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WHO? WHAT? WHEN? WHERE? WHY?

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Advances in digital technology within the security industry are driving today's convergence mania. For example, options abound in security video surveillance, particularly the choice between traditional and IP technology.

More choices offer greater flexibility for both the buyer and the seller, but these same choices can sometimes introduce confusion, complexity and doubt into the process. I have learned from years of experience that some "old school" training is still relevant in today's IT-centric world. Some of the best preparation for the buying/selling process involves answering these tried-and-true questions:

- **Who** is really going to use the system? (Not, who is buying — paying for — or recommending a sophisticated system?) How many feature sets are really necessary to satisfy 80 percent of the everyday requirements of the system?
- **What** will the system actually accomplish? This is very different than the concept of what the system is "envisioned" to accomplish. When you consider that most sophisticated technology systems are only used at 20-25 percent of system capabilities, you have to ask the question — is this really a good investment? Senior management will certainly ask that question.

- **Key benefits may include:**

When will the system actually be used? Will it be a "dark room" operation that is accessed only when an incident needs to be reviewed? If the answer is yes, and the time frame between incidents is three to four weeks, you may have a problem.

- **Where** will the system be accessed and viewed? New technology shines in "many to many" applications where many cameras can be viewed from many locations with no special training or software, but smaller applications may not require all the bells and whistles that jack up the cost.
- **Why** are we investing in this system and what is the Return on Security Investment? "What is the cost if we don't make this investment?" is a logical and often-asked question by senior management.

A key benefit of IP video surveillance is the ability to take advantage of unique features embedded in the IP camera processor. Motion detection, region of interest, cropping and masking zones, network auto-discovery and analytics are all examples of such features.

The next step is to look at these and other actual benefits of an IP video surveillance system and decide if indeed they are necessary to the application at hand.

- Less data storage required as events are pre-analyzed before they are sent.
- Less bandwidth required, thus enabling smaller VLAN configurations.
- Optimization of network performance by way of management by exception.
- Optimization of system operations by reducing observation errors.
- Standardization of systems around well defined network specifications and rules.

- Simplified operational use of video systems to reduce learning curves.
- Faster delivery of critical video data to reduce response times.
- Innovative applications to solve unique business, as well as security, issues.

There are also many non-quantifiable benefits attached to IP video surveillance systems, such as improved image quality, better maintenance and service, increased flexibility and easier troubleshooting. Additionally, IT equipment is expected to fall in price faster than analog equipment, which will make the comparison more favorable.

As we all know, security applications and system decisions are rarely black and white. In answering the above questions, actual need must be separated from other factors in order to make the right choice.

When comparing traditional and IP systems, it is also important to consider the fact that IP video solutions deliver business value in different, sometimes non-traditional ways. For example, equipment moves, additions and changes may be less expensive due to the use of structured cabling, and the integration of video into other systems often creates valuable, new customer solutions. New digital video surveillance technology can also integrate video to other computerized systems operating throughout a facility, thus increasing the systems' value and efficiency, almost without limit.

If a long-term, new system/building, network-centric, multi-tasking information system (video) with active daily or weekly access from multiple departments is needed for more than just security purposes (and a knowledgeable IT staff is available to support the system), the pure IP video route is the best bet.

The future adoption rate of the two system types will vary by industry. Vertical markets that already have robust IT backbone networks naturally will be adopting a pure IP video solution at a faster pace. An earlier adoption of IP video technology is an easy bet in facilities such as college campuses, hospitals, corporate headquarters and airports.

Consider the case of a mid-term investment mindset, with a system to be used to actively monitor or investigate incidents in real-time with PTZ operability, cabling that includes legacy systems and use of network capabilities. In this instance, a combined system of analog/digital/IP makes sense to explore. In these scenarios, security professionals are deploying "hybrid" solutions, which may incorporate analog/digital cameras with encoders and video management software onto IT servers to deliver a migration path that makes economic and operational sense.

Finally, there is still a market need for conventional analog/digital/DVR video solutions that are stand-alone without benefit of network connectivity. In the retail and banking industries, which by their very nature consist of widely dispersed networks of smaller locations, the preferred solution for some time will be analog cameras and recorders. They are also heavily invested in legacy systems.

This "traditional" market segment will be here for the foreseeable future and is still a viable solution regardless of so much future hype to the contrary.

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EDITOR'S NOTE: *Our monthly column translates issues of convergence into everyday, practical terms. The goal is to provide readers with an action plan to promote convergence within their companies and to provide useful information on how to implement new technologies. Previous columns are available at www.securitysolutions.com.*