

EFFECTS OF TELEWORKING STRUCTURES ON PERFORMANCE OF FINTECH FIRMS IN IKORODU LGA, LAGOS NIGERIA.

UGWUEGBU, PATRICK C.; ADEYEYE, M.M (PhD); IBRAHIM, G. (PhD) & OYIBE, ANGELA A.

Abstract

Financial technology (FinTech) firms are one of the sectors that telework, therefore, needs certain structure for effective performance. Hence, this study examines the effects of teleworking structures on the performance of Opay FinTech firms, Lagos. Three null hypotheses were developed and tested at 5% level of significance considering technology infrastructure, physical work environment, and operational efficiency. It is a quantitative approach adopting a survey strategy and based on Technological Acceptance Model. The sample frame of 248 employees was drawn from the Opay app while cluster probability sampling was engaged in selecting 153 employees. A five-point Likert scale self-structured questionnaire was used for data collection. Descriptive and inferential statistics was employed for analyses. The study found that technology infrastructure availability, physical work environment, and operational efficiency have significant positive effects on Opay's performance. Therefore, it is recommended that Organizations must enhance the physical work environment by providing ergonomic equipment and well-designed workstations. This approach will reduce physical strain and improve productivity.

Keywords: Fintech, Opay, Operational efficiency, Performance, Teleworking, Technological infrastructure.

1.1 Introduction

The last decade has witnessed significant technological evolution, transforming human resource practices, and communication methods in the world. Technologies such as cloud and mobile computing, big data and machine learning, sensors and intelligent manufacturing, advanced robotics and drones, and clean-energy technologies have enhanced efficiency and marked the advent of a new industrial revolution in the financial industry (Brynjolfson & McAfee, 2014; Schwab, 2016). Financial technology (or FinTech) is an expanding technology-driven sector of the financial industry that provides consumers and businesses with more affordable, secure, and convenient transactions (Al Nawayseh, 2020; Moran, 2020). In 2019, global investments in FinTech technologies reached \$40 billion, a significant milestone before the COVID-19 pandemic interrupted this growth (Al Nawayseh, 2020).

In many African countries, FinTech services include microcredit, loans, savings, and payments. The FinTech industry has become a prominent aspect of the evolving financial landscape in Nigeria. Young Nigerian tech entrepreneurs are leading the industry with their innovative products, which have gained recognition in Africa and beyond. For instance, in early 2020, two

young Nigerians and founders of PayStack, a payment system, sold their application to Stripe, a US-based global payment system, for \$200 million (Lunden, 2020). Additionally, Opay, Flutterwave, another FinTech payment solution founded by Nigerians, now has a valuation exceeding a billion dollars (Paul, 2021). The understanding of the implication of these technology shifts is critical as teleworking facilitated by advanced technology becomes a prevalent mode of operation (Ola-Ade, 2021).

Teleworking is a work arrangement where employees perform their duties from home using technological tools to stay connected with colleagues, managers, clients, and others, instead of commuting to a physical workplace (Bellmann and Hübler, 2021). This concept refers to individuals who do not work in a traditional office setting, do not operate on their employer's premises, or do not frequently rely on a physical workspace (Alkadash and Alamarin, 2021; Kara, Güneş, and Tüysüzer, 2021; Munna and Shaikh, 2020; Pretti, Etmanski, and Durston, 2020; Maguire, 2019). "Telework" is also known as telecommuting, remote work, distributed work, location-independent work, freelancing, e-working, working at home, working from home, or face-to-display workplace (Benó and Hvorecky, 2021). Additionally, it is termed homework, home office, outwork, mobile work, and flexible workplace (Bellman and Hübler, 2021) remote work (Schmitt, Breuer, and Wulf, 2021), work from home (Prodanova and Kocarev, 2021; van der Lippe and Lippényi, 2019), and virtual workplace (Kuruzovich, et al., 2021; Burrell, 2020). Any of these terms can describe teleworking. However, in this study, the terms teleworking, work from home, distance work, and telework will be used interchangeably.

In the post-pandemic era, teleworking policies have proven effective for managing administrative tasks (Akinyetun, 2022; Yusuf, 2021). While some sectors benefit from improved work-life balance and flexibility, others face challenges such as data security risks and difficulties in employee monitoring. This study explores teleworking within OPay, a FinTech firm in Nigeria, focusing on physical workspace, technological infrastructure, and operational efficiency. This study's findings will offer valuable insights for various stakeholders. FinTech organizations will gain a clearer understanding of how teleworking impacts operational efficiency and performance, guiding better remote work practices. Employees will learn how teleworking affects work-life balance and job satisfaction, potentially leading to improved remote work environments (Rodriguez-Modrono & Lopez-Igual, 2021). Policymakers can use these insights to develop supportive regulations, and researchers will have a foundation for further study. Technology providers will receive feedback to enhance and innovate their tools, ensuring alignment with organisational and employee needs in the digital workplace (GOA, 2023).

