Venturing Into the Video Void
BEYOND SECURITY

Technological advances have propelled video surveillance far beyond the purview of end users' security departments. The opportunities are vast for integrators that can vet out the many additional ways video data can improve clients' operational efficiencies.

By Gadi Piran

If you think of video surveillance as an instrument of the security department, you are missing the bigger picture. It's true that video systems perform well in security applications, but by continuing to focus exclusively on security, you risk overlooking the broader benefits of video. The fact is — due to several major technological advancements during the past few years — video is much more than a security tool. It's become a business intelligence tool.

Today's video can help with process control, personnel management, inventory tracking, quality control, customer service, merchandising and a range of other uses. Video can determine the most efficient scheduling of personnel or the most effective sales display. It can streamline manufacturing processes by providing an alert if there is a malfunction. Integrated with an HVAC system, video can even save energy costs by, for example, turning up the air conditioner only when room occupancy reaches a certain number.

As a consultative installing systems integrator, it is essential to become intimately familiar with how your clients' organizations operate. You must be able to determine how a surveillance system can fulfill their must-have requirements, as well as what they consider to be nice-to-have capabilities. It will then be incumbent upon you to render a solution that effectively and efficiently meets those parameters in a way that maximizes what can be achieved given their budget. A big part of that is a thorough understanding of existing applications for video data as described above, in addition to creating new ones as your customer's problem solver.

VMS, Open Platforms Enable Change

In the world of IP-based systems, video is data and its value is unprecedented. Video data can travel along the company's IT backbone and be analyzed at any point for content. This analysis can determine

customer movements, the best use of employees, or quality control. Users can view manufacturing processes, monitor remote facilities, or even follow the migration of fish for scientific research.

Video surveillance software allows users to monitor any location from anywhere — even remotely or from a mobile device. Video management systems (VMS) deliver video data in user-friendly formats that enable immediate response. This type of data has never existed before and is extremely beneficial, empowering owners and managers to run their businesses more effectively. Video surveillance solutions can work alone to deliver this intelligence or integrate with other business systems and optimize operations for access control, point of sale (POS), teleconferencing, process control systems or anything on the enterprise network.

Much of the expansion in video management capabilities is driven by the benefits of open architecture. Collaboration with third-party vendors helps to extend the core benefits and functionality of VMS to include cutting-edge technologies, such as video analytics, and to expand networks using wireless mesh and broadband networks.

VMS are also becoming easier to use, and even large systems can now be managed effectively and efficiently. Customers need real-time business intelligence to be presented in a usable format. More and more video cameras

and larger and larger systems are creating the real possibility of "information overload" for operators. To enable users to cope, video systems can tie the various information strands together, with video data at the center of it all as the "eyes" of the operation.

More importantly, systems can provide information to users in a prioritized and selective manner. The user gets only the information he or she needs — and gets it when, where and how it is needed. Better information enables better decision making and faster reactions. User interfaces are less complicated and include only information that is pertinent. Operating such a system is so intuitive as to become second-nature.

Virtually No Vertical Market Limits

There are virtually limitless vertical markets where video offers value beyond the security department. A partial list would include the following:

Education — Network video cameras can be located throughout a campus to view anything from stairwells where students congregate to entrances of residence halls, from parking lots to alleys between buildings. In addition to keeping students safe, cameras can help administrators manage discipline problems or view facility usage. Video can help to manage the flow of K-12 students during recess, analyze bottlenecks that form between classes

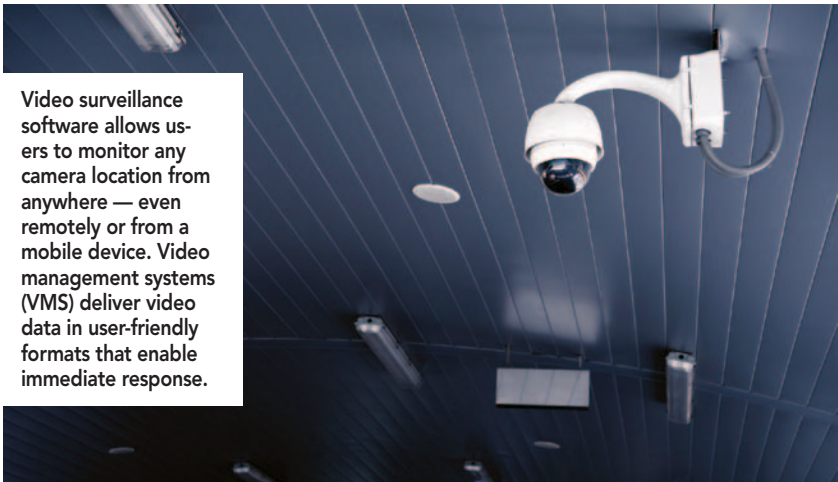or view traffic flow as parents drop students off in the morning.

