If you have purchased a new camera lately, it’s likely that it’s digital. Both traditional still photography and video have moved away from film and analog systems and are now almost entirely based on digital technology.

In the case of video for surveillance and security, the transition from analog to digital security systems (DSS) is more than just a change in technology. It’s a complete transformation, opening the door to smarter, more cost-effective, versatile solutions and increasing their appeal for a wide range of businesses—corporate offices, medical clinics, retailers, restaurants and more.

Here are three key reasons why:

• **Quality:** The quality of surveillance footage captured digitally is far better. It’s possible to zero in on details—faces, license plates, handwriting—making it much more effective in detecting and preventing undesirable behavior.

• **Integration:** Video surveillance systems can now integrate with other devices and applications. It’s now possible, for example, to automatically generate text alerts and e-mails. Surveillance video can be viewed on any connected device—tablet, smartphone, laptop/PC.

• **Analytics:** Finally, digital security and surveillance systems no longer need to be monitored by individuals and are no longer just for security. Video analytics software can be used to monitor footage for undesirable behavior (e.g., shoplifting) and also extract valuable information to support marketing, enhance business processes and optimize overall business performance.

**How Today’s DSS Systems are Being Used**

While the primary value of digital security and surveillance systems is to document and deter theft and other criminal activity, other major uses include:

**Reducing false claims:** Monitoring locations to reduce liabilities related to employee/customer injuries or vandalism.

**Business analytics:** Using analytics software to extract “usable information” such as people counts, zone counts, traffic flow, gender and age breakdowns, peaks and valleys, and so forth.

**Time Management and Staffing:** Accurate counts of customers provided via video surveillance make it possible to adjust staffing levels and to ensure that staff members are actually doing the tasks assigned to them, and doing them efficiently.

**Infrastructure Protection:** Monitor and protect critical infrastructures, such as warehouses, data centers, transportation centers, power plants and medical centers. Video can be used to support proactive response in the event of an intrusion, attack, fire, flooding, explosions, gas hazards, etc.

**Emergency Management:** Helping first responders organize their rescue operations; tracking the path of an intruder or a disaster (e.g., fire, flood); helping to prioritize responses; managing the flow of people in an evacuation.

**Process Automation:** Video footage of equipment and processes can complement supervisory control and data acquisition (SCADA) systems; providing visual data to complement raw SCADA data, helping ensure normal operations for power equipment, protecting against tampering by unauthorized personnel and preventing accidents.
Business Value
Here is a quick guide to the most common ways DSS solutions deliver value:

Preventing and Reducing Losses
• Reducing shoplifting and stock shrinkage through better security, deterrent messages
• Improving physical security and operational processes to deter losses

Increasing Personal Safety
• Monitoring areas where personal security is at risk (e.g., elevators, stairwells, parking lots)
• Monitoring entrances and exits to identify the presence of unauthorized personnel
• Monitoring situations where ill or violent individuals may be present (e.g., hospitals, emergency situations)

Reducing Claims and Liability Exposure
• Identifying ways to enhance physical security to reduce the potential for claims
• Gathering evidence to verify and reduce the incidence of false claims

Increasing Revenues
• Increasing sales by identifying need for better staffing of high traffic areas

• Increasing sales of higher margin products through better understanding of product placement

• Integrating with digital signage and anonymous viewer analytics to customize digital advertising depending on the profile of the person walking by

Lowering Costs and Improving Efficiency
• Using event-based viewing for investigative purposes, eliminating the need to chronologically review videotapes

• Reducing the need to monitor video cameras and change tapes

• Using footage to enhance employee training and business operations (e.g., staffing levels)

• Identifying emergencies immediately

• Supporting safety audits

The Market
The growing demand for DSS solutions has created a $40 billion industry, posting healthy growth rates of 9-19 percent, according to reports by IMS Research and other firms that follow the industry.

The steady improvements based on digital technologies have spearheaded the growth surge. IMS Research noted that in 2003, during the global economic downturn, while the demand for analog video surveillance solutions contracted, the demand for digital video surveillance solutions grew by more than 18 percent. 1

Retail is a major vertical market for DSS solutions. Education—including K-12 schools and universities—is widely considered one of the fastest growing market segments. The public sector is another major user of video surveillance. The need to protect citizens, customers and passengers is, and always will be, a high priority for governments.

Services Opportunity
The dramatic changes in DSS solutions and the role they can play in business are providing solution providers with more opportunities to add value, such as:

• Helping customers sort out the ways in which DSS solutions integrate with other capabilities, such as inventory, pricing and even systems such as digital signage and POS.

• Navigating the choices being offered in cameras, analytics software, etc.

• For many technology providers, providing remote management for digital security and surveillance networks offers an opportunity to earn significant revenues for a value-added service

For more information visit intel.com/retailsolutions

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