
HYBRID WORK MODELS AND EMPLOYEE PRODUCTIVITY IN HEWLETT-PACKARD (HP) REGIONAL OFFICE ABUJA, NIGERIA

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ABSTRACT

Hybrid work models acknowledges that not all tasks require physical presence and that employees can maintain productivity and engagement while enjoying the flexibility to work from different locations. This study examined effects of hybrid work models (effective communication, access to technology infrastructure and work environment) on employee productivity in the Hewlett-Packard (HP) Regional Office located in Abuja, Nigeria. The study adopted a descriptive research design and took a census of all employees in the Abuja regional of office of HP Nigeria. Responses from 346 employees was used in the final analyses of the study. A structured questionnaire designed in 5-Likert scale was used to collect primary data. The data analysis method employed was Partial Least Squares Structural Equation Modeling (PLS-SEM). The results of the PLS-SEM analysis revealed that hybrid work models have significant effects on employee productivity. The study therefore concludes that hybrid work models have significant effect on employee productivity in the HP regional office Abuja, Nigeria' and recommends that by improving access to technology infrastructure, enhancing communication channels, optimizing work environment HP regional office in Abuja Nigeria can enhance the productivity of their employees in hybrid work models.

Keywords: Effective communication, employee productivity, hybrid work models, work environment

INTRODUCTION

The COVID-19 pandemic has led to a global shift towards remote work, with many organizations implementing hybrid work models that allow employees to work both in the office and remotely. This practices have firstly been recorded among ICT companies that offered teleworking to their employees, empowering safety and flexibility through remote work policies and flexible working hours. Hybrid work models offer employees the autonomy to choose to work wherever and however they are most productive. The model reduce commuting time and allow employees to use time productively. It also offer better work-life balance to employees, which in turn drive productivity and engagement.

A hybrid workforce is often made up of three groups of employees: those who work on-site, those who work both on-site and remotely, and those who work remotely all of the time. Overall, hybrid work models enhance employee productivity by providing greater flexibility, autonomy, access to technology, and

supportive work environment. Employers can promote employee productivity in a hybrid work environment by managing these factors effectively (Mercea, et al, 2021).

Hybrid work models have become increasingly popular, but impact on employee productivity is not fully understood. To date, relatively few studies have specifically examined how hybrid work models impact employee productivity, and those that have been conducted have provided mixed results. Bloom et al. (2015) found that remote work increases productivity, but only when certain conditions are met, such as having a good job fit and being able to work autonomously. Madsen et al. (2019) found that effective communication tools and practices are important for managing employee expectations and maintaining trust in a hybrid work model.

In addition, Kurland and Bailey (1999) found that access to appropriate technology and infrastructure is essential for remote workers to be productive. Shokri et al. (2021) found that creating a positive work environment with appropriate office design and access to natural light can improve employee productivity in a hybrid work model. However, Liang and Xue (2018) found that remote work can decrease productivity if the work requires close collaboration with others.

Asika (2022) report that Hewlett-Packard (HP) Nigeria has adopted hybrid work model with their office open every day, but operate a flexible hybrid work model. This means they allow employees the flexibility to blend work from home and work from the office, in a way that encourages collaboration and social connection in the office while still leaving open the option to complete individual work that requires focus and privacy, remotely. This study therefore, aims to investigate the effect of hybrid work models on employee productivity in HP Nigeria's Regional Office in Abuja.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Concept of Hybrid Work Models

Hybrid work models refer to work arrangement that combines remote and in-person work. It is a model that provide employees the flexibility to work from a remote location for a certain number of days in a week, while also coming to the office for face-to-face meetings and collaboration on other days. This model has gained traction in recent times due to the COVID-19 pandemic, which forced many organizations to adopt remote work as a way of ensuring business continuity and protecting employees' health.

According to Golden et al. (2021) hybrid work arrangements refer to those where employees work both on-site and remotely, with a mix of in-person and technology-facilitated interactions. This model provides employees with the opportunity to balance their work and personal life in a more sustainable manner, while also allowing organizations to maintain the benefits of in-person collaboration and communication (Sharma et al., 2021). Gajendran and Harrison (2007) argued that hybrid work models can positively impact employee well-being, which in turn can lead to increased productivity.

In this study, we believe that hybrid work arrangements can reduce stress and improve work-life balance, and lead to better mental health and job satisfaction; and that it can be facilitated by effective communication, access to technology infrastructure and conducive work environment.

Employee Productivity

Productivity is defined as the quantifiable value added by a work unit, relative to its costs. Employee productivity is thus a measure of employees' task performance or how well employees execute duties and responsibilities assigned to them (Shields, 2016). Cardy and Leonard (2004, as cited in Okochi & Ateke, 2020) conceive employee productivity as accomplishments of employees, measured against their expected job performance. Employee productivity also relates to the outcome of the collection employees' goal-focused efforts and behaviours (Lepak et al., 2007).

