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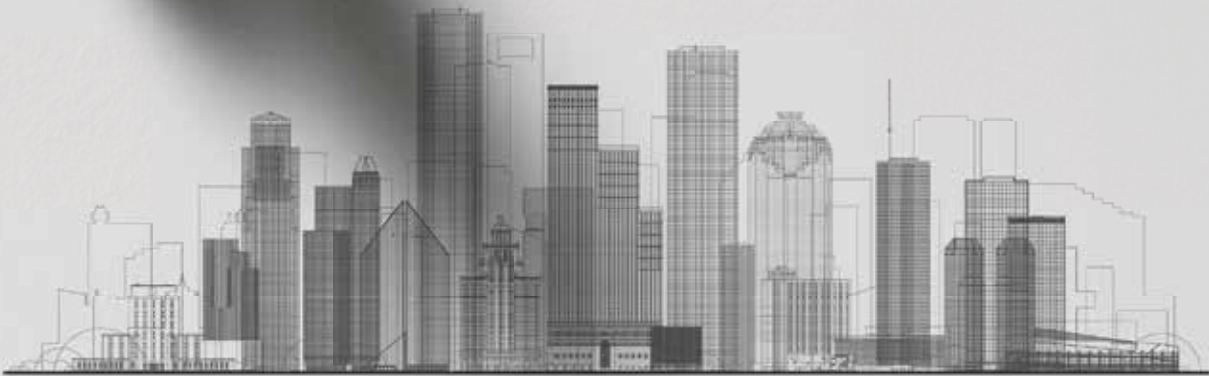
Mobile Credentials Gaining Ground In Access Control

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India's construction market, valued at $825.6 billion in 2023, is set for significant growth. Ensuring safety and security on construction sites is crucial due to high rates of accidents and theft. Traditional security measures often fall short, but modern technology offers robust solutions. Explore how advanced monitoring systems, wearable technology, access control, drones, robotics, and predictive analytics are transforming construction site management, enhancing safety, preventing accidents, and securing assets for more efficient project completion.

This article by Bernard Marr discusses key privacy and security tech trends for the next decade, including biosecurity, neurosecurity, quantum security, globalized cybersecurity, and digital identity, highlighting the challenges and risks posed by emerging technologies and the importance of robust ethical frameworks.

EDITOR'S NOTE

Dear Reader,

Statistics showed the Traffic Police has booked 16,859 violators for defective number plates so far this year, a significant increase from 4,363 in 2023. According to traffic police in New Delhi, defective number plates include those which are illegible, improperly formatted, or do not conform to the prescribed standards. Such number plates have been identified as a major issue contributing to traffic violations and security concerns.

Since it was invented in the UK in 1976, Automated Number Plate Recognition (ANPR) has come a long way. It is a technology that uses optical character recognition on images to read vehicle registration plates to create vehicle location data. It involves capturing photographic video or images of licence plates, and then they are processed by a series of algorithms that are able to provide an alpha numeric conversion of the captured licence plate images into a text entry in a form or database. It can use existing closed-circuit television, road-rule enforcement cameras, or cameras specifically designed for the task.

Since then, this exciting technology has matured considerably and prior limitations that were associated with vehicle speed, light fluctuation, angular skew, character segmentation and recognition have been solved with today's advanced algorithm technology, also known as Artificial Intelligence (AI). Today certain camera manufacturers claim up to 99% capture rates, at speeds up to 120 kmph, and 95% recognition rates. ANPR is being used by police forces around the world for law enforcement purposes, including to check if a vehicle is registered or licensed. It is also used for electronic toll collection on pay-per-use roads and as a method of cataloguing the movements of traffic, for example by highways agencies.

While ANPR can be used to store the images captured by the cameras as well as the text from the licence plate, with some systems even configured to simultaneously store a photograph of the driver. Systems commonly use infrared lighting to allow the camera to take the picture at any time of day or night. However, ANPR technology must take into account plate variations from place to place.

Concerns about these systems have centred on fears of the government tracking citizens' movements, intruding upon their privacy, misidentification and high error rates. Many ANPR systems claim accuracy when trained to match plates from a single jurisdiction or region, but can fail when trying to recognize plates from other jurisdictions due to variations in format, font, colour, layout, and other plate features.

Some jurisdictions even offer fancy number plates, which can create many variations within a single jurisdiction. Use of multiple fonts and colours; stickers bearing religious symbols or pictures of deities; slogans boasting of a particular political party, caste or community; and defects due to general wear and tear in high-security number plates are considered as illegal. But many just don't seem to care, creating a huge challenge for the police and ANPR cameras to recognise and record the correct data.

Till we meet next month, Stay Safe and Keep Others Safe.

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Top Privacy And Security Tech Trends Shaping The Next Decade

Bernard Marr

Bernard Marr is a world-renowned futurist, influencer and thought leader in the fields of business and technology, with a passion for using technology for the good of humanity.

Technology is evolving at a breakneck pace and in 10 years' time the world will probably be a very different place than it is today. My job is to look into the future and predict how technology will transform the way we live, work and play. Normally, I focus on what's just around the corner, as that's what my clients are preparing for today. But sometimes, it's interesting to look a bit further ahead.

In this piece, I'll take a look at how the way we think about and implement security and privacy might have evolved as we hit the halfway point of the next decade.

By this point, the world will be very different thanks to technologies that are emerging today, such as AI, quantum computing and biotechnology. With that in mind, here are what I believe will be the hot topics in this field as we head into the year 2035.

Biosecurity and NeuroSecurity

As technologies like gene editing and brain-computer interfacing (BCI) become commonplace, questions emerge about protecting the highly personal data contained in our DNA itself. Within ten years, we could even find ourselves needing to protect our innermost thoughts against entities seeking to hijack them for their own ends.

> **Within ten years, we could even find ourselves needing to protect our innermost thoughts against entities seeking to hijack them for their own ends.**

This could be selling our genetic data for unethical

research purposes. Or even reading our minds in order to work out how to manipulate and control us (or simply to sell us things). Sounds scary? Well, it's a danger that everyone is likely to be talking about in the next decade. The new field of neurosecurity will emerge, focused on protecting data that can be gathered from brainwaves and neurological activity from unauthorized access and manipulation. Robust technological, ethical and legal frameworks will need to be developed to ensure this frightening prospect doesn't become a reality.

Quantum Security

By 2035, quantum computing has evolved to the point that today's encryption measures, used to protect everything from your bank account to your private communications, may well be obsolete. Corporations and even governments will find themselves pouring huge amounts of resources into the race to develop more and more powerful forms of "quantum-safe" cryptography.

Financial transactions, highly personal healthcare data, confidential government and business information and intellectual property secrets are all potentially vulnerable. This will pose technological challenges, but also global security challenges as information held in encrypted depositories long considered safe become trivial for anyone with a powerful enough computer to access. Overcoming these challenges will require planning, investment, and the development of new frameworks for global data security cooperation.

Globalized Cybersecurity

Today, cybersecurity mainly focuses on protecting businesses and individuals from risks posed by cyber theft and fraud. In 10 years' time, the priority of cyber defense experts is national security. In recent years, we've seen an increase in state-sanctioned cyber-attacks, targeting business and civil infrastructure with the aim of disrupting economies and sowing fear and uncertainty. By 2035, it's possible that protecting populations from the impact of cyber-attacks by hostile nations or terrorist organizations is as much of a priority as defending against the threat of physical attack and invasion.

> " *By 2035, it's possible that protecting populations from the impact of cyber-attacks by hostile nations or terrorist organizations is as much of a priority as defending against the threat of physical attack and invasion.* "

As our reliance on interconnected networks continues to grow, so too does the potential damage that can be done. Critical infrastructure and financial systems will be targeted and disrupted with rising frequency. On a societal level, increasingly sophisticated deepfake technology makes it harder to differentiate fact from fiction, accelerating the spread of propaganda and disinformation and potentially undermining democratic processes as well as trust in national institutions.

We may even find ourselves facing the reality of "total cyber warfare," where opposing factions throw everything they have at destroying their enemies' capability to use technology, leaving populations without access to vital information and services.

Digital Identity And Data Sovereignty

As we spend more and more time inhabiting digital spaces and conducting more of our lives online, the distinction between our physical and digital identities becomes increasingly blurred. By 2035, our digital identity has become an integral part of who we are.

> " *By 2035, our digital identity has become an integral part of who we are.* "

The stakes for identity theft are higher than ever, evolving beyond simply having the potential to harm us financially to encompass the theft of our entire digital persona. This is exacerbated by the growing prevalence of deepfake and synthetic media, which will create new challenges for systems designed to authenticate our digital identities.

Furthermore, questions around our fundamental right to privacy will be more critical than ever in an era when AI and biometric technologies can trivially link our online behaviors to our real-world identities.

One potential solution to the question of data sovereignty may lie in decentralized technology, where encrypted, distributed systems could give individuals some control over who can access our data or monitor our digital activity. This is likely to spark a broader debate on the delicate balance between privacy and security – an issue that's likely to be just as hotly debated in 10 years' time than it is today.

