# ELECTRONIC SURVEILLANCE AND WORKGROUP PERFORMANCE (A STUDY OF SELECTED MICROFINANCE BANKS IN RIVERS-STATE)

#### Lenu Goodluck WEGE, Biobele Richard BRIGGS, Chiaza Ihenna ONUOHA

<sup>1</sup>Department of Business Administration and Management,
Kenule Beeson Saro-Wiwa Polytechnic, Bori, Rivers State, Nigeria
wege.lenu@kenpoly.edu

<sup>2</sup>Department of Business Administration and Management,
Kenule Beeson Saro-Wiwa Polytechnic, Bori, Rivers State, Nigeria
rwbiobriggs@gmail.com; briggs.biobele@kenpoly.edu.ng

<sup>3</sup>Department of Management, Ignatius Ajuru University of Education, Port Harcourt.
chiaza01@gmail.com

#### **ABSTRACT**

This paper examined the contributions of electronic surveillance on workgroup performance. The study employed a survey approach and used the questionnaire as its major source of data collection. In order to guide the study, four research questions and hypotheses that are consistent with the objectives of the study were raised. The population of study consists of 4953 employees drawn from 55 firms in Rivers and Delta State. The researcher used Taro Yamene method to determine the sample size of 370 members of staff as the sampled unit. Linear regression was the tool for data analysis, and from the findings, the researcher concludes that the fear of privacy invasion has always been an albatross to the successful implementation of workplace surveillance. It is however concluded by this study that the contributions of electronic surveillance to individual employee, group and organizational performance is enormous and should be encouraged. The study therefore recommends that as a behavior control mechanism, organizations should ensure that what constitutes wasteful organizational practice, Organization should ensure that workgroup members are is aptly educated on the use of electronic surveillance before deployment, to enable workgroup members to apply discretion which may lead innovative ideas, not all task of the workgroup should be subjected

to surveillance and that positive work behavior captured through surveillance should be rewarded timely.

**Keywords**: Electronic surveillance, workgroup, performance, microfinance banks

*JEL Classification Code*: M15, O15

#### 1. INTRODUCTION

Over the years, organizations have sought to effectively curb the menace of wasteful organizational practices such as lateness to work, bureaupathology, truancy; online loafing etc which in most cases has impacted negatively on their performance. One of the current trends adopted to achieve this is the adoption of electronic surveillance in the workplace. As a result of modern surveillance technology individual workers and their dealings grow more and more transparent. An employee carrying an ID-card equipped with biometric information and Radio Frequency sensors - a so called Smart-ID - can, upon her arrival at work, be authenticated and registered (Simukali, 2019). Once the card is authenticated, the employee's movements throughout a factory building can be followed in real time and/or tracked. Simultaneously, strategically placed close-circuited cameras may provide images and software can be used to monitor her movements. Company computers and electronic equipment can record activities and software like computerized performance monitoring (CPM) can be used to assess her work on a computer e.g. by measuring the number of keystrokes *per* time unit (Douglas & Mithal, 2012). Interaction with clients, customers and co-workers can be video recorded, intercepted and listened in on. Moreover, geographical positioning system (GPS) device in company owned vehicles can reveal an employee's position and path through areas outside the work-site (Chatterjee et al., 2021).

Not only has novel technology expanded the arsenal of tools, it has altered the nature of surveillance and the modes of gathering and processing information. Of course, observation and control have always been a part of the hiring process and employment conditions. Assessments have played a key role in efforts to control systems of transportation, communication and manufacturing (Thoben, *et al.*, 2017). But increasing availability of relatively inexpensive and easy to use surveillance devices is enabling employers to expand the range and scope of their control over their employees' activities. It also allows constant and more detailed surveillance than

has been possible with traditional methods (Graham & Wood, 2017) and the process of information gathering has become more surreptitious (Hansson & Palm, 2005). Even if employers have traditionally considered it within their right to monitor their employees and even though they have had various techniques at their disposal, the ways in which surveillance can be conducted have changed significantly in the past few decades. Traditional means of control such as human supervisors, cash registers, log books and punch clocks (Gerstel & Clawson, 2018, Kinnie, 2014) enabled employers to identify the doings and productivity of a group of workers. Today however, employers can single out individual workers, continuously scrutinize their activities and obtain detailed reports on their work.

In most organizations, employees work together or have at least some kinds of interaction with other co-workers and often also with customers or vendors. For that reason, there has been a remarkable amount of research related to group work, aiming to understand the structure and performance of small operational groups and teams, that is, how the members are behaving in them and influencing within. Nowadays, groups are the basic units of performance in many organizations. They bring together abilities, experiences, and insights of different people (Hackman & Katz, 2010). In the view of Roseth *et al.* (2011), a group is a number of persons who, for at least a brief period of time, have some psychological and/or task interdependency, which includes interaction with each other in face-to-face situation. Groups in organizations can be divided into two different kinds: formal and informal. Formal groups are approved by the hierarchy and they have particular tasks to perform. Informal groups are formed voluntarily by the employees themselves. A reason to create such a group can be the similarity of work, mutual attraction and a common need of fulfillment or even a mixture of all the above.

Workgroups are identified with different characteristics which include but not limited to the followings; firstly, members in a workgroup interact and communicate in order to create and organize tasks and relationships. Secondly, workgroups have purposes and goals that define what members seek to accomplish. Thirdly, Members in a workgroup have interdependence and influence each other. Fourthly, workgroups are organized units with norms and rule systems and their members take on different roles. Finally, workgroups are cohesive social arrangements that individuals can identify as a unit.

