the starting point of the regression line.

4.3. Analysis for Objective 3

Table 8 indicates that the regression analysis yielded a correlation coefficient (R) of 0.648, signifying a strong positive association between technology usability and schedule performance index. The R Square value of 0.420 suggests that around 42% of the variability in the schedule performance index can be accounted for by technology usability. The Adjusted R Square of 0.415 reinforces the model's adequacy by taking into consideration the number of predictors. The Standard Error of the Estimate is 0.487, reflecting the average discrepancy between the observed data points and the regression line.

Table 8. Model Summary for the Usability of Technology and Schedule Performance Index

Model Summary	
R	0.648
R Square	0.420
Adjusted R Square	0.415
Std. Error of the Estimate	0.487

Source: Field Data, 2025

Table 9 presents the overall regression model is statistically significant. The F-statistic is 121.423 with a p-value (Sig.) of 0.000, which is less than the standard significance level of 0.05. This confirms that the usability of technology significantly predicts the schedule performance index, and the model is not due to random chance.

Table 9. ANOVA Results for the Usability of Technology and Schedule Performance Index

ANOVA	
F	121.423
Sig.	0.000

Source: Field Data, 2025

In Table 10 the unstandardized coefficient (B) for the usability of technology is 0.685, accompanied by a standard error of 0.062. This indicates that for each unit increase in technology usability, the schedule performance index improves by 0.685 units, assuming all other factors remain constant. The t-value of 11.020 and the p-value of 0.000 signify that this predictor is statistically significant. The standardised coefficient (Beta) is 0.648, which confirms a substantial effect size. The constant term (Schedule Performance Index) has a B value of 1.201 and is also statistically significant.

Table 10. Coefficients for the Usability of Technology and Schedule Performance Index Predictors

Coefficients	**B Unstandardized**	**Std. Error**	**Beta Standardized**	**t**	**Sig.**
Schedule Performance Index	1.201	0.189	-	6.356	0.000
Usability of Technology	0.685	0.062	0.648	11.020	0.000

Source: Field Data, 2025

4.4. Analysis for Objective 4

Table 11 demonstrates a steady enhancement in explanatory power across three different models. The initial model, which considered only remote work, exhibited an R Square value of 0.396, indicating that remote work on its own accounts for 39.6% of the variation in the Schedule Performance Index. This illustrates a significant impact, indicating that remote work arrangements play a considerable role in the adherence to project schedules.

Table 11: Hierarchical Regression Model Summary: Remote Work and Management Support

Model Summary	**R Square**	**Δ R Square**	**F Change**	**Sig. F Change**
Remote Work Only	0.396	-	-	-
Management Support	0.498	0.102	19.384	0.000
Interaction Term	0.537	0.039	7.985	0.005

Source: Field Data, 2025

In the subsequent model, management support was factored in, resulting in an R Square increase to 0.498. This indicates that the combined influence of remote work and management support accounts for 49.8% of the variation in schedule performance – an impressive increase of 10.2% ($\Delta R^2 = 0.102$) from the previous model. The F Change value of 19.384 ($p < 0.001$) underscores

that the integration of management support substantially enhances the model, suggesting that managerial backing is a vital component in improving project schedule results in digital environments.

The third model incorporated the interaction term between remote work and management support. This final model recorded an R Square value of 0.537, indicating that 53.7% of the variance in schedule performance is now accounted for. The ΔR^2 of 0.039, along with an F Change of 7.985 ($p = 0.005$), confirms that the interaction between remote work and management support significantly enhances the model. This suggests that the effect of remote work on project schedule performance is amplified when management support is high, indicating a moderating effect.

Table 12 presents the unstandardized coefficient (B) for remote work is 0.488, with a standardised beta (β) of 0.412, and it is statistically significant ($p < 0.001$). This indicates that improvements in remote work infrastructure and policies strongly correlate with improved schedule performance. Management support also demonstrated a positive and statistically significant impact ($B = 0.421$, $\beta = 0.377$, $p < 0.001$), emphasising that managerial engagement is vital to meet project deadlines.

Table 12. Coefficients for Hierarchical Regression Model Including Interaction Term

Coefficients	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
Schedule Performance Index	0.872	0.218	-	4.000	0.000
Remote Work	0.488	0.063	0.412	7.746	0.000
Management Support	0.421	0.061	0.377	6.902	0.000
Remote Work × Management Support	0.213	0.075	0.219	2.825	0.005

Source: Field Data, 2025

Crucially, the interaction term (Remote Work × Management Support) was significant ($B = 0.213$, $\beta = 0.219$, $p = 0.005$), suggesting that management support influences the relationship between remote work and schedule performance. In other words, when management offers robust support, such as clear communication, timely feedback, and sufficient resources, the effectiveness of remote work in improving project timelines is significantly enhanced. This interaction effect confirms the hypothesis that management support is an essential facilitator in digital project settings, especially when remote work is the primary operational model.

