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MARCH 2010

Video Technology & Applications

IMS REPORT: Breakdown on the *HOT* Surveillance Trends for the Year Ahead

Video Roundtable Tell-All

SUPPLEMENT TO:
Security Dealer & Integrator
Security Technology Executive

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Video Surveillance Tops the Charts

IMS predictions for the year ahead

By Alastair Hayfield

Security and video surveillance go hand in hand, no matter what type of product or solution you are using to secure your business or home. And for today's video technology developers, integrators and resellers, timing could not be more of the essence. A large number of business owners and technology providers have been affected negatively by the economic downturn. Some have managed to prosper despite the recession. Others have managed to break even, without losing or gaining much but instead hoping for a better tomorrow. Whatever the current state, video surveillance is going to see a number of changes for the year ahead and getting on board with IP technology is inevitable.

Changes to come for 2010

It has a host of names—Managed Video as a Service (MVaaS), Video Surveillance as a Service (VSaaS), remotely monitored video—but whatever the name, 2010 will be the year it moves out of the shadows into the limelight. VSaaS could be the disruptive force needed for network surveillance to penetrate the low-end of the surveillance market. The current high price of network cameras and the need for reasonable IT skills is limiting the uptake of network video surveillance in smaller-sized systems with low camera counts. With VSaaS, the initial system cost is reduced by removing the need for local management and storage, and replacing it with a subscription-based monthly service. Furthermore, users are not required to be proficient with IT as the system management is performed remotely.

One of the benefits of VSaaS is none of the management or operation is really done by the end-user. VSaaS will be a product that a lot of monitoring centers will offer as a new service in addition to already offering alarm verification. It might even be a service that is appealing to people who have never used a surveillance system before. That said, people will continue to use traditional security systems for some time to come. But this particular technology will start to gain some market penetration—it will be a new service for end-users to opt for versus using a traditional DVR and analog camera system."

In the consumer electronics world, inexpensive and relatively large capacity solid state storage media are taken for granted. Used in cameras, phones and mp3 players; solid state disks are used in such great volumes that the price per unit has plummeted. Year 2010 will see more vendors offering

A Must Attend Event!

IMS Research will be hosting its press briefing at this year's ISC West show in Las Vegas. The press briefing will take place at the Venetian Hotel, Veronese room number 2403 at 2 p.m. on Wednesday March 24th.

To register for this event, please contact Paul Everett, research director, Access Control, Fire & Security Group, IMS Research, at paul.everett@imsresearch-usa.com

a wider range of network cameras with SD card support. Network cameras with SD cards are expected to be commonly used in VSaaS applications–further driving adoption of both technologies.

In the short-term, DVRs and NVRs will be the recording platform of choice while in the medium-to long-term, you'll see solid state media become a part of the recording ecosystem. People are still going to want a DVR or an NVR because that's the tool that allows them to manage the video and that will be the case for the next five years and beyond. Furthermore, hard-disk drive storage is much cheaper than solid state media and is therefore a more cost-effective means of storing video data. However, I do foresee solid state storage becoming an important part of the video surveillance system in the long run.

Network video surveillance solutions are also gaining major traction in large scale deployments where the lower total cost of ownership, integration benefits and improved camera resolutions are clear advantages over analog solutions. But in the lower-end market, network cameras remain too expensive, with some network camera models being more than four times the price of like-for-like analog models.

The overall transition to HD/megapixel cameras and dome-type cameras will see the average price of network cameras fall slowly–because the product mix is moving to higher value products. However, like-for-like network camera prices will start to fall significantly in 2010, by at least 15 percent in some instances. Increasing competition; lower cost imports from Korea, Taiwan and China; and a desire to penetrate price-sensitive markets will all play a factor. Furthermore, the adoption of open standards, such as ONVIF and PSIA, by lower cost camera suppliers means that inexpensive cameras can easily be supported by most VMS platforms. End-users will have a wider choice of low-cost solutions to choose from. It is likely that established manufacturers will announce 'basic' or 'economy' lines in 2010 to help maintain their competitive positions against lower-cost rivals. Furthermore, the adoption of HD sensors in video surveillance cameras means that the economies of scale from the consumer world can be brought to bear on the prices of high-resolution network surveillance cameras.