In today's work environment, it is not uncommon for employees to be found using the properties and equipment of the organization for their personal use (bureaupathology), thereby making secret gains and shortchanging the organization (Andhika, 2017). This practice and other wasteful organizational practices if not detected and controlled could hamper or place a snag on the performance of the work group. Furthermore, the need to guarantee the security of staff, clients and workgroup members in this era of world terror has made it imperative for organizations to deploy technology in monitoring movement in and around their establishment (Holt, 2012). However, in-house manipulation of data and poor compliance to the modus of ICT application can vitiate this purpose (Tounsi & Rais, 2018).

Over the years, the shift to group system of operation in workplaces is gaining prominence, hence, organizations are now deploying more of workgroups to accomplish organizational task. Although this confers varying benefits, it is challenged by the demand for thorough understanding among workgroup members. In the instance where there is mistrust among the workgroup members, suspicion and information hoarding may become the detects of the workgroup relationship and this can ruin the interpersonal relationship of workgroup members and hamper productivity. To build a sustainable cohesive and performance-oriented workgroup, workgroup members must be willing to be monitored through an unbiased system. Therefore, when workgroup members are not willing to take the risk to trust others or are seen as not trustworthy, there will be a bridge in communication in the group and this will certainly slow down the workflow, disrupt the unity or cohesion in the workgroup which at the long-run cripples the performance of the group. This study is therefore faced with the problem of x-raying the effects electronic surveillance can have on workgroup performance.

#### 1.1 Hypotheses

The following null hypothetical statements are made for this study;

H<sub>O1</sub>: Electronic surveillance does not have significant effect on the reduction of wasteful organizational practices

Ho2: Electronic surveillance does not have significant effect on the workgroup cohesion

H<sub>O3</sub>: Electronic surveillance does not have significant effect on workgroup productivity

H<sub>04</sub>: Electronic surveillance does not have significant effect on workgroup innovativeness

#### 2. REVIEW OF RELATED LITERATURE

# 2.1 Conceptual Review

# Electronic Surveillance

Electronic surveillance is characterized by low-tech methods including mail interception and human intelligence operatives. As defined in the 2006 edition of the Wikipedia Encyclopaedia, "electronic surveillance" refers to the practice of government agencies keeping tabs on the whereabouts, actions, and communications of individuals. Electronic equipment like cameras, microphones, tape recorders, or wire taps are used for the purpose of covertly or intrusively listening to or watching individuals, locations, or activities. Collecting proof of a crime or information about suspected criminal conduct is the goal of electronic surveillance when used by law enforcement. Businesses utilize electronic surveillance to keep their premises and employees safe as well as to learn more about their rivals. In America, electronic monitoring is present in almost every facet of daily life. According to Rosenbloom et al. (2022), this technology is used by the president, Congress, judiciary, military, and law enforcement within the public sector. Many private entities, including rival businesses, retail outlets, housing complexes, parking garages, medical institutions, financial institutions, employers, and even spouses, have used electronic eavesdropping techniques (Turow, (2017).

The three most common forms of electronic surveillance are bugging, videotaping, and wiretapping. Through the process of physically entering the wire circuitry, wiretapping is able to intercept telegraph messages and phone conversations. For this kind of monitoring to work, someone has to physically "tap" into the lines that carry phone or telegraph signals. To carry out bugging without the use of telephone lines, a tiny microphone or other listening device is often placed in one area to send talks to a nearby receiver and recorder. Cameras, either visible or concealed, capture and transmit visual pictures for the purpose of video surveillance. These images may be seen in real-time or viewed at a later time on tape. There are several uses for

electronic eavesdropping: (1) making people and their belongings safer; (2) finding and stopping wrongdoing; and (3) stealing, protecting, or intercepting information that might be damaging to a person's reputation. Finding a middle ground between legitimate needs for electronic monitoring and individuals' right to privacy is the goal of this legislation.

#### Workgroup

Although there is no agreed-upon theoretical definition of a workgroup, the idea is based on how teams are classified in sociology (Johnson & Johnson, 2013). We arrived at this idea after looking at a plethora of factors at the individual and group levels. Although there is still much to learn about group dynamics, this field of study has reached a mature stage (Hogg & Vaughan, 2011). According to Hogg (2001), there isn't much consensus on what constitutes a group from a social psychology perspective. Because of this, some scholars have wisely sought to include the greatest commonalities among different definitions. As a result, according to Forsyth (2010), a group consists of at least two people who are bound together in some way, either by shared interests or by social ties. All sorts of social groupings are included by this broad term. Some studies have gone to further lengths to identify the traits shared by various groups in the business world. Wageman (2014) has arrived at a more limited definition by concentrating on groups inside an organizational setting. Groups, in their view, are collections of individuals who work together to complete tasks, who take turns being accountable for the results, who perceive themselves and others as a whole social entity within a larger social system (like a company or business unit), and who are able to manage their relationships across organizational lines.

#### Performance

The term "performance" refers to the actions taken while on the work, including the most basic duties included in the job description. Knowledge of the necessary technical principles or information to guarantee job performance and the capacity to manage multiple assignments are examples of task knowledge. Ability to apply this information to complete tasks successfully with little supervision is an example of task skill (Schneider, 2017). Finally, task habits are examples of how an innate ability to respond to assigned jobs can either help or hurt performance. Therefore, according to Borman and Motowidlo (1997), job performance is the degree to which an

organization's goal is realized via the efficient execution of tasks by its employees, with appropriate rewards for both the organization and its employees.

