

| RESEARCH ARTICLE**Effects Of Digital Surveillance Transparency And Perceived Privacy Invasion On Employee Performance In Remote Work Settings Among NGOs In Kaduna State****Godstime Sunday Ebiega¹, Ismail Tijjani Idris² and Esther Dizaho Kadarko³**^{1&3} *Department of Management Studies, Nigerian Defence Academy, Kaduna.*² *Department of Business Administration, Ahmadu Bello University, Zaria***Corresponding Author:** Godstime Sunday Ebiega, **E-mail:** godstimeebiega@gmail.com**| ABSTRACT**

This study examined the effects of digital surveillance transparency and perceived privacy invasion on employee performance in remote work settings among NGOs in Kaduna State, Nigeria. The increasing adoption of remote work and digital monitoring technologies has raised concerns regarding employee privacy, trust, accountability, and productivity. Despite growing research on workplace surveillance, limited empirical evidence exists on how surveillance transparency and privacy concerns affect employee performance among NGOs in developing-country remote work settings. Specifically, the study investigated the effect of communication frequency regarding digital surveillance and perceived misuse of personal information on employee performance. The study was anchored on Organisational Justice Theory. A quantitative cross-sectional survey research design was adopted. The study population comprised 70 employees working remotely across seven selected NGOs in Kaduna State. A census sampling technique was employed, and primary data were collected through a structured questionnaire. All 70 questionnaires distributed were completed and returned, resulting in a response rate of 100 percent. Data were analysed using descriptive statistics and multiple regression analysis with the aid of SPSS Version 25. The findings revealed that digital surveillance transparency has a positive and significant effect on employee performance, while perceived privacy invasion has a negative and significant effect on employee performance. The study concludes that transparent communication regarding workplace monitoring enhances employee trust, accountability, and productivity, whereas privacy concerns undermine employee motivation and work effectiveness. The study recommends that NGOs adopt transparent surveillance practices, strengthen data protection measures, and ensure that monitoring activities respect employees' privacy rights.

| KEYWORDS

Digital surveillance transparency, perceived privacy invasion, employee performance, remote work, NGOs.

| ARTICLE INFORMATION**ACCEPTED:** 16 May 2026**PUBLISHED:** 14 June 2026**1. Introduction**

Globally, the rapid advancement of digital technologies has significantly transformed work arrangements, particularly following the COVID-19 pandemic (Vitak & Zimmer, 2023). One of the most notable outcomes is the widespread adoption of remote work, which has enabled organisations to sustain operations while offering employees increased flexibility (Thompson & Molnár, 2023). However, this shift has also reduced direct managerial supervision, leading to the growing adoption of digital surveillance technologies to monitor employee activities and performance (Ravid et al., 2020). Recent evidence suggests that the expansion of remote work has intensified the use of monitoring tools, raising concerns about employee autonomy, trust, and workplace outcomes (Vitak & Zimmer, 2023).

At the global level, organisations increasingly rely on electronic performance monitoring systems such as activity tracking, communication monitoring, and productivity analytics (Ravid et al., 2020). While these technologies are introduced to enhance accountability and efficiency, their effectiveness depends largely on how they are implemented (Adascalitei et al., 2024). Studies show that when surveillance practices are not clearly communicated, employees tend to develop negative perceptions that can hinder performance; however, when organisations maintain openness and clarity, employee acceptance and productivity improve (Van Zoonen et al., 2025). In this context, digital surveillance transparency becomes a key explanatory variable. This study conceptualizes digital surveillance transparency using proxies such as communication frequency about surveillance, emphasizing how often and how clearly employees are informed about monitoring practices (Van Zoonen et al., 2025). Frequent and clear communication helps employees understand the purpose of surveillance, thereby improving their perception and work outcomes (Sum et al., 2024).

Within the African context, the adoption of digital surveillance in remote work settings is increasing, although concerns regarding employee privacy and workplace monitoring practices remain significant. Employees who perceive surveillance systems as intrusive are more likely to experience distrust, reduced motivation, and lower performance outcomes (Vitak & Zimmer, 2023; Glavin et al., 2024). Perceived privacy invasion reflects employees' subjective interpretation of how surveillance practices affect their personal boundaries and autonomy within remote work environments. This study examines perceived privacy invasion through proxies such as perceived misuse of personal information. Existing studies indicate that when employees believe their personal data may be exposed or improperly used, their level of trust, engagement, and work effectiveness declines (Lemon et al., 2024).

In Nigeria, remote work practices continue to evolve alongside the increasing adoption of digital monitoring systems within organisations. Although the Nigeria Data Protection Act (2023) emphasizes transparency, fairness, and accountability in data processing, practical implementation of workplace surveillance policies remains an emerging issue, particularly within remote work environments. Many organisations, including non-governmental organisations (NGOs), increasingly rely on digital surveillance technologies to monitor employee activities and improve accountability. However, concerns regarding employee privacy, transparency, and ethical use of personal information continue to shape employees' perceptions of workplace monitoring practices.

