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CCTV SURVEILLANCE: THE DIFFERING AIMS AND FUNCTIONS OF CCTV WITHIN THE CORPORATE STRATUM

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Abstract

Closed Circuit Television (CCTV) systems are found in a variety of environments and used for a multitude of purposes, leading to differing views of CCTV within an organisation. In accordance to management theory, organisations contain a stratum of work where each level requires specific skills set. In accordance with this work stratum, the study's methodology used semi-structured interviews with different levels of security personnel in a Casino complex to extract and undertake a thematic analysis. The study extracted 10 CCTV surveillance features across two themes, being its aims and functions. CCTV features included creating a safe environment, protection, legal compliance and audit, management and support, deterrence, investigation and evidence, all of which were considered at each stratum levels; however, with difference in their meaning. Recommendations suggest that articulating clear awareness of CCTV aims and functions across the corporate work spectrum would result in a more effective CCTV surveillance system.

Keywords

CCTV; surveillance, aim, function, management; corporate; stratum

INTRODUCTION

Closed Circuit Television (CCTV) surveillance has become a common technology that can be found in a wide range of applications, such as public, private, social or work environments (Brooks & Corkill, 2012, p. 57). CCTV has become popular and with such a wide range of application, people in their daily lives can be captured by over three hundred cameras in thirty different systems (Norris & Armstrong, 1999, p. 40). Today, CCTV surveillance has come to mean more broadly the observation or monitoring of anyone or anything, usually by a range of electronic means (Sarre & Prenzler, 2011) and may include CCTV, satellite tracking, and dataveillance along with biometrics and DNA profiling.

CCTV, within a security context, focuses on either a general problem such as public surveillance or for a specific purpose, such as detect to identification (Standards Australia, 2008). Nevertheless, CCTV has become a staple in the criminal justice systems in the pursuit of a safer society (Zedner 2009). CCTV systems, in security, can have a multitude of different roles and functions with limited consensus.

In management theory, organisations consist of levels from operational employees to executive managers and these management levels undertake certain functions. In line with this view, it was suggested by Brooks and Corkill (2014, p. 222) that the application of functions at these different levels requires a specific set of skills. Therefore, this study explored the stratum levels in Corporate Security and how each level perceives and understands CCTV surveillance, with the Research Question: *How do the various work levels within the Corporate Security stratum perceive CCTV surveillance?*

Significance of the Study

By providing a better understanding of how the different levels of the security stratum perceive CCTV surveillance, their objectives can be better aligned with management expectations. Better alignment can lead to an improved design, implementation, operations and management of CCTV surveillance.

Furthermore, the Australian Standard AS4806 (Standards Australia, 2008) for CCTV only considers management objectives and responsibilities. The expectations of the many other levels within an organisation are not included. Therefore, this study highlights the importance of aligning the differences in perception of CCTV surveillance with the aim of achieving the strategic goals of the organisation. Findings may lay the foundation for complementing the existing standards.

THE STRATUM OF MANAGEMENT

Management is the basic structure of an organisation, being essential for an effective organisation's enterprise (Drucker, 2013, p. 6). Management is generally defined as planning, organising, setting goals and objectives, leading and controlling. Nevertheless, Scott (2013, p. 4) argues that it is much more, resulting in many definitions of management. For example, the Oxford English dictionary (1989, p. 1598) states that management is "organisation, supervision, or direction; the application of skill or care in the manipulation, use, treatment, or control." Merriam-Webster's (2004) define management as the "act or art of managing: the conducting or supervising of something: the collective body of those who manage or direct an enterprise". Summarising these key points and considering Scott (2013, p. 4), management is overseeing the work of others.

The Role and Levels of Work

According to Allen and Gilmore (1993, p. 5), an organisation has a stratum of four levels (Figure 1), where the first are operational and consists of employees with no managerial duties. The second level are first-line managers, also known as supervisors, responsible for a specific operational or functional task or process in the organisation (Abdelrazek et al., 2010; Kerr, Hill, & Broedling, 1986). The third level are middle managers, also known as divisional managers, responsible for implementing policies and plans from the senior managers. Middle managers are also responsible for structuring the first-line managers' work and activities (Jackson & Humble, 1994). The final level in the hierarchy are senior managers, who may be the Chief Executive Officer (CEO), a board of directors or corporate executives. This level is a relatively small group and its objective is to manage the overall organisation and set out the strategic direction for the organisation (Davidson, 2008).