#### 2.2 Costs of Electronic Surveillance in the Organization

A dramatic shift in the "method of doing things" and, by extension, the traits of organizational culture, is probably inevitable with the advent of electronic workplace monitoring. It is important to determine the impact on the organization and its employees of each change program, regardless of how little or unremarkable it may seem to upper management. In the course of managing change, the employer will likely evaluate the potential benefits—like increased productivity—against the potential risks—like a decline in employee trust—of instituting workplace surveillance. On the other hand, research indicates that certain drawbacks or expenses could not become apparent until after electronic monitoring equipment is put into place, and the employer finds out about them (Chen & Ross, 2007). Here, it's worth noting that the visible costs or drawbacks aren't always the same as, or even close to, the hidden costs that surface in the long run.

The possibility for both overt and covert surveillance adds another layer of complexity to the effects of monitoring technology on workers. In this regard, Miller (2002) argues that workers should be on the safe side and assume that they are under surveillance at work because no workplace is really devoid of electronic equipment. Regardless of whether the employee was notified that they were being watched or not, Wood (2001) adds that the legislation does not protect them if they are proven to be squandering business resources, such as via excessive personal Internet usage. The present state of affairs in the workplace is that many nations' laws provide employers near-total authority over the use of electronic surveillance devices. In addition, as Wood (2001) points out, the absence of precise legal precedent about the scope of employer liability for electronic monitoring makes it hard to control the subsequent events and their consequences. Employees face the ultimate punishment of losing their employment and the means of subsistence for themselves and their family in the most severe instances of electronic surveillance (Weckert, 2005). In addition, Vorvoreanu and Botan (2000) state categorically that there is a link between productivity and the detrimental impacts on workers caused by electronic surveillance in the workplace.

- ❖ Psychological and Health Risks: There is evidence that electronic workplace surveillance has detrimental consequences on employees, including a range of behavioural responses (Chen & Ross, 2007). Symptoms may manifest in a variety of ways, including but not limited to: poor morale and motivation, stress, anxiety, sadness, rage, exhaustion, musculoskeletal disorders, and repetitive stress injuries. According to Weckert (2005), employees often experience a decline in self-esteem as a result of factors such as restricted personal freedom, diminished opportunities to express creativity, low morale, lack of enthusiasm, and powerlessness.
- \* Relationships between Staff and the Employer: There is evidence that electronic workplace surveillance has detrimental consequences on employees, including a range of behavioural responses (Chen & Ross, 2007). Symptoms may manifest in a variety of ways, including but not limited to: poor morale and motivation, stress, anxiety, sadness, rage, exhaustion, musculoskeletal disorders, and repetitive stress injuries. According to Weckert (2005), employees often experience a decline in self-esteem as a result of factors such as restricted personal freedom, diminished opportunities to express creativity, low morale, lack of enthusiasm, and powerlessness.
- ❖ The Intensification of Workload Demands: The use of electronic monitoring systems is generally associated with an increase in staff effort, according to Holman et al. (2002). The authors acknowledge that there has been a dearth of research testing the purported correlation between monitoring employees' performance and reduced health, but they nevertheless state that the aforementioned health hazards are a result of the increased demands of the job. Nevertheless, it should be noted that employees' salaries might be impacted by data collected via technological means if their employers suspect that they are not putting in their maximum effort.
- ❖ Demographic and Personality Characteristics as a Variable: While it's true that most employees will feel the pinch at some point when electronic monitoring goes live, Chen and Ross (2007) note that certain workers will be more affected than others. Job discontent, stress, and consequent disengagement, according to them, are all influenced by one's unique personality. Women are more likely to experience stress due to their lower tolerance for privacy breaches, which makes them an easy target for the negative consequences of electronic surveillance (Panina, 2002). However,

Schleifer *et al.* (1996) found that stress positively correlates with staff performance and capacities. As a result of falling short of the expected levels of performance or failing to fulfil the necessary job standards, workers are seen to feel more anxious when monitored by a monitoring tool.

As an additional component, Zweig and Webster (2002) discovered that people who are introverted or emotionally unstable (for example, after a painful experience or a loss) are less likely to be open to or tolerant of electronic monitoring technologies. Even if the business is deemed to have been just and equitable in protecting workers' privacy, the authors find that only those employees who are very emotionally stable would gain from this policy. When compared to employees who had high levels of trust in their employer and organization, those with intrinsically low levels of trust were impacted differently by the introduction of electronic monitoring technology (Chen & Ross, 2007).

Workers' reactions to helpful criticism are heavily influenced by their sense of self-worth. When given a second chance, those with high self-esteem will work even harder to repeat their previous success, whereas individuals with poor self-esteem are more likely to psychologically "give up" and do even worse. Consequently, for those who already struggle with poor self-esteem, the introduction of electronic monitoring technology—which is meant to, among other things, boost productivity and performance—may have the reverse effect (Chen & Ross, 2007). According to Chen and Ross (2007), workers with low self-esteem may be helped to perform better and avoid theft and other negative behaviours by using electronic monitoring tools in conjunction with a supportive introduction program. Workers who value themselves highly may be less willing to cooperate with the introduction of electronic monitoring systems.

