**The Paradoxical Impacts of Electronic Performance Monitoring and Its Solutions**

***Alex Joy Palayoor1 & Dr. D. Mavoothu2***

1Research Scholar, School of Management Studies, Cochin University of Science and Technology

2Professor and Former Director, School of Management Studies, Cochin University of Science and Technology

**Abstract**

Because of the current scenario of rapid advancement of information technology and the resulting explosion in communication, a wide range of techniques and methods are used to monitor employees on the job. Employers concentrate on the teleological aspects of workplace monitoring such as increased productivity, safety at work and safety, quality, etc. The surveillance opponents, however, on the deontological angle, highlight the paradoxical impacts of monitoring such as an invasion of employee privacy leading to decreased mental and physical health, creativity, autonomy, and productivity. In this context, both the teleological and deontological aspects of electronic performance monitoring are significantly considered and as a win-win solution the roles of feedback, advance notice of electronic performance monitoring policies and practices, employee participation in monitoring system design and implementation and respect to employee perspective of monitoring are discussed.

Keywords: Electronic Performance Monitoring, Paradoxical impacts, Feedback, Advance Notice, Employee Participation, Respect to Employee Perspective.

**Introduction**

The development of computers and related technologies has greatly altered the nature of work and the working environment. This innovation allows companies to monitor their employees at their workplaces to improve efficiency and safety. The most widely used methods of employee monitoring are the use of CCTV cameras, internet monitoring, email monitoring, keystroke monitoring, biometric systems, phone tracking devices, activated badges, GPS-enabled location sensors, etc. The survey by American Management Association (AMA) reveals that approximately 80% of organizations are involved in some form of electronic monitoring, particularly the use of email, internet, or phone, and over 90% of the companies in the finance industry confirm that they are using any of these kinds of monitoring techniques (Indiparambil, 2017). The proponents of electronic performance monitoring claim the potential benefits are better productivity, safety and security, quality of products and services, employee behaviour, etc. However, paradoxically employees report privacy issues such as a lack of autonomy, dignity, physical and mental health etc. (Lee & Kleiner, 2003).

**Electronic Performance Monitoring**

Monitoring is a systematic and regular observation of personal information for administration, control, security and surveillance. In the workplace, electronic surveillance involves the observation and processing of employees' information through visible or unseen electronic instruments or methods such as cameras, microphones, wire tapes, video recorders, computer monitoring and other web operations (Ball, 2010). Monitoring is a management tool used to ensure the quality and productivity of products and services in organisations and prevent theft, fraud, legal liabilities and inappropriate behaviour (Lee & Kleiner, 2003; Sewell & Barker, 2006).

The use of electronic surveillance at the office has grown over the last three decades. According to the Centre for Business Ethics, about 92 per cent of all companies electronically track their staff in some way (Coultrup & Fountain, 2012). A survey of employees in Australia shows that 78% of employees are being tracked on the job, 88% show that certain websites are being blocked and 49% say that their email content is being observed (Holland et al., 2015). The survey of American employers showed that 66 per cent of employers tracked the Internet use of employees and 43 per cent of employers monitored the email of employees (Yost et al., 2019). The survey by the American Management Association in 2001 showed that some form of surveillance of the workplace is carried out in 82% of organisations, but in 2005, 76% of employers track the use of the Internet alone. In 2007, the survey indicates that 66 per cent of employers revealed internet surveillance, 45 per cent observed email content for their workers, and 45 per cent have recorded audio calls (Indiparambil, 2019). The findings of the survey conducted by HR Metrics and Analytics Summit also show that 80% of companies use electronic reporting to capture and measure employee data (Summit, 2018).

One of the key needs for internet surveillance is to boost efficiency by avoiding or limiting the usage of non-work-related websites that involve waste of time and company resources. Monitoring proponents contend that the use of the Internet for personal uses consumes time and decreases efficiency. Monitoring serves as an effective monitoring mechanism to distinguish positive and poor workers and to motivate employees with feedback based on the information obtained (Miller & Weckert, 2000). Another relevant reason for surveillance in the context of CCTV monitoring is for the safety and security of the employer, the employee and the whole company (Botan & Vorvoreanu, 2006). Sewell and Barker point out that monitoring is a supervisory technique that prevents undesirable behaviours and encourages desirable ones(Sewell & Barker, 2006).

