one way that integrators

selves. At ISC West 2018 those

integrators will get a chance to

such as better analytics, more

efficient storage and compres-

sion, and cloud technology that

will enable them to deliver more

tailored solutions to their retail,

gaming or other vertical market

cal market-specific solutions is

lance manufacturers and other

"One of the most fruitful

activities from our vertical growth

approach has been developing stra-

tegic relationships with enterprise

video management systems (VMS)

providers and SaaS (software

as a service) providers, increas-

ing Hikvision integration with

versatile technologies that deliver

more comprehensive solutions to

clients," said Jeremy Howard, VP

of business development at video

surveillance provider Hikvision

USA, Inc.

technology providers.

partnerships among video surveil-

customers.

critical infrastructure, healthcare,

A key element of the new verti-

New Analytics, Economical Upgrades and Technology Partnerships Propel Integrator Success in Vertical Markets



By Heather Martin. Vertical markets encompass a wide range of unique industries,

each with their own regulations, requirements and conditions for surveillance. At this year's show, exhibitors are showing exciting but ertical market expertise is practical new technology offerings for integrators who play in the reseek to differentiate themtail, critical infrastructure, casino gaming, and healthcare industries, among others. check out solutions with features

Retail

Retailers are seeking cost-effective solutions that leverage existing technologies and infrastructure at their stores. Video analytics that support loss prevention, drive sales and improve operations are highly valued. Analytics such as people counting and heat mapping technology measure the impact of an ad campaign or report traffic flow into stores. They can also show activity around specific in-store displays to gauge effectiveness.

"Integrators who can leverage third-party technologies will deliver greater ROI for their clients' surveillance systems. An integrated software solution enables retail managers to perform virtual visits, and to pull up footage from specific surveillance cameras within retail stores using key word or regional searches," said Cliff Miller, Hikvision's national accounts, retail. "This enhanced feature means greater capacity for



Technology, security and IoT-related innovation are key trends in the healthcare space

monitoring, with a reduction in travel time required."

Critical Infrastructure

Thermal cameras are integral to integrator success within the critical infrastructure protection market. Big users of thermal include transportation (airports, ports and rail), energy (oil and gas facilities), grid protection (electrical power plants, substations and nuclear

power), and government (border protection and military).

Thermal cameras can detect infrared energy, which is emitted from objects such as humans, animals, and vehicles, at distances up to several miles away. This technology caters to complex applications over large areas where lighting improvements are not practical or affordable.

"Integrators are using thermal in unique applications such as early

warning devices to detect rapid rise in heat before a fire can start, even before smoke or sprinkler systems can detect this activity," said Tony DeStefano, Hikvision's business development manager for thermal cameras. "Innovative applications of thermal technology can potentially save clients thousands of dollars, even millions in some cases, by improving operational efficiency and protecting equipment, property and personnel."

Casino Gaming

Technological innovations - such as longer range Ethernet capabilities and higher definition cameras working over coax cabling infrastructure – enable casinos to upgrade old analog cameras with high-definition cameras.

"New technologies are facilitating change in gaming. Typically, the average casino won't change its technology for eight to 10 years because they simply cannot afford to upgrade infrastructure from coaxial cable to CAT 5 cable on such large systems. This, coupled with the disruption to the casino floor during upgrades – affecting its core revenue stream - makes it virtually impossible to accomplish. With better technology, these challenges can be overcome," said Scott Bartlett, Hikvision's business development manager for casino gaming.

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The Top 5 Technology Trends That Will Shape 2018



VP, Americas, Axis Communications. Inc.

s Greek philosopher Heraclitus said, "The only one constant in life is change." This is certainly true for the technology and security industry. The pace of technological innovation is such that even the most fantastic of imagined futures seem like they could easily become reality.

As we look deeper into 2018, I've identified trends that I think will have an impact on the industry as a whole.

1. A move towards the edge Two trends of recent years that

have become familiar - cloud computing and the Internet of Things - have delivered undeniable benefits to businesses and consumers alike. But they also come with implications: namely the huge increase in the amount of data being transferred from connected devices to the data center for processing and storage, and the associated bandwidth needed. Edge computing alleviates this issue by performing data processing at the 'edge' of the network, near the source of the data. Doing so significantly reduces the bandwidth needed between sensors and devices and the data center. Additionally, in certain devices, recording at the edge is available, especially with SD cards increasing in size. A further drive towards edge computing relates

to potential concerns around data integrity and privacy: anonymizing and creating encrypted data within the device at the edge before it is transferred to the data center will be a likely response to these concerns.