# 2.3 Theoretical Review Diffusion Theory

A theory that attempts to explain the gradual spread of technical concepts, the diffusion of innovations was put out by Everett Rogers. Diffusion is described by Rogers *et al.* (2014) as the gradual spread of an invention inside a social system via predetermined pathways. There is a lag period between the introduction of a new concept and its widespread acceptance and adoption (Lieven *et al.*, 2011). Typically,

the diffusion pattern begins slowly but reaches its peak acceptability as the market becomes more used to the innovation. The practice of monitoring employees is not new. Managers have turned to monitoring as a means to enhance worker efficiency, productivity, and workplace safety. This method, which is being used today, originated in the late 19th and early 20th centuries. Today, most people would agree that workplace surveillance technologies have made it possible for companies to keep a close eye on their employees, allowing for things like regular drug testing and email monitoring (Cascio *et al.*, 2016).

#### **Self-Categorization Theory**

According to Turner (2005), the core postulate of self-categorization theory is that group conduct may be understood as people behaving in terms of a common identity rather than as diverse individual persons. It aims to explain the differences in how individuals identify and categorize themselves, as well as the consequences of such differences." Similarly, Otten (2005) argues that the theory focusses on the variables that motivate individuals to make certain self-categorizations, as well as the implications of such categorizations. Furthermore, Hogg and Smith (2007) defined social identity theory as "the theory that people's motivation to derive self-esteem from their group memberships is one driving force behind in-group bias". According to Hogg and Reid (2006), in-group bias is a common element of intergroup relationships and is described as the propensity to support the in-group over the outgroup (both in judgements and conduct). According to Myers (2005), a 'in-group' is "a group of people who share a sense of belonging, a feeling of common identity." An 'out-group' is described as "a group that people perceive as distinctly different from or apart from their in-group".

#### 2.4 Empirical Review

Yamoah (2014) looked at the topic of workplace performance monitoring. An exploratory survey design technique was used in the investigation. The target group consisted of all Unibank Ghana Ltd. workers. Sixty people made up the chosen sample size for the study. The respondents were chosen mostly based on their capacity, availability, and willingness to complete the questionnaire using the convenience sample approach. Utilizing descriptive statistics, the gathered data was examined. The findings showed that managers mostly employed computers, video, phones, and suggestion boxes to keep an eye on their staff members' performance.

But the majority of respondents thought that video surveillance violated their privacy and did not feel comfortable with it.

Odhiambo (2016) looked at the performance of manufacturing companies listed on the Nairobi Securities Exchange as well as electronic workplace surveillance. In this study, a descriptive research approach was used. A population of manufacturing enterprises registered on the Nairobi Securities Exchange was the focus of the investigation. Questionnaires were used to gather primary data, which was then tabulated, summarized, and presented using percentages and proportions. Regression analysis was used to further examine the data in order to ascertain the impact of electronic workplace monitoring systems on organizational performance. The results of the research indicate that the performance levels attained by Kenyan manufacturing businesses listed on the NSE are mostly attributable to the different techniques of employee observation. since a result, the research suggests that businesses give careful thought to the various electronic workplace surveillance techniques, putting particular attention on computer monitoring since it was shown to be the most significant. It is also advised that further study be done before using electronic workplace monitoring systems for other manufacturing businesses, as well as businesses that are not necessary in the manufacturing industry.

Ozowa *et al.* (2016) conducted research in the Francis Suleimanu Idachaba Library, University of Agriculture Makurdi, on the effects of electronic surveillance systems on theft and mutilation. The research was designed using a descriptive survey approach. Three hundred patrons of the University of Agriculture, Makurdi's nine colleges made up the study's population. The whole population served as the sample size for this investigation. The "Questionnaire on the Impact of Electronic Surveillance Systems on Book Theft and Mutilation in Francis Sulemanu Idachaba Library (QIESSBTMFSIL)" was a questionnaire and interview guide created by researchers. 300 responses, or 100%, were obtained. Frequency counts, percentages (%), means (), and standard deviations (SD) were used to analyze the data. The grand mean of (=2.69) showed that the main causes of theft and mutilation at the library were a lack of materials, certain patrons' selfishness, and staff members' inattention. However, the grand mean of (= 23.26) indicated that the main causes of theft and mutilation in libraries are the quantity and length of loans, the high cost of photocopying, the dearth of textbook recommendations, and the insufficiency of

library items for users. The grand mean of (= 13.20) indicated the suitability of the recommended surveillance methods. The Francis Sulemanu Idachaba Library's performance with electronic monitoring is impacted by insufficient power supply, expensive installation costs, and limited budget, as shown by the grand mean of (= 10.42). The approaches used to deal with the limitations posed by theft and mutilation (=15.72) were suitable. A policy on theft and vandalism, the supply of detective barcode machines, the installation and maintenance of an electronic surveillance system, the availability of sufficient resources, and the use of photocopying services to prevent book theft and mutilation were among the recommendations made.

Kariuki (2016) looked at the impact of employee involvement and performance monitoring on employee engagement in contact centres using Kenya Power as a case study. Using all 120 agents, the research used a census descriptive approach. Frequency tables, bar charts, and pie charts were used to display the data that was gathered using a structured questionnaire that included both open-ended and closed-ended questions. SPSS was used to analyze the results. The research found that excessive performance monitoring resulted in unattainable goals, stress at work, a contradiction between the volume and quality of calls, a lack of supervisor support, and insufficient autonomy. Accordingly, the research suggests that management switch from an authoritarian control style to a participatory approach in which agents participate in decision-making. The research suggests less stringent performance monitoring, remuneration linked to performance, and more effective and constructive methods of providing agents with performance feedback.