As the technology landscape rapidly evolves, these privacy and security trends not only shape our future but also remind us of the ongoing responsibility to balance innovation with ethical considerations, ensuring that as we step into the next decade, our world remains both connected and secure. ∎

Hikvision releases full-year 2023 and Q1/2024 financial results

Hikvision has released its full-year 2023 financial results, reporting a total revenue of RMB 89.34 billion USD 12.33B approx), up 7.42% year-over-year. Net profit attributable to shareholders of the company was RMB 14.11 billion, achieving a year-over-year (YoY) growth of 9.89%. The total cash dividend (tax inclusive) amounted to RMB 8.40 billion, 59.52% of the net profit attributable to shareholders of the company.

The revenue from the company's overseas main business increased 8.83% year-over-year to RMB 23.98 billion, 26.84% of the total revenue. The revenue from the domestic main business was RMB 46.81 billion, accounting for 52.40% of the total revenue, and the revenue from the innovative businesses was RMB 18.55 billion, representing 20.77% of the total revenue.

Hikvision also announced its first-quarter 2024 financial results. The company reported a quarterly revenue of RMB 17.82 billion, up 9.98% year-over-year. Net profit attributable to shareholders of the company in the first quarter was RMB 1.92 billion, representing a YoY increase of 5.78%.

In 2023, Hikvision achieved greater stability in its operations and continued to increase investment in research and development. The company has gradually built and improved its AIoT technology system, and launched scenario-based products and solutions for the digital transformation of businesses. Looking forward, Hikvision remains committed to creating value for customers and empowering the digital transformation of the community and businesses with its technologies.

RailTel secures Rs 51.53 crore contract for video surveillance systems

RailTel Corporation of India, a state-owned railway PSU, has secured a Rs 51.53 crore contract from Central Warehousing Corporation. The project involves supplying, installing, testing, and commissioning modern video surveillance systems across various locations in India, to be completed by November 30, 2029. The overall consideration for the contract stands at approximately Rs 51 crore.

Founded in 2000, RailTel aims to enhance Indian Railways' operational efficiency and safety through a nationwide broadband, VPN services, and telecommunications network. As a 'Miniratna' public sector enterprise (PSE), RailTel operates a network spanning about 6,000 stations, including major commercial hubs.

Gartner acknowledges HID as leader in indoor location services

HID has been named a Leader in the 2024 Gartner Magic Quadrant for Indoor Location Services, assessed on criteria including completeness of vision and ability to execute. Recent acquisitions of Guard RFID and Connexient have strengthened HID's location services portfolio.

"We are thrilled with our positioning in the Leaders Quadrant," said Marc Bielmann, Senior VP at HID. "This recognition validates our strategic approach to better serving customers through technology and delivery and we are excited to continue growing the capabilities and impact of our solution."

A Gartner Magic Quadrant is a culmination of research in a specific market, giving you a wide-angle view of the relative positions of the market's competitors. A Magic Quadrant provides a graphical competitive positioning of four types of technology providers, in markets where growth is high and provider differentiation is distinct: Leaders; Challengers; Visionaries; Niche Players.

The HID Location Services solution offers modular options to enhance organisations' capabilities, providing the fastest time to value and unrivalled flexibility. Key use cases for the technology include Safety and Duress, Asset Tracking, Infant Security, People Workflow, Wander Management, and Wayfinding.

"Our RTLS solution aims to enhance safety and experience within facilities," said Kerry Brock, Head of Healthcare RTLS Strategy and President of Guard RFID. "We look forward to further solidifying our market leadership."

'Economic Nationalism' is the new mantra with CP Plus says Aditya Khemka at ELCINA Conference

On the 9th of May 2024, Electronic Industries Association Of India (ELCINA) organised the 4th Electronics Supply Chain Summit focusing on Security Products and the Market to highlight the opportunities arising in the security sector and to highlight the salient features of the Preferential Purchase Order (PPO) and Compulsory Registration Order (CRO) for CCTV's approved by the Government.

The conference focused on Emerging Opportunities for Security Products Industry in heightened Risk Scenario. The event was sponsored by CP Plus, Sparsh CCTV and Matrix Comsec.

The inaugural session was addressed by Mr. Atul Lall, President, ELCINA & Vice Chairman & CEO, Dixon Technologies, Mr. Sanjeev Sehgal, Managing Director, Sparsh (Samriddhi Automations Pvt Ltd), Mr. Aditya Khemka, Managing Director, Aditya Infotech (CP PLUS), Mr. Asif Jalal, IPS - IG BSF and Dr. A P Maheshwari, IPS, former DG CRPF and BPR&D, also the guest of honour.

Mr. Lall said that India is the 4th largest market for video surveillance products and the focus is to cut down on imports and indigenise the manufacturing. He added that even if there was 10% value addition, this was better than 20% market growth with imported products in a global market that is worth US $25B today and growing at a CAGR of 17%. "The focus of the government is towards 'Design' led value addition in the electronic manufacturing sector," he said.

Mr. Sanjeev Sehgal, a pioneering indigenous CCTV camera manufacturer said that CCTV equipment was among the first category of products on which IoT standards have become mandatory. He hailed the policy formation driven by The Ministry of Electronics and Information Technology (MeitY), Government of India through the PPO which laid down the conditions for manufacturing 'cyber secure' video surveillance products in India. "India now has the potential to become the CCTV factory of the world," said Mr. Sanjeev Sehgal.

Mr. Aditya Khemka said that the global market consumes approx. 600 million (60 crore) video surveillance devices every year, and India's market share in this is less than 5%, signifying the huge potential to manufacture and export CCTV products to the global market as a trusted and reliable partner. "India will be the 2nd largest CCTV market by 2030,"

> **Sanjeev Sehgal: India now has the potential to become the CCTV factory of the world!**

he predicted. "As the population and the economic prosperity grow the need for CCTV cameras will also grow alongside. This sector has tremendous job creation opportunities. Services related to the CCTV industry as well as production of complementary products has a considerable potential to create more jobs," he said.

"Under the 'Make in India' initiative CP plus established a factory in Tirupati seven years ago in partnership with Dixon technologies and last year we set up a plant which is possibly the world's third largest manufacturing facility in Kadappa, Andhra Pradesh with a production capacity of 1.6 million units a month and we employ more than 3000 workers with 70% being women," said Mr. Khemka.

He announced that CP Plus, with over 150 R&D engineers and a vision of 'Aatmanirbhar Bharat,' will launch its own designed IP Camera SOC (System on chip) by the end of 2025. This key component will enhance the cybersecurity capabilities of their cameras. The announcement was met with applause.

The inaugural session was followed by other sessions such as the session for Security Agencies and Police Authorities which was chaired by Mr. AP Maheshwari and included Mr. Ravi Joseph Lokku, IPS, ADG, BPR&D, and other officers from central armed police forces such as Mr. ID Singh, DIG, BSF, Mr. Rahul R Nair, IPS, DIG, Prov., NSG, Mr. Amit Taneja, DIG Eqpt, CRPF and Mr. Ashwini Kumar, DIG, ITBP. Mr. M A Johar, President, ADITYA Infotech (CP PLUS) and Mr. Ganesh Jivani, MD & CEO, Matrix Comsec were the industry leaders participating in this session.

Opportunities and Challenges – Public Procurement Order (PPO) & Compulsory Registration Requirements (CRO) and Interactive Session with Government e-Marketplace (GeM) – Opportunities and Requirement for Industry were some of the other sessions that day.

Eagle Eye wins top honours in SIA Awards

Eagle Eye Networks, a leader in cloud video surveillance, has won the SIA New Products and Solutions (NPS) Award in the Video Management Surveillance System category for the Eagle Eye Camera Direct.

Eagle Eye Camera Direct is a simple-to-install direct-to-cloud solution with the benefits of a full-featured video management system, including central management, cloud sync, automatic feature and cyber security updates, and reliability. Built on the Eagle Eye Networks open platform with AI that constantly improves, Eagle Eye Camera Direct is a future-proof investment for business owners.

"We brought Eagle Eye Camera Direct to market to deliver the ideal solution for businesses looking for a high-performance cloud video management system with no extra hardware, the ability to cloud sync edge storage, and flexible purchasing options," said Dean Drako, Eagle Eye Networks CEO. "We are honoured to be selected for this award, and thank the esteemed SIA NPS judges and the Security Industry Association for this tremendous recognition."

"SIA applauds the 2024 SIA NPS Awards honourees of this year's highly competitive programme," said SIA CEO Don Erickson. "Thanks to the always-thorough consideration of the judges, the SIA NPS Awards is the most trusted awards program for new security technologies, and earning recognition in the NPS awards is a major accomplishment." Eagle Eye sells through a global network of resellers and integrators. Founded in 2012, Eagle Eye is headquartered in Austin, Texas, with offices in Amsterdam, Bangalore, and Tokyo.

Axon Acquires Dedrone, Expands in Robotic Security Tech

Axon is acquiring counter-drone technology leader Dedrone to advance its development of drones as first responders (DFR). This follows Axon's recent acquisitions of Sky-Hero, a tactical recon system developer, and Fusus, which enhances public safety and investigations.

CEO Rick Smith stated that Dedrone's technology will overcome FAA limitations on DFR programs, enabling operation in low-visibility conditions without a human observer. This acquisition aims to improve response times and decision-making for law enforcement and security personnel.

Smith highlighted the potential for new customer sectors like stadiums, infrastructure, and military. President Josh Isner noted Dedrone's strong international presence could boost Axon's global growth. CFO and COO Brittany Bagley added that robotic security will become a key business pillar, with Dedrone enhancing Axon's software and sensor products.