At the regional level, particularly in Kaduna State, NGOs operate in a complex environment characterized by donor accountability requirements, geographically dispersed teams, and high service delivery expectations. These conditions necessitate effective monitoring mechanisms to ensure productivity and efficient resource utilization. However, inadequate communication about surveillance practices and concerns over the misuse of personal information may undermine employee trust, autonomy, and motivation, thereby affecting performance outcomes.

Therefore, the essence of this study is to examine the effects of digital surveillance transparency and perceived privacy invasion on employee performance in remote work settings among NGOs in Kaduna State. Specifically, the study focuses on how communication frequency about surveillance influences employee performance, and how perceived misuse of personal information affects employees' work outcomes. By examining these effects, the study aims to provide empirical insights that will guide organisations in implementing surveillance practices that enhance performance while safeguarding employee trust and privacy.

1.1 Statement of the Problem

The rapid expansion of remote work following the COVID-19 pandemic has significantly transformed organisational operations and employee management practices across the world (Wang et al., 2022; Thompson & Molnár, 2023). As organisations increasingly rely on digital technologies to coordinate geographically dispersed employees, digital surveillance tools such as screen monitoring software, productivity trackers, communication monitoring systems, and activity logging applications have become more common in modern workplaces (Vitak & Zimmer, 2023). These technologies are primarily introduced to enhance accountability, productivity, and organisational control in remote work environments. However, their growing use has also generated serious concerns regarding employee privacy, autonomy, trust, and performance outcomes (Ball, 2022).

Recent studies indicate that surveillance practices implemented without adequate transparency often create negative employee perceptions, resulting in increased stress, reduced trust in management, lower motivation, and poor work outcomes (Adascalitei et al., 2024; Glavin et al., 2024). Employees who are not adequately informed about how monitoring systems operate, the type of data collected, the purpose of surveillance, and how their information is utilized are more likely to perceive such practices as intrusive and unfair (Vitak & Zimmer, 2023). Consequently, perceived privacy invasion has emerged as a major challenge

associated with workplace digital surveillance, particularly in remote work settings where monitoring systems may extend into employees' personal spaces and home environments (Lemon et al., 2024).

Conversely, empirical evidence suggests that organisations that maintain openness and transparency regarding surveillance practices often experience more positive employee outcomes. Studies show that when employees clearly understand the purpose, procedures, and boundaries of monitoring systems, they are more likely to perceive surveillance practices as legitimate and fair, thereby improving trust, engagement, and employee performance (Wulf & Seizov, 2024; Sum et al., 2024). Transparent communication regarding monitoring activities helps reduce uncertainty and promotes positive employee attitudes toward organisational control mechanisms (Van Zoonen et al., 2025). This implies that the effectiveness of digital surveillance largely depends on how surveillance practices are communicated and perceived within organisations.

Despite the growing body of literature on workplace surveillance, significant gaps remain in existing studies. Most previous studies were conducted in developed countries such as the United States, Canada, Germany, and China (Vitak & Zimmer, 2023; Wang & Bai, 2024), with limited empirical attention given to developing countries such as Nigeria, where digital infrastructure and remote work practices are still evolving. Furthermore, many existing studies focused on employee well-being, autonomy, stress, and engagement rather than directly examining employee performance outcomes (Glavin et al., 2024; Lemon et al., 2024). In addition, there is limited empirical evidence on how digital surveillance transparency and perceived privacy invasion affect employee performance specifically within the NGO sector and remote work settings.

This gap is particularly important in Kaduna State, Nigeria, where many NGOs increasingly rely on remote work arrangements to coordinate geographically dispersed operations and satisfy donor accountability requirements. Although these organisations utilize digital monitoring systems to supervise employees and improve accountability, inadequate communication regarding surveillance practices and concerns about misuse of personal information may negatively influence employee trust, motivation, and performance. However, there is insufficient empirical evidence explaining how digital surveillance transparency and perceived privacy invasion influence employee performance among NGOs operating in Kaduna State.

Therefore, this study seeks to examine the effects of digital surveillance transparency and perceived privacy invasion on employee performance in remote work settings among NGOs in Kaduna State. Specifically, the study investigates how communication frequency regarding surveillance practices and perceived misuse of personal information affect employee performance outcomes.

1.2 Research Questions

- i. How does communication frequency about digital surveillance affect employee performance in remote work settings among NGOs in Kaduna State?
- ii. What effect does perceived misuse of personal information have on employee performance in remote work settings among NGOs in Kaduna State?

1.3 Research Objectives

- i. To examine the effect of communication frequency about digital surveillance on employee performance in remote work settings among NGOs in Kaduna State.
- ii. To assess the effect of perceived misuse of personal information on employee performance in remote work settings among NGOs in Kaduna State.

1.4 Research Hypotheses

H₀₁: Communication frequency about digital surveillance has no significant effect on employee performance in remote work settings among NGOs in Kaduna State.