Research titled Employees' Response to Electronic Monitoring: The Relationship between CCTV Surveillance and Employees' Engagement was conducted by Gichuhi *et al.* (2016). A correlational research strategy was used to carry out the investigation. A randomly chosen sample of 384 bank workers was utilized to represent the whole population, and the structured questionnaire was evaluated using both a pilot questionnaire and Cronbach's alpha. A comprehensive assessment of the literature and consultation with specialists were used to assure validity. With the aid of SPSS (Statistical Package for the Social Sciences), the gathered data was coded and examined. Regression analysis, means, and correlations were used to determine the connection between staff engagement and electronics monitoring. The research found

a correlation between employee engagement and CCTV surveillance that is favourable. Further evidence that there is a statistically significant correlation between online CCTV surveillance and employee engagement comes from the null hypothesis' lack of support. Therefore, before using CCTV surveillance, every organization must consult with and include its personnel. Additionally, management has to foster a culture of trust and utilize any monitoring results as fertile ground for productive cooperation.

The impacts of electronic monitoring and surveillance in the workplace on management trust and the moderating influence of occupational type were investigated by Holland *et al.* (2015). The 2012 Australian Electronic Workplace Survey, which included 500 randomly selected workers, provided the data used in the article. OLS and ordered probit regression were used to analyze the data while controlling for various personal, job, and workplace factors. Regression analysis revealed an average inverse association between EMS and management trust. In order to investigate the possible effect of EMS on trust between manual and non-manual workers, the authors further separated the sample. The research discovered that only manual workers showed a clear correlation between EMS and management trust.

The Strategic Impact of High-Tech Monitoring on Employee Performance: An HRM Perspective was examined by Aktera *et al.* (2017). The workers of four mobile operators—Grameenphone, Banglalink, Robi, and Teletalk—who together hold over 90% of the market share and constitute a powerful representation of Bangladesh's telecommunications industry, were the subjects of the research. There were 100 people in the sample. A systematic questionnaire was used to gather data after the purpose sampling process. SPSS was used to do the statistical analysis (ANOVA, coefficients, and regressions).

Reagan (2017) conducted a secondary data analysis to assess the effects of disruptive innovation and electronic monitoring on recidivism rates in federal prisons. Quantitative statistics were generated using aggregate data sets from the Florida Department of Corrections Bureau of Research and statistics Analysis Community Supervision department to examine the relationships between electronically monitoring criminals from 2005 to 2007 and recidivism rates. Aggregate data allows

comparisons between other group information on a risk factor and the recidivism rate as a result, allowing relationships between groups of offenders sentenced with and without electronic monitoring to be studied. Consequently, the study's findings demonstrated that electronically tracking criminals did not considerably lower recidivism.

#### 3. METHODOLOGY

In order to investigate the effect of electronic monitoring on workgroup performance across 55 enterprises in Rivers State, Nigeria, the research used a descriptive survey approach. Taro Yamane's method was used to select a sample size of 370 workers out of the 4,953 total employees in the population. Participants were chosen by means of a balloting procedure using random sampling. The "Electronic Surveillance and Workgroup Performance Questionnaire (ES and WGPQ)," a structured questionnaire with a five-point Likert scale style, was used to gather data. Through expert vetting, the validity of the instrument was guaranteed, and the Pearson correlation coefficient was used to demonstrate its dependability. Using SPSS version 21, inferential statistics more particular, the linear regression were used to analyze the data. 352 of the 370 distributed surveys were accurately completed and returned, providing the foundation for the data analysis.

#### 4.0 RESULT, FINDINGS, CONCLUSION AND RECOMMENDATION

#### 4.1 Results

H<sub>01</sub>: Electronic surveillance does not have significant effect on the reduction of wasteful organizational practices

#### **Descriptive Statistics**

	Mean	Std. Deviation	N
Reduction of Wasteful Organizational Practices	3.1420	1.70878	352
Electronic surveillance	3.8636	1.22585	352

#### **Model Summary**

Adjusted R						
Model	R	R Square	Square	Std. Error of the Estimate		
1	.751ª	.563	.562	1.13085		

a. Predictors: (Constant), Electronic surveillance

#### **ANOVA**<sup>a</sup>

				Mean		
Model		Sum of Squares	df	Square	F	Sig.
1	Regression	577.307	1	577.307	451.434	.000b
	Residual	447.591	350	1.279		
	Total	1024.898	351			

a. Dependent Variable: Reduction of Wasteful Organizational Practices

b. Predictors: (Constant), Electronic surveillance

#### Coefficientsa

				Std		
				Coefficients		
Mode	1	В	Std. Error	Beta	t	Sig.
1	(Constant)	900	.200		<b>-</b> 4.510	.000
	ic surveillance	1.046	.049	.751	21.247	.000

a. Dependent Variable: Reduction of Wasteful Organizational Practices

**Discussion:** The results from the test of hypothesis one presented above indicated that electronic surveillance has effect on the reduction of wasteful organizational practices as evidenced by the mean values 3.8636 and 3.1420 in the descriptive statistics. The results of the t – statistics revealed that the coefficient was statistically significance since the P-value is 0.000 which is less than the ( $\alpha$  – level) of 0.05. The results of the F – statistics of the regression model has a significant level of (0.000) which is less than  $\alpha$  – level of 0.05; hence, it is an indication that our regression model is an important better fit to predict the effects of electronic surveillance on reduction of wasteful organizational practices. Also, our result showing the Pearson product moment correlation analysis (r) value of 0.563 indicated strong positive relationship between the two variables. Thus, we rejected the null hypothesis and concluded that electronic surveillance has significant effect on reduction of wasteful organizational practices.