In case of a maintenance problem, video can allow the central office to identify and observe the problem remotely before sending staff. Video can track facility occupancy, especially during the weekend or off-hours. The video system can provide instant access to real-time and archived video campus-wide, and utilizing an existing IP network infrastructure keeps system costs low.

Transportation — Expansive geography and large camera counts make VMS especially useful in the transportation sector. Video can provide real-time views of tollbooths, for example, to facilitate personnel management and improve customer service. Incorporating video and license-plate recognition functionality with toll payment systems can supply data tied to each transaction. Cameras installed along highways can provide real-time traffic information, with a single software interface providing access to various camera views. A single interface can also provide views of various transportation facilities, offering additional benefits related to facility maintenance and personnel.

Transportation applications also extend to ports and airports. Although security drives these markets, video also provides opportunities to improve operations and efficiencies at ports and airports.

Public Safety — Video is valuable for crime prevention, but it also can play a positive and proactive community relations role. In the public safety vertical, video cameras provide an unflappable witness with a perfect memory that can supply immediate feedback and insights to law enforcement personnel. The presence of video cameras can help convert crime-prone neighborhoods into centers of commerce; it can transform abandoned city parks into places where families and children are safe to linger.

Cameras located inside businesses,

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There are virtually limitless vertical markets where video offers value beyond the security department. Some of the many applications include retailers, school and university campuses, transportation and public safety, and health care and hospitals.

users. When any remote element of a utility's operation has a problem, camera views of the situation can guide operators to a timely and appropriate response. Operational benefits make video cameras even more valuable in an environment where protection of the nation's critical infrastructure is paramount.

Sell Clients Video's Value Proposition

There is an opportunity gap between the immense capabilities of video systems and how they are currently being used in the customer base. One element in the gap is the need to educate a broader range of end users about the value of video beyond the security department core customer who has historically been at the center of a video system purchase.

Video systems can provide a new and effective management device useful throughout today's companies. Real-time video coupled with the reach of corporate networking creates a powerful combination for today's companies, and customers are beginning to understand and embrace these expanded benefits.

This exciting, untapped potential also relates to another challenge in the current economic environment, which is the need to show a return on investment (ROI) for any technology purchase. The value proposition for video as a security and surveillance tool may be well understood in our industry, but economics make it imperative that the bottom-line benefit also be communicated effectively to the customer. The added value of uncovering additional benefits and uses of video makes the ROI case even stronger.

Security and business intelligence both have the same objective, which is to improve the bottom line. To that end, using a video system to provide data that transcends physical protection to boost operations and business efficiency makes perfect sense. ■

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schools or other institutions can be networked into public safety systems to enable police, law enforcement or homeland security personnel to monitor emergency situations and the public safety response. Tying together video feeds provides real-time situational awareness to first responders. Video can also assist with crowd control during special events to determine, for example, where more police officers are needed.

Health care — Video is available from cameras anywhere in a health-care setting via a campus-wide network or the Internet. Any computer can access video, so hospital management and department heads can immediately see what is happening in real-time. Mobile access to video even allows remote monitoring of activity across the hospital or health-care setting, providing a range of potential benefits related to monitoring efficiencies and productivity.

Retail — Video is a powerful tool that extends beyond security and loss prevention for today's retailers. Wide availability of video empowers a range of business intelligence functions, including quality control, customer service and merchandising. Video can help determine the most effective scheduling of personnel or the most effective point-of-purchase (POP) display by viewing when the busiest times are in stores or at a particular counter or display. By analyzing video, retailers can determine customer spending habits and the best use of personnel. Overall, analyzing video provides data that can direct retailers to the best use of people and resources.

Utilities — Whether viewing the premises of a large water reservoir and treatment plant or a transmission substation anywhere on the electrical grid, video of the geographically distant elements of a utility business can provide a useful resource for end