1.2 Statement of the Problem

Telework has become increasingly popular since the onset of COVID-19, driven by socio-economic challenges such as insecurity, high fuel costs, and unfavorable exchange rates in Nigeria. These challenges have made teleworking a relevant and necessary innovation. However, the effective implementation of teleworking in organizations like Opay, a leading FinTech company, requires adequate structures, including technology infrastructure, conducive physical

work environments, and operational efficiency. The absence or inadequacy of these structures may affect organizational performance.

Existing studies have explored teleworking and its impact on productivity across various sectors, but they often lack a focus on the specific structures needed to optimize performance in FinTech firms. For example, Kimondo (2022) explored "The Impact of Remote Working on Employee Productivity," while Yusuf (2021) examined "Remote Work and Performance Dimensions in the Nigerian Fintech Industry." Nwoko and Yazdani (2022) addressed "Stress and Mental Health Challenges in Remote Work," and Battisti et al. (2022) investigated the "Economic and Financial Implications of Remote Work." While these studies provide valuable insights into remote work's broader impacts, they do not delve into the specific structures such as technology infrastructure, physical work environment, and operational efficiency that are crucial for the success of FinTech firms like Opay. Despite the existing research, there is a clear gap in studies that focus on the specific teleworking structures influencing the performance of FinTech companies in Nigeria, particularly Opay. This study seeks to fill this gap by investigating how these structures affect performance, with a focus on Lagos, Nigeria. The specific objectives are to:

- i. Examine the effect of availability of technology infrastructure in teleworking on the performance of Opay in Ikorodo LGA, Nigeria.
- ii. Ascertain the effect of physical work environment in teleworking on the performance of Opay in Ikorodo LGA, Nigeria.
- iii. Investigate the effect of operational efficiency of teleworking on the performance of Opay in Ikorodo LGA Nigeria.

In order to achieve the aim and objectives of the study, the following research questions are raised:

- i. Does the availability of technology infrastructure for teleworking have effect on the performance of Opay in Ikorodo LGA, Nigeria?
- ii. What is the effect of physical work environment in teleworking on the performance of Opay in Ikorodo LGA, Nigeria?
- iii. Does the operational efficiency of teleworking have effect on the performance of Opay in Ikorodo LGA, Nigeria?

Research Hypotheses

Ho: The availability of technology infrastructure in teleworking does not have any statistically significant effect on performance of Opay in Lagos State, Nigeria.

Ho: The physical work environment in teleworking does not have a statistically significant effect on performance of Opay in Lagos State, Nigeria.

Ho: The operational efficiency in teleworking has no statistically significant effect on performance of Opay in Lagos State, Nigeria.

2.1 Literature Review

This literature review is organized into three sections: Conceptual, Theoretical and Empirical findings, providing a comprehensive overview of the relationship between teleworking and performance in fintech firms.

Conceptual Review

This section of the literature review provides a comprehensive analysis of the key concepts related to teleworking and performance in fintech firms.

Background to Teleworking

Remote work originated in 1970 when Jack Nilles, an infrastructure engineer working on a space vehicle and telecommunications project for the U.S. Air Force, decided that his team should work from home to avoid the stress of daily commuting (Nilles, 1975). The Cambridge English Dictionary later defined "teleworking" as employees working away from the office, usually from home, using telephone and email to communicate with stakeholders. However, Parris (2017) distinguishes between "teleworking" and "remote work", noting that teleworking involves working from home with occasional office visits, whereas remote work entails performing duties outside the firm's geographical location without needing to visit the office. This distinction became increasingly relevant during the recent pandemic, which led to the broader adoption of both teleworking and remote work by firms worldwide due to movement restrictions.

Teleworking, also referred to as remote work, is a work arrangement where employees perform their job duties outside the traditional office environment, often from home, using digital tools such as cloud computing, communication platforms, and high-speed internet to connect with colleagues and access organizational resources. This work model has evolved significantly, particularly with the advent of advanced technology that allows for virtual communication and collaboration. Teleworking has gained immense popularity, especially during the COVID-19 pandemic, and continues to be a crucial component of modern workforce strategies (Vasilescu, 2021; McKinsey, 2021).

Popovici and Lavinia (2020) argued that teleworking is a result of globalization, which has increased individual independence through advancements in information and communications technology. This shift is prompting organizations to adopt teleworking as an innovative approach to creating work flexibility for employees, significantly enhancing team performance. In Nigeria, the adoption of teleworking reflects global trends and the increasing reliance on digital infrastructure to maintain business continuity. Similarly, Ipsen et al. (2021) argued that teleworking significantly aids employees in balancing work with their family and personal lives, reducing work-related stress, and saving on daily transportation costs, ultimately enhancing work performance. Zykova and Maussymbe (2021) added that reducing daily commuting helps alleviate traffic congestion and decreases environmental pollution from commuters, aiding city planners in maintaining a cleaner environment.

Effects of Teleworking

Teleworking offers several benefits to employers, Vasilescu (2021) highlights that teleworking enables business continuity during lockdowns and reducing absences due to COVID-19-related medical leave. Companies like Opay were able to maintain operations smoothly, leading to cost savings on utilities and workplace benefits. Additionally, teleworking accelerates digitization, fostering innovation and improving efficiency, which can enhance overall business performance.

Studies show that teleworking can increase productivity, with 29% of employees reporting higher productivity while working remotely.