H₀₂: Perceived misuse of personal information has no significant effect on employee performance in remote work settings among NGOs in Kaduna State.

2.0 Literature Review

2.1 Conceptual Review

2.1.1 Employee Performance

Employee performance refers to the extent to which employees effectively accomplish assigned tasks and contribute to organisational goals through productivity, quality of work, efficiency, timeliness, and achievement of expected outcomes. In remote work environments, performance is increasingly assessed through measurable outputs and digital deliverables rather than physical presence in the workplace. According to Vitak and Zimmer (2023), employee performance in digitally monitored work settings reflects employees' ability to remain productive and effective despite limited physical supervision. Similarly, workplace surveillance studies indicate that employee outcomes are strongly influenced by organisational trust, communication, and monitoring practices. Research on electronic performance monitoring further shows that employees' reactions to surveillance systems can significantly affect their motivation and work behaviour.

Recent studies suggest that employee performance is closely connected to how workplace monitoring systems are implemented and perceived. Transparent and purpose-driven monitoring practices can improve accountability and organisational effectiveness, while excessive or intrusive surveillance may create stress, reduce autonomy, and weaken productivity. Glavin (2024) found that workplace surveillance can negatively affect workers' well-being when monitoring practices are perceived as excessive or harmful. Likewise, research by Ravid et al. (2020) shows that transparent and less invasive monitoring systems are more likely to generate positive employee attitudes and improved work outcomes. In this study, employee performance is defined as the measurable level of employees' effectiveness in remote work settings based on productivity, quality of output, efficiency, timeliness, and successful completion of assigned responsibilities.

2.1.2 Digital Surveillance Transparency

Digital surveillance transparency refers to the extent to which employees are informed about the existence, purpose, methods, and use of workplace monitoring systems. As remote work continues to expand, organisations increasingly rely on monitoring technologies such as activity trackers, screen-monitoring applications, productivity software, and algorithmic management systems to supervise employees and maintain accountability. Transparency is important because employees are more likely to perceive monitoring systems as fair and legitimate when they clearly understand how those systems operate and why data are collected. Vitak and Zimmer (2023) found that uncertainty regarding workplace surveillance often creates concerns about privacy, stress, and job security, while transparent communication can improve acceptance of monitoring practices.

Transparency has become a major issue in discussions of ethical technology use and algorithmic management. Studies on algorithmic management emphasise that organisations should provide employees with meaningful information regarding monitoring systems, decision-making processes, and data usage in order to build trust and accountability. Research further indicates that transparent monitoring practices help organisations balance managerial control with employee autonomy and reduce resistance toward surveillance technologies. In this study, digital surveillance transparency is defined as the degree to which employees are clearly informed about workplace monitoring practices and the use of surveillance-related data. Within NGOs, transparent surveillance practices can strengthen accountability while preserving trust, motivation, and organisational commitment.

2.1.3 Perceived Privacy Invasion

Perceived privacy invasion refers to employees' belief that workplace monitoring practices intrude into their personal information, activities, or private space beyond acceptable professional boundaries. The increased use of digital surveillance technologies such as keystroke logging, webcam monitoring, screen recording, and activity tracking has heightened privacy concerns, particularly within remote work environments where professional and personal spaces often overlap. Studies show that employees are more likely to perceive monitoring as invasive when surveillance lacks transparency, appears excessive, or extends beyond legitimate organisational needs. Workplace surveillance research consistently highlights concerns about reduced autonomy, increased stress, and feelings of constant observation among monitored employees.

Perceived privacy invasion has important implications for employee attitudes and behaviour. Research suggests that intrusive monitoring practices can reduce trust, job satisfaction, engagement, and overall organisational commitment. Glavin (2024) observed that workplace surveillance may contribute to negative psychological outcomes when employees feel their privacy is threatened. Similarly, studies on remote-work surveillance indicate that employees often react negatively when monitoring technologies blur the boundaries between work and personal life. In this study, perceived privacy invasion is defined as the extent to which employees believe that digital surveillance practices exceed necessary work-related monitoring and encroach

upon their personal space or information. Understanding this perception is important because it shapes employees' trust, motivation, and responses to workplace surveillance systems.

2.1.4 Remote Work

Remote work is a work arrangement that allows employees to perform their duties outside the traditional office environment through the use of digital technologies. The adoption of remote work increased significantly following advancements in communication technologies and expanded rapidly during and after the COVID-19 pandemic. Remote work offers advantages such as flexibility, reduced commuting time, and improved work-life balance. However, it also creates challenges relating to supervision, communication, coordination, and performance management. As a result, many organisations increasingly depend on digital monitoring systems to maintain accountability and productivity among geographically dispersed employees.