 $H_{O2}$ : Electronic surveillance does not have significant effect on the workgroup cohesion

#### **Descriptive Statistics**

	Mean	Std. Deviation	N
Workgroup Cohesion	4.3580	1.11311	352
Electronic surveillance	4.2869	1.07552	352

#### **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Err of the Est.
1	.571a	.326	.324	.91529

a. Predictors: (Constant), Electronic surveillance

#### **ANOVA**<sup>a</sup>

Mode	[	Sum of Squs	Df	Mean Square	F	Sig.
1	Regression	141.684	1	141.684	169.123	.000b
	Residual	293.214	350	.838		
	Total	434.898	351			

a. Dependent Variable: Workgroup Cohesion

#### Coefficientsa

		Unstandardized		Standardized		
		Coefficients		Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	1.826	.201		9.094	.000
	Electronic surveillance	.591	.045	.571	13.005	.000

a. Dependent Variable: Workgroup Cohesion

**Discussion**: Test of hypothesis two demonstrated that electronic surveillance has effect on the workgroup cohesion as shown by the mean values 4.2869 and 4.3580 from the descriptive statistics. The results of the t - statistics showed that the coefficient was statistically significance since the P-value is 0.000 which is less than the ( $\alpha$  - level) of 0.05. Furthermore, the results of the F - statistics of the regression model has a significant level of (0.000) which is less than  $\alpha$  - level of 0.05; hence, this is an indication that our regression model is an important better fit to predict the effect of electronic surveillance on the workgroup cohesion. Thus, we rejected the null

b. Predictors: (Constant), Electronic surveillance

hypothesis and concluded that electronic surveillance has significant effect on the workgroup cohesion.

 $H_{03}$ : Electronic surveillance does not have significant effect on workgroup productivity

### **Descriptive Statistics**

	Mean	Std. Deviation	N
Workgroup Productivity	4.3381	1.11295	352
Electronic surveillance	4.1875	1.16651	352

#### **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Err of the Est
1	.776a	.602	.601	.70277

a. Predictors: (Constant), Electronic surveillance

#### **ANOVA**<sup>a</sup>

Mode	21	Sum of Sqs	df	Mean Square	F	Sig.
1	Regression	261.910	1	261.910	530.306	.000b
	Residual	172.860	350	.494		
	Total	434.770	351			

a. Dependent Variable: Workgroup Productivity

b. Predictors: (Constant), Electronic surveillance

#### Coefficients<sup>a</sup>

		Unstd Coefficients		Std Coefficients		
Mo	odel	В	Std. Error	Beta	t	Sig.
1	(Constant)	1.237	.140		8.852	.000
	Electronic surveillance	.741	.032	.77	6 23.028	.000

a. Dependent Variable: Workgroup Productivity

**Discussion**: Results on test of hypothesis three indicated that electronic surveillance has effect on workgroup productivity as shown by the mean values 4.3381 and 4.1875 from the descriptive statistics. The results of the t - statistics showed that the coefficient was statistically significance since the P-value is 0.000 which is less than the ( $\alpha$  - level) of 0.05. Furthermore, the results of the F - statistics of the regression model has a significant level of (0.000) which is less than  $\alpha$  - level of 0.05; hence, this is an indication that our regression model is an important better fit to predict the relationship between Mobile banking and performance of SME. In addition, our result showing the Pearson product moment correlation analysis (t) value of 0.602 indicated strong positive relationship between variables. Thus, we rejected the null hypothesis and concluded that electronic surveillance has significant effect on workgroup cohesion.

 $H_{04}$ : Electronic surveillance does not have significant effect on workgroup innovativeness

#### **Descriptive Statistics**

	Mean	Std. Deviation	N
Workgroup Innovativeness	4.1648	1.19167	352
Electronic surveillance	4.2813	1.06104	352

#### **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Err of the Est.
1	.707a	.500	.498	.84419

a. Predictors: (Constant), Electronic surveillance

#### **ANOVA**<sup>a</sup>

Mo	del	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	249.015	1	249.015	349.420	.000b
	Residual	249.428	350	.713		
	Total	498.443	351			

a. Dependent Variable: Workgroup Innovativeness

#### Coefficientsa

		Unstand	Unstandardized			
		Coeffi	Coefficients			
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.766	.187		4.091	.000
	Electronic surveillance	.794	.042	.707	18.693	.000

a. Dependent Variable: Workgroup Innovativeness

**Discussion**: Results on test of hypothesis three indicated that electronic surveillance has effect on workgroup innovativeness as shown by the mean values 4.1648 and 4.2813 from the descriptive statistics. The results of the t – statistics showed that the coefficient was statistically significance since the P-value is 0.000 which is less than the ( $\alpha$  – level) of 0.05. Furthermore, the results of the F – statistics of the regression model has a significant level of (0.000) which is less than  $\alpha$  – level of 0.05; hence, this is an indication that our regression model is an important better fit to predict the relationship between Mobile banking and performance of SME. In addition, our result showing the Pearson product moment correlation analysis (r) value of 0.500

b. Predictors: (Constant), Electronic surveillance

indicated strong positive relationship between variables. Thus, we rejected the null hypothesis and concluded that electronic surveillance has significant effect on the innovativeness of workgroup members.