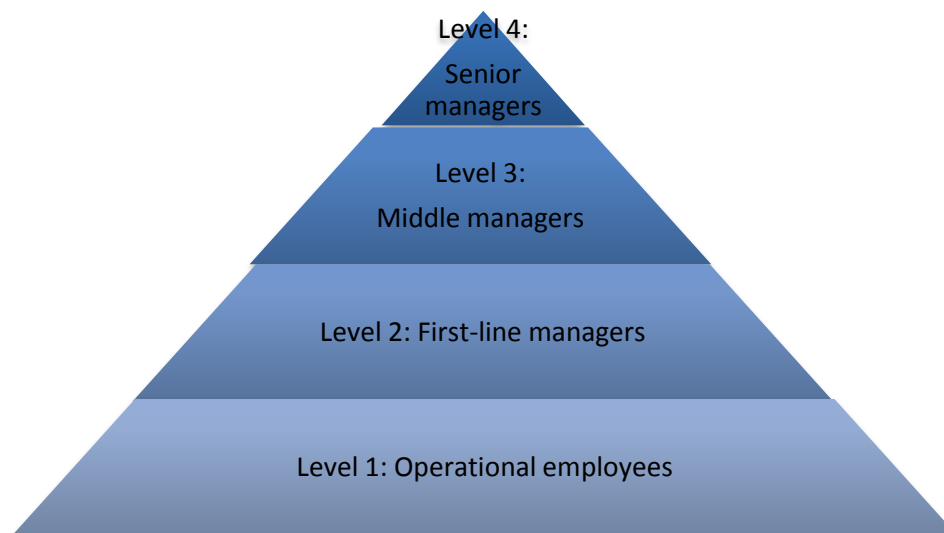


Figure 1. Types of Workers by Organisational Level (Allen & Gilmore, 1993)

CCTV SURVEILLANCE SYSTEMS

CCTV surveillance can be found in both public and private environments. It has been used as a tool to identify potential accidents, deter crimes and in the event of criminal activities, ability to support with evidence (Norris & Armstrong, 1999, p. 45). Within public transport, CCTV is used as a safety measure to prevent accidents (Keval & Sasse, 2006). CCTV has often been implemented in public areas in an attempt to reduce crimes, such as theft or vandalism (Harwood, 2008, p. 153; Phillips, 1999, p. 140).

Other examples of public area CCTV is in the deterrence of crimes, providing surveillance, evidence or situational awareness in town centres, shopping centres, car parks, etc (Brown, 1995, p. 1; Norris & Armstrong, 1999, p. 42). Such CCTV systems have been effective in reducing crime rates and providing evidence against offenders (Gill, Spriggs, & Britain, 2005; Poyner, 1992; Tilley, 1993).

In the private workplace, CCTV may be implemented to support specific security functions, such as access control, situational awareness or general surveillance. For example, Kreugle (2006, p. 516) suggest using CCTV in a lobby environment to determine that order prevails, support the building's access control by monitoring personnel entering and exiting, and provide the ability to control and monitor materials in and out of the

building. In addition, to being used as a security measure, CCTV may also support site management by providing situational awareness (Harwood, 2008, p. 157; Kruegle, 2006, p. 528).

Finally, CCTV is a legal requirement in some working environments. One such environment is the Australian Gaming (Casino Control Act 1984) and Liquor License (Liquor Control Act, 1988). Organisations in the gaming industry have to comply with the Casino Control Act 1984. According to the Act, members or officers from the Gaming and Wagering Commission have certain rights to inspect or investigate material or procedures in the organisation under the casino license. The licenced organisation also has to be able to provide certain evidence of procedures, such as money transfers for tax reasons or who enter the casino to prevent juveniles or banned people (Casino Control Act, 1984).

Categorising the Features of CCTV

CCTV surveillance is applied within a multitude of environments, where its features are perceived to have a proven application. Features present CCTV and its language as a tool for deterrence, monitoring, reducing crimes, providing safety and evidence or supporting situational awareness (Brooks & Corkill, 2012; Brooks, Corkill & Coole, in press). CCTV, as a tool for security, meets the objectives of theft reduction, asset protection, security investigations, providing evidence (Fay, 2007, p. 271) and deterrence.

CCTV, as a deterrent, is the preventive effects from increased risk, effort or moral cost for the thief and the decreasing profits from offending (Gill, 2003, p. 128; Clarke, 1997, p. 14). As Whitson, Doyle and Walby state, "camera surveillance systems are commonly installed to deter crime" (2009, 14). The intruder's risk of detection derives from either a subjectively perceived risk or through actual risk, where the subjective risk comes from the intruder's feelings of 'getting caught in the act' or 'you will be detected'. The risk stems from the view that the camera may be monitored (Phillips, 1999, p. 124; Tilley, 1998, p. 139). The effectiveness of CCTV as a deterrent is however widely debated, since there is no way to determine how many criminal acts it actually discourages (Fischer et al., 2013, p. 211; Smith & Brooks, 2013, p. 108).

