

ISSN 2278 - 0211 (Online)

Employees' Response to Electronic Monitoring: The Relationship between CCTV Surveillance and Employees' Engagement

John Kimani Gichuhi

Lecturer, Africa Nazarene University, Ongata Rongai, Kenya

Dr. James Mark Ngari

Assistant Professor, Department of Management, United States International University Africa, Nairobi City, Kenya

Dr. Thomas Senaji

Assistant Professor, Department of Management, Kenya Methodist University (KEMU), Kenya

Abstract:

Organizations use various methods to control employees' activities to ensure increased productivity, performance and profitability. The different methods used by employers to monitor employees will certainly affect how they are engaged in the workplace. Through employee engagement in the workplace there is assurance that employees are committed to their organization's goals, values, motivated to add to organizational achievements, and are able at the same time to improve their individual sense of well-being. Among the surveillance methods used is CCTV surveillance. However, the relationship between CCTV surveillance and employees' engagement has been scarcely researched. The study aimed to determine the relationship between CCTV surveillance and employees' engagement in commercial banks in Kenya. In conducting the study, a correlational research design was adopted. Out of the population of banks employees, a sample of 384 employees, randomly selected was used as a representation of the population. Structured questionnaires were used for data collection purposes. Reliability of the questionnaire was tested by a pilot questionnaire and also by use of Cronbach's alpha. Validity was ensured through thorough literature review and discussion with experts. The collected data was coded and analyzed by use SPSS (Statistical Package for the Social Science). Means, correlations and regression analysis were used to establish the relationship between electronics monitoring and employee engagement. The study established that there is a positive correlation between CCTV monitoring and employees' engagement. The null hypotheses was not supported which is a further confirmation that there is a statistically significant relationship between web CCTV monitoring and employee's engagement. Consultation and involvement of employees is therefore necessary for any organization intending to introduce CCTV surveillance. Management should also create an environment of trust and the outcome of any surveillance should be used for constructive purpose as these will create a good ground for positive engagement. Future studies could focus on other methods of electronic monitoring other than the ones that has been considered in this study. In addition, there could be studies on how acceptable legal structures could be developed to suit the use of electronic surveillance systems.

Keywords: Electronics monitoring, electronic surveillance, employees' engagement, commitment, closed circuit television monitoring, and control

1. Background of the Study

With the increasing use of Information Technology in organizations, concerns over security and privacy issues have become a major concern among the stakeholders (Randeree, 2006). This has made employers to develop capability and implementation of surveillance of employees in the workplace. Companies have an obligation to protect their trade secrets from disclosure by disgruntled and greedy employees (Bressler, & Bressler, 2014). They also have a duty to protect their good names and reputations from unauthorized employees' communications with outside parties, and even other employees who may take advantage (Halpern, Reville, & Grunewald, 2008). It is a prime duty of the management to ensure that employees execute their responsibilities by working full time on their assigned duties. In this regard, any management that fails to oversee its workforce to ensure that employees are not spending valuable company time, for which they are compensated on personal communication and online business, is failing in its mandate (Halbert, & Ingulli, 2011). This may lead to reduced employee productivity and company performance.

A concrete understanding of employee behaviors is necessary in the modern workplace in order to assist managers to effectively perform the control function of management (Griffin, 2012). Control systems and mechanisms include elements such as policies and

procedures which are categorized into outcome controls or behavior controls (Warkentin, & Willison, 2009). Control systems impose boundaries on employee behaviors and actions in the workplace (Smith, Carayona, Sandersa, Lim, & Legrande, 2012). Management monitors employees to improve and increase productivity and protect corporate resources (Epstein, & Buhovac, 2014).

It is important for organizations to control, restrict and direct employee behaviors, decisions and actions in order to harmonize and coordinate the behaviors towards achievement of individual and organizational goals (Javicijevic, 2012). The process of electronic surveillance in management pays attention to three key areas including employee performance, use of computer and information technologies and employee behaviors in relation to utilization of resources (Büyük & Uğur, 2012). Organizations watch over their employees in order to protect the organizational information and intellectual assets, improve productivity and avoid liabilities by preventing inappropriate use of company computers by employees (Determann & Sprague, 2011). This is made possible by electronic tools such as cameras, websites and emails, rationed internet and electronic clock-in systems.

According to Reilly, (2010), knowing there is a CCTV camera in the workplace provokes a psychological response either negative or positive; similarly, someone working in an overly and highly surveilled environment is provoked into a psychological response to the mere presence of cameras. Employees feel that while a certain level of monitoring and surveillance in the workplace is acceptable for purposes of security and prevention of computer misuse, the use of CCTV encroach on their privacy and some see it as spying and undermining the trust relationship between employer and employee (Buyuk & Ugur, 2012).