Quanergy boldly projects 300% year on year growth

Quanergy Solutions, Inc., focuses solely on physical security and business intelligence applications, anticipating a 300% year-over-year growth in fiscal 2024. Their new-generation sensors track people and vehicles across various zones, enhancing security and operational efficiency. An independent study forecasts over 3 million sensors generating $6 billion USD in revenue by 2030.

Enzo Signore, CEO of Quanergy, emphasizes the urgent need for sophisticated threat management and capital efficiency improvements. Quanergy's 3D Lidar solutions offer higher accuracy at lower costs, attracting increased demand for Perimeter Intrusion Detection (PID) solutions in critical infrastructure and corporate enterprises.
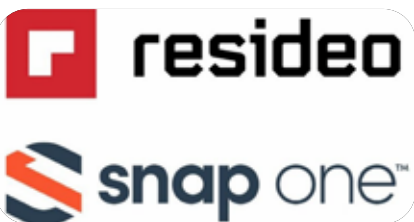
Quanergy's recent partnership with Convergint aims to provide early detection and faster response times, while deployments at San Jose Water and other global installations demonstrate their commitment to 3D Lidar innovation.

Resideo to Acquire Snap One to Expand Presence in Smart Living Products and Distribution

Resideo Technologies, Inc. (NYSE: REZI), a leading manufacturer and distributor of technology-driven products and solutions, and Snap One Holdings Corp. (Nasdaq: SNPO), a leading provider of smart-living products, services, and software to professional integrators, today announced a definitive agreement pursuant to which Resideo has agreed to acquire Snap One for $10.75 per share in cash, for a transaction value of approximately $1.4 billion, inclusive of net debt. Upon closing, Snap One will integrate into Resideo's ADI Global Distribution business.

The transaction will combine ADI's strong position in security products distribution and Snap One's complementary capabilities in the smart living market and innovative Control4 technology platforms, which is expected to drive increased value for integrators and financial returns. Together, ADI and Snap One will provide integrators an increased selection of both third-party products and proprietary offerings through an extensive physical branch footprint augmented by industry leading digital capabilities.

"The acquisition of Snap One is an exciting step in Resideo's continued transformation through portfolio optimization, operational enhancements and structural cost savings actions," commented Jay Geldmacher, Resideo's President and Chief Executive Officer. "ADI and Snap One are highly complementary businesses and together will meaningfully enhance our strategic and operational capabilities as a significant player in attractive growth categories. We are excited about the enhanced value proposition through increased product breadth, local availability, support services and broad market expertise, as well as the future opportunities this creates for integrators serving residential and commercial markets. In addition, the investment by Clayton, Dubilier & Rice is a testament to the strategic and financial merits of this transaction and provides financial flexibility as we continue to transform and optimise our portfolio. We look forward to the ADI and Snap One teams working together to drive value for all stakeholders through executing on the substantial business and financial synergies we see in combining the two businesses."

"Snap One has grown from a startup built by entrepreneurial integrators to an industry leader in smart technology, delivering seamless experiences to consumers and high-quality services and support to our integrators," said John Heyman, Chief Executive Officer of Snap One. "This is the right next step to capture new opportunities to bring our solutions to market. The future of smart living is here. Demand for connected technology products continues to grow, and Resideo is the right owner to drive our expansion. We believe this transaction will deliver compelling value to our stakeholders and will create opportunities for our people and integrator partners."

"We are excited to support Resideo on this highly strategic acquisition and in their ongoing transformation," commented Nathan Sleeper, CD&R's Chief Executive Officer. "I look forward to joining Resideo's Board of Directors and supporting the business as it executes on this transaction and the significant opportunity we see available over the coming years."

Dahua Enhances ECO Partner Program for Industry Players

Dahua Technology has revamped its ECO Partner Program to accommodate a wider range of industry players, including software houses and other hardware and software complementors. The program now includes a strategic partner level and aims to respond to evolving trends and partner demands.

Originally launched in June 2020, the program has grown to over 135 members globally, with a focus on security environments. As Dahua has diversified its product portfolio, new partnerships have emerged, bringing together expertise from various industries.

The program now welcomes technology companies and software houses seeking enhanced solutions, as well as partners offering complementary products like connectivity devices and digital signage mounting systems. Additionally, a new partner level, ECOValue Partner, has been introduced, recognizing strategic partners with proven commercial cooperation.

KERB, a smart parking technology provider, is the first partner to join at this level, expressing excitement about leveraging Dahua's global reach to access new markets. Both companies see potential in combining their technologies to offer comprehensive solutions to clients worldwide. ■

Leveraging Technology In Managing Safety And Security At Construction Sites

The construction market size in India was estimated to be $825.6 billion in 2023 and achieve an AAGR of more than 5% during 2025-2028. The growth of the market is attributed to investment in the construction of hotels, industrial, green energy, and transport infrastructure projects. The Government of India has projected very large investment requirements for providing infrastructure to specified norms and also supporting the growth process. They have also identified the need for introducing modern technologies to increase the speed and efficiency of developing this infrastructure.Therefore, the government is actively striving towards stimulating construction activities in the country.

In the dynamic and hazardous environment of construction sites, ensuring safety and security is crucial. The industry has long struggled with high rates of accidents and theft, resulting in financial losses and project delays. With valuable building materials and expensive equipment scattered throughout, construction sites are prime targets for theft and vandalism. Without effective security measures, unexpected costs and project delays are inevitable. Traditional on-site security guards are costly and often fall short in adequately protecting the site. However, the advent of modern technology has revolutionised the management of safety and security on construction sites, offering robust solutions to these persistent challenges.

Construction is a vast and valuable industry which involves both the storage and on-going use of high value vehicles, materials, tools and machinery. Work sites are often the target of theft and vandalism, but this kind of criminal activity is a big liability for construction companies. Equipment and tools are not just valuable and expensive to replace, but they are necessary to get the job done safely, properly and on schedule.

Security of construction sites is challenging because the area is constantly changing, and the project involves a lot of different workers from various companies. The machinery, tools and fuel which can be stolen from vehicles has a resale value which makes them highly attractive to criminals. Stolen or damaged equipment, tools and material is costly and can cause big delays in the work schedule. Unauthorised entry and vandalism are some of the other major concerns, both for the construction company and for the property owner.

The risks that the industry is exposed to, can leave businesses and their workforces in vulnerable situations – unable to work or function when important tools or machinery are missing or the site in general is inflicted with damage.

Construction Sites Present Particular Security Challenges

Busy sites mean constant movement. With workers being focused on their own areas and tasks, the site may be vulnerable to opportunists who may just walk in unchallenged to help themselves, or enter the site to check out the layout, value of assets and presence (or not) of onsite security, in order to return later for a more organised theft spree.

Difficult economic times and job losses often cause a spike in many kinds of crime. The construction sector has it worse when financial problems cause work stoppages that leave sites dormant and unoccupied for extended periods. This makes them even more vulnerable to theft and vandalism and has caused construction crime to become a serious national concern quickly.

A site with massive amounts of material can be overwhelming to manage and track. With a high volume of supply, it becomes easy for materials to go missing, and typically, these instances go unnoticed until after the fact. Equipment and material theft is a major source of loss and while insurance can offset some of the financial impacts, many uninsured costs are left to contractors and fleet managers to take care of.

While various access points are often necessary, it is best to limit these to as few as possible for vehicles, construction workers, and authorised visitors. As work progresses, access points and arrangements may need to change, becoming particularly vulnerable during different phases of the project.

Securing the movement and temporary storage of vehicles on-site can be challenging in a cost-effective and safe manner. Beyond vehicle parts, the fuel stored in these vehicles is especially attractive to thieves.

During the darker winter months and on remote, isolated sites, protecting your assets becomes even more crucial as they are more susceptible to criminal activity.

Leveraging Technology

Risk at construction sites can be significantly reduced by use of modern technology. One of the most significant contributions of technology to construction site safety and security is the implementation of advanced monitoring and surveillance systems. High-definition cameras equipped with motion sensors and night vision capabilities are now standard, allowing for continuous oversight of the site. These cameras are often integrated with artificial intelligence (AI) and machine learning algorithms that can detect unusual activities, such as unauthorised entry or unsafe practices, and alert supervisors in real time.

Real-Time Data Collection and Analysis

Wearable technology is revolutionising safety on construction sites. Devices such as smart helmets, vests, and goggles are embedded with sensors that monitor workers' vital signs, detect falls, and provide real-time data on environmental conditions

like temperature and air quality. This data is crucial for identifying potential hazards and ensuring that workers are operating in safe conditions. Moreover, wearable devices can alert workers and management to immediate dangers, allowing for quick responses that can prevent accidents.

Access Control and Intrusion Detection

Ensuring that only authorised personnel can access construction sites is a critical aspect of maintaining security. Modern access control systems use biometric scanners, such as fingerprint and facial recognition, to verify identities and grant access. These systems are more secure than traditional keycards, which can be lost or stolen.

Additionally, intrusion detection systems equipped with sensors and alarms can detect unauthorised access attempts. When integrated with surveillance cameras, these systems provide comprehensive security coverage, ensuring that any breach is quickly identified and addressed.

Improved Communication and Coordination

Effective communication is essential for maintaining safety and security on construction sites. Digital communication tools and mobile apps enable instant communication between workers, supervisors, and emergency services. These tools can disseminate safety protocols, updates, and emergency alerts swiftly, ensuring that all personnel are informed and can respond appropriately to any situation.