As network cameras, audio and other sensors - the devices on the edge of the network - become ever more sophisticated and of higher quality, the need to balance both cloud computing and edge computing domains will be imperative to deliver refined, reliable and usable data.

2. Cloud-to-cloud

Despite the move toward edge computing, as outlined above, cloud computing will still play a significant role in IT infrastructures. But while cloud computing

can give the impression of a single entity, there are, of course, multiple 'clouds' being used around the globe. As an increasing number of companies offer cloud-based services, the cloud ecosystem is increasingly becoming the preferred point of integration, rather than the traditional on-premise systems.

One benefit of integration between clouds is a significant potential reduction of in-house IT services required. Further, however, advanced composite services from multiple providers can be created and deployed through rich service APIs, including data analytics, content management, and storage, reducing time-to-market and rapidly increasing scale. Any organization delivering cloud-based services should be investigating the opportunity for integration with

related services to add value to customers and partners.

3. Cybersecurity

Once again, as it did last year, cybersecurity must appear on the list of trends for the next 12 months and beyond. The constant enhancement of cybersecurity will be a never-ending task, because wellresourced cybercriminals will never stop looking to exploit vulnerabilities in any new technology. As the number of connected devices grows exponentially, so do the potential flaws that, if0 left unaddressed, could provide the opportunity for networks to be breached, ransomware to be planted or, more simply, costly downtime to occur. 2018 will no doubt see more attacks and vulnerabilities exposed. The answer continued on page 40

Bartlett adds that casinos that do upgrade

to IP cameras can benefit from more efficient

compression technology. Codecs such as the

H.265 standard reduce data storage require-

ments and make better use of bandwidth so

without slowing down transmission.

that more equipment can work on one system

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Healthcare

Healthcare covers a broad segment of the market that includes major hospital systems, assisted living facilities, and skilled nursing facilities, as well as pharmaceutical manufacturers and distributors.

"Each healthcare sector has a unique set

of requirements, but in general healthcare vertical end users are looking for scalable, cost-effective and efficient solutions that can solve security and technology challenges in a sometimes chaotic and stressful environment. End users are looking for integrators who can implement and deploy systems that



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Learn more at Seagate.com/ISCWest Booth 10053 automate tasks or integrate into existing systems to improve security," said Chris Lennon, Hikvision's business development manager for the healthcare vertical.

Technology, security and IoT-related innovation are key trends in the healthcare space, with clinical facilities opting for video and audio in specialty patient rooms to help reduce things like patient falls and IV-pulling. Facilities are utilizing deep learning and smart analytics to ensure they are providing a safe and secure environment for their staff, patients and visitors.

Regulatory requirements, security profile, and operational environments all impact the demand for specific solutions in each vertical market. New applications using Artificial Intelligence (AI), deep learning, machine vision and smart analytics can deliver solutions that were previously unattainable.

Integrators will find that subject matter expertise in specific markets through industry experience, market study and understanding an end user's pain-points can help them leverage surveillance technology in new ways.

Hard-Wired Door Controllers Provide UltimateFirewall vs IP Based Systems

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programmer. Systems employing air lock control are typical in minimum security applications where all of the doors in the system are normally unlocked until any door is opened. Once any door is opened, all other doors in the system automatically lock. Typically, this design incorporates door position switches to control the system.

Secure entry/free egress systems allow a faster method of egress through a combination of locked and unlocked doors. Exterior doors are normally secured and interior doors normally unlocked. A card access system controls entry from the exterior and a R-E-X device is used on the interior of the outside door. A valid access card will unlock the exterior door only if the interior door is closed. Unlocking the exterior door will lock the interior door. Once the exterior door is re-secured, the interior door is unlocked to allow access into the facility.

With restricted entry and exit systems, a door can only be unlocked by making a request for access, all doors in the system are normally locked. As a result, opening any door keeps all other doors secure and simultaneous requests are buffered to prevent two or more doors from being unlocked at the same time.

Programmable interlock door control systems allow installers to customize a variety of entry and egress procedures and timing functions to meet user's specific needs. Their versatility, cost-efficiency and added security make them ideal for numerous applications.