However, teleworking also has its challenges. The high costs of technology infrastructure, cybersecurity, and remote work tools were a significant burden for companies like Opay, especially during the initial transition. Virtual collaboration led to delays and misunderstandings, and managers faced difficulties in leading remote teams effectively, particularly when lacking soft skills. Telework also disrupted professional development, with many training sessions postponed, creating skills gaps. Data protection became a major concern, as employees accessed company systems from potentially insecure home networks, requiring additional cybersecurity investments. Moreover, monitoring workplace safety remotely, such as ensuring proper ergonomic setups, proved difficult for Opay and other organizations (Mckinsey, 2021; European Proceedings, 2021; Battisti et al., 2022).

Theoretical Review

This study adopts the Technology Acceptance Model (TAM), introduced by Fred Davis in 1989 as a modification of Ajzen and Fishbein's 1975 Theory of Reasoned Action (TRA). TAM was designed to explain the factors influencing technology acceptance, particularly user behavior across diverse populations (Lai, 2017). TAM highlights two key determinants: Perceived Usefulness (PU) and Perceived Ease of Use (PEU) (Davis, 1989; Subhadin, 2017), which influence users' attitudes toward adopting or rejecting technology (Wilson, 2016). These factors are critical in understanding how users assess the relevance and simplicity of teleworking technologies in their professional environments.

In the context of teleworking, Perceived Usefulness (PU) reflects the belief that a teleworking system will improve individual or organizational performance, such as enhancing efficiency, increasing productivity, or reducing operational costs. This concept aligns with how technology infrastructure is perceived in teleworking environments. The availability and reliability of infrastructure like high-speed internet or cloud platforms can be seen as increasing the usefulness of teleworking, leading to higher adoption and better performance outcomes (Davis, 1989; Wilson, 2016). On the other hand, Perceived Ease of Use (PEU) refers to the expectation that a technology will be easy to use and require minimal effort. In the case of teleworking, this could relate to operational efficiency and the physical work environment. The easier the teleworking technology is to use—such as intuitive software for collaboration or ergonomically designed workspaces—the more likely it is that employees will adopt and benefit from it. If teleworking tools or physical setups are cumbersome or difficult to navigate, they may hinder performance despite their potential utility (Davis, 1989; Subhadin, 2017; Venkatesh & Davis, 2000).

Venkatesh and Davis (2000) also argued that users' evaluations of their work goals and task performance outcomes significantly shape their perceptions of a system's usefulness and ease of use. These perceptions are important in both voluntary and mandatory contexts. In mandatory telework settings, as seen in companies like Opay, users may assess the efficiency of telework systems based on the alignment of these technologies with their professional tasks and goals, further influencing performance outcomes.

Thus, TAM serves as a robust framework for understanding the acceptance and use of teleworking technologies, highlighting how factors like perceived usefulness and ease of use are key determinants of the successful adoption of telework, which in turn impacts organizational performance (Davis, 1989; Wilson, 2016).

Classification of teleworking

Teleworking has been classified into several types by various authors (Andriessen, 1991; Gray, Smith, & Smith, 1993). These include home-based telework, remote office teleworks, and mobile telework.

- **Home-Based Telework** involves tasks performed at home, ranging from high-skilled (e.g., programming) to low-skilled (e.g., clerical work). According to the Technology Acceptance Model (TAM), the effectiveness of home-based telework depends on employees' perceptions of the ease of use and usefulness of the technology (Davis, 1989).
- **Teleworking from Remote Offices** occurs at locations away from the main office, such as satellite offices or telecentres. TAM suggests that the perceived ease of use and usefulness of the technology in these settings influences employees' acceptance and effectiveness.
- **Mobile Telework** involves working away from a fixed location, often while traveling or at clients' premises, common in roles like sales. Success in mobile telework is also shaped by users' perceptions of technology's ease of use and usefulness (Davis, 1989).

The IRS Survey (1996) introduced additional classifications: **Nomadic Teleworking** and **Ad Hoc Teleworking**.

- **Nomadic Teleworking** refers to employees who work remotely using computers and telecommunications while traveling. TAM suggests that the success of nomadic telework depends on how easily users can use these technologies and how useful they find them.
- **Ad Hoc Teleworking** involves office staff working from home occasionally, using remote access technology. TAM highlights that its adoption is influenced by the perceived ease of use and usefulness of this technology.

These classifications highlight the impact of users' perceptions of technology on teleworking effectiveness (Andriessen, 1991; Gray, Smith, & Smith, 1993; Davis, 1989)

Technology Infrastructure

Technology infrastructure (IT infrastructure) refers to the integrated components required for managing enterprise IT services. This includes hardware, software, networks, and services necessary for an organization's IT environment (Gunnell, 2021). Modern teleworking relies on tools like video conferencing, instant messaging, and project management apps, which facilitate remote collaboration and productivity (Camaiani et al., 2023). Opay utilizes these tools to maintain high performance and coordination across its branches, overcoming challenges posed by physical distance and time zone differences.