#### 4.2 Summary of Findings

The Value of P for Hypotheses 1, 2, 3 and 4 were 0.000 according to the SPSS result. This demonstrates that the impact of electronic monitoring on the performance characteristics of the employees studied is substantial, but to varying degrees. Results showed that;

- i. With a substantial positive contribution (P = 0.000), the research concluded that organizations may benefit from electronic surveillance in detecting and controlling workers' unproductive conduct in the workplace, which in turn leads to inefficient organizational practices.
- ii. The research concluded that organizations may improve teamwork by using electronic monitoring. There was a statistically significant positive influence (P=0.000).
- iii. Also, the research found a correlation between electronic surveillance and groups' innovativeness. Consequently, there is beneficial effect of electronic monitoring on the innovativeness of workgroups (P = 0.000, indicating a significantly positive impact).
- iv. Finally, the study found that at P =0.000, electronic surveillance positively contributes to workgroup productivity

#### 5. CONCLUSION AND RECOMMENDATIONS

The effective use of workplace monitoring has always been hampered by the concern of privacy violation. Nonetheless, this research concludes that electronic monitoring has a significant positive impact on worker, group, and organizational performance and should be promoted. Thus, the research suggests the following:

- i. Organizations should make sure that staff orientation and training programs provide a clear definition of what constitutes inefficient organizational practice as a behaviour control tool.
- ii. Prior to deployment, the organization should make sure that workgroup members are properly trained in the use of electronic surveillance.
- iii. Not every workgroup assignment should be monitored in order to allow members to exercise discretion, which may result in creative ideas.

iv. Prompt rewards for good work behaviour seen during monitoring are necessary. As a result, there is more continuity and eventually more output.

**Competing Interest:** The authors declare that there is no competing or conflicting interest in this manuscript.

#### REFERENCES

- Aktera, S., Evaa, T. P., & Hossain, S. (2017). Strategic Impact of High-Tech Monitoring on Employee Performance: An HRM Perspective. *World Review of Business Research*, 7(1), 45-57.
- Andhika, L. R. (2017). Pathology Bureaucracy: Reality of the Indonesian Bureaucracy and Prevention. *Jurnal Bina Praja*, 9(1), 101-114.
- Borman, W.C., & Motowidlo, S.J (1997). Task performance and contextual performance: Then meaning for personnel selection research. *Human Performance*, 10(2), 99–109
- Cascio, W. F., & Montealegre, R. (2016). How technology is changing work and organizations. *Annual review of organizational psychology and organizational behavior*, 3(1), 349-375.
- Chatterjee, S., Kar, A. K., & Mustafa, S. Z. (2021). Securing IoT devices in smart cities of India: from ethical and enterprise information system management perspective. *Enterprise Information Systems*, 15(4), 585-615.
- Chen, J. V., & Ross, W. H. (2007). Individual differences and electronic monitoring at work. *Information, Communication and Society*. 10(4), 489-505
- Douglas, S. A., & Mithal, A. K. (2012). *The ergonomics of computer pointing devices*. Springer Science & Business Media.
- Forsyth, D. R. (2010). Group Dynamics. Cengage Learning
- Gerstel, N., & Clawson, D. (2018). Control over time: Employers, workers, and families shaping work schedules. *Annual review of sociology*, 44(1), 77-97.
- Gichuhi, J. K., Ngari, J. M., & Senaji, T. (2016). Employees' response to electronic monitoring: The relationship between CCTV surveillance and employees' engagement. *International Journal of Innovative Research and Development*, 5(7), 141-150.
- Graham, S., & Wood, D. (2017). Digitizing surveillance: Categorization, space, inequality. In *Surveillance, crime and social control* (pp. 537-558). Routledge.

- Hackman, J. R., & Katz, N. (2010). Group behavior and performance. *Handbook of social psychology*, 2, 1208-1251.
- Hansson, S. O., & Palm, E. (Eds.). (2005). *The ethics of workplace privacy* (Vol. 50). P.I.E. Lang Publisher.
- Hogg, M. A. (2001). A social identity theory of leadership. *Personality and Social Psychology Review*, 5(3), 184-200.
- Hogg, M. A., & Reid, S. A. (2006). Social identity, self-categorization, and the communication of group norms. *Communication theory*, 16(1), 7-30.
- Hogg, M. A., & Smith, J. R. (2007). Attitudes in social context: A social identity perspective. *European Review of Social Psychology*, 18(1), 89-131.
- Hogg, M. A., & Vaughan, G. M. (2011). Social psychology (Sixth edition ed.). Pearson Education.
- Holland, P. J., Cooper, B., & Hecker, R. (2015). Electronic monitoring and surveillance in the workplace: The effects on trust in management, and the moderating role of occupational type. *Personnel Review*, 44(1), 161-175.
- Holman, D., Chissick, C., & Totterdell, P. (2002). The effects of performance monitoring on emotional labor and well-being in call centers. *Motivation and Emotion*. 26(1), 57-81
- Holt, T. J. (2012). Exploring the intersections of technology, crime, and terror. *Terrorism and Political Violence*, 24(2), 337-354.
- Johnson, D. W., & Johnson, F. P. (2013). *Joining together: Group Theory and Group Skills* (11th ed.). Allyn and Bacon.
- Kariuki, V. W. (2016). Effect Of Performance Monitoring and Employee Participation on Employee Engagement in Contact Centers: A Case Study of Kenya Power (Doctoral dissertation, PAC University).
- Kinnie, N. (2014). Human resource management and changes in management control systems. In *New Perspectives on Human Resource Management (Routledge Revivals)* (pp. 137-153). Routledge.
- Lieven, T., Mühlmeier, S., Henkel, S., & Waller, J. F. (2011). Who will buy electric cars? An empirical study in Germany. *Transportation Research Part D: Transport and Environment*, 16(3), 236-243.
- Miller, M. (2002). Absolute PC security and privacy. United States of America: Sybex.
- Myers, k. (2005). Workplace relationship and membership negotiation. In S. W. Smith, & S. R. Wilson (Eds.). New Directions in Interpersonal Communication Research (135-158). Sage, Los Angeles, USA.