Therefore, whether CCTV achieves the desired objectives for which was implemented is not clear (Gill et al., 2005, p. 3). Studies tend to agree that CCTV is more effective in reducing crimes in controlled environments. Whether CCTV reduces the fear of crime has been approached from several directions. Studies find the term 'feelings of safety' more suitable; meanwhile, others argue it should be referred to as 'worry about being a victim of crime' (Hale, 1996, p. 79). It is suggested that CCTV can be the guardian that prevents offenders from the opportunity to commit crime. In turn, this makes people feel safer and therefore use public spaces (Phillips, 1999, p. 124).

METHODOLOGY

The study adapted a constructivist approach to understand the complex world from the point of view of those who live in it. This approach rejected that there is only one objective reality; rather, approach it with the aim to understand the multiple social constructions of meaning and knowledge (Mertens, 2005, p. 14). Constructivist predominantly uses qualitative methods such as interviews, observations and document reviews (Lincoln, Lynham & Guba, 2011).

In line with constructivist, the study conducted semi-structured interviews to enable the respondent to explain their response in order to achieve a richer understanding. The sample used a convenience approach in participant selection, being those that are available to be used (Hesse-Biber & Leavy, 2011, p. 46). Participants were sampled with the criteria that they had worked at least two years within the security industry and at the necessary organisational level. As this type of sample does not represent any other group apart from itself, there is a limitation to extrapolate broader findings. Therefore, findings are limited to the population sample studied (Cohen, Manion, & Morrison, 2011, p. 156).

The interviews consisted of four questions, where the first two asked the participants to state their perception of CCTV's role and objectives within their organisation. The intent was to understand whether the participants perceived a difference between roles and objectives, and if there was a different perception at the various work levels. The third question asked the participants to describe their understanding of how CCTV supported their organisational objectives as a check question to validate the research by cross-examination. The final question asked the participants if there was anything they would like to add.

Analysis

Study participants consisted of individuals (N=10) at various work levels within the security and surveillance departments of an Australian Casino. This resulted in a selection of three participants at operational level, two at first-line management, two at the mid-level management and finally, three at the executive level. Participants were met individually interviewed, their responses recorded and transcribed. Analysis included their views on CCTV objectives and roles, and a comparison between participants and work levels.

CCTV SURVEILLANCE STRATUM

The study found that CCTV surveillance in the corporate security stratum displayed two themes. The first considered the *overarching aims of CCTV*, relating to why the CCTV system was in place. The second considered the *functions of CCTV*, which included features relating to CCTV procedures and processes conducted to accomplish the system's overarching aim. The meaning of themes varied between across all work levels of the security stratum.

CCTV Surveillance Overarching Aim

CCTV Surveillance overarching aims were further extrapolated into three distinct areas, namely feeling of safety, protection of assets and legal requirements.

Feeling of Safety

One of the CCTV surveillance features, perceived at the majority of levels, was creating a safe environment. At the operational level (Level 1), the perception is that CCTV surveillance provided a sense of security for patrons and staff undertaking their work. The first-line management had a broader view and this linked to the goal of delivering good customer service and providing a safe atmosphere. This view was also supported at the senior level, where the perception is that the CCTV does provide a safe environment rather than creating the perception. The mid-level management was the only group that did not have the perception that CCTV created a safe environment.

The majority view of creating a safe environment was summarised as reducing the fear of danger and crime. Such a view suggests that CCTV provides feelings of safety, reducing the fear of crime or worry about being a victim of crime (Hale, 1996, p. 79). In reducing fear of crime, Phillips (1999, p. 124) suggested CCTV may be considered a potential guardian, reducing offender opportunity to commit crime. The perception at first-line management of creating a safe atmosphere may be linked to delivering a good customer service, as Sarno et al. (1999) found, CCTV makes people feel safer. In addition, Brooks found that at a broader community level people supported CCTV (2005, p. 19). With this broader understanding, senior managers felt that people were more likely to interact in an environment where they feel safe, arguable a primary corporate focus when operating an entertainment complex.

Nevertheless, this indicates the difference in the perception between the lower and the higher corporate security stratum levels. At operational level, the perception of CCTV is that it is able to monitor people and assist in mitigating dangers or crimes. However, at the higher levels, there is a broader view that it is linked to other security and safety measures, and its purpose relates to a broader business aim. Such an outcome is congruence with Brooks and Corkill (2014, p. 224), where it is suggested that lower work levels have a more security related knowledge focus whereas higher levels have a more business focus, able to draw links across business.