Building Information Modeling (BIM) technology also enhances coordination by providing detailed, real-time visualisations of construction projects. BIM allows all stakeholders to access up-to-date information, plan effectively, and anticipate potential safety issues before they arise.

Drones and Robotics

Drones are increasingly used for aerial surveillance and inspection of construction sites. They can quickly and safely survey large areas,

monitor progress, and identify potential hazards from a vantage point that is difficult to achieve from the ground. Drones equipped with thermal imaging cameras can detect heat sources, which is particularly useful in identifying electrical faults or overheating machinery that could pose a risk. Robotics also plays a crucial role in enhancing safety and efficiency. Autonomous or semi-autonomous robots can perform tasks that are dangerous for human workers, such as demolishing structures, handling hazardous materials, and working in extreme environments. By taking on these high-risk tasks, robots significantly reduce the likelihood of accidents and injuries on construction sites.

Predictive Analytics and Risk Management

The use of predictive analytics in construction is a game-changer for safety and security management. By analysing historical data and identifying patterns, predictive analytics can forecast potential risks and incidents. This proactive approach allows construction managers to implement preventive measures, allocate resources more effectively, and ensure that safety protocols are adhered to rigorously.

Technology alone cannot ensure complete security. Clever use of trained manpower coupled with prior planning and risk analysis can work wonders in preventing losses. Some tips, which physical security practitioners will find handy for setting up and managing security for construction sites, are as follows:

Setting up a secure construction site:

• Develop a general job site security policy which can be shared with all workers and parties involved in the project.

• Create SOPs for every security guard post.

• Contract a professional guarding agency.

• Have a professional systems integrator understand site requirements and then design and install the security automation system, including CCTV cameras.

• Have adequate fire safety measures established.

• For each specific site, create a map of the site marking sensitive areas which need higher levels of security.

• Make a site-specific plan which states how the sensitive areas will be secured.

• Designate responsibilities for maintaining the established security measures.

• Charge one person with supervisory security tasks and ensure that workers understand his/her role.

• Go over these measures and roles with workers.

• Ask workers to be aware of any security issues.

• Review the procedure for reporting any suspicious activity.

• Share contact information with the managers of the properties nearby.

• Maintain ample lighting systems around the site to deter criminal activity at night.

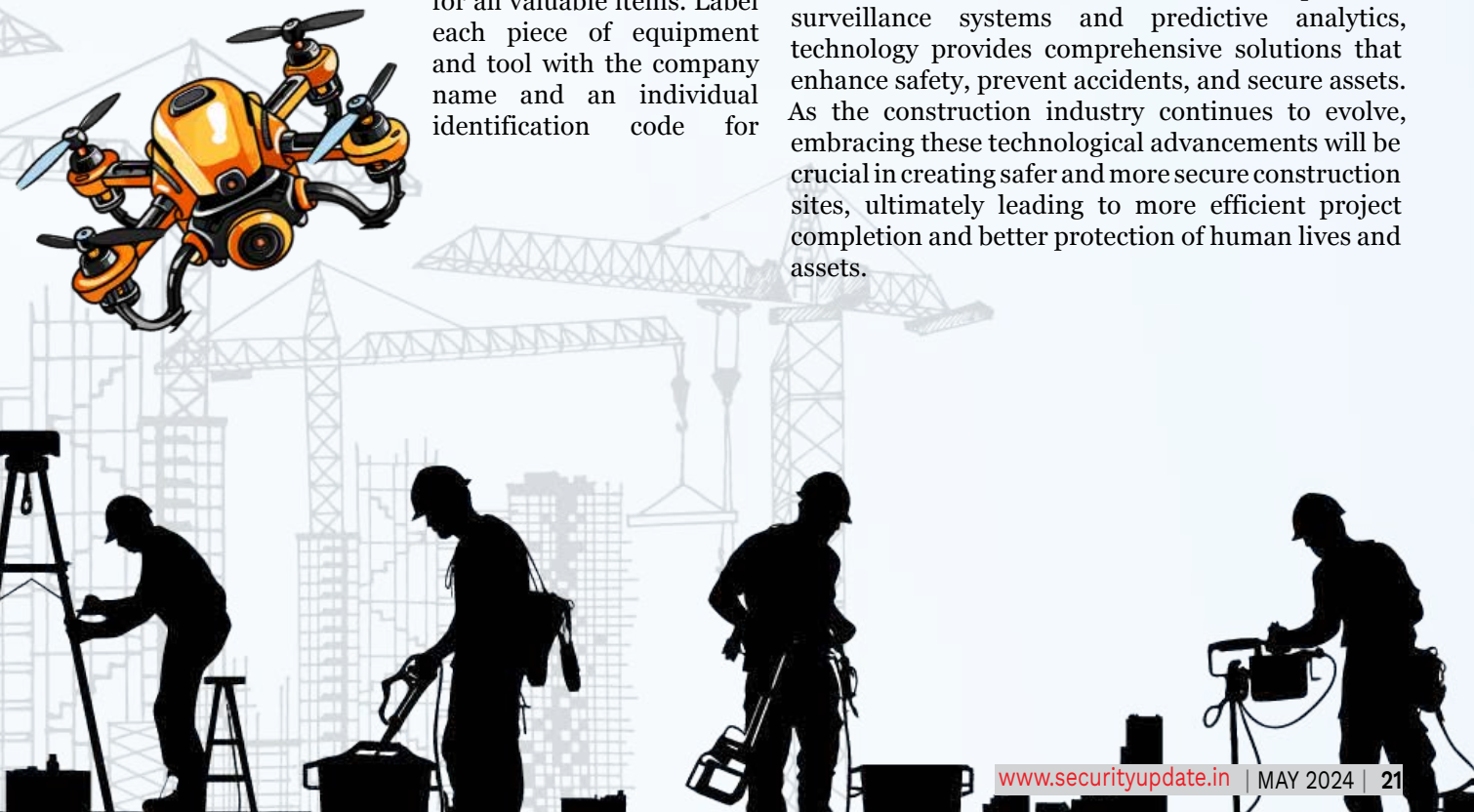### Secure Storage of Vehicles, Equipment, Tools, and Supplies

To ensure the secure storage of vehicles, equipment, tools, and supplies, maintain a record of the serial numbers and ownership documentation for all valuable items. Label each piece of equipment and tool with the company name and an individual identification code for easier tracking. Keep a detailed inventory and perform daily checks to account for all items. Whenever possible, lock valuable equipment, tools, and supplies in a storage trailer or shed. Park work vehicles in well-lit areas, away from the perimeter fence overnight. Store duplicate and master keys in a safe place, preferably off-site, and lock all vehicle cabins when not in use. Avoid storing unnecessary equipment, tools, supplies, or vehicles on site to reduce potential targets for theft.

Consider Extra Security Measures

For sites where security is a major concern, it is advisable to hire a private security agency to patrol the area during the night and other sensitive times of the day. This agency should be resourceful and have good relations with local law enforcement and government authorities. Additionally, having your security cameras and other systems monitored remotely by a professional agency can enhance the monitoring of access points, offices, and storage areas for valuable equipment. Adequate signage about security patrols and cameras should be posted to serve as deterrents. Furthermore, attaching remote GPS and other tracking devices to all vehicles and valuable equipment can provide additional security and tracking capabilities.

The integration of advanced technology in managing safety and security at construction sites has brought about a significant shift in how these environments are monitored and controlled. From wearable devices and drones to AI-powered surveillance systems and predictive analytics, technology provides comprehensive solutions that enhance safety, prevent accidents, and secure assets. As the construction industry continues to evolve, embracing these technological advancements will be crucial in creating safer and more secure construction sites, ultimately leading to more efficient project completion and better protection of human lives and assets.

Hikvision's Solar-Powered Wireless Cameras Guard DECHO Group's Construction Site

Isolated sites such as farms, natural resorts, and pipelines, and temporary locations such as construction sites, by their very nature, lack power and infrastructure, and face all kinds of light and weather challenges. Without readily available, "on-the-grid" energy sources in these outdoor environments, installing a traditional security system is wholly impractical.

In the midst of a rise in building material thefts, construction company DECHO used Hikvision's solar-powered wireless cameras to guard the construction site for its much-anticipated Coast Garden project.

Building material shortages and rising prices fuelled a rise in construction site thefts in New Zealand, which has prompted worries among builders, project managers, and contractors.

The DECHO Group is one of Auckland's most innovative and respected land developers, serving civil infrastructure, industrial, and building markets. DECHO's newly launched Coast Garden project is a new, premium development under construction in the highly sought-after Hobsonville Peninsula locale. The exclusive Coast Garden development is a brand new 4.3-hectare subdivision delivering exceptional waterfront living on an elevated clifftop site on the peninsula.

"We need a security solution to protect our high-value items such as machinery, tools, copper, and other building materials." Ning Zhao, Director of DECHO, said, "Our projects don't get completed overnight. It can take months and years to execute a single project. The construction sites endure all kinds of weather, power issues, security problems, and many other challenges. Therefore, we are in need of a solution that boosts security quickly and easily with simple installation and suited for deployment in any kind of outdoor environment, and without need for a fixed network or power supply."