Banking industry has recorded tremendous development in technology in Kenya (Gikandi, & Bloor, 2010). The force behind this transformation of the banking industry is innovation in information technologies and banking and money transfer tools such as M-Pesa (Aker, & Mbiti, 2010, Okiro, & Ndungu, 2013). The advancement in Technology has played an important role in improving service delivery standards in the Banking industry in Kenya. In its simplest form, Automated Teller Machines (ATMs) and deposit machines now allow consumers carry out banking transactions beyond banking hours. Mobile banking on the other hand allows individuals to check their account balances and make fund transfers using their mobile phones. Electronic monitoring in Kenya is used in border control (Mau, & Guyo, 2014), in medicine and research (Sharma, Ndisha, Ngari, Kipruto, Cain, Sitienei, & Bloss, 2015) in power management (Kiere, 2015) among other areas. Banks are also using information technology such biometric check-in systems, CCTV monitoring, web and internet surveillance and control to monitor their employees in Kenya although, very little has been documented on this area.

Electronic monitoring that has a positive perception could lead to better outcomes with regards to the input that is put by employees. In parallel, employees desire greater meaning and personal development from their work (Brad Shuck, Rocco, & Albornoz, 2011) a situation that suggests that employee engagement is a key factor in retaining employees and enhancing their productivity. Employees' engagement in the workplace may be dependent on how they perceive the level of control that employers have over them. More control may mean employees have lesser space to express themselves hence negative perception and vice versa.

1.1. Research Objective and Hypothesis

The objective of the research was to determine whether CCTV surveillance influences employees' engagement in the commercial banks in Kenya. This lead to the hypothesis-H: There is no relationship between Closed Circuit Television surveillance and bank employees' engagement

1.2. Scope and Significance of the Study

The study mainly focused on employees of 46 commercial banks in Kenya (CBK, 2015). The study utilized a random sample of 384 employees selected from various branches of the commercial banks from the whole country. The study clarified the effect of use of electronic monitoring and surveillance on engagement of employees in Kenyan commercial banks sector. This served as a foundation for future studies on this research area. It also aimed at contributing to the observations and conclusions of the four theories used in the study. The study built up on available knowledge on use of electronic monitoring in organizations hence providing knowledge to management researchers and academicians. The findings of this study were be of practical importance to bank managers in the Kenyan commercial banking industry and organizations in other industries by providing practical insights regarding use of electronic monitoring to achieve positive organizational outcomes. The study informed the decisions of banking institutions and other firms on how to adopt electronic monitoring systems.

2. Theories Related to the Study

2.1. Panopticon Surveillance Theory

A useful metaphor in the understanding of the impact of electronic monitoring in the workplace is Foucault's use of Benthem's panopticon prison, in which a central tower could view all cells (Holland, Jeffrey, Cooper, & Hecker 2015). In his argument the prisoners could never be sure if or when they were being watched. Foucault saw the panoptical effect as an example of discipline at work and the best way to manage, as those surveilled would feel under constant authoritative watch and thus manage their own behaviours (Bauman & Lyon 2013) Surveillance is a technology that has been designed and is being continually revised to serve the interests of decision makers within the government and the corporate world (Fuchs, 2011). Workplace surveillance is the surveillance of the spaces where work is conducted to ensure that workers conduct the duties that have been assigned to them and it aims at ensuring that employees do not use work time as idle time, but as surplus value generating activity (Fuchs, 2013). This theory shows how management do not trust their subordinates if one was to consider the arguments made by Strickland (1958) and Kruglanski

(1970), Zureik (2003) about close monitoring and surveillance is undertaken in the work place. This position has been compounded further with the development of electronic monitoring techniques, where the level of monitoring and surveillance is intensive, continuous and unrelenting Adler (2001). Monitoring and surveillance in the work place is all about empowerment and disempowerment which according to Botan (1996) is derived from the ability of technology, but more significantly, the management policy and worker perception. According to Zuboff (1988) it is management that determines the policies and various electronic monitoring techniques and is often a reflection of management's philosophy towards the worker that determines the extent and use of the electronic panopticon. For workers, the perception alone that one is being monitored, even if it is not actually occurring, can be a powerful tool for management and can have serious potential impacts for the individual

2.2. Theory of Reasoned Action (TRA)

The theory of reasoned action (TRA) was formulated by Ajzen and Fishbein in 1980 (Ajzen, I., & Fishbein, M. 2000) as a result of attitude research from the Expectancy Value Models (Ajzen, I. 2011). The Theory of Reasoned Action postulate that in any organisation there are moral norms (Landridge, Sheeran, & Connolly, 2007) which refer to people's sense of obligation to perform ethical behaviours and not perform unethical behaviours. There is need for the management to consider ethicality of the monitoring they are addressing in the organisation. Engagement will ensure that each party both the employees and employers engage in their practice ethically in the organisation (AL-Majali, 2011).

It is a theory that predicts deliberate behavior, because behavior can be deliberative and planned. Theory of Reasoned Action suggests that a person's behavior is determined by his/her intention to perform the behavior and that this intention is, in turn, a function of his/her attitude toward the behavior and his/her subjective norm (Hale, J. L., Householder, B. J., & Greene, K. L. 2002). The theory of planned behavior holds that only specific attitudes toward the behavior in question can be expected to predict that behavior (Ajzen, I., & Fishbein, M. 2000).