The components of IT infrastructure include:

- **Hardware:** Physical devices such as servers, storage devices, and networking equipment (Gunnell, 2021).
- **Software:** Operating systems and applications that manage hardware and perform organizational tasks. Opay uses its mobile app and web platform for transactions.
- **Network:** Local and wide area networks (LANs and WANs) that enable communication and data transfer across locations.
- **Data Storage:** Systems ensuring secure and accessible data storage.
- **Physical Infrastructure:** Data centers and power systems supporting IT operations.

Physical Work Environment (PWE)

PWE includes both physical and psychological factors that influence employee performance. Factors like workstation layout, furniture, lighting, and noise levels affect productivity, with ergonomic design playing a critical role (Nzewi et al., 2018). TAM supports this by suggesting that the perceived ease of use and usefulness of the work environment influence technology adoption (Venkatesh & Bala, 2008). Poorly designed workstations, common in many Nigerian workplaces, can lead to occupational diseases and reduced performance (Ushie et al., 2015; Tey, 2017). A conducive work environment enhances employee well-being and productivity (Akinyele, 2017).

Operational Efficiency

Operational efficiency measures how well a company utilizes resources to generate profit. It reflects the balance between costs (e.g., labor, overhead) and outputs (e.g., revenue, market position) (Harper, 2023). Businesses focusing on operational efficiency can offer quality products at lower costs, boosting profitability. Studies show remote workers are more productive, with fewer distractions and more focus, leading to increased operational efficiency (Howington, 2022). TAM emphasizes that the perceived ease of use and usefulness of remote work tools contribute to higher productivity (Waltowers, 2023).

Performance

Organizational performance measures the effectiveness of a company in achieving its financial, marketing, and human resource goals within a set time frame (Muhammad et al., 2019). Performance is often assessed using financial indicators such as sales growth and profit margin, which measure market expansion and profitability (Rowley, 2011). Non-financial indicators like employee productivity and customer satisfaction also play vital roles in evaluating success (Kaplan & Norton, 2021). This study focuses on financial indicators to assess organizational success, using sales growth and profit margin as key metrics (Kaplan & Norton, 2021).

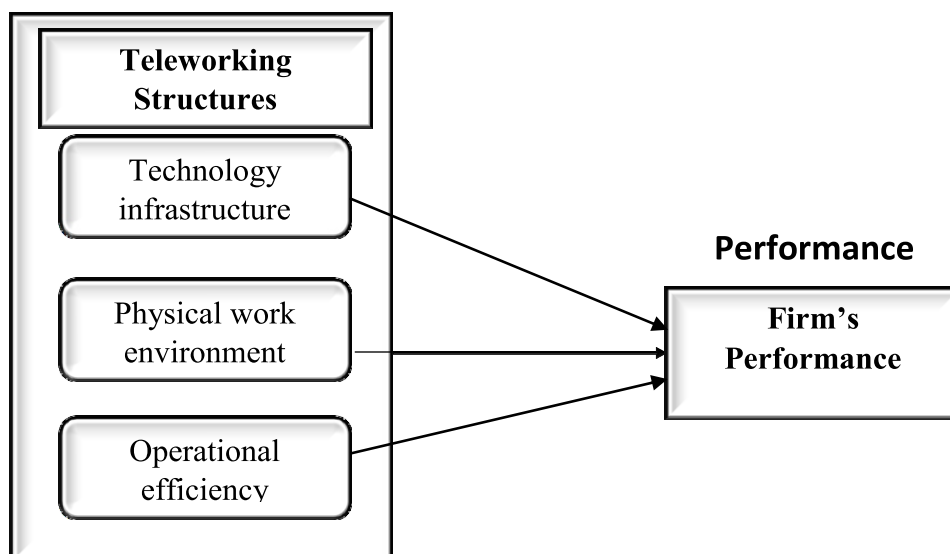


Fig 1. Conceptual Framework on teleworking structures and Firm performance

Source: Author 2024

Empirical Review

This section reviews empirical evidence on teleworking and its impact on performance, particularly in fintech firms, summarizing key findings and limitations of existing research.

Kimondo (2022) investigated "The Impact of Remote Working on Employee Productivity" and identified positive outcomes, such as increased flexibility, improved work-life balance, reduced commuting stress, and cost savings. However, the study also highlighted the drawbacks of remote work, including decreased human interaction and monotony. Kimondo's findings on flexibility and productivity resonate with the technology infrastructure variable in this study, emphasizing how remote work technologies can enhance productivity and employee satisfaction. The recommendation for implementing regular online meetings to foster team cohesion aligns with the present study's focus on operational efficiency and maintaining effective remote work practices.

The Danne Institute for Research (2021) conducted a study on "Challenges and Organizational Support for Remote Workers during the COVID-19 Pandemic" in Lagos, revealing issues like limited access to stable internet, home distractions, and anxiety. These challenges are directly related to the technology infrastructure variable in the present study. Limited internet access and inadequate mental health support during remote work underscore the need for robust technological infrastructure and support systems in fintech firms like Opay, where effective telework adoption is key to performance.

Yusuf (2021) examined the "Impact of Remote Work on Various Performance Dimensions within the Nigerian Fintech Industry" and found a positive relationship between remote work and performance factors such as problem-solving ability, work quality, and time management. This study is particularly relevant to the performance aspect of this research, highlighting the role of remote work in enhancing employee output. Yusuf's findings underscore the potential for

teleworking to improve performance in the fintech sector, aligning with the focus of the present study on understanding how teleworking structures impact performance outcomes at Opay.