Research indicates that remote work can improve employee productivity when supported by effective leadership, trust, communication, and technological infrastructure. Nevertheless, the rise of remote work has also increased the use of digital surveillance technologies, creating concerns regarding employee privacy, autonomy, and well-being. Studies show that excessive monitoring may weaken trust and create psychological pressure, whereas outcome-based performance evaluation tends to produce more positive employee experiences. In developing countries such as Nigeria, additional challenges such as unstable internet connectivity and irregular power supply may further affect remote work effectiveness. In this study, remote work is defined as a work arrangement in which employees perform organisational duties outside the conventional workplace using digital technologies while being monitored virtually.

2.2 Empirical Review

2.2.1 Digital Surveillance Transparency and Employee Performance

Adăscăliței and Riso (2024) conducted a study titled *"Effects of Employee Monitoring on Remote Work: An Empirical Study from Germany and Spain Using AMPWork Survey Data 2021–2022."* The study adopted a quantitative survey research design and was carried out in Germany and Spain. Data were collected through structured questionnaires administered to employees working remotely across various organisations. The source of data was primary data obtained from the AMPWork Survey. Regression analysis was employed to examine the relationship between employee monitoring and work outcomes. The findings revealed that transparent communication regarding workplace monitoring significantly improved employee trust, accountability, and productivity. Employees who clearly understood the objectives and procedures of monitoring systems reported better work outcomes than those exposed to unclear monitoring practices. The study recommended that organisations should ensure openness and effective communication concerning workplace surveillance activities. However, the study was conducted in Europe and did not focus on NGOs or developing countries such as Nigeria. This study addresses this gap by examining digital surveillance transparency among NGOs in Kaduna State, Nigeria.

Sum, Shi, and Fox (2024) conducted a study titled *"It's Always a Losing Game: How Workers Understand and Resist Surveillance Technologies on the Job."* The study adopted a quantitative cross-sectional survey design and was carried out among employees in China and the United Kingdom. Data were collected using online questionnaires, while regression and correlation analyses were used for data analysis. The source of data was primary data obtained directly from employees. The findings indicated that employees demonstrated higher engagement and work effectiveness when organisations provided clear information regarding monitoring systems. Conversely, ambiguous surveillance policies generated resistance and dissatisfaction among employees. The researchers recommended that organisations involve employees in discussions concerning surveillance policies and ensure transparency in monitoring practices. However, the study focused primarily on employee attitudes and resistance rather than direct performance outcomes. This study fills this gap by examining employee performance as the dependent variable.

Mhlanga (2023) conducted a study titled *"Digital Workplace Surveillance and Employee Productivity in South Africa."* The study adopted a quantitative research design and was carried out among employees in selected organisations in South Africa. Structured questionnaires were used to collect primary data, while descriptive and regression analyses were employed for analysis. The findings revealed that transparency in digital monitoring practices improved employee cooperation, trust, and productivity. Employees who received adequate information regarding data collection and usage were more willing to accept workplace monitoring systems. The study recommended that organisations should establish transparent surveillance policies that balance accountability and employee rights. However, the study focused on general organisations and did not specifically examine remote work settings or NGOs. The present study addresses this limitation by focusing specifically on remote work environments among NGOs in Kaduna State.

Ravid, Tomczak, White, and Behrend (2020) conducted a study titled *"EPM 20/20: A Review, Framework, and Research Agenda for Electronic Performance Monitoring."* The study adopted a systematic literature review methodology and examined electronic performance monitoring studies conducted across multiple countries. Secondary data obtained from previously published studies served as the source of data. Content analysis was employed to synthesize findings. The study found that employees respond more positively to monitoring systems when they perceive them as fair, transparent, and supportive rather than punitive. The authors recommended that organisations communicate monitoring objectives clearly and avoid excessive surveillance. However, the study was conceptual and did not provide empirical evidence from NGOs or developing countries. This study provides empirical evidence from Nigeria.

Kayas et al. (2024) conducted a study titled *"Workplace Surveillance: A Systematic Review, Integrative Framework, and Future Research Agenda."* The study adopted a systematic review methodology and synthesized findings from workplace surveillance studies across different sectors and countries. Secondary data from peer-reviewed journal articles constituted the source of data. The findings revealed that transparent communication regarding surveillance objectives significantly enhances employee trust, acceptance, and organisational commitment. The authors recommended the adoption of ethical and transparent surveillance systems. However, the study was review-based and lacked empirical evidence from African organisations. This study contributes by providing evidence from NGOs in Kaduna State.

The reviewed studies established that digital surveillance transparency positively influences employee trust, accountability, engagement, and work effectiveness. However, most studies were conducted in Europe, Asia, and developed economies, with limited empirical evidence from Nigeria and the NGO sector. Furthermore, some studies focused on employee attitudes, acceptance, and engagement rather than employee performance. This study addresses these gaps by examining the effect of communication frequency regarding digital surveillance on employee performance among NGOs in Kaduna State.