Theory of Reasoned Action has received significant attention in the literature of information technology and information system acceptance. It is a theory that leads to the development of Technology Acceptance Model (TAM) that focuses on the attitudes and explains the intentions of the user of a specific technology or service and later translated into a Theory of Planned Behaviour (TPB) (Nasri & Charfeddine, 2012). In a study conducted by Mzoughi, Ahmed & Ayed (2010), it is established that, TRA has perceived cohesion and social identity, psychological and motivational factors that explain how a community can participate in social activities. It further states that, self-image congruence acts as a catalyst to social identity that fully mediates the effect of social intentions and its impact on its attitudes.

Alam et al. (2012) supports that, in an empirical study carried out on Malaysian Malay based small/medium enterprise (SMEs) which established that TRA has been employed to measure the factors implicating information and communication technology (ICT) adoption. Moreover, the use of ICT depends on the attitudes and social norms in an organisation. Consequently, these issues apply in banks adoption of better policies and practices in embracing ICT as it will help in the expansion of their coverage, reduction of operating cost and information sharing and availability. According to AL-Majali (2011) TRA has been successful in the adoption of internet banking in the financial institutions as a way of embracing emerging technologies in ICT. In Jordan, TRA is said to have successfully been used to predict the behaviour and intentions of internet banking services (Abbad, 2013). Therefore, TAM and TRA are conversely interdependent and, as a result, can be used to draw instincts in the entire research due to their history and application by different scholars across the globe. In addition, they both have an ICT background as they have been used to test how adoption of emerging technologies in different work setting has been successful. To sum up, the Banks ICT adoption in Kenya can distinctly be examined using these models due to their proficiency that is dictated in literature by renowned scholars.

TRA model has received several criticisms in its applications of predicting behaviours and intentions. In this study the model looks at the attitudes of the employees in banks where they are monitored by electronic devices so as to measure their engagement in their different tasks that they are completing. The criticism of TRA clusters around three main issues that entail; the relative relationship among attitudes as well as normative beliefs, whether TRA components are adequate predictors of intentions along with behaviours, and the restricted range of meaning encompassed by the theory (Landridge et al., 2007). So as to address the criticisms in the theory of reasoned behaviour some, variables could be added so as to enhance their predictive use. These variables entail belief salience which refers to the most salient belief that determines an individuals' attitude at a particular point in time.

Consecutively, in any organisation there are moral norms (Brinkmann, 2004). This refers to people's sense of obligation to perform ethical behaviours and not perform unethical behaviours, and should provide support for, and have an influence on, behaviours that have a moral or ethical dimension. Moral norms work in parallel with attitude, subjective norm and perceived behavioural control (Landridge et al., 2007). The TRA model does not advocate much about being ethical in the organisation. In our study, there is need for employers being ethical as some of the uses of technology such as CCTV require the consent of employees where they are notified that they are being observed and given the reason for being observed. This is an ethical part of electronic monitoring and will go ahead towards ensuring that the employees are supportive of the management use of electronic monitoring.

3. Review on CCTV Monitoring of Employees

The monitoring of employees through CCTV entails the observation of the movement of employees through video cameras among other electronic devices. The employer uses this mode of monitoring to assess whether the employees use their time and resources in the work place in the right manner (Miller, 2013). Nonetheless, lack of engagement while initiating such a mode of monitoring has at times led to discomfort among employees who might see it as lack of trust in what they undertake and also a breach of their privacy.

As a result, the study looks at how engagement with employees by the management can aid in smooth implementation of CCTV's in the organisation and everyone is comfortable.

Smith et.al, (2012) in their article "Employee stress and health complaints in jobs with and without electronic performance monitoring", argued that the CCTV cameras are a passive addendum to policing, as advances in camera and surveillance technologies now include real time voice contact. A questionnaire survey of staff in telecommunications firms representative of each region in America examined job stress in directory assistance, service representative as well as clerical jobs with specific emphasis on the impact of electronic monitoring of job effectiveness, satisfaction in addition to employee health. The findings showed that the CCTV cameras are watched around the clock, sometimes by police officers in control rooms, or what has been termed as room of control. The control rooms are sometimes operated by outside security organizations and occasionally by a combination of both police and private security workers. In the majority of cases, the CCTV footage is controlled and monitored by non-law enforcement individuals, working for the local authority, local shops, or shopping centre employees. The results of the survey revealed that employees who had their performance monitored by CCTV thought of their working conditions as additionally stressful, and reported increased levels of job boredom, psychological tension, anxiety, depression, frustration, health complaints and fatigue. It is postulated that these particular effects may be related to changes in job design due to electronic CCTV monitoring. The study focused more on the impact the CCTV has on employees but ignored the benefits the employers have when applying monitoring through CCTV in the workplace. Our study assesses the impacts that CCTV has on both the employee and employer and how each one of them perceives the monitoring.