The year 2010 will also see the continuing polarization of the Video Content Analysis (VCA) market.

The biggest trend for video analytics in 2010 will be searchable or forensic analytics. In the same way that search engines created mass appeal for the internet, searchable analytics are predicted to change the way that stored video is searched by making it quicker, easier and more cost effective.

Searchable analytics work by creating a meta-data stream in parallel with the video stream. The meta-data acts like an index of the video, storing event information such as object size, color, type, speed and the event duration. This allows the user to quickly search the stored video for a specific object, for example "red cars". This trend will be driven by markets such as homeland security which require fast data retrieval and analysis in the event of major incidents.

In the past few months we saw more and more technology providers partner or merge to provide more powerful solutions. United Technologies Corp. (UTC) acquired GE Security; GenNx360 Capital Partners purchased GVI Security Solutions; Samsung Techwin absorbed Samsung Electronics' video surveillance business; Pelco and Cisco formed a strategic technology agreement; and these are just a handful of the major acquisitions and mergers we've seen in past months. The number of mergers and acquisitions for 2010 will continue to grow and IMS Research predicts that at least one "established" vendor of video surveillance will withdraw from the market in 2010.

It's not only acquisitions and mergers. We're seeing an increasing number of technology partnerships in the market and for the end-user, the end benefit is that the individual strengths of the companies are brought together to provide better products, better support and better service.

For megapixel network cameras, the days of too much hype might be behind us. Two or three years ago, the market saw a lot of product announcement with companies announcing their cameras having 5, 7 or 10 megapixels. 2010 will see 720p and 1080p (full HD) cameras offer a good compromise between image resolution and bandwidth usage, and manufacturers are beginning to exploit this opportunity.

Nowadays, manufacturers are focusing less on pixel count and a lot more on product maturity, camera quality, low light capabilities, sensor size and dynamic range.

In IMS Research's "World Market for CCTV and Video Surveillance Equipment–2009 Edition" report, one and two megapixel cameras are forecast to represent nearly three-quarters of megapixel camera shipments in 2010. Whilst HD network cameras currently account for a small percentage of these, IMS Research believes shipments will grow rapidly to represent the majority of the megapixel camera market.

H.264 is no longer a new compression technology in video surveillance. In 2008, over half of the world's fifteen largest vendors of video surveillance equipment (by sales revenue) offered H.264 products and in 2009 this increased to eleven of the top fifteen. The use of H.264 will continue to grow rapidly in 2010.

For IP cameras, the existing providers are looking to expand either their current megapixel ranges or their HD products. The sensor technology providers are offering HD format chips or HD format image sensors taken from

the consumer world. You'll also see the expansion of product ranges to have a broader range of megapixel or HD cameras and H.264 will be rolled out over those new products as well.

Video Management Software (VMS) will also continue to evolve. 2009 saw a handful of VMS providers moving towards converged security management, with OnSSI launching its Ocularis management platform, Genetec launching its unified security platform Security Center and NICE Systems' acquisition of Orsus. VMS vendors will face increasing competition as more DVR suppliers make the move into the IP video surveillance market.

Furthermore, there is an increasing trend for low-cost network camera manufacturers to offer low functionality VMS free of charge. In the longer term, the move to open standards, such as ONVIF and PSIA, will lower the barrier to entry for the VMS market, further increasing competition. Moreover, as open standards gain traction, support for hundreds of network cameras will no longer be a unique selling point. VMS vendors will have to focus on advanced functionality in order to remain competitive.

Open standards will positively impact the video surveillance industry in a number of ways. Firstly, open standards will accelerate the transition from analog CCTV to network video surveillance by reducing current installation complexity and introducing "plug and play" compatibility. Secondly, open standards will lower the barriers to market entry for both VMS vendors and network camera manufacturers. As a result, IMS Research expects an influx of new suppliers and this will drive equipment and software prices down.

We don't really foresee a third standard specifically for video surveillance in the near future. When you look at the companies who are participating in both standard groups ONVIF and PSIA, there is a very high market coverage in those two existing groups. With a large number of companies being members of both standards, one possible outcome could see ONVIF's standard and the PSIA's video surveillance standard coalescing. While we do not foresee this occurring in 2010, it should not be ruled out in the longer term.