The productivity of employees is often assessed by the quality of output emanating from employees' efforts (Okochi & Ateke, 2021). Hence, the efforts of employees as demonstrated in the output of goods and services they produce, and these conform to standards, are free of errors and wastes, and does not require reworking, is a mark of employee productivity. Employee productivity in relation to hybrid work models refers to the ability of employees to produce high-quality work and achieve performance goals while working in an environment that combines remote and in-office work.

Effective Communication and Employee Productivity

Effective communication refers to the ability to convey ideas, information, and expectations clearly and efficiently. Scholars emphasize the importance of both formal and informal communication to the maintenance of team cohesion and collaboration (Golden et al., 2021; Wong et al., 2022). Böhm et al. (2021) found that effective communication is essential for successful hybrid work models; and canvassed the importance of clear communication of expectations, goals, and feedback.

Kocoglu and Peker (2021) examined the effect of communication technology use on employee productivity in a hybrid work model. The study found that use of communication technology has positive effect on employee productivity in a hybrid work model. Similarly, Naqvi et al. (2021) examined the effect of communication overload on employee productivity in a hybrid work model; and found that communication overload has a negative effect on employee productivity in a hybrid work model.

Regular communication and interaction improve employee productivity in a hybrid work environment (Rosen et al., 2021). Cramm and Nieboer (2021) supports this position in their observation that effective communication is essential to successful hybrid work models. Clear processes, shared goals and regular communication channels helps to maintain team cohesion and collaboration (Cramm & Nieboer, 2021). More so, Mercea et al. (2021) found that employee productivity in a hybrid work model can be enhanced through effective communication and collaboration tools, such as video conferencing and project management software. Therefore, we hypothesizes that:

H₀₁: Effective communication has no significant effect on employee productivity in HP Regional Office in Abuja, Nigeria.

Access to Technology Infrastructure and Employee Productivity

Access to technology infrastructure refers to the availability of technology tools and resources that enable remote work and collaboration in a hybrid work model. Scholars suggest that access to necessary technology infrastructure, such as high-speed internet, video conferencing software, and project management tools, is critical to successful hybrid work models (Deloitte, 2021; McKinsey & Company, 2020).

Liu et al. (2021) examined the effect of technology use on employee productivity in a hybrid work model in Chinese organizations; and found no significant relationship between technology use and employee productivity in a hybrid work model. Relatedly, Rauschnabel et al. (2021) examined the effect of access to technology on employee productivity in a hybrid work model among organizations in Germany. They found that access to technology has a positive effect on employee productivity in a hybrid work model.

Lai and Chen (2021) found that access to technology infrastructure is critical to hybrid work, but warned that quality of technology and its integration with work processes can affect employee productivity and satisfaction. The study recommended that employers invest in high-quality technology that is tailored to the needs of remote workers, and provide training and support to ensure that employees can effectively use the technology.

Zhang and Chen (2021) reports that access to high-quality technology tools, such as video conferencing software and project management platforms improve employee productivity and satisfaction in a hybrid

work environment. Zhang and Chen (2021) thus, highlighted the importance of access to technology infrastructure in hybrid work models. Consequently, we hypothesize that:

Ho₂: Access to technology infrastructure does not affect employee productivity significantly in HP Regional Office in Abuja, Nigeria.

Work Environment and Employee Productivity

Providing employees with a comfortable and supportive work environment enhance employee productivity in a hybrid work environment. This view is supported the report of Rosen et al. (2021) that employee productivity is influenced by quality of work environment, including factors such as lighting, temperature, noise, and privacy.

Sharma et al. (2021) and Kossek et al. (2017) define work environment as the physical, social, and cultural conditions in which work is performed. Scholars emphasize the importance of a positive work environment that supports employee well-being, job satisfaction, and productivity. This includes factors such as ergonomic home office setups, flexible office spaces, social support, and leadership style (Wong et al., 2020).

Purnomo et al. (2021) examined the effect of work environment on employee productivity in a hybrid work model among organizations in Indonesia and found no significant relationship between work environment and employee productivity in a hybrid work model. The study provides valuable insights into the mixed results of the relationship between work environment and employee productivity in a hybrid work model.

Lee et al. (2021) in another study, examined the effect of office design on employee productivity. The study found that office design has a positive effect on employee productivity; but that job satisfaction mediates the relationship between office design and employee productivity, such that the positive effect of office design on employee productivity is stronger when employees perceive high levels of job satisfaction.