In their study "Dimensions of employee privacy" Ball, Daniel, M., and Stride, (2012), it goes past the more frequent involvement in information privacy to recognize other notions of privacy in the workplace. The objective of the paper was to investigate how the additional concepts of privacy related to key demographic and employment features and how data protection training, often instigated as a way of highlighting and addressing issues relating to privacy of customers' data, is related to employees' notions of their very own workplace privacy. The study was undertaken in two telephone call centers given that they offered a functioning environment where staffs are highly monitored and hence they are likely to be concerns associated with employee privacy. The research is exploratory in nature plus adopts a mixed method approach according to a questionnaire survey that was accompanied by semi-structured, qualitative face to face interviews. The findings revealed that effective data protection training are associated with increased concern for their own privacy by means of concern for personal information privacy, plus that inclusion of data protection concerns in performance reviews is associated their concern for workplace privacy. The study focuses on privacy in the workplace focus on the simplistic notion of information privacy. Our study goes beyond such studies and provides empirically-based evidence of multiple dimensions of privacy operant in a single, real-world workplace setting with a specific focus on CCTV. It additionally provides empirical insight to the previously unexplored issue of the association between CCTV monitoring and employees' notions of their own privacy.

Agustina & Coudert (2013), in their article, "Limits and challenges of the expanding use of covert CCTV in the workplace in Spain-beyond jurisprudential analysis", assessed influence of CCTV monitoring. The paper evaluated the expanding use of legitimate hidden CCTV in the workplace in Spain. By examining the recent evolution of the jurisprudence in the field, researchers focused on the legal motives that supported court decisions from 2000 to the present and include some criminological and ethical perspectives to better comprehend not only the legal rationale, but additionally some other collateral effects that employers must take into account in implementing CCTV surveillance. To investigate the recent evolution of the jurisprudence on covert CCTV at place of work in Spain in order to comprehend the reasoning behind such evolution, the researchers begun from the very first constitutional court decision through which that concern was addressed the Spanish Constitutional Court decision STC 186/2000. The results of the research done by Agustina & Coudert (2013) showed that one of the central argument that could present an exceptional case is where an employer may find when there is a continuous situation and the only way to stop it is by discovering the wrongdoers in action.

Agustina & Coudert (2013) in their research omit an accountability check of the employer assessment of the above-mentioned exceptional case which cannot only be left to Courts, but ought to be integrated to internal processes of companies. This study intends to look at a platform where in order to ensure good faith in working relationships the employer can check the compliance with employees' obligations; additionally employees should be given some means to do the same through consultative procedures. Most of the above studies were not concerned about the reaction of employees. They did not bother to check the effect of monitoring on commitment and engagement of employees. This is the gap that the study aims to fill with looking at the relationship of CCTV monitoring and employees engagement in a banking scenario.

4. Research Gaps

Employee engagement is closely linked with organizational performance outcomes. Engaged employees are emotionally attached to their organization and highly involved in their job with a great enthusiasm for the success of their employer, going extra mile beyond the employment contractual agreement (Kompaso, & Sridevi, 2010). Employee reactions to monitoring matter because organizations have a strong stake in maintaining both employee motivation and wellbeing. The presence or absence of performance monitoring and the way in which monitoring is conducted influence the amount of effort that employees address to different tasks. Monitoring plays a role in effective supervision, optimal organizational structure, and good teamwork. As technology advances and changes the way that employees are monitored, there is need to understand how employees view these new technological machineries that have been put in their workplace and how this in turn affect their engagement. The study focused on the relationship between electronic surveillance and employee engagement in Kenya commercial banks

5. Research Methodology

The study adopted a correlational research design. Correlation Research determines whether a relationship or association exists between two or more variables, but cannot determine if one variable causes another (Creswell, 2012). In correlational research, the researchers do not manipulate any of the variables or put the participants into groups. Since the study involved variables that were not measurable quantitatively, the researcher and the respondents actively participated in the creation of data for the research that was collected through questionnaires.

For the purposes of the study, the target population was the 42,245 employees of all 46 commercial banks in Kenya. This figure included an approximate of all current employees of banks in Kenya. Banks world over employ electronics monitoring and hence provides a good population of the study. The almost similar experience faced by bank employs also made it good for the study. A sample size for proportion is given by $n = p(1-p)\left(\frac{z}{E}\right)^2$ (Robert *et. al.*, 1999 and Robert, Douglas & William 1999) Where n is the minimum sample size, p is the hypothesized prevalence of risk factors in this case the hypothesized figure is 50%, z is the Standard normal deviation at 5% confidence interval (1.96) and E is the degree of precision, set at 5%. Hence $n = 0.50(0.50)\left(\frac{1.96}{0.05}\right)^2$ which gives 384