Protection of Assets

CCTV surveillance was perceived by all levels as a method to protect assets, with all levels in general agreement. The operational level considered CCTV as a method of "keeping a close eye on the important stuff". This view can further be explained as monitoring money, people and procedures within the complex, in line with the mid-level view. At the first line manager and senior manager levels, it was perceived that the protection of assets covered a broader context than just material assets with money or possessions, extending to the protection of business reputation.

Legal Compliance

The final overarching CCTV surveillance aim, perceived by the first to senior management levels (level 2 to 4), was the legal aspect. At first line management, it was claimed that the "objectives for an organisation like this

would be built around the requirements from the government". Such a requirement is defined by the Australian governmental in respect to the gambling and the sale of liquor. This view was supported at mid-level management, who stated that the organisational procedures are written in respect to these legislated requirements and therefore, "compliance is very heavy subject here". Finally, senior management stated that complying with these legal requirements is a significant purpose in supporting business objectives.

Due to the type of business, namely gaming, the Australian government has certain expectations on evidence being provided by the organisation that only legal activity is occurring. As stated in the Australian Casino Control Act (1984), the Gaming and Wagering Commission has the right to investigate and inspect procedures and material within a licensed organisation. Also, in the Department of Racing Gaming and Liquor (2002, p. 1), CCTV is suggested to ensure legislative compliance.

CCTV Surveillance Functions

The second CCTV Surveillance theme of function comprises of a number of distinct areas. These are procedures and processes the CCTV system conducts in order to accomplish the stated overarching aims. The more significant feature that all stratum levels perceived was ensuring and and/or auditing compliance. This area considered employees or patrons being compliant to organisational procedures, standards, laws and regulation. Other areas included auditing and compliance, evidence, monitoring, deterrence, investigations, performance management and as a support unit.

Audit and Ensure Compliance

At the operational level, the view was that CCTV surveillance ensures that employees are compliant with organisational procedures. For example, one participant stated that CCTV is "making sure that everything is up to standard, that everyone is complying with the operating procedures and company policy". First line manager perceived that one part of compliance was to ensure that the organisational procedures are conducted correctly, linked to the overarching aim to support a legal requirement. That is, ensuring that gaming is conducted in compliance to the Casino Control Act (1984) and in relation to serving alcohol or handling patrons, according to the Liquor Control Act (1988).

The mid-level managers perception was congruence with first line managers, that there CCTV was in place for compliance to procedures and as a legal requirement. More specifically, the view of the mid-level managers was that the organisational procedures are established to meet legislation and therefore, ensuring staff are compliant to procedures the business is compliant to its legal requirements. Furthermore, compliance extends to procedures to prevent accidents of faulty handling of equipment, and detecting and monitoring criminal activities. Such a view was also supported by senior management, where regardless of department, procedures are established to be compliant to legislation and ensure service quality, which protects the business and its brand.

Performance Management

Through monitoring and recording, CCTV enables managers to review and audit how employees conduct procedures, which in turn facilitates evaluation and improvement. The perception for first line managers is that faults can be "identified and remedied". In congruence, the view of mid-level managers is that CCTV is a performance tool that enables the identification of areas where retraining is needed or opportunities to develop new policies, processes and procedures. Therefore, it can be argued that the perception of a performance management tool is similar to the view of Harwood (2008, p. 157), Kruegle (2006, p. 528) and Norris and Armstrong (1999, p. 47), where managers use CCTV to analyse work in order to ensure smoother operations.

Investigation

At the higher work levels, the process of identifying ineffective or faulty procedures also falls under the use of CCTV in investigations. All management (levels 2 to 4) claimed that CCTV surveillance played a part in investigations. However, the perception of these groups was that CCTV investigative role is passive, being the use of recorded material to establish what occurred during an event.

Nevertheless, for senior management the investigation aspect of CCTV is not limited to passive surveillance. Their view was that when surveillance operators identify suspicious behaviour, they commence an investigation resulting in active surveillance. The investigation becomes a direct response, where the most suitable department acts upon. Furthermore, the mid-level management (levels 2 and 3) tended to limit their perception of CCTV to a security related context.

At senior management there was differing views of the CCTV, being much broader to include all departments and extending to external departments. As one participant stated, “for any concerns, issues or anything basically that impacts on any part of the business, there is a surveillance support component”. In relation to other external departments, such as the police or regulatory bodies, CCTV can support their investigations, by monitoring certain individuals, incidents or providing evidence.