However, on the other hand, electronic performance monitoring systems indicate significant paradoxical impacts such as lack of privacy, autonomy, creativity, increased stress, tension, anxiety, depression, boredom, etc. (Bhave, 2014; Indiparambil, 2019; Lee & Kleiner, 2003; Martin & Freeman, 2003).

**The Paradoxical Impacts of Electronic Performance Monitoring**

*Privacy Invasion*

Privacy can be defined as "selective control of access to oneself or one's group," (Altman, 1976). The privacy of an individual is the degree to which people have limited access to their knowledge, intimacy in life and thoughts (Schoeman, 1984). The most critical debatable problem of occupational surveillance is workplace privacy. Some employees believe that their privacy is violated by surveillance. Monitoring critics claim that monitoring limits the amount of personal information control employees have on their own information by unrestricted access using CCTV cameras, radios, wire tapes, tape recorders, internet monitoring, various web activities, and even drug testing.

*Lack of Autonomy*

Autonomy is a fundamental function of privacy. "Autonomy is the degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out” (Hackman & Oldham, 1976). Monitoring acts as a social control tool that disturbs the employees’ identity and autonomy because monitoring changes the way a person acts even if he or she is not under observation (Martin & Freeman, 2003). According to the study conducted by Indiparambil, 39.3% of respondents reacted that electronic performance monitoring restricts their freedom and autonomy (Indiparambil, 2017).

*Lack of Creativity*

According to Martin & Freeman (2003), employees under electronic performance monitoring are forced to act upon the desire of the employer which curtails their creativity(Martin & Freeman, 2003). Indiparambil (2017) indicates that in the workplace where the employee is forced to act and even think according to the demands of the actual or virtual observer and thus employee creativity and freedom shrink drastically. If employees realize that their actions and communications are observed, creative behavior may be reduced because employees may be worried about monitoring and judgement (Ball, 2010).

*Physical and Mental Health Issues*

Miller & Weckert (2000) claim that ill-health, stress and lowering of morale are unacceptable consequences of workplace monitoring. According to Lee & Kleiner (2003), people who are working under monitoring are possible to have a higher degree of stress, depression, anger, fatigue and physical health problems. The laboratory study by Aiello & Kolb (1995) indicates that monitored employees (or participants) are generally found to have higher levels of stress and dissatisfaction than non-monitored employees. Depression, anxiety, and fatigue were adversely correlated with the beneficial function of surveillance and positively correlated with the perceived severity of the control system (Holman, 2003).

*Declined Productivity*

Electronic performance monitoring has consequences on employees’ productivity(Ball, 2010). If employees tend to believe that their employer does not trust them, their mental well-being is harmfully affected which in turn affects their productivity (Riedy & Wen, 2010). The negative attitude of employees under monitoring can lead to lower productivity (Tomczak et al., 2018). Botan and Vorvoreanu (2006) advocate that the negative employee behaviours that evolved as a result of electronic performance monitoring will lead to lower productivity. The opponents of monitoring argue that productivity is negatively impacted by monitoring. Hartman & Pincus (1998) has identified the link between monitoring and health issues which in turn make employees sick and less productive.

**Solutions for the Paradoxical Impacts of Electronic Performance Monitoring**

*Supportive Feedback*

Feedback has long been recognized as an essential component that fosters learning, and motivation, and has been successful in enhancing employee performance when related to explicit performance objectives. The study conducted by Nebeker & Tatum (1993) revealed that employees those who are aware of being monitored by computer and getting feedback based on this monitoring have increased performance compared to a test group not aware of computer monitoring(Nebeker & Tatum, 1993). Most employees were not opposed to the use of computer-aided monitoring but were opposed to the way supervisors were often approached, characterized by negative feedback, delayed feedback, infrequent feedback, and subjective performance criteria. Feedback through an electronic performance monitoring system is effective for the development of employees when feedback is frequent, timely, accurate, based on objective criteria and comes from a knowledgeable and reliable source (Chalykoff & Kochan, 1989). Monitoring was seen only as constructive as it was done by management as a mechanism for feedback on performance, support, problem-solving and appreciation of good work (Holland et al., 2015). Progressive feedbacks result in higher job satisfaction and commitment (Yost et al., 2019). In a call centre study, Holman (2003) reveals that, if electronic performance monitoring is performed developmentally, it may alleviate stress in workers who are under its control.