At a Glance: 10 for 2010 predictions

1 2010 will see Video Surveillance as a Service (VSaaS) emerge from the shadows and take the limelight; 2010 will see a raft of companies announce VSaaS solutions.

2 Storage on the camera will be a hot topic in 2010. SD card support will be offered in more network cameras and end-users will increasingly exploit this feature.

3 Brazil is IMS Research's country market to watch in 2010. Infrastructure development and security spending ahead of the FIFA World Cup and Olympics will see the video surveillance market boom in Brazil.

4 Network camera prices will drop in 2010 as a result of increasing competition, lower cost imports and manufacturer desire to penetrate price sensitive markets.

5 Searchable analytics will be the next growth area for Video Content Analysis (VCA).

6 The competitive landscape of the video surveillance market will change significantly during 2010. Mergers and acquisitions will continue apace, with at least one "established" vendor leaving the market altogether.

7 HD resolution cameras will gain serious market traction in 2010.

8 H.264 usage will grow spurred by the increasing prevalence of megapixel and HD resolution cameras.

9 Open standards will continue to impact the market positively and will further accelerate the transition to network video surveillance. Greater availability of products conforming to open standards, such as ONVIF and PSIA, will further accelerate the trend to network video surveillance.

10 Video Management Software (VMS) will evolve in 2010 to offer unique user features, PSIM functionality and much more.

So with all the changes video surveillance will see in the next year, which is the market to watch in 2010? IMS Research is picking Brazil and predicts that video surveillance revenues in Brazil will grow by an average of 20 percent per year for the next five years. By 2013 Brazil is forecast to be the fastest growing major market for video surveillance equipment, outstripping China, India and Russia. With the FIFA 2014 World Cup and the 2016 Olympic Games both being hosted by Brazil, it's hard to expect anything less. Both events will require significant infrastructure development and expenditure on security. Brazil's Justice Minister Tarso Genro recently announced that the Rio de Janeiro state will receive 900 million Reais (U.S. $511 million) to ensure security of the 2016 Olympic Games. Brazil is also looking to combat rising crime levels with public area surveillance. The year 2010 will likely see more city-wide surveillance projects announced, further fueling demand for video surveillance cameras.

Alastair Hayfield is research manager for Video Surveillance and VCA, IMS Research, Wellingborough, England.

Manual Review No More!—Agent Vi's video search software, Vi-Search, performs automatic and rapid search, retrieval and analysis of video segments, events and data from vast amounts of recorded video. **Visit www.securityinfowatch.com/sdi/einquiry 601.**

View It Live!—IndigoVision's 'Control Center' software allows operators to view live and recorded video from cameras and NVRs located anywhere on the network. The ONVIF version of 'Control Center' will be released in the second quarter of 2010. **Visit www.securityinfowatch.com/sdi/einquiry 602.**

All-In-One DVR—Swann Security's DVR-5500 is an all-in-one DVR security system. It features live remote viewing over the internet, intuitive menus and pentaplex operation for simultaneous viewing/playback/backup/configuration. **Visit www.securityinfowatch.com/sdi/einquiry 603.**

Expanding the 'JPEG' Line—Arecont Vision's new Compact JPEG cameras are designed to address cost sensitivities in the JPEG market and are equipped with motion detection and 64 zone capability and customized programmable options. **Visit www.securityinfowatch.com/sdi/einquiry 604.**

Versatility at the Core—Avermedia's EB5216Plus solution is a full hybrid EH DVR system that can be used as an NVR. Additional features include: a Linux embedded system; Graphical User Interface (GUI); and customizable frame rates (fps) and resolution. **Visit www.securityinfowatch.com/sdi/einquiry 605.**

Video Surveillance in Any Environment—AXIS Communications' P1344 Network Camera is a fixed network camera, delivering H.264 performance in a robust design. Superb HDTV video quality is provided with progressive scan in multiple individual H.264 streams, as well as motion JPEG streams. **Visit www.securityinfowatch.com/sdi/einquiry 606.**

S-Box Series—Bolide's SVR9000S "S-Box" series DVR is compatible with iPhone, Symbian OS, BlackBerry and Windows-based smart phones. It allows the users to control and view up to 16 cameras remotely. **Visit www.securityinfowatch.com/sdi/einquiry 607.**