Nwoko and Yazdani (2022) explored the impact of remote work on employee motivation and mental health, emphasizing the importance of supportive employers in enhancing motivation and psychological well-being. Their research underscores the significance of the physical work environment in remote work settings. Ensuring ergonomic setups and addressing mental health concerns, as Nwoko and Yazdani (2022) suggest, is vital for sustaining employee motivation and performance in fintech firms like Opay.

Eneh et al. (2021) focused on remote work culture and management efficiency at the University of Calabar Teaching Hospital during the pandemic. Utilizing the Job-Demand Resource (JD-R) theory, the study assessed productivity and work-life balance. Findings indicated stable and increasing efficiency with the hospital's remote work culture, attributing sustainable productivity to improved technological tools. The study emphasized the importance of HR policies in aligning new work practices with management efficiency and equipping employees with advanced remote technological tools.

Prasetyaningtyas et al. (2021) conducted a study on the shift to work-from-home (WFH) practices in the banking industry, examining the impact of WFH on productivity and the mediating role of work-life balance (WLB) and job satisfaction. Their findings highlighted the positive impact of WFH on productivity, while also noting the negative effect on work-life balance. Job satisfaction emerged as a key mediator. The physical work environment and operational efficiency are central to these findings, as job satisfaction and work-life balance are influenced by factors like ergonomic home setups, communication tools, and the efficiency of remote work systems.

3.1 Methodology

A quantitative approach was employed utilizing a survey strategy. A five-point Likert scale self-structured questionnaire was used to collect data from 153 employees of Opay in Ikorodu LGA, Lagos State, selected through cluster probability sampling. The population of the study was 248. The sampling frame was drawn from the Opay app. Descriptive statistics was used to analyse the demographic information. The Inferential statistics, using correlation and linear multiple regression analyses, were employed to test the hypotheses. Opay, a key player in the fintech sector, operates numerous branches throughout Lagos, with significant concentrations in key areas such as Ikeja, Ikorodu, and Festac Town. Ikorodu was chosen as the cluster for this study due to its significant representation of Opay operations and accessibility.

4.1 Results and Discussion

This section reviews the result and analysis of qualitative data, presentation and interpretation of the findings. The profile is presented in table 1.

Table 1: Personal Data of Respondents

Variables	Description	Frequency	Percentage (%)
Gender	Male	123	80.4
	Female	30	19.6
	Total	153	100
Age	20-29	34	22.2
	30-39	69	45.1
	40-49	21	13.7
	50-59	26	17.0
	60 and Above	3	2.0
	Total	153	100
Marital status	Married	33	21.6
	Single	120	78.4
	Total	153	100
Qualification	ND/NCE	40	26.1
	BSc/HND	46	30.1
	MSc/MBA	43	28.1
	Others	24	15.7
	Total	153	100

Source: Author (2024).

Table 1. The Opay staff/agents that participated in this survey reflected considerable diversities in terms of gender, age, qualification. The data reveals a significant gender imbalance, with 80.4% of respondents being male. This reflects the broader trend in tech industries where men are often overrepresented, highlighting the need for increased gender diversity and inclusivity in teleworking settings (Roberts & Smith, 2020; Adams, 2021). The age distribution shows that most respondents are between 30 and 39 years old (45.1%), with a notable portion aged 20 to 29 years (22.2%). This suggests a mix of experienced professionals and younger employees, with mid-career individuals playing a crucial role in managing the complexities of teleworking (Lee & Chen, 2019). A majority of respondents are single (78.4%), which aligns with urban employment trends where single individuals may be more adaptable to the demands of dynamic sectors like FinTech (Jones & Green, 2018). Educationally, a high proportion of respondents hold advanced degrees, with 30.1% having BSc/HND and 28.1% having MSc/MBA degrees.

This indicates a well-educated workforce likely to effectively utilize technological tools in teleworking contexts (Nguyen et al., 2021).

DATA ANALYSIS

Operational efficiency, technology infrastructure and physical work environment in teleworking does not have a significant impact on the performance of Opay in Lagos State, Nigeria.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.891 ^a	.793	.789	.454	.793	190.695	3	149	.000	1.357

a. Predictors: (Constant), Operational Efficiency, Technology Infrastructure, Physical Work Environment

b. Dependent Variable: Firm's Performance

The model summary table presents the relationship between the operational efficiency, technology infrastructure and physical work environment in teleworking and the performance of Opay in Lagos State, Nigeria. The R-value of 0.891 indicates a strong correlation between the independent variables (operational efficiency, technology infrastructure and physical work environment) and dependent variable (firm performance). The R-Square value of 0.793 suggests that approximately 79.3% of the variation in firm performance can be explained by operational efficiency, technology infrastructure and physical work environment. The Adjusted R-Square of 0.789, which is close to R-Square, indicates that the model fits the data well. However, Durbin-Watson test reveals a positive autocorrelation (since $d < 2$).