5. DISCUSSION OF RESULTS

Objective 1 assessed how access to digital tools influences schedule performance in remote project settings. The regression analysis demonstrated a strong, statistically significant positive correlation, indicating that a one-unit rise in tool accessibility resulted in a 0.658 unit increase in the Schedule Performance Index (SPI), backed by a standardised beta of 0.643. This suggests that enhancing access to tools like dependable Internet and digital platforms positively impacts schedule performance. Supporting studies further reinforce the significance of having accessible tools, with research by Das et al. (2021) and Ginley (2020) indicating that restricted access can hinder communication and elevate cognitive load, while accessible tools boost productivity, employee well-being, and overall performance (Maitraye et al., 2021; Pereira & Duarte, 2025). This reinforces the conclusions, highlighting that accessible digital tools are vital for enhancing schedule performance in remote project situations.

Objective 2 examined how Internet connectivity affects schedule performance in remote work situations. The regression analysis revealed that Internet connectivity has a notably positive effect on the Schedule Performance Index (SPI), indicating that a one-unit rise in connectivity results in an increase of 0.601 units in SPI, assuming other factors remain unchanged. The t-value of 9.452, along with a p-value of 0.000, validates the statistical significance of this correlation. The standardised beta coefficient of 0.592 also underscores that Internet connectivity is a significant factor in the model. These results are consistent with previous studies, emphasising the importance of reliable Internet connectivity for remote workers, as it fosters productivity, job satisfaction, and collaboration (Adomako et al., 2024; Buhari & Athithan, 2024). Furthermore, data from the U.S. Bureau of Labor Statistics (2022) and the Office of Personnel Management (2022) affirm that dependable Internet access is directly linked to enhanced work efficiency and improved employee retention. Thus, guaranteeing reliable Internet connectivity is vital to maintain high schedule performance in remote project environments.

Objective 3 assessed how the usability of technology affects schedule performance. The regression analysis indicated a significant positive correlation between usability and schedule performance, with an unstandardised coefficient (B) of 0.685, suggesting that for each unit increase in the usability of technology, the Schedule Performance Index (SPI) is projected to rise by 0.685 units, assuming other variables stay constant. The t-value of 11.020 and a p-value of 0.000 validate the statistical significance of this predictor. The standardised beta coefficient of 0.648 further highlights the considerable impact of technology usability on the model. These results are consistent with studies that emphasise the significance of usability in technology. For instance, Solomon (2024) found that enhanced usability in e-learning systems notably improved their effectiveness. Dahri et al. (2022) illustrated the favourable effects of usability on task completion and user satisfaction in mobile applications. Likewise, Samuel (2023) demonstrated that improving usability in e-government systems results in higher user acceptance and performance. In summary, these studies indicate that enhancing technology usability is vital for optimising performance outcomes, especially in settings that depend on digital tools.

Objective 4 examined how management support influences the relationship between remote work and schedule performance. The regression analysis indicated that both remote work and management support had significantly positive impacts on schedule performance, with coefficients of 0.488 (B) for remote work and 0.421 (B) for management support, alongside standardised beta coefficients of 0.412 and 0.377, respectively. The interaction term (Remote Work × Management Support) was also found to be statistically significant ($B = 0.213$, $\beta = 0.219$, $p = 0.005$), suggesting that management support boosts the effectiveness of remote work in enhancing schedule performance. These findings underscore the essential role of management in reinforcing the beneficial effects of remote work on project timelines. Research supports this conclusion, highlighting that management support, which includes providing resources, feedback, and ensuring clear communication, is crucial to assist remote employees in meeting deadlines (Ferreira & Gomes, 2023). Additional studies by Wiesenfeld et al. (2021) or Errichiello and Pianese (2021) further demonstrate that managerial support enhances engagement and satisfaction and mitigates feelings of isolation, contributing to improved compliance with timelines. Furthermore, strategic organisational practices like well-defined remote work policies and training initiatives were identified as factors that improve performance and decrease turnover intentions (Errichiello & Pianese, 2021). These findings affirm that adequate managerial support is a vital factor in maximising remote work results, ensuring that project timelines are consistently achieved.

