CCTV in Retail Industry - Crime, security... and more

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CCTV in Retail Industry

Naturally, security and safety, crime prevention and investigation remain critical issues underpinning the design, specification and operation of CCTV systems in shopping centers, and the appropriate selection, training and development of the individual CCTV operator is a prerequisite to maximizing the effective use of the whole installation.

In addition to monitoring CCTV, Control Room operators might also be overseeing the continual access of delivery vehicles, handling customers, car parking queries or making a series of announcements over the Public Address system.

Indeed, the CCTV installation managed from a modern shopping centre Control Room isn't solely focused on crime and security. CCTVs so-called 'wider values' can be seen in functions such as:

- regularly measuring the shopping center's 'lifeblood' in terms of pedestrian footfall, flows and hotspots, monitoring specific promotions and, perhaps, supporting rent review negotiations (these may be considered the direct commercial benefits of cameras);
- monitoring and managing staff performance and Health and Safety issues, providing examples for training and development or dealing with insurance claims (in other words, CCTVs 'human' or 'personnel' advantages);
- Camera installations may be programmed automatically to focus on individual pieces of equipment in the event of malfunction or in alarm conditions such as a fire extinguisher sprinkler head breakage, an open cashbox to a pay-on-foot machine or activity in a remote, normally 'untrafficked' corridor or plant room area (i.e. the equipment monitoring functions).

CCTV licensing and regulation

Various statutes affect the operation of CCTV in public space areas, the two most notable being the Private Security Industry Act 2001 and the Data Protection Act 1998.

The SIA requires all operators of Public Space Surveillance (PSS) CCTV systems to be licensed. A shopping centre CCTV system will generally fall within this requirement, and a PSS license will be required if equipment is either deployed into fixed positions or has a pan, tilt and zoom capability where the operator is required to do any of the following:

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- proactively monitor the activities of members of the public, whether they're in public areas or on private property;
- use cameras to focus on the activities of particular individuals, either by controlling or directing cameras at an individual's activities;
- use cameras to look out for particular individuals;
- Use recorded CCTV images to identify individuals or to investigate their activities.

However, the PSS license isn't required where camera images are monitored solely to identify intruders/trespassers at a site and track their activities, and for the protection of vehicles or buildings against theft or damage to that property or premises, and not specifically to monitor members of the public who may enter that property. Here, staff would need the basic SIA security license.

The operational requirement

Depending on the incumbent manager's level of security knowledge, a security consultant may be used to assist with devising the operational requirements. They must have a proven track record, be independent and possess Professional Indemnity insurance.

The first step is to define the problem be it a security threat, a public safety issue or another kind of vulnerability. This is the Level 1 operational requirement. Once CCTV has been decided upon as the best response, specific issues relating to surveillance can be addressed at Level 2. Development here helps the centre manager to further define (and refine) areas of concern (with reference to the Level 2 Operational Requirement Checklist), understand operational issues and responses, decide on suitable system requirements and identify any managerial implications.

The initial and most important question to be addressed with any CCTV system is: 'What do I need to see?' closely followed by: 'Why do I need to see it?' The choice of cameras in particular depends on the nature of the activity to be observed.

When 'defining the problem', each key location should be considered in turn and the main activities to be observed at each place noted. The purpose of the observation should then be defined do you wish to monitor a wide area for activity, or do you need a high resolution view that enables the identification of individuals? Who monitors the system, where are they monitoring it and how should they respond in the event of an activity? Thought needs to be given to the totality of functions to be fulfilled. Overloading operators can make for lapses in concentration and inefficiencies of system use.

Attention should then be focused on the features of the CCTV/recording system itself. With advice from the local police, the CCTV manager should decide on a suitable retention time for the application's images, and the appropriate level of metadata (for example time, date, camera number marking) as part of the operational requirement.

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When purchasing and commissioning a CCTV recorder it's vital to inspect the quality of recorded images and the live view. There could well be a substantial difference between the two. Adjusting the settings to increase retention times will result in a reduction of stored image quality ('best storage' settings offer you the lowest quality recorded video).

Digital recording and evidence

In most cases a CD or DVD writer will suffice for exporting single images and short video clips under about ten minutes in duration. For exporting longer video clips (and for large-scale archiving), the system should provide one of the following:

- the ability to export video to an external 'plug-and-play' hard drive via a USB or Fire wire connection;
- network port;
- Removable hard drive.

The exported video sequence may be in a non-standard format. If this is the case, it's important to ensure that the manufacturers provide additional software such that video may be replayed on a standard computer.

The operational requirement highlights various issues that a CCTV operator should consider during the commissioning stages. Of course, any legislative or licensing requirements ought to be fully investigated to ensure adequate compliance.

Maintenance of the installed system should be considered at this stage, including who's responsible and who will pay any associated costs. This should cover emergency maintenance such as breakage or damage, so too routine cleaning and alignment of cameras.

Specification and tendering tips

Once the operational requirement has been completed, a security specification must be compiled wherein the full requirements of the system will be listed. The situation where a single contractor assesses a site, designs a system and then produces a proposal should always be avoided.

Where the on-site manager knows exactly what is to be tendered for, then the project is on a firm footing from the start. Even if resulting proposals produce a bewildering array of jargon, close reference to the original tender document will allow the manager to see whether or not the contractor is providing what's actually required.

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