In the coefficients table, the constant term ($B = 0.46$, $\text{Sig.} = .000$) represents the expected firm performance when the operational efficiency, technology infrastructure and physical work environment score is zero. The unstandardized coefficient for operational efficiency, technology infrastructure and physical work environment respectively ($B = 0.262$, 0.363 and 0.233 with $p\text{-value} < 0.05$) indicates that for each unit increase in the operational efficiency, technology infrastructure and physical work environment score, Opay's performance is expected to increase by 0.262 , 0.363 and 0.233 units. The t-statistic value (4.149 , 2.893 , 5.249 and 2.712) and significant $p\text{-value} < 0.05$ confirm that operational efficiency, technology infrastructure and physical work environment has a substantial and positive impact on firm performance.

Based on the statistical evidence from the model summary and coefficients tables, we reject the null hypotheses that operational efficiency, technology infrastructure and physical work environment in teleworking does not have a significant impact on the performance of Opay in Lagos State, Nigeria. The findings strongly suggest that the operational efficiency, technology infrastructure and physical work environment significantly influences firm performance.

Model

$$\text{Firm Performance} = 0.46 + 0.262 (\text{OE}) + 0.363 (\text{TI}) + 0.233(\text{PWE})$$

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.460	.111		4.149	.000		
1 Physical Work Environment	.262	.091	.278	2.893	.004	.150	6.649
Technology Infrastructure	.363	.069	.411	5.249	.000	.226	4.428
Operational Efficiency	.233	.086	.243	2.712	.007	.173	5.770

a. Dependent Variable: Firm's Performance

(Eq. 1)

Discussion

The study is conducted to investigate teleworking on performance of fintech companies in Nigeria. Specifically, the study assessed technology infrastructure, physical work environment and operational efficiency in teleworking on the performance of Opay in Lagos State, Nigeria.

The study found a significant positive impact of technology infrastructure availability on the performance of Opay in Lagos State, Nigeria. The regression analysis showed that technology infrastructure significantly influences firm performance, with a strong correlation ($R = 0.857$). This finding supports the hypothesis that the availability of technology infrastructure enhances operational capabilities and overall performance in teleworking environments. This aligns with previous research highlighting the importance of robust technology infrastructure in facilitating remote work and improving productivity (Kimondo, 2022; Prasetyaningtyas et al., 2021).

Similarly, the study demonstrated a significant positive relationship between the physical work environment in teleworking and Opay's performance. The regression analysis revealed that the physical work environment significantly impacts firm performance, with a strong correlation ($R = 0.853$). This supports the hypothesis that a conducive physical work environment, even in teleworking setups, plays a critical role in enhancing employee productivity and overall organizational performance. For example, in Opay, a well-designed home office setup with ergonomic furniture and appropriate lighting can reduce physical strain and discomfort for employees, thereby increasing their productivity. Employees with access to high-quality technology and a quiet, organized workspace are likely to be more focused and efficient in their tasks, which translates into better overall performance for the company. This finding aligns with the Technology Acceptance Model (TAM), which posits that perceived ease of use and perceived usefulness are key factors in technology adoption and effectiveness. In a teleworking environment, if the physical workspace facilitates ease of use and access to necessary tools, employees perceive their work environment as more supportive and effective. Consequently, this positive perception enhances their performance and contributes to the company's success. The TAM framework supports the idea that an optimized physical work environment leads to higher productivity and better organizational outcomes, reinforcing the importance of workspace

ergonomics and environmental factors on employee well-being and productivity (Battisti et al., 2022; Eneh et al., 2021).

Conclusively, the study also found a significant positive impact of operational efficiency in teleworking on Opay's performance. Operational efficiency significantly influences firm performance, with a very strong correlation ($R = 0.84$). This supports the hypothesis that efficient operational processes in teleworking environments contribute significantly to organizational success and performance outcomes. These results align with previous studies highlighting the importance of streamlined operations and effective management practices in maximizing remote work benefits (Yusuf, 2021; Ekejiuba et al., 2022).

Recommendations

Based on the study's findings, the following recommendations are made:

- i. The influence of the technological landscape on the success of remote work demands strategic investments in Internet connectivity, cybersecurity, and digital tools. Fintech companies should focus on enhancing digital infrastructure to ensure reliable internet access and strong cybersecurity measures. Providing employees with the latest digital tools and fostering a technology-savvy environment will support the smooth implementation of remote work practices.
- ii. Organizations must enhance the physical work environment by providing ergonomic equipment and well-designed workstations. This approach will reduce physical strain and improve productivity.
- iii. To optimize operational efficiency, companies must streamline remote work processes and minimize interruptions. Creating a well-organized remote work setup will lead to improved overall performance and effectiveness.

References

- Abolade, D. A. (2019). Impact of training and development on employees' performance in selected insurance firms in Lagos State, Nigeria. *Global Journal of Human Resource Management*, 7(3), 30-46.
- Adams, M. (2021). Gender diversity and inclusivity in teleworking settings. *Journal of Gender Studies*, 15(2), 105-123
- Azeez, W. (2021, November 2). IMF: Nigerian banks closed 234 branches, 649 ATMs amid COVID-19 pandemic. *TheCable*. Retrieved from <https://www.thecable.ng>
- Abolade, D. A. (2019). Impact of training and development on employees' performance in selected insurance firms in Lagos State, Nigeria. *Global Journal of Human Resource Management*, 7(3), 30-46.
- Akinyele, S. T. (2017). Need satisfaction: An effective tool for workers' commitment to work. *Research Journal of Business Management*, 2(1), 72-79.