To protect its valuable tools and equipment, DECHO researched several options and deployed Hikvision's solar-powered security camera setup. EXIR Fixed Bullet Solar Power 4G Network Cameras and 4K ColorVu Fixed Bullet Solar Power 4G Network Camera Kits were placed around the perimeter of DECHO's Coast Garden construction site.

The solar-powered security camera setup uses a 40-Watt photovoltaic panel and a highly durable 20 Ah rechargeable Lithium battery to power a Hikvision EXIR Fixed Bullet Solar Power 4G Network Camera. Because the setup gets power from the sun, there is no need for fixed power or network cables on site. With the product's smart power management features, each setup can provide up to 7 days of operation during cloudy or rainy periods when fully charged. Its 4G camera further adds a 32 GB eMMC (embedded MultiMediaCard) in addition to an SD memory card, this ensures continuous video recording even if there is an interruption with the SD card.

According to DECHO's Director, Ning Zhao, the fact that the Hikvision solar-powered cameras can be installed hassle-free was a key deployment feature for the company. The pole-mounted unit weighs just 14 kg (30 lbs), and no wires or cables are required, making the deployment process fast, easy, and cost-effective.

"With its own power source, each Hikvision camera can be deployed anywhere on the site without having to route cables, saving valuable time and resources, which could be redirected to other critical tasks to help the company complete construction on time," said Ning Zhao.

Empowered by ColorVu technology, the cameras offer clear vision in extremely dark environments. "Construction site compounds are most vulnerable to theft at night," commented Ning Zhao, "With these cameras installed, our valuables are now well protected during vulnerable out-of-hours periods."

Besides that, intrusions can now be detected accurately and addressed immediately. As the AcuSense technology embedded in the cameras helps to differentiate between humans and other moving objects such as animals, falling leaves, or heavy rain, false positives are minimised, and DECHO will only be alerted in the event of real security threats. In addition, being waterproof and dust-resistant, the solar power cameras are suitable for deployment in any kind of outdoor environment.

"These cameras are sturdy enough to withstand the harsh conditions on the construction site, as well as Auckland's frequent rainy and windy weather," said Ning Zhao. Requiring only a single solar panel, the self-contained setup operates for up to 7 days on a single battery charge, which delivers significant cost savings for DECHO. In addition, powered by clean and renewable energy, the solar cameras not only help to save operational costs for the building firm, but also reduce the company's carbon footprint. Ning Zhao commented, "We work hard to build a green culture within DECHO. Deploying a solar-powered wireless camera system represents an opportunity to have an immediate positive impact on sustainability."

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New ALCEA Traffic Cabinets Locking Solution Implemented

This case study illustrates the importance of advanced security measures in modernizing city infrastructure and highlights how ALCEA's innovative solutions can address the unique challenges faced by municipalities.

The Transportation Services and Mobility department for the city of Grand Prairie, Texas, recently undertook a substantial initiative to enhance the security of their Intelligent Traffic Cabinets. The project aimed to replace existing locks with a more secure and efficient solution. ALCEA's Traffic Cabinet Locking Solution, powered by ABLOY technology, emerged as the perfect fit, providing robust security features and ease of use.

The Overview:

Grand Prairie, located in the Dallas-Fort Worth metroplex, is the sixteenth largest city in Texas with a population exceeding 207,000. The city has a rich history in the defense and aviation industries and is a significant distribution center due to its strategic location near major interstates and rail lines. With major attractions like the Lone Star Park horse racetrack and Epic Waters indoor waterpark, the city experiences heavy traffic on its 81 square miles of roadways. This growth, reflective of Texas' overall expansion, necessitated improvements in the city's infrastructure security.

Challenge:

Grand Prairie, Texas completes ALCEA Traffic Locking Solution installation

Raul Perez, Grand Prairie's ITS Specialist with 13 years of experience in the transportation industry, identified the need to secure the city's traffic signal cabinets against tampering and unauthorized access. The existing lock system was vulnerable, with widespread access possible using generic #2 keys available for a few dollars. This posed significant security concerns, especially with increasing cyber threats targeting government infrastructure.

Solution:

Perez's search for a more secure lock led him to ALCEA's Traffic Cabinet Locking Solution. ALCEA, formerly ASSA ABLOY Global Solutions - Critical Infrastructure, has developed a robust solution integrating both mechanical and electromechanical locks, managed through the ABLOY PROTEC2 CLIQ™ system. The solution includes:

• 240 smart locks and 210 high-security mechanical locks and padlocks for traffic cabinets and message boards.

• 191 mechanical locks for school flashing sign cabinets.

• 20 Bluetooth keys for secure, convenient access management.

ALCEA's solution offered a unique blend of mechanical security with electronic access control, key tracking, and audit trails via CLIQ Web Manager software. This hybrid approach provided the flexibility and security Grand Prairie needed.

Implementation:

After evaluating offerings from three other vendors, Perez was convinced by ALCEA's capabilities and engaged his department to secure the necessary funding. By the end of 2023, the project was integrated into the department's budget, and the purchase order was placed in mid-January.

The Results:

The implementation of ALCEA's locking solution brought several key benefits:

• Enhanced Security: High-security cylinders and electromechanical locks significantly reduced the risk of unauthorized access.

• Access Control: The CLIQ system enabled precise control over who could access the traffic cabinets and when, enhancing accountability.

• Convenience: The system's user-friendly design allowed technicians and supervisors to manage access effortlessly, with Bluetooth keys updating via the CLIQ app.

• Cost Efficiency: The ability to use the same key for both mechanical and electronic locks, including padlocks, streamlined operations and reduced costs.
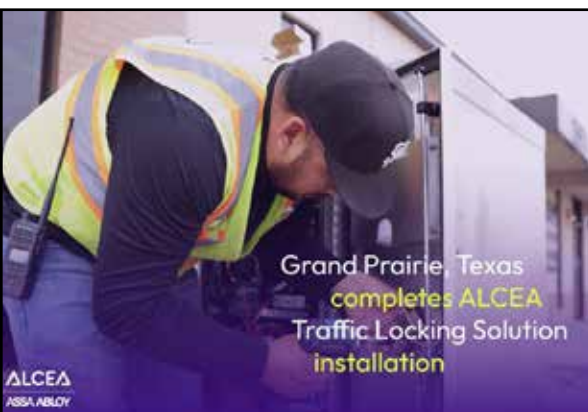
Conclusion:

The ALCEA Traffic Cabinet Locking Solution has greatly improved the security and efficiency of Grand Prairie's traffic infrastructure. Raul Perez praised ALCEA's local support and customer service. "This new system solves common industry issues, ensuring our infrastructure is protected. Its versatility and security features give us peace of mind."

Securing a 1-Megawatt Solar Farm with 360 Vision Technology Predator Radar Camera

This case study explains how a special 360 Vision Predator Radar camera was used to protect a 1-Megawatt solar farm in Herefordshire. The camera offered a cheaper and more effective way to monitor the large, remote area. It worked with monitoring systems to detect threats in real-time and manage alarms efficiently.

In the remote countryside of Ross-on-Wye, Herefordshire in UK, a 1-Megawatt solar farm was constructed by VARTEC EPC Limited for Lowther Renewables Ltd. To secure this extensive site, the project team turned to 360 Vision Technology, a UK-based manufacturer renowned for its ruggedised HD, radar, and thermal PTZ surveillance cameras. This case study examines the implementation of the 360 Vision Predator Radar camera unit, which provided an effective and economical security solution.

Overview:

The solar farm, capable of generating 1-Megawatt of electrical power, was developed to offset the carbon footprint of AJ Lowther & Son Ltd, the parent company of Lowther Renewables. AJ Lowther & Son Ltd specializes in steelwork, cladding, and refurbishment services for various types of buildings, including manufacturing, industrial, agricultural, commercial, and equestrian structures.

The solar farm's location in a remote and uneven terrain with multiple access points posed significant security challenges. Traditional CCTV solutions were deemed impractical due to their high costs and limited coverage capabilities.

Challenge:

Lowther Renewables required a comprehensive surveillance system that could provide 360-degree coverage, withstand all weather conditions, and minimize costs. Traditional security camera setups would have necessitated several units to cover the entire site, leading to prohibitive expenses and complex installation.

Solution:

VARTEC and 360 Vision Technology collaborated to devise a technical specification for the solar farm's security needs. Craig Carton, Technical & Customer Support Manager at 360 Vision Technology, recommended the 360 Vision Predator Radar camera unit. This unit integrates radar technology with a 1080p HD camera, offering a cost-effective perimeter and wide area surveillance solution.

Key features of the Predator Radar camera unit include:

• 200m radius/400m diameter constant surveillance: Provides extensive coverage, reducing the need for multiple cameras.

• 360° scanning: Scans twice every second, detecting and tracking up to 40 moving objects simultaneously.

• All-weather capability: Operates effectively in rain, fog, snow, and mist, ensuring uninterrupted protection.

Implementation:

The installation process involved the deployment of one 360 Vision Predator Radar camera unit to secure the entire solar farm. The camera's radar technology significantly reduced the number of units required compared to traditional CCTV systems, leading to cost savings and simplified installation.

Integration with Monitoring Systems:

The Predator Radar camera unit was integrated with the NX Witness VMS and the Sentinel alarm management platform at the Doncaster Security Operations Centre (DSOC). This integration provided seamless alarm

activation and management:

• Alarm Activation: On detecting an object, the Predator Radar camera sends an alarm to the NX Witness VMS via an I/O module, which then forwards the alarm to the Sentinel platform at DSOC.