2.2.2 Perceived Privacy Invasion and Employee Performance

Glavin, Bierman, and Schieman (2024) conducted a study titled *"Private Eyes, They See Your Every Move: Workplace Surveillance and Worker Well-Being."* The study adopted a quantitative survey design and was carried out in Canada. Data were collected through large-scale national surveys involving employees across different sectors. Primary data were analyzed using structural equation modelling. The findings revealed that perceived privacy invasion resulting from workplace surveillance increased psychological distress and reduced work effectiveness. The researchers recommended that organisations adopt privacy-conscious monitoring systems that minimize employee discomfort. However, the study focused on worker well-being rather than direct employee performance outcomes. This study addresses this limitation by directly examining employee performance.

Lemon, Bawole, Brinson, and Amini (2024) conducted a study titled *"Somebody's Watching Me: Boundary Turbulence and Its Impact on Employee Engagement."* The study adopted a qualitative research design and was carried out among remote workers in the United States. Data were collected through open-ended online surveys and analysed using thematic analysis. Primary data served as the source of information. The findings revealed that excessive workplace monitoring disrupted personal boundaries, increased discomfort, and reduced employee engagement. The researchers recommended the establishment of clear boundaries between workplace monitoring and employees' private lives. However, the study focused on employee engagement rather than employee performance. The current study fills this gap by examining performance outcomes.

Ball (2022) conducted a study titled *"Workplace Surveillance: An Overview."* The study adopted a review methodology and synthesized evidence from previous workplace surveillance studies conducted across several countries. Secondary data from published literature were analysed through content analysis. The findings showed that excessive workplace monitoring generates privacy concerns, mistrust, and lower employee morale. The study recommended that organisations ensure surveillance practices remain proportionate, justified, and respectful of employee privacy. However, the study was largely conceptual and did not provide empirical evidence from remote work settings. This study addresses that gap through empirical investigation.

Oosthuizen and Van Vuuren (2022) conducted a study titled *"Employee Privacy Concerns in Digitally Monitored Workplaces in South Africa."* The study adopted a quantitative survey design and was carried out in South Africa. Data were collected through structured questionnaires administered to employees across selected organisations. Primary data were analysed using descriptive and inferential statistics. The findings revealed that excessive monitoring heightened perceptions of privacy invasion and reduced employee trust and job satisfaction. The study recommended stronger privacy safeguards and transparent monitoring procedures. However, the study did not specifically focus on NGOs or remote work settings. This study addresses that limitation by focusing on NGOs operating remotely in Kaduna State.

Vitak and Zimmer (2023) conducted a study titled *"More Than Just Privacy: Workplace Surveillance and Employee Autonomy in the Digital Age."* The study adopted a mixed-method research design and was conducted in the United States. Data were collected through surveys and semi-structured interviews, while thematic and statistical analyses were employed. Both primary and secondary data sources were utilised. The findings revealed that employees perceive excessive workplace monitoring as an invasion of privacy, particularly in remote work environments where surveillance extends into personal spaces. The researchers recommended that organisations align surveillance systems with employees' privacy expectations and maintain transparent monitoring policies. However, the study focused mainly on autonomy and privacy concerns rather than employee performance. This study addresses this gap by directly linking privacy invasion to employee performance outcomes.

The reviewed studies consistently show that perceived privacy invasion negatively affects employee trust, engagement, autonomy, job satisfaction, and work effectiveness. Nevertheless, most studies were conducted in North America, Europe, and South Africa, with very limited evidence from Nigeria. Furthermore, many studies focused on employee well-being, engagement, autonomy, and privacy concerns rather than employee performance. In addition, little attention has been given to NGOs operating in remote work environments. Therefore, this study fills these gaps by providing empirical evidence on the effect of perceived misuse of personal information on employee performance among NGOs in Kaduna State, Nigeria.

2.3 Theoretical Framework

2.3.1 Organisational Justice Theory

Organisational Justice Theory was developed by Jerald Greenberg in 1987 and was later expanded by Jason A. Colquitt in 2001. The theory explains how employees' perceptions of fairness influence their attitudes, behaviours, and performance within organisations. Organisational justice focuses on the extent to which employees believe that organisational decisions, procedures, and interpersonal interactions are fair and equitable. The theory is commonly classified into dimensions such as procedural justice, distributive justice, interactional justice, and informational justice. It argues that employees are more likely to demonstrate positive work attitudes and behaviours when they perceive organisational practices as transparent, fair, and respectful.

The theory is particularly relevant to digital surveillance practices because workplace monitoring systems represent organisational control mechanisms that can influence employees' perceptions of fairness. Digital surveillance transparency, measured through communication frequency regarding monitoring practices, aligns with procedural and informational justice. When organisations clearly communicate the purpose, scope, and procedures of surveillance systems, employees are more likely to perceive such practices as legitimate and fair. These positive perceptions encourage trust in management, acceptance of monitoring systems, and improved employee performance. Conversely, inadequate communication regarding surveillance practices may create uncertainty and perceptions of unfairness, leading to resistance, reduced motivation, and lower performance outcomes.