Software Supports Edge Devices—DVTel's latest version of Latitude Network Video Management System (NVMS) - V6.0.2 supports over 300 different edge devices from Arecont, Axis, Bosch, Extreme CCTV, IQInvision, Panasonic, Pelco, Sight Logix, Sony, Verint and all the latest IP cameras and encoders from DVTel. **Visit www.securityinfowatch.com/sdi/einquiry 609.**

Update on Video Analytics Technology—Honeywell's Active Alert® v4.7 is the newest addition to the company's portfolio of video analytics technology. It features foreign language support and a centralized alarm management system that users can customize. **Visit www.securityinfowatch.com/sdi/einquiry 610.**

HD/Megapixel Network Camera—The IQeye HD1080p from IQinVision delivers HD progressive scan video for surveillance, marketing, and web attraction applications. The camera is available in standard and day/night, features H.264 performance and is PoE ready. **Visit www.securityinfowatch.com/sdi/einquiry 612.**

Universal VMS—iOmniscient's Video Management System offers: seamless integration with video analysis; universal connectivity – it can connect to cameras, encoders and analog devices; and infinite scalability and total flexibility in terms of architecture and distribution. **Visit www.securityinfowatch.com/sdi/einquiry 611.**

Powerful Solution the Enterprise Level—NUUO's Central Management System V1.3 is designed for large-scale and high-level enterprise projects. Features include: centralized video management; advanced GUI alarm management; and an instant live view and playback. **Visit www.securityinfowatch.com/sdi/einquiry 614.**

Innovation Through the Lens—Theia Technologies' offers its ultra wide angle, no distortion, SY110 megapixel lens, which can be used on day/night and standard security cameras. The lens is offered with a CS mount, in both auto and manual iris versions. **Visit www.securityinfowatch.com/sdi/einquiry 608.**

New Spectrum of Thermal Cameras—FLIR Systems' new line of IP thermal cameras includes the PT Series. The camera provides easy integration over open IP network standards and dual channels of streaming digital video in H.264, MPEG-4, or MJPEG formats, allowing users to mix and match formats to meet various viewing and recording requirements. **Visit www.securityinfowatch.com/sdi/einquiry 621.**

HD CCTV—SANYO North America Corp. showcases its line of nine HD surveillance cameras that offer up to 4MP MJPEG and full High Definition (HD) 1080p video for critical security monitoring. The network cameras offer multi-streaming H.264 and MJPEG codecs. **Visit www.securityinfowatch.com/sdi/einquiry 630.**

H.264 IR Surveillance System—Supercircuits' complete turnkey video surveillance systems with H.264 technology includes four night vision color dome cameras and a four-channel H.264 DVR with 250 GB hard drive. **Visit www.securityinfowatch.com/sdi/einquiry 619.**

Exceptional Imaging Comes in Small Packages—Tamron's DCV-28105N-12 dome camera combines state of the art imaging technology and an ultra-high-resolution, multi-coated Tamron 2.8-10.5mm f/1.2 vari-focal lens for maximum flexibility and performance at viewing angles up to 100 degrees. **Visit www.securityinfowatch.com/sdi/einquiry 620.**

Meeting Installers Demands—Video Mount Products' new IWB-1 flat panel In-Wall Box Adapter works in conjunction with the VMP LCD-1 Multi-Configurable Universal LCD Monitor Wall Mount or the VMP LCD-2537 Multi-Configurable Universal Mid-Size LCD Monitor Wall Mount. Additional features include: a load capacity of 75 pounds; and it holds most 15-inch to 32-inch monitors. **Visit www.securityinfowatch.com/sdi/einquiry 632.**

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VIDEO Surveillance: The Year Ahead

Exclusive supplier's roundtable

By Paul Rothman

The rise of high-definition video, enhanced video compression standards and the movement to create open standards in the IP Video market are some of the driving forces behind change in the video surveillance industry in 2010.

SecurityInfoWatch.com recently caught up with several of the major video surveillance technology vendors to get their take on what 2010 and the future holds in store for end-users, vendors and integrators alike.

The following is excerpted from the full roundtable discussion available at SecurityInfoWatch.com. Be sure to check the Web for further discussion from our vendor panel on these topics, in addition to discussions on systems integrators and recent mergers and acquisitions and their impact on the industry.