Monitor and Evidence

Two other features considered within the corporate security stratum were monitoring and evidence. The operational level had a short time frame of CCTV, where evidence supported daily security operations. That is, if anything went wrong in the daily processes or procedures, CCTV footage existed as evidence to support staff or patrons. Such a perception of evidence aligns with the feature of audit and compliance. First line and mid-level managers were congruence with such a view; however, with the extended perception that CCTV footage can also be attached to incidents with evidence. Furthermore, first to senior management (levels 2-4) provided a more broad view of CCTV, similar to Webster’s (2009, p. 18) topology of CCTV.

Deterrence

The final and the least robust feature of CCTV was its ability to deter, with the perception of first to senior management (levels 2 to 4) being a successful deterrent. However, operational level had the view that within the gaming industry it does not deter people from committing crimes. Furthermore, at mid-level management it was perceived that the deterrence effect relied on people knowing that they were being watched. Such a view was supported by senior management, with the extended idea that when it comes to achieving a deterring effect among staff, it is important to introduce the CCTV system and its abilities.

CORPORATE SECURITY STRATUM PERCEPTION OF CCTV

The study put forward the Research Question *How does the various work levels within the Corporate Security stratum perceive CCTV surveillance?* The study identified two themes in response, being CCTV surveillance overarching aims and functions (Table 1). These aims and functions, broken into 10 discrete features, indicated the different and similarities of perceptions in the corporate stratum. The lower work level of the stratum did not have a narrower view of CCTV surveillance, inasmuch as the higher levels had a broader perception. For example, the higher levels have an understanding of the context specific and short time framed functions of CCTV. Just as the lower levels have an understanding of the broader overarching functions of CCTV. Nevertheless, the perception of the functions does vary between the levels of the stratum.

Table 1. Perception of CCTV surveillance according to the corporate stratum

| Corporate Stratum Level | Level 1 (Operational) | Level 2 (First-line) | Level 3 (Mid) | Level 4 (Senior) |
|--------------------------------|----------------------------------|---------------------------------|--------------------------|-----------------------------|
| Overarching aims | | | | |
| Feeling of safety | ✓ | ✓ | ✗ | ✓ |
| Protection of assets | ✓ | ✗ | ✓ | ✓ |
| Legal compliance | ✗ | ✓ | ✗ | ✓ |
| Functions | | | | |
| Audit & compliance | ✓ (procedures) | ✓ (regulation) | ✓ (regulation) | ✓ (regulation) |
| Evidence | ✓ | ✓ | ✓ | ✓ |
| Monitor | ✓ | ✓ | ✓ | ✓ |
| Deterrence | ✓ (negative) | ✗ | ✓ (positive) | ✓ (positive) |
| Investigations | ✗ | ✓ | ✓ | ✓ |
| Performance management | ✗ | ✓ | ✓ | ✗ |
| Support unit | ✗ | ✗ | ✗ | ✓ |

As an example, the lower levels of stratum considered auditing and compliance aligned with compliance of organisational procedures. Meanwhile, the higher levels of the stratum viewed compliance as a legislative

requirement, essential for business survival. Furthermore, that there was an understanding of the organisational procedures being in place in order to comply with laws and regulations.

It can be demonstrated that at the higher levels of stratum (level 2 to 4), the perceived functions of CCTV surveillance can be structured in a hierarchy. The higher stratum levels, as opposed to the operational level, produced a hierarchy linkage between the aims to ensure business survival and the context specific functions of CCTV. Therefore, the corporate security stratum perception of CCTV surveillance varies in that higher levels have a broader understanding of CCTV surveillance throughout the entire organisation compared to the lower levels. What the study did not explore, which future research could, is the impact senior management creates in philosophy or culture of surveillance at the lower stratum levels.

CONCLUSION

The study explored how the corporate security stratum of work perceived CCTV surveillance. Such an exploration demonstrated that by identifying CCTV features, with aims and functions of CCTV, the view of those within the stratum alters. These were further broken into 10 features across these aims and functions of CCTV surveillance.

The study found differences between the perceptions of those within the various work levels of the stratum. The majority of work levels aligned with common features; however, their understanding of these features varied. This issue drew similarities to the study's underlying management theory, where the lower level of stratum have a more narrow and context specific view. Whereas, the higher levels have a broader and more holistic view, and they link the operational CCTV functions with the overarching aims.

The study found differing understanding and views of CCTV surveillance at the various levels of the corporate stratum. With this improved understanding, CCTV can be better aligned with those management's expectations throughout all parts of the organisational stratum.

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