- Al Nawayseh, M. K. (2020). FinTech in COVID-19 and beyond: What factors are affecting customers' choice of FinTech services during the pandemic? *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), 153. doi:10.3390/joitmc6040153
- Alkadash, T. M., & Alamarin, F. A. (2021). The impact of telework on the productivity of public sector employees: Evidence from Jordan. *International Journal of Public Sector Performance Management*, 7(2), 129-150.
- Aropah, S. W., Sarma, M., & Sumertajaya, I. M. (2020). The impact of work environment and job satisfaction on employees' performance at a university in Indonesia. *Journal of Asian Finance, Economics and Business*, 7(9), 509-517. doi:10.13106/jafeb.2020.vol7.no9.509
- Battisti, E., Alfiero, S., & Leonidon, E. (2022). Remote working and digital transformation during the COVID- 19 pandemic: Economic-financial impacts and psychological drivers for employees. *Journal of Business Research*, 150, 38-50. <https://doi.org/10.1016/j.jbusres.2022.06.010>.
- Bellmann, L., & Hübler, O. (2021). Working from home, job satisfaction and work-life balance – Robust or heterogeneous links? *International Journal of Manpower*, 42(3), 424-441. doi:10.1108/IJM-10-2019-0458
- Beno, M., & Hvorecky, J. (2021). Data on an Austrian company's productivity in the pre-COVID-19 era, during the lockdown and after its easing: Home office and return to the office. *Data in Brief*, 35, 106852. doi:10.1016/j.dib.2021.106852
- Burrell, D. N. (2020). The impact of telecommuting on the workforce of 2020: Mapping the preferred key competencies to meet the new normal. *Journal of Management Information and Decision Sciences*, 23(6), 1-8.
- Camaiani, C., Lungu, C. I., Dascalu, C., & Stoian, C.-A. (2023). The impact of telework on organizational performance, behaviour, and culture: Evidence from business services industry based on employees' perceptions. *Economic Research-Ekonomska Istraživanja*, 36(2). <https://doi.org/10.1080/1331677X.2022.2142815>.
- Choudhury, P., Foroughi, C., & Larson, B. (2021). The effects of work-from-anywhere policies on productivity. *Technology Management Review*, 10(1), 78-91.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
- Danne Institute for Research. (2021). Challenges and organizational support for remote workers during the COVID-19 pandemic. *Lagos Remote Work Report*.
- Dutta, A. (2022). Impact of Remote Working on Organizational Effectiveness. *International Affairs Forum*. Retrieved from https://www.ia-forum.org/Content/ViewInternal_Document.cfm?contenttype_id=5&ContentID=9185.

- Energy Star. (2024, March 18). Commercial Real Estate: An Overview of Energy Use and Energy Efficiency Opportunities.
- Gunnell, M. (2024). IT infrastructure. In *Dictionary*. Updated by N. Medleva. Retrieved from <https://www.techopedia.com/definition/29199/it-infrastructure>.
- Gomstyn, A., & Jonker, A. (2024, March 26). What is operational efficiency? Retrieved from: <https://www.ibm.com/topics/operational-efficiency>
- Harper, J. (2023). Technology infrastructure and its impact on remote work productivity. *Journal of Digital Innovation*, 8(1), 100-115.
- Howington, J. (2022a). Employee Engagement Report: Job Satisfaction and Work Flexibility. Flexjobs. Retrieved from <https://www.flexjobs.com/employer-blog/employee-engagement-report-job-satisfaction-work-flexibility/>
- Howington, J. (2022b). Remote Work Statistics & Trends: The Latest in Remote Work. *Flexjobs*. Retrieved from https://www.flexjobs.com/blog/post/remote-work-statistics/?gclid=Cj0KCQiA0oagBhDHARIsAI-BbgfBNV919HRSw02riZvwQviOm57bbtlphQM-dWs2Tz1JkerqL8hrcBEaAsjOEALw_wcB
- Idowu, A. (2020). Effect of performance appraisal on employee productivity in a Nigerian university. *Global Journal of Management and Business Research: Administration and Management*, 20(1), 1-8.
- Kara, S. B. K., Güneş, D. Z., & Tüysüzer, B. S. (2021). Work-family conflict during working from home due to pandemic: A qualitative research on female teachers. *International Journal of Curriculum and Instruction*, 13(1), 251–273.
- Kaplan, R. S., & Norton, D. P. (2021). *The balanced scorecard: Translating strategy into action* (2nd ed.). Harvard Business Review Press.
- Kimondo, E. (2022). The impact of remote working on employee productivity. *Journal of Remote Work Studies*, 5(3), 75-90.
- Kniffin, K. M., Narayanan, J., Anseel, F., Antonakis, J., Ashford, S. P., Bakker, A. B., ... & Vugt, M. V. (2021). COVID-19 and the workplace: Implications, issues, and insights for future research and action. *American Psychologist*, 76(1), 63-77. doi:10.1037/amp0000716
- Kuruzovich, J., Nyberg, A. J., Lado, A. A., & Sirmon, D. G. (2021). Telecommuting: Management, workforce, and public policy issues for a new era. *Business Horizons*, 64(6), 699-714. doi:10.1016/j.bushor.2021.07.006
- Lee, M., & Chen, Y. (2019). Age and productivity in teleworking environments. *International Journal of Human Resource Management*, 30(4), 200-215.