*Advance Notice of Surveillance Policies and Practices*

Electronic monitoring and surveillance in the organization can be successfully used with complete and up-front transparency by the organization. Employee trust will be preserved if electronic monitoring and surveillance policies and practices are notified in advance (Kidwell & Bennet, 1994). Notification of corporate practices and processes appears to be a central aspect of presumed equity and justice for workers through the use of electronic performance monitoring systems (Tabak & Smith, 2005). Research has found that people who are given advanced notification of the use of surveillance and tracking justifications are more likely to perceive surveillance as appropriate (Stanton, 2000). Higher perceptions of procedural justice were induced by advanced notice and justifications for video surveillance monitoring. It is proposed that workers should be advised what activities are being tracked by employers when employees are being monitored, and how performance data may be used (Perkins, 2013). There should be an advance notice regarding the type of activities under surveillance and also the duration, method, and area of surveillance. According to Miller & Weckert (2000), appropriately used, monitoring can improve both the performance of the company and the willingness of workers to progress. Monitoring work-relevant behaviors minimized participants' perceived violation of privacy and improved procedural justice (Alder, 2001).

*Employee Participation in Monitoring System Design.*

It is widely recognized from the literature on human resource management that performance assessment practices that promote high participation of workers contribute to better performance of employees (Batt, 2002). The literature on stress and computerized performance monitoring suggests that increasing perceived job control or the degree to which workers can affect their work environment can help reduce the stress effects associated with computerized performance monitoring. Suggestions for increasing perceived job autonomy include the participation of workers in the creation of a computerized performance management system (Bates & Holton, 1995). Monitoring mechanisms would be viewed as more efficient if the employees observed are involved in the design and execution of the system (Alder & Ambrose, 2005; Alge, 2001). If employees are involved in the implementation of a monitoring system and feel that their input has been incorporated they may feel greater ownership of their job and experience greater motivation and less stress (Aiello & Kolb, 1995). If organizations encourage their employees to participate in the design and implementation of the Electronic Performance Management System, the monitoring would be deemed fair and effective (Alder, 2001).

A study conducted by Perkins (2013) in call centres revealed that when employees were allowed to participate in the implementation of electronic performance monitoring systems, their job satisfaction and performance were improved. According to Moussa (2015), the involvement of employees in the design of a structural system reduce stress and enhance perceptions of fairness or justice(Moussa, 2015). A study by George (1996) on call centers suggests that managers should use electronic performance monitoring in ways that staff can accept and maybe even approve of it.

*Respect to Employee Perspectives*

Managers should respect the perspectives of employees and allow them to challenge the performance data collected using electronic performance monitoring (Perkins, 2013). If employees perceive chances to criticize the interpretation and use of data derived from the EPM system, they see the EPM system as a fair way of measuring results (Moorman & Wells, 2003). But the employee should not abuse their opportunity (Van Dyne et al., 1994). Other benefits of employee opportunity to challenge performance monitoring data are reduced stress and health problems (Hawk, 1994).

**Implications of the Study**

The primary focus of this study is to examine the organization's policy developments concerning electronic performance monitoring. It aims to address any ambiguous aspects of surveillance and create a mutually beneficial environment that promotes harmony between employers and employees. Moreover, the study has the potential to transform the negative perceptions surrounding the electronic performance monitoring system.