6. CONCLUSIONS

This study has offered important insights into the elements that affect schedule performance in remote work environments, highlighting the significance of digital tools, Internet access, technology usability, and managerial support. The results indicate that the availability of tools, especially Internet access and technology usability, greatly improves schedule performance. Additionally, the research points out the crucial moderating effect of management support in strengthening the link between remote work and schedule performance. When management delivers clear communication, necessary resources, and prompt feedback, the effectiveness of remote work in achieving project deadlines is notably improved. These findings emphasise the necessity of fostering an inclusive and supportive digital workplace that promotes productivity and engagement. The study adds to understanding how remote work environments function and provides practical guidance for organisations aiming to optimise project timelines. Future research may investigate other factors like organisational culture and employee resilience, further expanding the knowledge on enhancing remote work efficiency.

REFERENCES

Abdullahi, M., & Jarma, U. (2023). The impact of training and development programmes onretention of staff: A case of Global Access Savings and Loans Company Limited, Accra. *Journal of Human Resource Management, 11*(1), 1-6. Doi: 10.11648/j.jhrm.20231101.11

Adomako, K., Agor, P. A., Terkpertey, D. T., Mensah, D., Akakposu, L. Y., & Dwomoh, A. Y. (2024). Impact of working from home on employee productivity in post COVID-19 era: The moderating role of organizational support. *World Journal of Advanced Research and Reviews*, *23*(1), 340-358. Doi:10.30574/wjarr.2024.23.1.2022

Aruldoss, A., Berube Kowalski, K., Travis, M.L., & Parayitam, S. (2022). The relationship between work–life balance and job satisfaction: Moderating role of training and development and work environment. *Journal of Advances in Management Research, 19*(2), 240-271. Doi:10.1108/JAMR-01-2021-0002

Bloom, N., Han, R., & Liang, J. (2024). Hybrid working from home improves retention without damaging performance. *Nature*, *615*(7950), 1-6. Doi:10.1038/s41586-024-07500-2

Bolick, C. (2020). 5 time management strategies for project managers. *Northeastern University*. Retrieved from https://graduate.northeastern.edu/knowledge-hub/time-management-project-management/

Buhari, A., & Antony Athithan, A. (2024). Influence of internet and its connectivity in workplace - A comprehensive analysis. *Recent Research Reviews Journal*, *3*(1), 244-257. Doi:10.36548/rrrj.2024.1.016

Bunt, A. M., de Korte, E. M., & van der Meij, H. (2023). Potential effectiveness and efficiency issues in usability evaluation within digital health: A systematic literature review. *International Journal of Medical Informatics, 174,* 104883. Doi:10.1016/ j.ijmedinf.2023.104883

Capone, V., Schettino, G., Marino, L., Camerlingo, C., Smith, A., & Depolo, M. (2024). The new normal of remote work: Exploring individual and organizational factors affecting work-related outcomes and well-being in academia. *Frontiers in Psychology*, *15,* 1340094. Doi:10.3389/fpsyg.2024.1340094

Chatterjee, S., Chaudhuri, R., & Vrontis, D. (2022). Does remote work flexibility enhance organizational performance? Moderating role of organization policy and top management support. *Journal of Business Research, 139,* 1501-1512. Doi:10.1016/j.jbusres.2021.10.069

Dahri, N. A., Vighio, M. S., Al-Rahmi, W. M., & Alismaiel, O. A. (2022). Usability evaluation of mobile app for the sustainable professional development of teachers. *International Journal of Interactive Mobile Technologies* (iJIM), *16*(16), 1-15. Doi:10.3991/ijim.v16i16.32015

Das, M., Tang, J., Ringland, K. E., & Piper, A. M. (2021). Towards accessible remote work: Understanding work-from-home practices of neurodivergent professionals. *Proceedings of the ACM on Human-Computer Interaction*, 5(CSCW1), Article 183. Doi:10.1145/3449282

DeLone, W.H., & McLean, E.R. (2003). The DeLone and McLean model of information systems success: A ten-year update. *Journal of Management Information Systems*, *19*(1), 9-30. Doi:10.1080/07421222.2003.11045748

Demerouti, E., Bakker, A.B., Nachreiner, F., & Schaufeli, W.B. (2001). The job demands–resources model of burnout. *Journal of Applied Psychology*, *86*(3), 499-512. Doi:10.1037/0021-9010.86.3.499

Emanuel, D., & Harrington, J. (2021). Work from home and productivity: Evidence from personnel and analytics. *Journal of Labor Economics*, *39*(4), 1-34. Doi:10.1086/721803