Structured questionnaires were used in this study for the purpose of collecting primary data. The questionnaires were used for the following reasons: their potential in reaching out to a large number of respondents within a short time, able to give the respondents adequate time to respond to the items, offers a sense of security (confidentiality) to the respondents and it is an objective method since there is no bias resulting from the personal characteristics of an interview. To establish the reliability of the research instruments, the researcher carried out a pilot test of the instruments using a group of employees from 30 banks with the same characteristics as the ones targeted in the study. The pilot study was done to test whether the aim of the study could be achieved, if there any ambiguity in any item, if the instrument could elicit the type of data anticipated, whether the research objectives were being appropriately addressed thus enhancing reliability and validity, and lastly to indicate whether the type of data collected could be meaningfully analyzed in relation to the stated research questions and objectives. The participants were encouraged to make comments and suggestions concerning the instructions in the questions, clarity of the questions and relevancy of the questions to ensure the reliability of the instruments. Once the questionnaires were received, the data was coded and analyzed. The result gave a Cronbach alpha of 0.756 which was good enough.

To test whether results from different banks differed in terms of the employees' perception, Spearman's rank correlation was run and the correlation coefficient and p-value examined. Then, Kruskal–Wallis, which is a non-parametric method, was used to test whether the independent variables had a statistically significant relationship with the dependent variable. In this case, it was necessary to check if CCTV monitoring had a significant negative relationship with employee engagement as postulated in the hypotheses. Aside from the correlation and Kruskal-Wallis tests, regression tests (simple linear and multiple) were done. To test the hypothesis relating to effect of CCTV monitoring on engagement, we estimated model on our data sample by regressing engagement on the independent variable CCTV monitoring.

6. Data Presentation, Analysis and Interpretation

6.1. Demographic Information

Information was sought on the respondents' demographic characteristics such as organization in which the respondents worked or to which they were affiliated. Gender, age, level of education and the duration for which the respondents had served in the specified organization or bank were also targeted for analysis. The response rate and reliability of the data was also addressed.

Gender		What is your age bracket?				
		20-30 years	31-40 years	41-50 years	60 years and above	Total
Male	Count	117	70	15	1	203
Female	Count	101	65	15	0	181
	Count	218	135	30	1	384

Table 1: Gender by Age Bracket Research Data (2016)

The results shown on Table above indicate the spread of gender across the four different age brackets with more males than females found in the age brackets of 20-30 years and 31-40 years. Overall, the age bracket of 20-30 accounts for the majority 218 of all the respondents. Fewest respondents, male or female, 31, were aged 41 years and above. This is an indication that employees there are more young people employed in the bank.

6.2. Factor Extraction for CCTV Monitoring

Principal component method of factor analysis was used to extract factors whose Eigen values exceeded 1(factors with maximum loadings). Table 2(a) shows the KMO and Bartlett's Test and Determinant test results for CCTV monitoring.

Kaiser-Meyer-Olkin Measure	.727			
Bartlett's Test of Sphericity	1266.027			
	Df			
	.000			

Table 2(a): KMO and Bartlett's Test for CCTV Monitoring

Determinant = .035 Research Data (2016)

The results shown in Table 2(a) indicate KMO and Bartlet's Test result of 0.727. This is above the cut-off point of 0.6, and shows that the sample was adequate. It has also passed the test for suitable case to variable ratio for factor analysis. The determinant value, 0.035, also indicates good inter-item correlation.

6.3. Variance

Factor extraction gave an outcome of 4 factors with component loadings or Eigen values above 1, and the percentage of variance explained. Table 2 (b) shows the components extracted and the variance they explained all together.

6.3.1. Total Variance Explained in CCTV Monitoring

Component		Initial Eigen v	alues	Rota	Rotation Sums of Squared Loadings			
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %		
1	3.450	28.748	28.748	2.299	19.159	19.159		
2	1.940	16.169	44.917	2.102	17.519	36.678		
3	1.337	11.141	56.058	1.847	15.395	52.073		
4	1.002	8.347	64.405	1.480	12.332	64.405		
5	.913	7.612	72.017					
6	.775	6.460	78.477					
7	.580	4.836	83.313					
8	.509	4.244	87.558					
9	.443	3.693	91.251					
10	.386	3.216	94.467					
11	.357	2.976	97.444					
12	.307	2.556	100.000					
	Extraction Method: Principal Component Analysis.							

Table 2(b): Research Data (2016)

The results in Table above indicate that the 4 factors extracted from CCTV monitoring accounted for 64.405% of the variance. The factors extracted included integrity and trust, information, commitment, and enthusiasm.

7. Relationship between CCTV Monitoring and Employee Engagement

Hypothesis three had stated that CCTV monitoring has no relationship with employee engagement. Simple linear regression analysis was used to test the hypothesis. The results are contained in Table below.