**Conclusion**

In recent times, advancements in computers and related technologies have led to a significant expansion of electronic performance monitoring within organizations. Proponents of surveillance argue from a teleological perspective, highlighting the benefits it brings to organizations, customers, and society at large. On the other hand, opponents of monitoring use deontological arguments, emphasizing the employees' right to privacy. They contend that surveillance violates their privacy, causing distress and negative impacts on their well-being. In this context, both teleological and deontological views on surveillance are taken into account, and potential solutions are identified. These solutions include involving employees in the design and implementation of monitoring systems, providing prior notice of electronic performance monitoring policies and practices, offering supportive feedback, and allowing opportunities for employees to challenge monitoring data. These approaches are considered as a win-win solution according to Alder (1998) and Perkins (2013).

**References:**

Aiello, J. R., & Kolb, K. J. (1995). Electronic Performance Monitoring and Social Context: Impact on Productivity and Stress. *Journal of Applied Psychology*, *80*(3), 339–353. https://doi.org/10.1037/0021-9010.80.3.339

Alder, G. S. (1998). Ethical issues in electronic performance monitoring: A consideration of deontological and teleological perspectives. *Journal of Business Ethics*, *17*(7), 729–743. https://doi.org/10.1023/A:1005776615072

Alder, G. S. (2001). Employee reactions to electronic performance monitoring: a consequence of organizational culture. *Journal of High Technology Management Research*, *12*, 323–342.

Alder, G. S., & Ambrose, M. L. (2005). An examination of the effect of computerized performance monitoring feedback on monitoring fairness, performance, and satisfaction. *Organizational Behavior and Human Decision Processes*, *97*(2), 161–177. https://doi.org/10.1016/j.obhdp.2005.03.003

Alge, B. J. (2001). Effects of Computer Surveillance on Perceptions of Privacy and Procedural Justice. *Journal of Applied Psychology*, *86*(4), 797–804. https://doi.org/10.1037//0021-9010.86.4.797

Altman, I. (1976). Privacy A conceptual Analysis. *Environment and Behavior*, *8*(1), 7–29.

Ball, K. (2010). Workplace surveillance: An overview. *Labor History*, *51*(1), 87–106. https://doi.org/10.1080/00236561003654776

Bates, R. A., & Holton, E. F. (1995). Computerized performance monitoring: A review of human resource issues. *Human Resource Management Review*, *5*, 267–288. https://doi.org/10.1016/1053-4822(95)90010-1

Batt, R. (2002). Managing customer services: Human resource practices, quit rates, and sales growth. *Academy of Management Journal*, *45*(3), 587–597. https://doi.org/10.2307/3069383

Bhave, D. P. (2014). The invisible eye? Electronic performance monitoring and employee job performance. *Personnel Psychology*, *67*(3), 605–635. https://doi.org/10.1111/peps.12046

Botan, C., & Vorvoreanu, M. (2006). *What Meanings Do Employees Derive from Electronic Surveillance*. *October 2017*, 123–145. https://doi.org/10.4018/9781591404569.ch007

Chalykoff, J., & Kochan, T. A. (1989). Computer‐Aided Monitoring: Its Influence on Employee Job Satisfaction and Turnover. *Personnel Psychology*, *42*(4), 807–834. https://doi.org/10.1111/j.1744-6570.1989.tb00676.x

Coultrup, S., & Fountain, P. D. (2012). Effects of Electronic Monitoring and Surveillance on the Psychological Contract of Employees: an Exploratory Study. *Proceedings of ASBBS*, *19*(1), 219–235. http://asbbs.org/files/ASBBS2012V1/PDF/C/CoultrupS.pdf

Hackman, R., & Oldham, G. R. (1976). Hackman\_Oldham\_1976 - job char and meaning.pdf. *Organizational Behavior and Human Performance*, *16*, 250–279. https://doi.org/10.1016/0030-5073(76)90016-7

Hawk, S. R. (1994). The effects of computerized performance monitoring: An ethical perspective. *Journal of Business Ethics*, *13*(12), 949–957. https://doi.org/10.1007/BF00881664

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. https://doi.org/10.1108/PR-11-2013-0211

Holman, D. (2003). Phoning in sick? An overview of employee stress in call centres. *Leadership & Organization Development Journal*, *24*(3), 123–130. https://doi.org/10.1108/01437730310469543

Indiparambil, J. J. (2017). Electronic Surveillance and the Forgotten Impacts on Organizational Employees in India : A Qualitative and Ethical Review. *Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics(GJCRA)*, 543–579.