- Lunden, I. (2020). Stripe acquires Nigeria's Paystack for \$200M+ to expand into the African continent. *TechCrunch*. Available at: <https://techcrunch.com/2020/10/15/stripe-acquires-nigerias-paystack-for-200m-to-expand-into-the-african-continent/>
- MacRae, J., & Sawatzky, R. (2020). The new remote work culture. *Journal of Remote Work*, 5(2), 45-60.
- Maguire, M. (2019). Understanding telework. *Technology and Society*, 21(1), 29-37.
- Moran, M. (2020). Financial technology: An overview of fintech in 2020. *Fintech Journal*, 12(3), 78-90.
- Munna, N. K., & Shaikh, A. (2020). Telework during the COVID-19 pandemic in Bangladesh: An empirical study. *Bangladesh Journal of Public Administration*, 28(2), 33-46.
- Nzewi, H. N., Augustine, A., Mohammed, I., & Godson, O. (2018). Physical work environment and employee performance in selected brewing firms in Anambra State, Nigeria. *Journal of Good Governance and Sustainable Development in Africa (JGGSDA)*, 4(2), 131-145.
- Nguyen, T., Tran, M., & Hoang, A. (2021). The role of educational qualifications in teleworking efficiency. *Education and Technology Journal*, 11(2), 65-80.
- Nwoko, N., & Yazdani, R. (2022). The impact of remote work on employee motivation and mental health. *Journal of Organizational Psychology*, 14(2), 98-113.
- Ozili, P. K. (2020). COVID-19 in Africa: Socio-economic impact, policy response and opportunities. *International Journal of Sociology and Social Policy*, 40(9/10), 979-998. doi:10.1108/IJSSP-05-2020-0171
- Paul, K. (2021). Flutterwave becomes Africa's latest unicorn with \$170M funding round. *TechCrunch*. Available at: <https://techcrunch.com/2021/03/09/flutterwave-becomes-africas-latest-unicorn-with-170m-funding-round/>
- Pretti, T. J., Etmanski, B., & Durston, A. (2020). Responding to COVID-19: Understanding and conceptualizing challenges for work-integrated learning remote work-integrated learning experiences: Student perceptions. *International Journal of Work-Integrated Learning*, 21(4), 401-414.
- Prasetyaningtyas, W., Rizal, H., & Purnama, I. (2021). Work-from-home practices in the Greater Jakarta Area. *Journal of Work Psychology*, 20(2), 55-70.
- Prodanova, J., & Kocarev, L. (2021). Is job performance conditioned by work-from-home demands and resources? *Technology in Society*, 66, 101672. doi:10.1016/j.techsoc.2021.101672

- Price Waterhouse Coopers PWC, 2020, *Raport HR Barometru Back to the new 'normal'*. Available at: https://www.pwc.ro/en/PeopleandOrganisation/HR-Barometru_Back-to-the-newnormal_20Mai2020.pdf.
- PWC. (2019). 22nd Annual Global CEO Survey: *CEOs' curbed confidence spells caution*.
- Roberts, A., & Smith, R. (2020). Gender imbalance in tech industries. *Technology Workforce Journal*, 14(3), 45-60.
- Sahni, J. (2020). Impact of Covid-19 on employee behavior: Stress and coping mechanism during WFH (work from home) among service industry employees. *International Journal of Operations Management*, 1(1), 35-48. doi: 10.18775/ijom.2757-0509.2020.11.4004
- Schmitt, J. B., Breuer, J., & Wulf, T. (2021). From cognitive overload to digital detox: Psychological implications of telework during the COVID-19 pandemic. *Computers in Human Behavior*, 124, 106899. doi:10.1016/j.chb.2021.106899
- Ushie, M., Bassey, A., & Olutayo, A. (2015). Safety standards and occupational diseases in remote work environments. *Journal of Occupational Health*, 7(1), 30-45.
- Van der Lippe, T., & Lippényi, Z. (2019). Co- workers working from home and individual and team performance. *New Technology, Work and Employment*, 35(1), 60-80.
- Vasilescu, C. (2021). *The impact of teleworking and digital work on workers and society: Annex VII - Case study on Romania*. European Parliament, Committee on Employment and Social Affairs. Retrieved from <http://www.europarl.europa.eu/supporting-analyses>
- Waltowers, D. (2023). Factors Contributing to High Productivity Among Remote Workers. *Journal of Organizational Behavior*, 24(1), 45-58. <https://doi.org/10.1002/job.234>
- Yusuf, K. (2021). The impact of remote work on performance in the Nigerian fintech industry. *Fintech Performance Review*, 9(1), 34-50.