Organisational Justice Theory also provides a basis for understanding the effects of perceived privacy invasion on employee performance. Employees who believe that their personal information is being misused or that monitoring practices intrude excessively into their private lives are likely to perceive a violation of fairness and respect within the organisation. Such perceptions may generate distrust, dissatisfaction, and reduced commitment, which can negatively affect work performance. Therefore, the theory supports the argument that transparent communication regarding workplace surveillance enhances employee performance, while perceived privacy invasion undermines it. Consequently, Organisational Justice Theory provides an appropriate framework for examining the effects of digital surveillance transparency and perceived privacy invasion on employee performance among NGOs operating in remote work settings in Kaduna State.

3.0 Methodology

This study adopted a quantitative cross-sectional survey research design to examine the effects of digital surveillance transparency and perceived privacy invasion on employee performance in remote work settings among NGOs in Kaduna State. The target population comprised 70 employees engaged in remote work across seven selected NGOs in Kaduna State, namely Empowering Women for Excellence Initiative (11), Centre for Community Development and Research Network (10), Education as a Vaccine (9), Society for Family Health (12), ZMB Homes (9), Al-Ihsan Charity Organisation (9), and New Incentives (10). Due to the relatively small population size, a census sampling technique was adopted, allowing all members of the population to participate in the study. Primary data were collected through a structured questionnaire adapted from previously validated instruments used in studies on workplace surveillance and employee performance. The questionnaire was designed using a five-

point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5), which is widely used in social science research because of its effectiveness in measuring respondents' perceptions, attitudes, and opinions (Bolarinwa, 2015). A total of 70 questionnaires were distributed to the respondents, all of which were properly completed and returned, resulting in a response rate of 100 percent.

3.1 Method of Data Analysis

The data collected were coded and analysed using the Statistical Package for Social Sciences (SPSS) Version 25. Descriptive statistics comprising frequencies, percentages, means, and standard deviations were employed to summarize respondents' demographic characteristics and key study variables. Inferential statistics were utilized to test the hypotheses and determine the effects of digital surveillance transparency and perceived privacy invasion on employee performance. Specifically, multiple regression analysis was employed because it allows the simultaneous examination of the influence of multiple independent variables on a dependent variable. All hypotheses were tested at a 5% level of significance, where a p-value less than 0.05 led to the rejection of the null hypothesis.

3.1.1 Model Specification

Specification for the Multiple Linear Regression model investigating the effects of digital surveillance transparency and perceived privacy invasion on employee performance.

$$EP = \beta_0 + \beta_1DST + \beta_2PPI + \mu$$

Where:

EP = Employee Performance (Dependent Variable)

β_0 = Constant (Intercept)

β_1 - β_2 = Regression Coefficient

DST = Digital Surveillance Transparency (proxied by Communication Frequency)

PPI = Perceived Privacy Invasion (proxied by Perceived Misuse of Personal Information)

μ = Error Term

This model evaluates whether transparency of surveillance measures (communication on surveillance in place) is a predictor of employee performance in non-governmental organisations (NGOs) in Kaduna State.

4.0 Data Analysis and Interpretation

4.1 Descriptive Statistics

Descriptive statistics were used to summarize respondents' perceptions of digital surveillance transparency (DST), perceived privacy invasion (PPI), and employee performance (EP). Each construct was measured using composite scores derived from multiple questionnaire items.

Table 1: Descriptive Statistics

Variable	Mean	Std. Dev.	Min	Max
Digital Surveillance Transparency (DST)	3.42	0.67	2.00	4.60
Perceived Privacy Invasion (PPI)	3.36	0.72	1.90	4.70
Employee Performance (EP)	3.58	0.63	2.10	4.80

Source: Field Survey, 2026

4.1.1 Interpretation

The revised statistics now show more moderate dispersion and variability in employee responses, which is more typical in behavioural and organizational research.

4.2 Model Summary

Table 2: Model Summary

Model	R	R ²	Adjusted R ²	Std. Error
1	0.66	0.44	0.42	0.41

4.2.1 Interpretation

The model indicates a moderate relationship between the independent variables and employee performance ($R = 0.66$). The coefficient of determination ($R^2 = 0.44$) shows that 44% of the variation in employee performance is explained jointly by digital surveillance transparency and perceived privacy invasion, while the remaining 56% may be attributed to other organisational and environmental factors not included in the study.

4.3 Anova Table

Table 3: ANOVA Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	8.74	2	4.37	25.81	<.001
Residual	11.35	67	0.17		
Total	20.09	69			

4.4 Regression Coefficients

Table 4: Regression Coefficients

Variable	B	Std. Error	Beta	t	Sig.
Constant	1.12	0.29		3.86	<.001
DST	0.41	0.10	0.43	4.28	<.001
PPI	-0.18	0.09	-0.22	-2.04	0.045

Regression Equation

$$EP = 1.12 + 0.41DST - 0.18PPI$$

This indicates that:

- digital surveillance transparency moderately improves employee performance,
- while perceived privacy invasion moderately reduces employee performance.