• Alarm Management: DSOC operators receive live and recorded video and audio, allowing them to quickly verify and respond to alarms. The system guides operators through predefined actions based on the cause of the alarm.

• Audit and Analysis: The entire alarm handling process is audited, facilitating further analysis and reporting.

Results:

Since the installation of the radar-based camera system, the site has experienced no false alarms, thanks to visual verification from DSOC. The Predator Radar camera provides continuous and automatic tracking of detected objects, ensuring real-time awareness and security.

Benefits:

• Cost Efficiency: Using a single radar camera unit instead of multiple traditional cameras significantly reduced capital outlay.

• Comprehensive Coverage: The Predator Radar camera covers the entire solar farm, providing extensive surveillance with minimal equipment.

• Enhanced Security: Integrated LED white light capability acts as a deterrent during nighttime, reducing the need for physical patrols.

• Remote Monitoring: The cloud-based NX Witness VMS allows for remote monitoring and management of the site, providing real-time insights.

Conclusion:

The collaboration between VARTEC, Lowther Renewables, and 360 Vision Technology resulted in a highly effective and economical security solution for the 1-Megawatt solar farm. The Predator Radar camera unit not only met the site's security requirements but also provided significant cost savings and operational efficiencies.

Craig Vardy, Managing Director of VARTEC, and Craig Carton of 360 Vision Technology, both expressed satisfaction with the project's outcome. The successful implementation at the solar farm highlights the advanced capabilities of the Predator Radar camera range and underscores its suitability for securing large, challenging sites.

"This project underlines the highly effective surveillance capability of the Predator Radar camera range," said Craig Carton. "Our innovative radar camera solutions are supporting high-security, safety, and site management applications worldwide, from national borders to utility and commercial sites."

Enhancing Dispatch Operations with RGB Spectrum's KVM Solution at the University of California San Diego

The University of California San Diego (UCSD) Police Department oversees a 1,200-acre campus with 900 buildings, presenting unique law enforcement challenges. The department's Communications Division coordinates emergency responses and manages communications, a critical role in ensuring campus safety.

Challenges:

Before partnering with RGB Spectrum, UCSD's dispatchers faced several operational challenges:

• Multiple Devices: Dispatchers juggled separate computers for CAD, radio, and phone, each with its own keyboard and mouse.

• Ergonomic Issues: The setup led to repetitive movement injuries, with up to 25% of operators experiencing neck and movement-related injuries

• Limited Access: Only one station had access to the fire alarm system, restricting operational efficiency.

Solution:

UCSD sought a seamless KVM solution that integrated multiple systems under a unified interface. After exploring various options, they chose RGB Spectrum's XtendPoint™ solution. This system offers local and remote access to source computers, consolidates multiple monitors into multi-view displays, and unifies control.

Key Features:

• Consolidated Monitors: Multiview displays handle up to eight signals, reducing monitor clutter and ergonomic strain.

• Customised Display Viewing: Operators can tailor their display settings, even in multi-shift operations.

• KVM-over-IP Backbone: Allows all dispatcher stations access to critical systems, including the fire alarm system.

Implementation:

The RGB Spectrum XtendPoint™ solution was implemented to streamline UCSD's dispatch operations:

• Unified Control: Dispatchers now use a single keyboard and mouse to control multiple systems.

• Video Integration: Live video feeds and mission-critical systems are accessible within one interface.

• Ergonomic Benefits: Reduced need for multiple devices minimized repetitive movement injuries.

Results:

The implementation of the XtendPoint™ solution led to significant improvements:

• Increased Efficiency: Dispatchers experienced a streamlined workflow, reducing errors and accelerating response times.

• Enhanced Ergonomics: The unified control interface minimized physical strain on dispatchers.

• Improved Situational Awareness: Real-time visual information and video wall integration enhanced collaboration and response capabilities.

Garrett Williams, Sergeant at UCSD Police Department, noted the transformative impact: "The flexibility of the RGB system allowed us to leverage video wall capabilities, share critical information, and create a more collaborative environment."

Future Opportunities:

UCSD plans to further leverage RGB Spectrum's technology:

• New Monitors: Implementing 43-inch curved monitors for e nhanced ergonomics and workspace customization.

• Mobile Command Post: A "flyaway" kit for real-time situational awareness during special events.

• Field Access: Equipping mobile units with AV-over-IP systems for real-time updates and better collaboration during incidents.

Conclusion:

The partnership between UCSD Police Department and RGB Spectrum has significantly transformed dispatch operations, achieving unprecedented levels of efficiency, ergonomics, and situational awareness. This case study highlights the successful integration of advanced technology to enhance campus safety and operational effectiveness.

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Understanding Fire Doors

Fire doors are essential components in modern building safety, designed to protect property and save lives during a fire. Their importance cannot be overstated, as they play a pivotal role in slowing the spread of fire and smoke, providing crucial time for occupants to evacuate safely and for emergency services to respond. This article delves into the fundamental aspects of fire doors, including their construction, installation, maintenance, and regulatory requirements, to highlight their significance in fire safety strategies.

A fire door is a door with a fire-resistance rating (sometimes referred to as a fire protection rating for closures) used as part of a passive fire protection system to reduce the spread of fire and smoke between separate compartments of a structure and to enable safe egress from a building or structure or ship.

Construction and Design

Fire doors are specially constructed to withstand fire and prevent its spread for a specified period, typically ranging from 30 to 120 minutes. They are made from a combination of materials such as glass sections (including vision panels), timber, steel, gypsum, Aluminium, GI, and vermiculite boards.

The core of a fire door is designed to provide insulation, and the door is fitted with intumescent strips around the edges. These strips expand when exposed to heat, sealing gaps between the door and the frame to block the passage of smoke and flames. Fire doors also feature components like fire-resistant glass, which can withstand high temperatures without shattering, and self-closing devices that ensure the door automatically closes in the event of a fire. Additionally, fire doors are equipped with smoke seals to prevent the spread of smoke, which is often more dangerous than the fire itself due to the risk of asphyxiation.

Both the door leaf (the swinging panel of the door) and the door frame are required to meet the guidelines of the testing agency which provides the product listing. The door frame includes the fire or smoke seals, door hardware, and the structure that holds the fire door assembly in place. Together, these components form an assembly, typically called a "doorset" which holds a numerical rating, quantified in minutes or hours of resistance to a test fire. All of the components of the fire door assembly must bear a listing agency's label to ensure the components have been tested to meet the fire rating requirements.

Installation and Placement

The effectiveness of fire doors largely depends on their correct installation and strategic placement within a building. Fire doors are typically installed in fire-rated walls, which are designed to compartmentalise a building and contain fire within a specific area. Common locations for fire doors include stairwells, corridors, and entrances to rooms with high fire risk, such as kitchens and boiler rooms.

Proper installation is crucial and must comply with specific building codes and standards. This includes ensuring the door fits snugly within its frame, the hinges are fire-rated, and the self-closing mechanism is functioning correctly. Incorrect installation can compromise the door's integrity, rendering it ineffective during a fire.

Maintenance and Inspection

Regular maintenance and inspection of fire doors are vital to ensure their continued effectiveness. Over time, wear and tear, accidental damage, or improper repairs can affect a fire door's performance. It is recommended that fire doors be inspected at least every six months, with more frequent checks in high-traffic areas.

Key aspects of fire door inspection include checking the door for any visible damage, ensuring the intumescent strips and smoke seals are intact, verifying the operation of the self-closing device, and confirming that the door closes fully and securely. Any issues identified during inspection should be addressed promptly to maintain the fire door's protective capabilities.

Regulatory Requirements

Fire doors must comply with stringent regulatory requirements to be deemed effective. In many countries, building codes specify the fire resistance rating that doors must meet, as well as guidelines for their installation and maintenance. Compliance with these regulations is mandatory and is enforced through regular inspections by fire safety authorities.

In India, for example the National Building Code (NBC) of 2016, Part 4 covers the requirements for fire prevention, life safety in relation to fire and fire protection of buildings. Part 4 of the Code specifies occupancy-wise classification, constitutional aspects, egress requirements and protection features

that are necessary to minimise danger to life and property from fire. In the United States, the National Fire Protection Association (NFPA) sets the standards for fire doors through publications such as NFPA 80, which outlines the installation and maintenance of fire doors and other opening protectives. Similarly, in the United Kingdom, fire doors must adhere to British Standards (BS) and European Standards (EN), such as BS 476 and EN 1634.

The NBC describes Fire Door and Fire Door Assembly as, " Any Combination of fire door, frame, hardware and other accessories that together provide a specific fire resistant rating to the opening in terms of its stability, integrity and insulation properties, when installed in the openings in fire separation walls. Fire door-is a component of fire door assembly."