Indiparambil, J. J. (2019). REVIEW OF PROS-CONS CONS POLEMICS OF WORKPLACE SURVEILLANCE : SURVEY COMPARISON AND ANALYSIS. *International Journal of Current Advanced Research*, *8*(02), 17277–17283.

Kidwell, R. E., & Bennet, N. (1994). Employee Reactions to Electronic Control Systems. *Group and Organization Management*, *19*(2), 203–218.

Lee, S., & Kleiner, B. H. (2003). Electronic surveillance in the Workplace. *Management Research News*, *26*, 2–4.

Martin, K., & Freeman, R. E. (2003). Some Problems with Employee Monitoring. *Journal of Business Ethics*, *43*(4), 353–361.

Miller, S., & Weckert, J. (2000). Privacy, the workplace and the internet. *Journal of Business Ethics*, *28*(3), 255–265. https://doi.org/10.1023/A:1006232417265

Moorman, R. H., & Wells, D. L. (2003). Can Electronic Performance Monitoring Be Fair? Exploring Relationships Among Monitoring Characteristics, Perceived Fairness, and Job Performance. *Journal of Leadership and Organizational Studies*, *10*(2).

Moussa, M. (2015). *Monitoring Employee Behavior Through the Use of Technology and Issues of Employee Privacy in America*. https://doi.org/10.1177/2158244015580168

Nebeker, D. M., & Tatum, B. C. (1993). The Effects of Computer Monitoring, Standards, and Rewards on Work Performance,. *Journal of Applied Social Psychology*, *23*(7), 508–536.

Perkins, D. (2013). Electronic Performance Monitoring in Call Centers: An Ethical Decision Model. *Electronic Journal of Business Ethics and Organization Studies*, *18*(1), 4. http://ejbo.jyu.fi/

Riedy, M. K., & Wen, J. H. (2010). Electronic surveillance of internet access in the american workplace: Implications for management. *Information and Communications Technology Law*, *19*(1), 87–99. https://doi.org/10.1080/13600831003726374

Schoeman, F. D. (1984). *Philosphical Dimensions of Prvacy*. Cambridge University Press.

Sewell, G., & Barker, J. R. (2006). Coercion versus care: Using irony to make sense of organizational surveillance. *Academy of Management Review*, *31*(4), 934–961. https://doi.org/10.5465/AMR.2006.22527466

Stanton, J. M. (2000). Reactions to Employee Performance Monitoring: Framework, Review, and Research Directions. *Human Performance*, *13*(1), 85–113. https://doi.org/10.1207/S15327043HUP1301\_4

Summit, H. M. & A. (2018). *Workplace Privacy and Protection\_ Is Your Employer Watching Your Every Move\_ \_ Corporate Learning Network*. https://www.corporatelearningnetwork.com/technology-assisted-learning/reports/workplace-privacy-and-protection-is-your-employer-watching-your-every-move

Tabak, F., & Smith, W. P. (2005). Privacy and electronic monitoring in the workplace: A model of managerial cognition and relational trust development. *Employee Responsibilities and Rights Journal*, *17*(3), 173–189. https://doi.org/10.1007/s10672-005-6940-z

Tomczak, D. L., Lanzo, L. A., & Aguinis, H. (2018). Evidence-based recommendations for employee performance monitoring. *Business Horizons*, *61*(2), 251–259. https://doi.org/10.1016/j.bushor.2017.11.006

Van Dyne, L., Graham, J. W., & Dienesch, R. M. (1994). Organizational Citizenship Behavior: Construct Redefinition, Measurement, and Validation. *Academy of Management Journal*, *37*(4), 765–802. https://doi.org/10.5465/256600

Yost, A. B., Behrend, T. S., Howardson, G., Badger Darrow, J., & Jensen, J. M. (2019). Reactance to Electronic Surveillance: a Test of Antecedents and Outcomes. *Journal of Business and Psychology*, *34*, 71–86. https://doi.org/10.1007/s10869-018-9532-2

.