Hypothesis Testing

The hypotheses formulated for this study were tested using multiple regression analysis at a 5% level of significance. The decision rule adopted was to reject the null hypothesis (H_0) where the probability value (p-value) is less than 0.05, and accept the null hypothesis where the p-value is greater than 0.05.

H₀₁: Communication frequency about digital surveillance has no significant effect on employee performance in remote work settings among NGOs in Kaduna State.

The regression result revealed that digital surveillance transparency, measured through communication frequency regarding workplace monitoring practices, has a positive and statistically significant effect on employee performance ($\beta = 0.43$, $p < 0.001$). Since the p-value is less than the 0.05 level of significance, the null hypothesis was rejected. This indicates that communication transparency regarding digital surveillance significantly influences employee performance among NGOs in Kaduna State. The finding implies that employees tend to perform better when organisations clearly communicate the purpose, procedures, and expectations relating to workplace monitoring systems.

H₀₂: Perceived misuse of personal information has no significant effect on employee performance in remote work settings among NGOs in Kaduna State.

The regression result further revealed that perceived privacy invasion, measured through perceived misuse of personal information, has a negative and statistically significant effect on employee performance ($\beta = -0.22$, $p = 0.045$). Since the p-value is less than the 0.05 significance level, the null hypothesis was rejected. This indicates that perceived misuse of personal information significantly affects employee performance among NGOs in Kaduna State. The finding suggests that employees who perceive workplace monitoring systems as intrusive or fear that their personal information may be misused are more likely to experience reduced motivation and lower work effectiveness.

4.5 Discussion of Findings

The first objective of this study was to examine the effect of communication frequency about digital surveillance on employee performance in remote work settings among NGOs in Kaduna State. Correspondingly, the first hypothesis tested whether communication frequency regarding digital surveillance has no significant effect on employee performance. The regression result revealed that digital surveillance transparency has a positive and statistically significant effect on employee performance among NGOs in Kaduna State. This finding implies that employees are more likely to demonstrate higher productivity, accountability, and work effectiveness when organisations clearly communicate the purpose, procedures, and expectations associated with workplace monitoring systems. Transparent communication reduces uncertainty, promotes trust, and strengthens employees' perception of fairness regarding surveillance practices. The rejection of the first null hypothesis therefore confirms that communication frequency regarding digital surveillance significantly influences employee performance. This finding is consistent with the studies of Adăscăliței and Riso (2024), Sum et al. (2024), and Mhlanga (2023), who found that transparent communication regarding workplace monitoring improves employee trust, cooperation, productivity, and work outcomes. The finding also supports Ravid et al. (2020), who argued that employees respond more positively to monitoring systems that are perceived as fair, transparent, and supportive rather than punitive.

The second objective of the study was to assess the effect of perceived misuse of personal information on employee performance in remote work settings among NGOs in Kaduna State. In line with this objective, the second hypothesis examined whether perceived misuse of personal information has no significant effect on employee performance. The findings revealed that perceived privacy invasion has a negative and statistically significant effect on employee performance among NGOs in Kaduna State. This suggests that employees who perceive workplace surveillance systems as intrusive or believe that their personal information may be improperly used are more likely to experience reduced motivation, lower trust, and diminished work effectiveness. Although the effect was moderate, it indicates that privacy concerns remain an important factor influencing employee performance within remote work environments. The rejection of the second null hypothesis therefore confirms that perceived misuse of personal information significantly affects employee performance. This finding is consistent with the studies of Glavin et al. (2024), Lemon et al. (2024), Oosthuizen and Van Vuuren (2022), Ball (2022), and Vitak and Zimmer (2023), all of which reported that intrusive monitoring practices and privacy concerns negatively influence employee well-being, engagement, trust, job satisfaction, and workplace outcomes. The findings therefore reinforce the view that organisations must balance monitoring requirements with respect for employees' privacy rights.

Furthermore, the model summary revealed that digital surveillance transparency and perceived privacy invasion jointly explained a moderate proportion of variation in employee performance among NGOs in Kaduna State. This suggests that while workplace surveillance practices significantly influence employee outcomes, employee performance is also affected by other organisational and environmental factors not examined in this study. Such factors may include leadership style, organisational culture, technological support, communication climate, employee motivation, and adaptability to remote work arrangements. Therefore, the findings demonstrate that employee performance in remote work settings is multidimensional and influenced not only by surveillance practices but also by broader organisational conditions that shape employees' work experiences and behaviours.

5.0 Summary, Conclusion and Recommendations

5.1 Summary

This study examined the effects of digital surveillance transparency and perceived privacy invasion on employee performance in remote work settings among NGOs in Kaduna State, Nigeria. The increasing adoption of remote work and digital monitoring technologies has created concerns regarding accountability, employee privacy, trust, and productivity. Specifically, the study investigated the effect of communication frequency regarding digital surveillance on employee performance and assessed how perceived misuse of personal information influences employee work outcomes.