Also, be sure to check out SIW's exclusive "Video Surveillance: The Year Ahead" integrator's roundtable, where several consultants and systems integrators share their views on these topics.

What is the one technological innovation that will have the greatest impact on video surveillance this year, and how will it do it?

Eli Gorovici: As the technology for high-definition and megapixel cameras continues to improve and applications are created to use these IP cameras, processing on the edge is the technology innovation to watch. All of these factors are forcing the industry to put applications such as analytics on the edge to stream less video data to the center and to balance the load to improve functionality.

Bill Taylor: The newest standard in IP video compression, H.264 will continue to gain traction as more manufacturers, resellers and end-users embrace it. By minimizing bandwidth consumption, this technology will continue to pave the way for greater use of analytics and megapixel cameras.

Dr. Michael Kaplinsky: The H.264 video compression standard will continue to have a huge impact on cost and adoption of IP video surveillance this year and for years

The Participants

Eric Fullerton, Chief Sales & Marketing Officer, Milestone Systems

Dr. Michael Kaplinsky, CEO, Arecont Vision

Marek Robinson, Sales Director, Honeywell Video Systems

Eli Gorovici, President and CEO, DVTel

Miguel Lazatin, Senior Marketing Mgr., Sony Electronics

Bill Taylor, President, Panasonic System Solutions Co.

Chris Johnston, Product Marketing Mgr., Bosch Security Systems

Gadi Piran, president, On-Net Surveillance Systems

Eran Wachman, VP of Product Management, Verint Systems

to come. H.264 compression makes video stream sizes more manageable, which greatly reduces issues of bandwidth and storage. H.264 also opens the door to industry-wide uses of previously bandwidth-intensive state-of-the-art technologies such as megapixel video.

Miguel Lazatin: As the industry migrates toward IP video solutions, the need for higher resolution image capture and recording is becoming more important; thus, high definition video will have the greatest impact in 2010. Continued success of HD will be facilitated by manufacturers that are committed to developing and introducing products that seamlessly integrate with various software platforms including video management, access control, PSIM and POS.

Chris Johnston: The movement to create and popularize open standards — such as ONVIF — within the industry will have the greatest affect on video surveillance this year. Already, many major manufacturers' products are gaining certification by ONVIF, and most software head-end manufacturers are in the process of integrating ONVIF into their offerings.

Eric Fullerton: 2010 is going to be the year where low-end appliances carrying IP VMS already installed will become competitive with the low-end DVRs, thus making a large dent into the DVR (and analog) market that previously has not been accessible due to price and form factors.

Gadi Piran: Video on the network platform will continue to transform video surveillance and management across the enterprise with a new level of integrated physical security and shared event-handling capabilities. Video and data management technologies will continue to gain traction as more organizations move to network-based integrated systems.

Eran Wachman: Video content analysis (VCA) will continue to be a key innovation impacting the video surveillance market. VCA provides organizations with a sophisticated, proactive, network-based IP video platform that leverages video management and analytics solutions.

How will video analytics gain traction and become a profitable part of the video surveillance industry in 2010?

Taylor: Adoption of video analytics as a security tool is, relatively speaking, in the early stages. As customers see the benefits in these analytic tools, the market will respond. Right now, customers with specific needs will certainly lead the market in their use of video analytics for targeted applications. As time goes on, it will become apparent to the remainder of the market that intelligent video technology can help increase efficiency and effectiveness of security staff.

Piran: Video analytics are an effective tool in the broader-based environment of a video-based physical security information management (PSIM) system. Linking video analytics events to other components in an overall system — from access control systems to point-of-sale systems — creates a composite alert and can confirm an alarm and provide the operator real-time video. It's a way to improve efficiency and effectiveness while preserving the critical element of human intervention.

Kaplinsky: Mainstream deployment of analytics on the edge devices will probably be impeded by the lack of clear standardization of functionality and interfaces for camera-based analytics. Furthermore, many algorithms are computationally expensive, causing substantial cost increase of the camera — making deployment unfeasible for camera manufacturers. Analytics will likely remain a niche market for a while, evolving into features in network video recorders (NVRs), where it can be implemented as user-selectable option without affecting system cost.

Gorovici: No longer is video analytics the "black magic" that it was just a few short years ago. With all of the gathered field experience and product modifications, it is now a technology that improves surveillance and security performance in installations in which it is deployed. This trend will continue to push intelligence to the edge so that more behaviors can be installed using less central processing power.