In terms of compliance section J-6.5 further states that Fire Doors shall comply with the following requirements:

a) Fire doors shall be constructed of noncombustible material having appropriate fire resistance, and two fire doors may be fitted in an opening if each door by itself is capable of closing the opening and the two doors together achieve the required level of fire resistance.
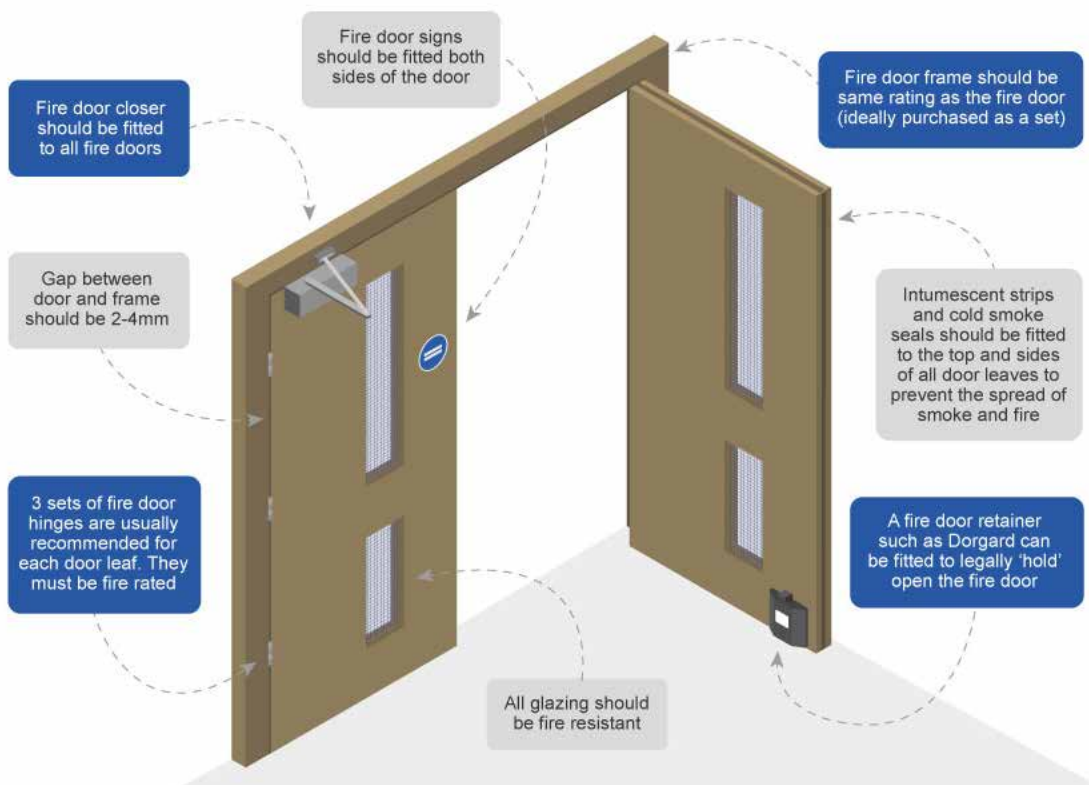
b) All fire doors shall be fitted with an automatic self-closing device, of the same fire rating as of the door, which is capable of closing the door from any angle and against any latch fitted to the door.

c) Any fire door fitted within an opening which is provided as a means of escape shall be capable of being opened manually, not be held open by any means other than by an electromagnetic or electro-mechanical device which can be activated by the presence of smoke and/or the fire alarm system, provided that this shall not apply in the case of fire doors opening into

Understanding fire doors is crucial for anyone involved in building design, construction, and maintenance. These life-saving devices are fundamental to fire safety strategies, offering protection against the devastating effects of fire and smoke. Ensuring that fire doors are properly constructed, installed, maintained, and compliant with regulations is essential for safeguarding lives and property. By prioritising fire door safety, we can significantly enhance the resilience of buildings against fire incidents, providing peace of mind and security for all occupants. ∎

Key Facts about Fire Doors

Fire door signs should be fitted both sides of the door

Fire door frame should be same rating as the fire door (ideally purchased as a set)

Fire door closer should be fitted to all fire doors

Gap between door and frame should be 2-4mm

Intumescent strips and cold smoke seals should be fitted to the top and sides of all door leaves to prevent the spread of smoke and fire

3 sets of fire door hinges are usually recommended for each door leaf. They must be fire rated

A fire door retainer such as Dorgard can be fitted to legally 'hold' open the fire door

All glazing should be fire resistant

Harnessing The Limitless Power Of Drones

In an era of rapid technological advancement, drones have become crucial assets in the security industry, revolutionizing traditional methods and introducing a new level of effectiveness and efficiency. As security challenges evolve, integrating Unmanned Aircraft Vehicles (UAVs), or drones, into security protocols provides unparalleled advantages in surveillance, monitoring, and operational safety across various applications, including physical security. Drones for security and surveillance offer a unique information gathering and monitoring perspective. With technological advancements, security drones equipped with live video, infrared, and thermal sensors have become essential tools for law enforcement and security teams.

Equipped with high-resolution cameras and thermal imaging capabilities, drones can deliver real-time video feeds to security personnel, enabling them to monitor expansive areas with greater precision and fewer resources. This capability is particularly beneficial in situations where quick assessment and response are crucial. For instance, in the event of an intrusion or emergency, drones can be deployed instantly to assess the situation, providing live updates that are critical for shaping response strategies. This rapid deployment capability drastically improves response times, allowing security teams to manage situations proactively without endangering human lives.

Drones secure public spaces during large-scale events like religious and sporting events or concerts. Their aerial perspective allows for comprehensive monitoring and swift response to

> **Drones can safely enter potentially hazardous situations, such as environments with criminal activity, suspicious behavior, or natural disasters, without risking human lives.**

potential incidents, ensuring the safety of attendees.

One of the most significant advantages of employing drones in security operations is their ability to keep personnel out of immediate danger. Drones can safely enter potentially hazardous situations, such as environments with criminal activity, suspicious

behavior, or natural disasters, without risking human lives. This ability to remotely assess and monitor dangerous scenarios ensures the safety of security teams and allows them to relay accurate information to law enforcement or emergency responders, enhancing overall situational awareness and response effectiveness.

Incorporating drones into security strategies also presents a cost-effective solution for many organizations. Compared to the expenses associated with manned patrols or the installation of extensive fixed surveillance systems, drones offer a dynamic and adaptable alternative. They can perform routine patrols improves the ability of on-site guards to monitor property. The real-time footage from drones, when integrated with existing video surveillance systems, provides comprehensive coverage and allows for quick response to any incidents. Moreover, the ability to share drone footage in real-time with stakeholders, including clients and first responders, enhances both security and operational efficiency.

As technology continues to advance, the role of drones in the security industry is expected to grow even further. While human guards will always play a vital role in security, drones offer a complementary solution effectively deter crime, as there are numerous instances of crimes occurring even in their presence. Contributing factors include liability, training, the evolving criminal landscape, prosecution challenges, and limited resources. Increasingly, guards are relied upon not to prevent or stop crime, but to alert first responders and ensure they arrive on the scene as quickly as possible. This task can be efficiently accomplished with drones, a practice that is already being implemented to some extent today.

Surveillance drones, characterized by their elevated viewpoint, swift deployment, remote video control, and data

> ❝ **While human guards will always play a vital role in security, drones offer a complementary solution that enhances their effectiveness and safety.** ❞

autonomously and be redirected as needed, all at a fraction of the cost. Additionally, drones provide superior data and imagery that are essential for real-time security and forensic analysis, making them an invaluable asset in comprehensive security frameworks.

The true potential of drones is best realized when they are integrated into a broader security system. By combining drone technology with other security measures, such as ground-based sensors and AI-driven analytical tools, organizations can create a robust and cohesive security solution. This integrated approach not only enhances overall security but also allows for strategic allocation of human resources, focusing on intervention and decision-making rather than routine monitoring tasks.

Patrols by UAVs are being conducted to increase situational awareness. The enhanced visibility provided by drones significantly that enhances their effectiveness and safety. By leveraging the unique capabilities of drones, the security industry can address contemporary challenges more effectively, ensuring a safer and more secure environment for all.

The true potential of drones is realized when integrated into a broader security framework by combining drone technology with other security systems like ground-based sensors and AI-driven analytical tools, organizations can create a comprehensive security solution that leverages the strengths of each component. This integrated approach enhances overall security and allows for strategic allocation of human resources, focusing on intervention and decision-making rather than routine monitoring tasks.

As technology advances and the security landscape evolves, the reliance on security guards may decrease over time. In today's environment, guards do not always collection capabilities, are indispensable in modern security operations. They contribute significantly to scenarios such as continuous site surveillance, event security, rapid incident detection, intrusion prevention, monitoring of crowded events, swift deployment to remote areas, search and rescue operations, and coordination support during crisis management. As we navigate the challenges and opportunities presented by surveillance drones, it is clear that they are not just tools. They are transformative agents shaping the future of security and safety. ■

Frost & Sullivan Demystifies AI and Explores Lucrative Opportunities

FROST & SULLIVAN

In today's rapidly evolving digital landscape, artificial intelligence (AI) and data analytics are revolutionizing industries, transforming traditional business practices, and unlocking new growth opportunities. Frost & Sullivan has developed a unique 4-stage AI maturity framework to help organizations evaluate their readiness for AI, identify growth opportunities, enhance customer value, and navigate the dynamic AI landscape effectively.

The AI Maturity Framework

Frost & Sullivan's AI maturity framework provides a structured approach for organizations to assess their preparedness for AI. This framework focuses on four key indicators:

1. Strategy and Roadmap Articulation: Assessing an organization's ability to define business goals, expected AI outcomes, governance structures, and leadership commitment.

2. Data Readiness: Evaluating the integration, standardization, and preparedness of enterprise data for AI and machine learning (ML) deployments.