7.1. Regression Test for the Relationship between CCTV Monitoring on Employee Engagement

Model	R	R	Adjusted R	Std. Error of the	Change Statistics				
		Square	Square	Estimate	R Square	F	df1	df2	Sig. F
					Change	Change			Change
1	.345 ^a	.119	.116	.793	.119	50.018	1	371	.000

Table 3(a): Model Summary

a. Predictors: (Constant), CCTV Monitoring

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31.475	1	31.475	50.018	$.000^{b}$
	Residual	233.458	371	.629		
	Total	264.933	372			

Table 3(b): Anova

a. Dependent Variable: Employees' Engagement

b. Predictors: (Constant), CCTV Monitoring

Research Data (2016)

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	В	Std. Error	Beta		
1 (Constant)	2.769	.177		15.645	.000
CCTV Monitoring	.403	.057	.345	7.072	.000

Table 3: (c) Coefficients Source: Research Data (2016)

a. Dependent Variable: Engagement

The results in Table 3 indicate a correlation coefficient (R) of .345, coefficient of determination, $R^2 = .119$ and F = 50.018. CCTV monitoring system explained 11.9% of the variance in employee engagement, leaving 88.1% unexplained (explained by other factors). F statistic (50.018) was significant at p <0.01 explaining the fitness of the model. The standardized coefficients indicate that CCTV monitoring has a positive relationship with employee engagement is (Beta =0.345). The hypothesis is therefore not supported.

7.2. Equation

The regression equation for the relationship is as follows:

 $E = f(C \text{ and } \varepsilon)$

 $E = 3.582 + 0.345C + \varepsilon$

Where:

E = Employee Engagement

C= CCTV Monitoring

 ε = Error term

The equation implies that a unit change in CCTV monitoring would likely result in a change of 0.345 in the extent of employee engagement.

8. Hypothesis Test

The objective was to determine whether CCTV monitoring influences employees' engagement in the Kenyan commercial banks. The hypothesis was Closed Circuit Television monitoring has no relationship with bank employees' engagement. The test gave R= 0.250 and p-value =0.000 which means the hypothesis is not supported.

8.1. Why CCTV Monitoring should not be Used in a Bank

The study had sought to find out the respondents feeling on why the use of CCTV monitoring in a bank set-up would not be appropriate using an open ended question. The responses were collated and presented in Table below

Reason	Frequency	Percent
Interferes with individuals privacy	30	23.8
It shows lack of trust in the employees	10	7.9
It is expensive to maintain	9	7.1
It reduces staff freedom	9	7.1
They are not perfectly reliable or efficient for supervision	9	7.1
They are not perfect and are bound to fail or get damaged	8	6.3
It may not reflect fair conduct of the employee	7	5.6
It causes anxiety and tension at work place	6	4.8
It is time consuming	6	4.8
Others	32	25.4

Table 4: Why CCTV Monitoring should not be Used in a Bank

Many reasons were advanced by employees as to why CCTV monitoring should not be used. Some of these reasons are that it interferes with individual privacy, shows lack of trust in the employees, is expensive to maintain, reduces staff freedom and is not perfectly reliable among others. These reasons may confirm the intention of the proponent of Panopticon theory where a central tower could view all cells in this case employees. The desired effect is discipline at work and the best way to manage, as those under surveillance would feel under constant authoritative watch and thus manage their own behaviours (Bauman & Lyon 2013).

9. Summary Conclusion and Findings of the Study

The findings of the correlation analysis between CCTV monitoring and engagement indicate that there is a medium positive and statistically significant correlation between the two. The results imply that increase in the positive opinion on the use CCTV monitoring corresponds to positive increment on engagement.

10. Contributions of the Study

This study tested the hypotheses developed out of the existing literature on the effects of CCTV surveillance with data collected from bank employees. The findings present evidence that there is a positive relationship between CCTV surveillance and engagement. This has given credibility to the observation that workers would accept electronic monitoring so long as it is not misused (Stahl, Prior, Wilford, & Collins, 2004).

Based on the literature reviewed it is clear that organizations are taking electronic monitoring seriously. This has been driven by the organizations desire to safe guard their interest, to reduce misuse of assets and for security purpose. Management also want to have a record of what is taking place in the organization, an information that would come in handy in case of a law suit. However, it was also observed that electronic monitoring is a threat to privacy can lead to negative consequences on an individual, adversely affect the development and character of an individual and can also impede the development and maintenance of a healthy interpersonal relationship. The results from this study will make management consult more and involve employees as good use of electronic monitoring can improve employees' engagement. Employees' engagement will in turn lead to improved performance, quality of work done and productivity of the organization.

The results from this study give contribution to the body of knowledge on electronic monitoring and also employees' engagement. Whereas the past studies focused on the psychological effect of electronic monitoring, this study has introduced the element of employees' engagement to it. It is worth noting that most of the past studies were done in Europe, Asia and America. This study will bring into the body of knowledge observations from Africa.