Also, Choudhury et al. (2021) reported that employee productivity in a hybrid work model is influenced by social capital, which includes trust, reciprocity, and shared norms and values. The study found that positive work environment, including social support, flexibility, and physical comfort, enhance employee performance and job satisfaction. In addition, Kramar et al. (2021) found that factors such as work-life balance, social support, and leadership styles influence employee well-being and productivity in a hybrid work model. Therefore, we hypothesize that:

Ho₃: Work environment does not have significant effect on employee productivity in HP Regional Office in Abuja, Nigeria.

Theoretical Framework

Demands-Resources (JD-R) Theory: This theory proposed by Bakker and Demerouti (2007) posits that job demands (e.g., workload, time pressure) and job resources (e.g., autonomy, social support) can affect employee job engagement and performance. In the context of the study, the JD-R theory can be used to understand how demands and resources associated with hybrid work models affect employee productivity. For example, hybrid work models may increase autonomy and flexibility for employees, but also introduce new demands such as technology challenges and communication difficulties. A weakness of the JD-R theory is that it does not account for individual differences in how employees perceive demands and resources.

Social Exchange Theory: This theory by Blau (1964) suggests that social relationships between employees and organizations can affect employee productivity. In the context of the study, social exchange theory can be used to understand the role of support and communication from the organization in enhancing employee motivation and productivity in a hybrid work model. For example, providing employees with regular feedback, recognition, and opportunities for collaboration can enhance their social exchange with the

organization. A weakness of social exchange theory is that it does not account for the broader societal and cultural context that may affect social relationships.

METHODOLOGY

This study adopted a descriptive research design. The population of the study comprised employees of HP in Abuja Regional office. The study adopted census. The goal of a census is to provide a comprehensive and accurate picture of the population, rather than just a subset of it. This approach is often used in situations where the population is small, well-defined, and accessible, such as in a small town or within a specific organization. To achieve the objectives, a structured questionnaire in designed in a Likert format was used to collect data from every member of the organisation which has a total workforce of 436. The survey form was sent to the participants through digital means such as WhatsApp and email and out of them, 346 copies of questionnaire were completed and considered for analysis. The data collected was analyzed using Partial Least Squares Structural Equation Modeling.

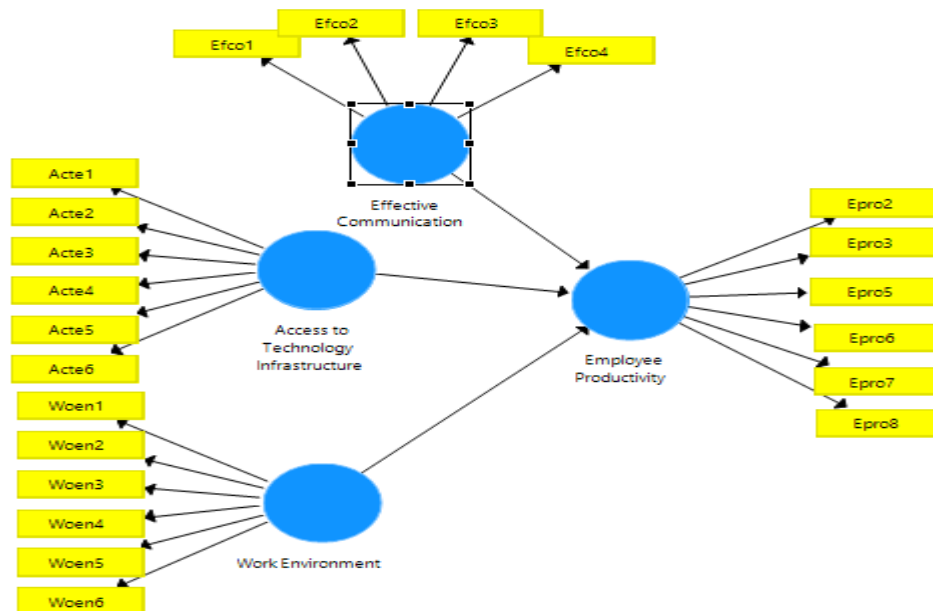


Fig. 1: Conceptual Model of the Study
Source PLS-SEM 2023

RESULTS AND DISCUSSIONS

Table 1: Convergent Validity and Reliability of the Constructs and Indicators

Constructs	Factor Loadings	Cronbach	Composite Reliability	AVE
Acte1	0.754	0.865	0.914	0.762
Acte2	0.805			
Acte3	0.841			
Acte4	0.857			
Acte5	0.755			
Acte6	0.791			
Efco1	0.820	0.921	0.794	0.718
Efco2	0.897			
Efco3	0.871			
Efco4	0.808			
Epro2	0.751	0.853	0.946	0.781
Epro3	0.895			
Epro5	0.806			
Epro6	0.850			
Epro7	0.811			
Epro8	0.914			
Woen1	0.724	0.948	0.865	0.810
Woen2	0.703			
Woen3	0.880			
Woen4	0.761			
Woen5	0.780			
Woen6	0.780			

Source PLS-SEM output, 2023

In order to ensure that the constructs are consistent and reliable, it is recommended that Cronbach's Alpha and Composite Reliability (CR) exceed a threshold of 0.7. Table 1 shows that all the latent indicators are reliable since their values exceed the threshold. Convergent validity refers to how well the construct explains the variance of its items. To assess convergent validity, the Average Variance Extracted (AVE) should be greater than 0.5. The values of AVE for all constructs in table 1 exceed 0.5, indicating that the constructs meet the requirement for convergent validity. This also means that each construct explains at least 50% of the variance in the items that make up the construct.