Lazatin: While use of analytics is not prevalent in most security applications, successful deployment in high-risk, high-profile areas, such as airports and stadiums, will ultimately accelerate adoption of video analytics in more common market segments and applications.

Fullerton: It's questionable that this will happen in 2010. Video analytics has been the promise of the future for the past half decade; however, no VA companies have proven what an acceptable, sustainable business model would look like.

Johnston: Analytics won't truly gain traction in the market until integrators and end-users recognize it as a reliable technology. Using features like the ability to perform a forensic search on pre-recorded video can help; technicians can fine tune algorithms to customer specifications during initial system setup instead of making repeated trips to the site to adjust for changing conditions.

2009 saw a slow-down in the overall market growth projections for IP video. Do you expect 2010 to be similar to 2009 in terms of market growth, or if not, what will turn it around in 2010?

Kaplinsky: The second half of 2009 has already shown marked upturn in our market and I think we can expect 2010 to be even better. The economic slow-down in 2009 has forced many manufacturers to invest heavily into cost-reduction redesign of their products using most modern and efficient compo-

nents. These lower cost and often higher performing products will hit the market in 2010, promoting an increased market growth.

Fullerton: Most markets have returned to the growth patterns we saw before the 2008 slowdown. The factors helping the market come back include the fact that there's a continuous need for physical security and that the extent of the financial crisis is now better understood, so customer confidence has returned and budgets are being released.

Piran: As the economy continues to rebound, we expect a renewed interest to invest in video and security technologies. Certainly, many companies are realizing that the economic justification is there for video and security systems. Adoption of IP-based solutions will accelerate in 2010, fueled in part by advances in investigative functionality.

Taylor: The improving economy suggests that IP video will grow and most likely exceed 2009 growth rates. In addition to a better market outlook, the benefits of networked video are becoming better known among integrators and especially end-users, whose buying decisions are increasingly influenced by IT professionals inside their organizations. Also paving the way for broader market growth is development of standards by ONVIF and PSIA. Among other advantages, standardization can help to simplify installation of IP-based systems.

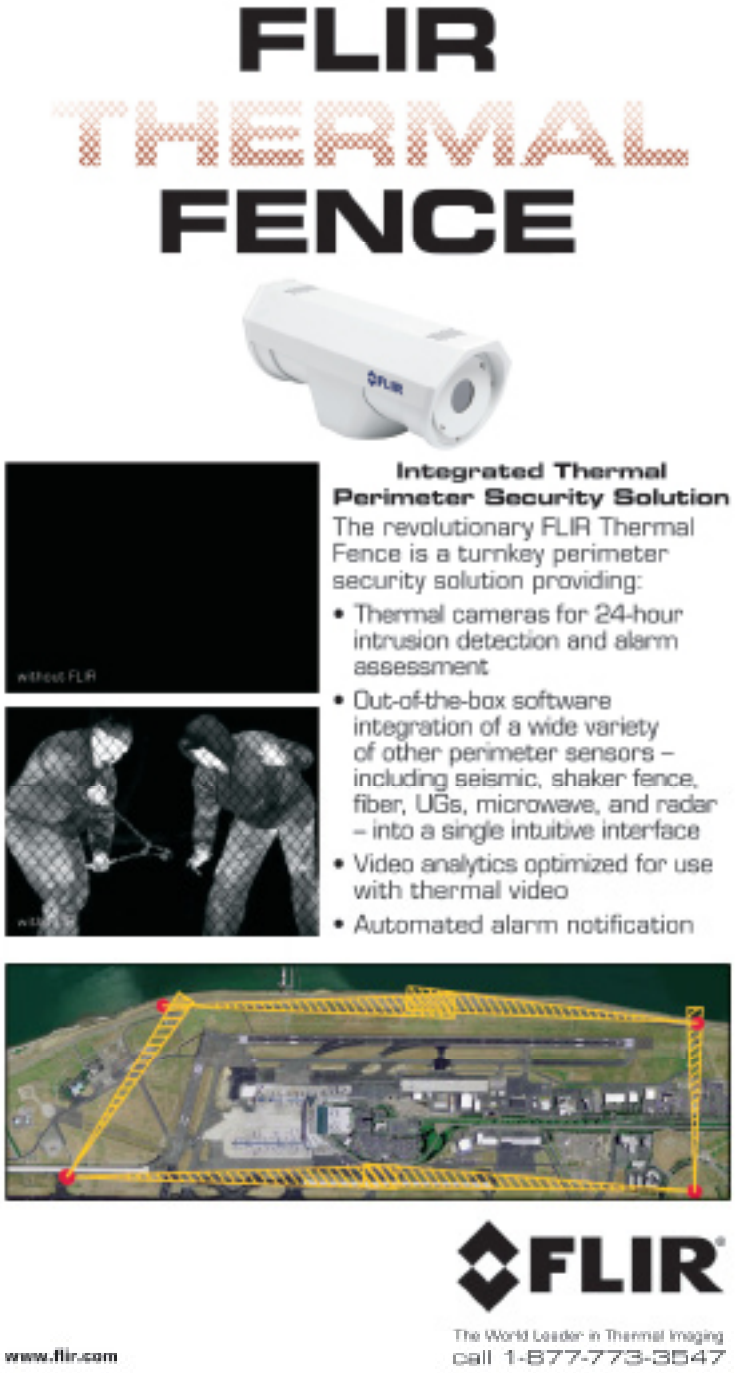
Lazatin: 2010 growth rates will be similar to 2009. Success in the government sector depends on how quickly stimulus funds funnel to projects. If the economic situation persists, opportunities in retail, banking and key segments in the private sectors will continue to be scarce.