11. Recommendations

Electronic monitoring is still evolving and therefore organizations can no longer ignore the subject. The need to use sophisticated surveillance and monitoring methods in the work place has gained more momentum due to terrorism and cyber-crime. It will therefore be important for any organization to invest more in this area. However, management cannot just take an arbitrary decision without consulting the employees as this would have negative consequences. Among the reasons cited by employees as to why care should be taken when using electronic monitoring are: it limits access to vital work related information, it leads to lack of trust, it is intimidating, can lead to micromanagement of employees, it can cause anxiety, tension and stress and that it interferes with proper flow of information.

12. Areas for Further Research

The study focused on only CCTV surveillance and with ongoing growth in technology and telecommunication industries many other methods are coming up every day and hence the need to study them. The study also looked at the relationship CCTV surveillance and engagement, however, there are many other areas such as motivation that are affected and which future studies should focus on.

Many Constitution and labour law provides that every person has the right to privacy which includes the right not to have information about their family or private affairs unnecessarily revealed, or the privacy of their communications infringed. The Employment Act, need to come with elaborate procedure on how CCTV should be used in work places without infringing on the right of employees. The governing structures such as the employees consent before installation, or rather the requirement to inform them of the devices are not in place. There is therefore need for further research on the development of legal framework to govern this important area of management.

13. References

- i. Abbad, M. M. (2013). E-banking in Jordan. Behaviour & Information Technology, 32(7), 681-694.
- ii. Agustina, J. R., & Coudert, F. (2013). Limits and challenges of the expanding use of covert CCTV in the workplace in Spain–beyond jurisprudential analysis. Innovation. The European Journal of Social Science Research, 26(1-2), 145-160.
- iii. Ajzen, I., & Fishbein, M. (2000). Attitudes and the attitude-behavior relation: Reasoned and automatic processes. European review of social psychology, 11(1), 1-33.
- iv. Aker, J. C., & Mbiti, I. M. (2010). Mobile phones and economic development in Africa. Center for Global Development Working Paper, (211).
- v. Alam, S. S., Jani, M. F., Omar, N. A., Hossain, T., & Ahsan, N. (2012). (2012) Empirical Study of Theory of Reason Action (TRA) Model for ICT Adoption among the Malay Based SMEs in Malaysia. Business Management and Strategy, , 3 (2), 43-53.
- vi. Alder, G. S. (2001). Employee reactions to electronic performance monitoring: A consequence of organizational culture. The Journal of High Technology Management Research, 12(2), 323-342.
- vii. AL-Majali, M. (2011). The Use of Theory Reasoned of Action to Study Information Technology