Errichiello, L., & Pianese, T. (2021). The role of organizational support in effective remote work implementation in the post-COVID era. In D. Wheatley, I. Hardill, & S. Buglass (Eds.), Handbook of research on remote work and worker well-being in the post-COVID-19 era (pp. 221-242). *IGI Global*. Doi:10.4018/978-1-7998-6754-8.ch013

Eyibio, O. N., & Daniel, C. O. (2020). The Effective Resource Budgeting as a Tool for Project Management. *Asian Journal of Business and Management*, *8*(2). Doi:10.24203/ajbm.v8i2.6190

Ferreira, P., & Gomes, S. (2023). Work–life balance and work from home experience: Perceived organizational support and resilience of European workers during COVID-19. *Administrative Sciences*, *13*(6), 153. Doi:10.3390/admsci13060153

Gabelica, C., van den Bossche, P., Segers, M., & Gijselaers, W. (2012). Feedback, a powerful lever in teams: A review. *Educational Research Review*, *7*, 123-144. Doi:10.1016/j.edurev.2011.11.001

Giamos, D., Doucet, O., & Léger, P.-M. (2023). Continuous performance feedback: Investigating the effects of feedback content and feedback sources on performance, motivation to improve performance and task engagement. *Journal of Organizational Behavior Management*, *44*(2), 1-20. Doi:10.1080/01608061.2023.2238029

Ginley, B. (2020). Working remotely if you are visually impaired. *Disability & Society*, *35*(5), 798-818. Doi:10.1177/0264619620925702

Goodhue, D.L., & Thompson, R.L. (1995). Task–technology fit and individual performance. *MIS Quarterly*, *19*(2), 213-236. Doi:10.2307/249689

Handke, L., Klonek, F., O'Neill, T.A., & Kerschreiter, R. (2022). Unpacking the role of feedback in virtual team effectiveness. *Small Group Research*, *53*(1), 41-87. Doi:10.1177/10464964211057116

Jansson, L.J., & Kangas, H. (2024). The art of staying in touch – exploring daily feedback interactions between a leader and a subordinate in remote work. *Personnel Review*. Doi:10.1108/PR-04-2023-0301

Katsaros, K.K. (2024), Firm performance in the midst of the COVID-19 pandemic: the role of perceived organizational support during change and work engagement. *Employee Relations*, *46*(3), pp. 622-640. Doi:10.1108/ER-07-2022-0313

Katz, I.M., Moughan, C.M., & Rudolph, C.W. (2023). Feedback orientation: A meta-analysis. *Human Resource Management Review*, *33*(2), Article 100986. Doi:10.1016/j.hrmr.2023.100986

Kerzner, H. (2022). *Project management: A systems approach to planning, scheduling, and controlling* (13th ed.). Wiley.

Khan, U. U., Ali, Y., Garai-Fodor, M., & Csiszárik-Kocsir, Á. (2023). Application of Project Management Techniques for Timeline and Budgeting Estimates of Startups. *Sustainability, 15*(21), 15526. Doi:10.3390/su152115526

Kluger, A.N., & DeNisi, A. (1996). The effects of feedback interventions on performance: A historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin, 119*(2), 254-284. Doi:10.1037/0033-2909.119.2.254

Krauß, N., & Pöhlmann, M. (2024). Does feedback type matter? The superiority of process feedback over performance-only feedback in virtual teams. *Computers in Human Behavior*, 142, Article 107573. Doi:10.1016/j.chb.2024.107573

Lemmetty, S. (2024). Real-time and long-term challenges of remote learning and innovation: Cases from police and technology organisations. *Vocations and Learning*, *17*, 565-587. Doi:10.1007/s12186-024-09354-1

Lorko, M., Servátka, M., & Zhang, L. (2024). A better way to avoid project delays. *MIT Sloan Management Review*.

Mabaso, C.M., & Manuel, N. (2024). Performance management practices in remote and hybrid work environments: An exploratory study. *SA Journal of Industrial Psychology, 50*, Article a2202. Doi:10.4102/sajip.v50i0.2202

Maitraye, D., Tang, J., Ringland, K.E., & Piper, A. M. (2021). Mixed abilities and varied experiences: A group autoethnography of a virtual summer internship. *Proceedings of the 23rd International ACM SIGACCESS Conference on Computers and Accessibility* (ASSETS '21), 22–43. Doi:10.1145/3441852.3471199

Mbonigaba, C., & Sujatha, S. (2024). Analyzing the long-term impact of remote work on organizational efficiency and employee performance: Exploring key technologies and management practices. *International Journal of Applied and Advanced Scientific Research, 9*(2), 102-112. doi:10.5281/zenodo.13955398