Wachman: We expect to see continued migration from analog to IP video over the next few years. Further, we expect there will be a growing trend in the number of customers that purchase end-to-end IP solutions to help ensure optimal system interoperability and lower integration costs.

Gorovici: The launch of new products and innovation shows overall confidence in the market. We have seen more funds made available for security, and the landslide of recent breaches lend itself to a much-improved 2010.

Have the rumors of the death of analog video been highly exaggerated?

Marek Robinson: Yes, the rumors are a bit exaggerated. At this point in time, we're not going to see the complete death of analog video anytime soon. While IP-based systems are growing in prevalence as viable video options, it's still difficult for many organizations to rationalize



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and navigate a complete switch from analog to IP given factors such as tight budgets, unsettled industry standards and increased scrutiny on new expenditures. Analog is also still very much a relevant factor in the IP migration equation due to the use of hybrid solutions, which incorporate both IP and analog-based technology. We're seeing a number of companies adopting hybrid strategies and further proving that analog is not dead yet.

Fullerton: We've always known that analog would live on for a long time, like the typewriter continued to live for years after the PC was introduced. It is expected that the technology is a sunset industry, but there are installed bases with cycles that are 12-15 years long that will continue for that reason.

Lazatin: Although there was demonstrable slowdown in sales of analog video in 2009, end-users can realize cost advantages to installing analog based systems. This trend is more prevalent in small- to medium-sized surveillance applications, in segments such as retail, restaurants, houses of worship, etc. The decline of analog video and the growth of IP video will be slower than predicted.

Johnston: While the rate of change from analog to IP video is certainly increasing, 2010 will not be the year that IP sales exceed those of analog systems. Many customers, such as large retailers with thousands of stores, have significant investments in analog technology. The owner of a delicatessen or pizzeria isn't likely to prefer an IP system to an analog system, but it's likely that cost will factor highly in the sale.

Piran: Analog video systems are still alive and will generally remain in place until upgrades are required but they are facing a slow death. IP-based video systems are the superior technology, although there may continue to be installations for which analog systems are "good enough," and can be integrated onto a networked platform to some degree.

Gorovici: There will always be applications for analog video, but the need is becoming less and less. IP Video is now a more accepted technology and the trend is certainly for network-based solutions and applications.

Kaplinsky: Given the convergence of corporate IT infrastructure with security, it is likely that within five years, analog video will be a small percentage of new systems sold. Analog video does not offer a clear resolution upgrade path, and greater resolution is critical for the security industry.

Taylor: Analog is still alive and is a perfectly viable solution for certain applications. Customers need to work with resellers and manufacturers to determine the best solution for their security needs and choose the most beneficial solution based on cost-comparisons.

Paul Rothman is managing editor of Security Technology Executive.

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