- Odhiambo, D. A. (2016). Electronic workplace surveillance and performance of manufacturing firms listed in the *Nairobi Securities Exchange* (MBA, A Research Project Paper, University of Nairobi).
- Otten, S. (2005). The ingroup as part of the self: Reconsidering the link between social categorization, ingroup favoritism, and the self-concept. In *The self in social judgment* (pp. 241-265). Taylor and Francis Inc.
- Ozowa, V., Aba, J., & Aba, T. (2016). Impact of electronic surveillance systems on theft and mutilation in Francis Suleimanu Idachaba Library, University of Agriculture Makurdi. *Library Philosophy and Practice, e-journal*, 1–17.
- Panina, D. Y. (2002). Effects of group cohesiveness and procedural fairness context on the performance and stress of electronically monitored individuals. Rutgers The State University of New Jersey, School of Graduate Studies.
- Reagan, J. R. (2017). The impact of electronic monitoring and disruptive innovation on recidivism rates in federal prisons: A secondary data analysis. *Biometrics & Biostatistics International Journal*, *5*(4), 125-130.
- Rogers, E. M., Singhal, A., & Quinlan, M. M. (2014). Diffusion of innovations. In *An integrated to communication theory and research* (pp. 432-448). Routledge.
- Rosenbloom, D. H., Kravchuk, R. S., & Clerkin, R. M. (2022). *Public administration: Understanding management, politics, and law in the public sector.* Routledge.
- Roseth, C. J., Saltarelli, A. J., & Glass, C. R. (2011). Effects of face-to-face and computer mediated constructive controversy on social interdependence, motivation, and achievement. *Journal of educational psychology*, 103(4), 804.
- Schleifer, L. M., Galinsky, T. L., & Pan, C. S. (1996). Mood disturbance and musculoskeletal discomfort under different levels of VDT data entry performance. *International Journal of Human-Computer Interaction*. 8(4), 369-384.
- Schneider, W. (2017). Training high-performance skills: Fallacies and guidelines. In *Simulation in Aviation Training* (pp. 211-226). Routledge.
- Simukali, C. M. (2019). *Multi factor authentication access control for student and staff based on RFID, barcode and GIS* (Doctoral dissertation, University of Zambia).
- Thoben, K. D., Wiesner, S., & Wuest, T. (2017). Industrie 4.0" and smart manufacturing-a review of research issues and application examples. *International journal of automation technology*, 11(1), 4-16.
- Tounsi, W., & Rais, H. (2018). A survey on technical threat intelligence in the age of sophisticated cyber attacks. *Computers & security*, 72, 212-233.

- Turner, J. C. (2005). Explaining the nature of power: A three-process theory. *European journal of social psychology*, 35(1), 1-22.
- Turow, J. (2017). The aisles have eyes: How retailers track your shopping, strip your privacy, and define your power. Yale University Press.
- Vorvoreanu, M., & Botan, H. C. (2000), Examining electronic surveillance in the workplace. *Proceedings of the International Communication Association*, Acapulco, Mexico.
- Wageman, R. (2014). The meaning of interdependence. In *Groups at work* (pp. 197-217). Psychology Press.
- Weckert, J. (2005), *Electronic monitoring in the workplace*. Pennsylvania; Idea Group Publishing.
- Wood, G. (2001). Monitoring employee use. *Proceedings of the International Bar Association Conference* 29 October 2001, Cancun, United States of America.
- Yamoah, E. E. (2014). Monitoring Employee Performance at the Workplace. *Developing Country Studies*. Albany.
- Zweig, D., & Webster, J. (2002). Where is the line between benign and invasive? An examination of psychological barriers to the acceptance of awareness monitoring systems. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 23(5), 605-633.

## QUESTIONNAIRE ON ELECTRONIC SURVEILLANCE AND WORKGROUP PERFORMANCE (A STUDY OF SELECTED MICROFINANCE BANKS IN RIVERS-STATE)

**Instruction:** Tick (v) to fill the appropriate space or box applicable to you. Please carefully read through the statement below and give honest response. The abbreviation as used for the statement means: SA = strongly agree; A = Agree; U = Undecided; D = Disagree; SD = Strongly disagree

STATEMENT OF ITEMS			A	U	D	SD
Contri	butions of Electronic Surveillance on the					
Reduct	tion of Wasteful Organizational practices					
1.	Electronic surveillance helps reduce					
	unnecessary use of organizations' resources.					
2.	Workgroup members are more conscious					
	about waste when they know they are being					
3.	Surveillance improves the efficiency of					
	resource allocation within the organization.					
	Contributions of Electronic Surveillance on					
	Workgroup Cohesion					
4.	Electronic surveillance fosters trust among					
	workgroup members.					
5.	Workgroup members collaborate more					
	effectively when electronic surveillance is in					
6.	Electronic surveillance has a positive effect					
	on team unity.					
Contri	butions of Electronic Surveillance on					
7.	Electronic surveillance increases my					
	productivity at work.					
	Electronic surveillance helps the workgroup					
meet performance targets.						
9.	The monitoring of work group improves					
	workers' overall output.					
Contri	butions of Electronic Surveillance on					
Workg	roup Innovativeness					
10.	Electronic surveillance stifles creativity and					
	innovation among workgroup members.					
11.	Workgroup members are more likely to					
	explore new ideas in a monitored					
	environment.					
	The presence of electronic surveillance					
	supports the innovation process in my					