McLarnon, M.J.W., O'Neill, T.A., Taras, V., Law, D., Donia, M.B.L., & Steel, P. (2019). Global virtual team communication, coordination, and performance across three peer feedback strategies. *Canadian Journal of Behavioural Science*, *50*(2), 207-218. doi:10.1037/cbs0000135

Munthali, G., & Kandasamy, L. (2024). Prospects and Challenges of Budgeting in Project Management; An Explorative Review of CCEI Malawi. *International Journal of Research and Innovation in Social Science, 8*(7), 1888–1901. Doi:10.47772/IJRISS.2024.807149

Ng, P.M.L., Lit, K.K., & Cheung, C.T.Y. (2022). Remote work as a new normal? The technology-organization-environment (TOE) context. *Technology in Society*, *70*, 102022. doi:10.1016/j.techsoc.2022.102022

Office of Personnel Management. (2022*). The effect of telework and remote work on key FEVS outcomes*. https://www.opm.gov/about-us/reports-publications/agency-reports/brief-on-the-effect-of-telework-and-remote-work-on-employee-perceptions/

Patiño, A., & Naffi, N. (2023). Lifelong training approaches for the post-pandemic workforces: A systematic review. *International Journal of Lifelong Education*, *42*(3), 249-269. Doi:10.1080/02601370.2023.2214333

Pereira, L.S., & Duarte, C. (2025). Evaluating and monitoring digital accessibility: Practitioners' perspectives on challenges and opportunities. *Universal Access in the Information Society*. Doi:10.1007/s10209-025-01210-w

Pham, N.T., Hoang, H.T., Tuan, T.H., Hoang, G., & Thuy, V.T.N. (2023). Improving employee outcomes in the remote working context: A time-lagged study on digital-oriented training, work-to-family conflict and empowering leadership. *Asia Pacific Journal of Human Resources*. Doi:10.1111/1744-7941.12374

Prasad, S., Arahant, A., & Kaushik, A. (2024). Exploring the impact of remote work on productivity: A systematic review. *Acta Universitatis Bohemiae Meridionalis, 27*(2), 50-63. Doi:10.32725/acta.2024.008

Putri, P.L., Nugrahini, E., & Setyono, J. (2023). Organizational support of working from home: Aftermath of COVID-19. *Sustainability, 14*(9), 5107. Doi:10.3390/su14095107

Rajhans, K. (2018). Effective Communication Management: A Key to Stakeholder Relationship Management in Project-Based Organizations. *The IUP Journal of Soft Skills, 12*(4), 47-66.

Samuel, O. (2023). Human factor issues in the use of e-government services among Ghanaian middle-aged population: Improving usability of existing and future government virtual interactive systems design. *Journal of Information Engineering and Applications*, *13*(1), 1-10. Doi:10.11648/j.jiea.2023.01.01

Singh, A., & Arora, P. (2024). Positive feedback, feedback seeking and performance: Feedback orientation as a moderator. *South African Journal of Business Management*, *54*(1), 1-10. Doi:10.4102/sajbm.v54i1.3910

Solomon, P. N. (2024). Technological usability and effectiveness of the e-learning system: Evidence from Muni University, Uganda. *European Journal of Open Education and E-learning Studies, 4*(1), 1-15. Doi:10.46827/ejoe.v4i1.912

Steel, P., & König, C.J. (2023). Feedback orientation: A meta-analysis. *Human Resource Management Review*, *33*(1), Article 100986. Doi:10.1016/j.hrmr.2023.100986

Su, W., & Jiang, S. (2023). Positive feedback, feedback seeking and performance: Feedback orientation as a moderator. *South African Journal of Business Management*, *54*(1), 1-10. Retrieved from https://sajbm.org/index.php/sajbm/article/view/3910

U.S. Bureau of Labor Statistics. (2022). *The rise in remote work since the pandemic and its impact on productivity*. www.bls.gov/opub/btn/volume-13/remote-work-productivity.htm

Venkatesh, V., Morris, M.G., Davis, G.B., & Davis, F.D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, *27*(3), 425-478. doi:10.2307/30036540

Wiesenfeld, B.M., Raghuram, S., & Garud, R. (2021). Communication patterns as determinants of organizational identification in a virtual organization. *Organization Science*, *12*(6), 778-790. Doi:10.1287/orsc.12.6.778

Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper & Row.

Zabihzadeh, M., Janatyan, P.A., & Syahrial, J. (2022). A systematic review of earned value management methods for monitoring and control of project schedule performance: An AHP approach. *Sustainability*, *14*(22), Article 15259. Doi:10.3390/su142215259