Besides assessing the validity of individual indicators, the validity of the constructs themselves was evaluated using HTMT. It was expected that each construct would demonstrate higher correlation with itself than with other constructs. The diagonal values, which are the square root of AVE, were used to assess this. These values also indicate the correlation between the study variables, with positive and negative signs indicating the direction of the relationship. Table 2 shows the relationship.

Table 2: Heterotrait-Monotrait iRatio i(HTMT)

	Access to tech infrast	Effective Communication	Employee Productivity	Work Environment
Access to tech infrast	1.000			
Effective Comm	0.725	1.000		
Employee Product	0.713	0.610	1.000	
Work Environment	0.634	0.748	0.825	1.000

Source: Smart PLS Output, 2023

Table 2 presents the Heterotrait-Monotrait Ratio (HTMT) values used to assess the construct validity. HTMT values compare the correlations between different constructs (heterotrait) to the correlations within the same construct (monotrait). Typically, HTMT values below 0.9 suggest favorable discriminant validity, indicating that the constructs are distinct from each other and do not measure the same underlying construct. In this particular case, all HTMT values are below 0.9, demonstrating good discriminant validity among the constructs.

Table 3: Path Assessment

Constructs	Beta	T. Stats	P. Value	Decision
Access to Technology Infrastructure -> Employee Productivity	0.236	7.064	0.000	Rejected
Effective Communication -> Employee Productivity	0.592	14.337	0.000	Rejected
Work Environment -> Employee Productivity	0.120	2.295	0.022	Rejected

Source: PLS-SEM 2023

The study employed bootstrapping, a technique used to assess the significance of constructs in explaining each other within a structural model. Table 3 presented the regression coefficients (Beta), t-statistics, p-values, and decisions for four constructs: access to technology infrastructure, effective communication, work environment, and employee productivity. Importantly, the hypotheses were formulated in the null form, assuming no significant relationship between the predictor and the outcome variables in the context of the HP Regional Office in Abuja, Nigeria.

The significant p-value of 0.000 (less than 0.05) indicates that access to technology infrastructure has a significant positive effect on employee productivity. Therefore, we reject the null hypothesis, which would state that there is no relationship between access to technology infrastructure and employee productivity. Liu et al. (2021) had similar finding but the work of Rauschnabel et al. (2021) reported an opposite finding.

Further, the significant p-value of 0.000 (less than 0.05) suggests that effective communication has a significant positive impact on employee productivity. Hence, we reject the null hypothesis, which assumes no relationship between effective communication and employee productivity. This result agrees with a study by Kocoglu and Peker (2021) but Naqvi et al. (2021) reported a negative relationship between the variables.

Finally, The p-value of 0.022 (less than 0.05) indicates that work environment has a statistically significant positive effect on employee productivity. Therefore, we reject the null hypothesis that assumes no relationship between work environment and employee productivity. This result agrees with the findings of Lee et al. (2021) but contrasts that of Purnomo et al. (2021).

CONCLUSION AND RECOMMENDATIONS

The findings of this study provide valuable insights into the effect of hybrid work models (effective communication, access to technology infrastructure and work environment) on employee productivity in HP Regional Office in Abuja, Nigeria. The results consistently showed significant positive effects of access to technology infrastructure, effective communication, and work environment on employee productivity. This suggests that these factors are crucial to employee productivity. Based on the findings of the study, the following the study recommends that HP regional office in Abuja, Nigeria should:

- a) Invest in technology infrastructure: Given the significant positive impact of access to technology infrastructure on employee productivity, HP is advised to continue to invest in up-to-date technological resources, including devices and software required to perform their tasks efficiently in a hybrid work model.

- b) Foster effective communication channels: Since effective communication emerged as a significant predictor of employee productivity, it is important for HP to enhance internal communication. This can be achieved through regular team meetings, clear communication guidelines, and use of appropriate communication tools and platforms.
- c) Create a conducive work environment: The study revealed that work environment has significant positive effect on employee productivity. HP should focus on creating a supportive work environment that promotes collaboration, employee well-being, and work-life balance. This may involve providing comfortable workspaces, encouraging positive organizational culture, and offering flexible work arrangements when feasible.

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