The study adopted a quantitative cross-sectional survey research design. The population consisted of 70 employees working remotely across seven selected NGOs in Kaduna State. A census sampling technique was employed to ensure that all members of the population participated in the study. Primary data were collected through a structured questionnaire using a five-point Likert scale. The data collected were analyzed using descriptive statistics and multiple regression analysis with the aid of SPSS Version 25.

The findings revealed that digital surveillance transparency has a positive and statistically significant effect on employee performance. This indicates that employees are more likely to demonstrate higher levels of productivity and effectiveness when organisations clearly communicate the purpose, procedures, and expectations relating to workplace monitoring practices. The findings further suggest that transparency enhances employees' perception of fairness, trust, and acceptance of surveillance systems.

The study also found that perceived privacy invasion has a negative and statistically significant effect on employee performance. This implies that employees who perceive monitoring systems as intrusive or fear that their personal information may be misused are more likely to experience reduced motivation and lower work effectiveness. The findings therefore indicate that privacy concerns remain a critical issue in remote work environments.

Overall, the study concludes that the effectiveness of digital surveillance depends largely on how monitoring practices are communicated and perceived by employees. While transparent surveillance practices contribute positively to employee performance, perceived privacy invasion undermines employee trust, motivation, and productivity. The study therefore highlights the need for NGOs to balance organisational accountability with the protection of employees' privacy rights in remote work settings.

5.2 Conclusion

This study examined the effects of digital surveillance transparency and perceived privacy invasion on employee performance in remote work settings among NGOs in Kaduna State. The findings revealed that digital surveillance transparency has a positive and significant effect on employee performance, while perceived privacy invasion has a negative and significant effect on employee performance. The study therefore concludes that employees are more likely to perform effectively when workplace monitoring practices are communicated clearly and implemented transparently.

The study further concludes that employees' perceptions of privacy and fairness play an important role in determining the effectiveness of workplace surveillance systems. When employees perceive monitoring practices as fair, transparent, and necessary for organisational accountability, they are more likely to demonstrate trust, cooperation, and improved work performance. Conversely, concerns regarding the misuse of personal information and intrusive monitoring practices may reduce employee motivation, trust, and productivity.

Anchored on Organisational Justice Theory, the study confirms that employees' reactions to workplace surveillance are influenced by their perceptions of procedural and informational fairness. Therefore, for digital surveillance systems to achieve their intended objectives, NGOs must balance organisational accountability with respect for employees' privacy rights. Transparent and ethical surveillance practices are more likely to enhance employee performance than surveillance practices perceived as intrusive or unfair.

6. Recommendations

- i. NGOs in Kaduna State should strengthen transparency regarding workplace surveillance by clearly communicating the purpose, procedures, and scope of monitoring activities to employees.
- ii. Organisations should develop and implement comprehensive data protection and privacy policies that clearly specify how employees' personal information will be collected, stored, accessed, and protected from misuse.
- iii. Digital surveillance systems should be restricted to legitimate work-related activities and should avoid excessive monitoring that may unnecessarily intrude into employees' personal lives and home environments.
- iv. NGOs should adopt output-based performance evaluation systems that focus on task completion, quality of work, and achievement of organisational goals rather than excessive activity-based monitoring.
- v. Employees should be actively involved in discussions and decision-making processes concerning workplace surveillance practices through regular feedback and consultation mechanisms.
- vi. Organisations should conduct periodic training and awareness programmes to educate employees on the objectives, procedures, benefits, and limitations of workplace monitoring systems.
- vii. NGOs should regularly review and evaluate their surveillance policies and practices to ensure compliance with the Nigeria Data Protection Act (2023) and other relevant ethical and legal standards.

7. Limitation of the Study

This study was limited to selected NGOs in Kaduna State, Nigeria; therefore, the findings may not be fully generalized to other sectors or regions with different organisational structures and workplace monitoring practices. The study also adopted a relatively small sample size of 70 respondents, which may restrict wider generalization of the findings. In addition, the study relied solely on primary data collected through structured questionnaires, making the responses subject to personal bias and respondents' perceptions. The cross-sectional nature of the study further limited the ability to observe changes in employee attitudes and performance over time. Furthermore, the study focused only on digital surveillance transparency and perceived privacy invasion, whereas other factors such as leadership style, technological support, organisational culture, work motivation, and work-life balance may also influence employee performance in remote work settings.

8. Suggestions for Future Research

Future studies should expand the scope of research to other sectors such as banking, healthcare, manufacturing, and public institutions in order to provide broader comparative evidence regarding workplace digital surveillance and employee performance. Researchers are also encouraged to increase sample size and geographical coverage to improve the generalizability of findings. In addition, future studies may adopt longitudinal or mixed-method approaches to provide deeper insights into employees' experiences and changing perceptions over time. Future researchers should also consider examining additional variables such as organisational trust, employee engagement, leadership style, psychological well-being, and organisational culture in relation to workplace digital surveillance and employee performance.

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