- viii. Ball, K., Daniel, E. M., & Stride, C. (2012). Dimensions of employee privacy: an empirical study. Information Technology & People, 25(4), 376-394.
- ix. Bauman, Z., & Lyon, D. (2013). Liquid surveillance: A conversation. John Wiley & Sons.
- x. Botan, C. (1996). Communication work and electronic surveillance: A model for predicting panoptic effects. Communications Monographs, 63(4), 293-313.
- xi. Bonta, J., Wallace-Capretta, S. M., & Rooney, J. (1999). Electronic monitoring in Canada. Ottawa: Solicitor General Canada.
- xii. Brad Shuck, M., Rocco, T. S., & Albornoz, C. A. (2011). Exploring employee engagement from the employee perspective: Implications for HRD. Journal of European Industrial Training, 35(4), 300-325.
- xiii. Bressler, M. S., & Bressler, I. (2014). Protecting Your Company's Intellectual Property Assets from Cyber-Espionage. Journal of Legal, Ethical and Regulatory Issues, 17(2), 1.
- xiv. Brinkmann, J. (2004). Looking at consumer behavior in a moral perspective. Journal of Business Ethics, 51(2), 129-141.
- xv. Büyük, K., & Uğur, K. (2012). Panopticon's electronic resurrection: Workplace monitoring as an ethical problem. Turkish Journal of Business Ethics, 5(10), 75-88.
- xvi. Creswell, J. W. (2012). Qualitative inquiry and research design: Choosing among five
- xvii. Dajani, M. A. Z. (2015). The Impact of Employee Engagement on Job Performance and Organisational Commitment in the Egyptian Banking Sector. Journal of Business and Management Sciences, 3(5), 138-147.
- xviii. Davenport, T. H. (2013). Process innovation: reengineering work through information technology. Harvard Business Press. approaches. . New York: Sage.
- xix. Davis, F. (2009). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly,, 13, 475-87.
- xx. Deci, E. L., & Ryan, R. M. (2000). The support of autonomy and the control of behavior. Higgins, E Tory [Ed], . 128-145.
- xxi. Deci, E. L., Connell, J. P., & Ryan, R. M. (1989). Self-determination in a work organization. Journal of Applied Psychology, 74, 580-590.
- xxii. Determann, L., & Sprague, R. (2011). Intrusive monitoring: Employee privacy expectations are reasonable in Europe, destroyed in the United States. Berkeley Tech. International Journal, 26, 979-1036.
- xxiii. Ellis, R., Gage, G. R., & Signor, T. (2004). A multi-tasked human resources and payroll accounting system. U.S. Patent Application . 12/444,983.
- xxiv. Epstein, M. J., & Buhovac, A. R. (2014). Making sustainability work: Best practices in managing and measuring corporate social, environmental, and economic impacts. Berrett-Koehler Publishers.
- xxv. Fuchs, C. (2011). New media, web 2.0 and surveillance. Sociology Compass, 5(2), 134-147.
- xxvi. Fuchs, C. (2013). Political economy and surveillance theory. Critical Sociology, 39(5), 671-687.
- xxvii. Gikandi, J. W., & Bloor, C. (2010). Adoption and effectiveness of electronic banking in Kenya. Electronic commerce research and applications, 9(4), 277-282.
- xxviii. Griffin, R. W. (2012). Fundamentals of management. Mason, OH: South-Western: Cengage Learning.
- xxix. Halbert, T., & Ingulli, E. (2011). Law and ethics in the business environment. Cengage Learning.
- xxx. Hale, J. L., Householder, B. J., & Greene, K. L. (2002). The theory of reasoned action. The persuasion handbook: Developments in theory and practice, 259-286.
- xxxi. Halpern, D., Reville, P. J., & Grunewald, D. (2008). Management and legal issues regarding electronic surveillance of employees in the workplace. Journal of business ethics, 80(2), 175-180.
- xxxii. 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.
- xxxiii. Hsu, C. L., & Lin, J. C. (2008). Acceptance of blog usage: The roles of technology acceptance, social influence and knowledge sharing motivation. Information & Management, , 45(1), 65-74.
- xxxiv. Janićijević, N. (2012). The impact of organizational culture on control of behavior in organizations. . Economic Themes, 50(3), 289-308.
- xxxv. Kompaso, S. M., & Sridevi, M. S. (2010). Employee engagement: The key to improving performance. International Journal of Business and Management., 5(12), p89.
- xxxvi. Kruglanski, A. W. (1970). Attributing trustworthiness in supervisor-worker relations. Journal of Experimental Social Psychology, 6(2), 214-232.
- xxxvii. Lampe, C., Vitak, J., & Ellison, N. ((2013, February)). Users and nonusers: Interactions between levels of adoption and social capital. In Proceedings of the 2013 conference on Computer supported cooperative work. (pp. 809-820). ACM.
- xxxviii. Landridge, D., Sheeran, P., & Connolly, K. J. (2007). Analyzing additional variables in the theory of reasoned action. Journal of Applied Social Psychology, 37, 1884 –1913.
- xxxix. Mau, M. W., & Guyo, W (2014). Effective electronic strategies on cross border migration control adopted by immigration authority in Kenya.
 - xl. Miller, J. S. (2013). High tech and high performance: Managing appraisal in the information age. Journal of Labor Research, 24 (3), 409-424.
 - xli. Nasri, W., & Charfeddine, L. (2012). Factors affecting the adoption of Internet banking in Tunisia: An integration theory of acceptance model and theory of planned behavior. Journal of High Technology Management Research, 23 (3) 1–14.

- xlii. Ogura, T. (2006). Electronic government and surveillance-oriented society. Theorizing surveillance, 270-295.
- xliii. Okiro, K., & Ndungu, J. (2013). The impact of mobile and internet banking on performance of financial institutions in Kenya. European Scientific Journal,9(13).
- xliv. Randeree, E. (2006). Knowledge management: securing the future. Journal of knowledge management, 10(4), 145-156.
- xlv. Reilly, S. (2010). The use of electronic surveillance and performance measures in the workplace: a qualitative investigation (Doctoral dissertation, Durham University).
- xlvi. Sharma, A., Ndisha, M., Ngari, F., Kipruto, H., Cain, K. P., Sitienei, J., & Bloss, E. (2015). A review of data quality of an electronic tuberculosis surveillance system for case-based reporting in Kenya. The European Journal of Public Health, 25(6), 1095-1097.
- xlvii. Smith, M. J., Carayona, P., Sandersa, K. J., Lim, S. Y., & Legrande, D. (2012). Employee stress and health complaints in jobs with and without electronic performance monitoring. Applied Ergonomics, 23 (1), 17-27.
- xlviii. Stahl, B. C., Prior, M., Wilford, S., & Collins, D. (2004). Electronic Monitoring in the Workplace: If People Don't Care, Then. Electronic Monitoring in the Workplace: Controversies and Solutions: Controversies and Solutions, 50.
- xlix. Strickland, L. H. (1958). Surveillance and trust1. Journal of personality, 26(2), 200-215.
 - 1. Warkentin, M., & Willison, R. (2009). Behavioral and policy issues in information systems security: the insider threat. European Journal of Information Systems, 18(2), 101.
 - li. Zuboff, S. (1988). In the age of the smart machine: The future of work and power. Basic Books.
 - lii. Zureik, E. (2003). 2 Theorizing surveillance. Surveillance as social sorting, 31.