3. Regulatory Compliance and Policy Alignment: Ensuring adherence to industry standards and government regulations.

4. Technology Implementation: Assessing the extent of AI deployment and infrastructure within an organization to achieve widespread AI implementation across various functions.

The Era of Digital Transformation

As industries undergo profound changes driven by AI and data analytics, innovations in generative AI (GenAI), virtual assistants, machine learning, hybrid clouds, predictive analytics, and natural language processing (NLP) are set to revolutionize sectors. These technologies are transforming manufacturing processes, automating workflows, personalizing services, enhancing customer experience (CX), and driving business growth.

However, the transition from proof-of-concept to full-scale AI deployments presents significant challenges. Organizations must overcome barriers such as data readiness, legacy infrastructure limitations, complex technology integrations, data disparities, and regulatory compliance to fully leverage the potential of AI. Failure to implement robust, enterprise-wide AI strategies can impede large-scale implementations and hinder the realization of enterprise-wide value.

4-Stage AI Maturity Framework

1 **Strategy & Roadmap Articulation**
Assessing business goals, expected AI outcomes, governance structures, and leadership commitment.

2 **Data Readiness**
Evaluating the integration, standardization, and preparedness of enterprise data for AI and ML deployments.

3 **Regulatory Compliance and Policy Alignment**
Ensuring adherence to industry standards and government regulations.

4 **Technology Implementation**
Assessing the extent of AI deployment and infrastructure within an organization to achieve widespread AI implementation.

AI Maturity and Market Opportunities

Frost & Sullivan's research reveals a significant gap between the recognition of AI's importance and its actual implementation. While 97% of enterprises view AI and ML as crucial for achieving business goals, only 1% have reached a ubiquitous level of AI maturity. This disparity highlights the need for comprehensive advisory services, support for enterprise-wide AI adoption, and compelling value propositions focusing

on data security and industry-specific knowledge.

Key concerns for IT decision-makers (ITDMs) regarding AI adoption include data privacy and security, quantifying return on investment (ROI), and defining ethical AI practices. Providers must address these concerns by enhancing integration and data migration support services, developing comprehensive advisory capabilities, and aligning growth strategies with the rapidly evolving technology landscape.

Capitalizing on AI Advancements

AI and advanced analytics are bringing about a new era of data-driven decision-making and automation.

Chatbots, for instance, are transforming customer service by providing instant responses and freeing human agents for more complex tasks. AI algorithms analyze massive datasets with unprecedented accuracy, uncovering hidden patterns and generating valuable insights previously impossible to detect.

Furthermore, AI is revolutionizing network management by optimizing resource allocation, preventing network failures, and enhancing security through advanced threat detection. This transformation creates significant growth opportunities for ICT providers to boost operational efficiencies, catalyze creativity and innovation, and develop new revenue streams. Notable areas of growth include:

• GenAI Deployment Services

• AI Implementation Platforms

• System Integration Services

• CT Advisory Services

• Data Readiness and Management

• Applied AI Applications

• Responsible AI Practices

• Multimodal Foundational Models

This comprehensive approach enables providers to address evolving business needs and challenges.

The Future of AI in Business

As AI technology continues to advance, its role in business processes will only grow more significant. The integration of AI with other technological systems, such as ground-based sensors and AI-driven analytical tools, will create comprehensive security solutions and operational efficiencies. By leveraging the unique capabilities of AI, businesses can address contemporary challenges more effectively, ensuring a safer and more secure environment for all.

Frost & Sullivan's insights and frameworks offer a clear roadmap for organizations to harness the full

potential of AI, transforming not just their operations but also the broader industry landscape. As businesses strive to overcome implementation challenges, the promise of AI-driven growth and innovation remains a compelling and achievable goal, ultimately fostering sustainable competitive advantages and paving the way for future advancements. ■

Warehouse Fire: Where Fire Protection Is A Round The Clock Task

Fire safety in a warehouse is a particularly big challenge since, usually, these types of buildings have a high fire load. In addition to the merchandise, installations contain elements that spur on the spread of flames, like plastic materials, cardboard or wood, among others. To minimise this risk, warehouses must have fire prevention, detection and suppression systems.

The warehouse is the key element in the supply chain of a business. For this reason, it is imperative to be vigilant and keep it in top shape, to eliminate risks to personnel, to minimise damage to goods and to avoid hold ups in customer service. Interruptions in services or the total or partial destruction of a warehouse can lead to enormous losses, both in materials and moneywise, in addition to the damage to a company's corporate image.

To minimise these repercussions, normally these large-sized warehouses are sectored. The different zones are separated by walls or fire doors that impede flames from spreading. Preventing, controlling or stopping a fire in a building with such an elevated fire load, like a warehouse has, is a technical problem that requires a detailed expert based study.

A constructed element has a capacity to withstand exposure to a fire during a period of time, namely its load-bearing capacity, without losing its structural stability. There are programmes to calculate the time a metal structure can cope with a fire before collapsing. This time is influenced by many factors, such as:

- Fire load, Type of fire, Rack structure, Coating of the structure and Location of the installation (if there is humidity, air currents, etc.).

The load-bearing capacity of a metal structure during a fire can be enhanced through passive protective systems, which include materials and techniques intended to prevent, halt, or delay fire spread, as well as through active protection, which involves equipment and systems installed to detect and suppress fires.

The firefighting measures that may be employed in a warehouse are determined by the:

- Standards related to this subject area.

- Size of the warehouse.

- Fire load of the goods.

- Location of the warehouse in respect to other buildings.

- Insurance company's requirements.

- How interested the company is in protecting the stored goods.

There are no load-bearing capacity requirements for racks in a warehouse in regards to dealing with fires. When steel is employed in the construction of rack components, the European EN 13501 standard classifies this material as A1 (non-combustible). Conversely, the most commonly used paints –like the ones utilised by Mecalux– are categorised as Bs3d0 in accordance with the EN 13501, i.e., they are combustible but not flammable. These paints are less than 100 µ thick and, during a fire, they calcinate instead of causing a blaze. Thus, the fire does not spread. However, they do not provide the coated element with a fire bearing capacity; intumescent paints should be used for that purpose.

Intumescent paints are specialised coatings designed to provide passive fire protection to structures. When exposed to high temperatures, typically during a fire, these paints undergo a chemical reaction that causes them to expand significantly in volume and form a thick, insulating char layer. This char layer acts as a barrier, insulating the underlying material (such as steel or wood) from the heat, thereby slowing down the rate of temperature increase and helping to maintain the structural integrity of the material for a longer period during a fire. Intumescent paints are commonly used in buildings, bridges, and other infrastructure to enhance fire resistance and safety. However, they are impracticable on metal racks with light-duty or slotted profiles for several reasons:

- To assure the load-bearing capacity of the rack profiles during a blaze, a very thick coating must be applied, more than 1,000 µ.

- The rack must be painted after it has been set up.

Assuming this, the on-site paint application could be very complicated due to the distinctive features of the profiles (partially open and perforated).

- The paint could end up peeling off due to rubbing (for example, between the unit load and the elements it is holding).

- The cost would be very high.

Moreover, the EN-15629 "Steel static storage systems. Specification of storage equipment" standard lays out in Section 10 that in regards to racks, generally passive protection is not practical. Despite this, standards may be more restrictive in other countries. For example, in France clad-rack warehouses must be set up to collapse inward in case of a fire, so adjacent buildings are not harmed.

Active protective measures in a warehouse include fire detection devices (flames, smoke or heat) and the automatic or semi-automatic equipment to put out fires. These are first response items to deal with a fire and are recommended by fire regulations for small, low-risk warehouses. In large-sized warehouses or those with a larger fire load, these items are used in addition to the automatic fire equipment.

These systems are usually recommended to contain small outbreaks of fire or, if a fire is already spreading, to aid the other intervening equipment. Locating a fire right when it starts is crucial to minimise fire damage. There are devices that can detect a fire via certain indicators: the presence of smoke, flames or rising temperatures.

Thermal detectors are useful in buildings that are up to 6 m high. UV detectors are only used when there is a susceptibility of visible flames in the initial phases of a fire, as well as during the combustion of flammable liquids.

Smoke detectors, either optical or aspirating, are the most used in warehouses. In buildings that are up to 12 m high, they are installed in the ceiling (where combustible gases accumulate) and are distributed as required by fire regulations. When a fire starts, the optical smoke detectors recognise changes in the air's opacity due to the presence of smoke. Then, the sensor sounds an alarm in the central control panel, which is under constant surveillance.

In turn, aspiration smoke detectors contain only one centralised sensor (usually a highly sensitive one) and a network of pipes with calibrated orifices spread throughout the warehouse (an orifice is equivalent to one sensor). The system gathers air samples from the room through these orifices and analyses them. If there is a fire, the sensor equipment will detect it and sound an alarm.

Automatic sprinkler systems are the most commonly used in storage buildings. They consist of a network of pressurised water pipes that are equipped with discharge nozzles (sprinklers) appropriately distributed throughout the warehouse, for example, inside the racks. Sprinkler nozzles are covered by a heat-sensitive material that keeps them closed when they are not in use.

Just the sprinklers within the affected zone will be activated during a fire and only when a particular temperature has been exceeded (usually between 68 and 74 ºC), permitting the water to spray freely. When it turns on, the water sprays against a deflector plate, creating fine water droplets in a spray pattern that soaks the specified zone uniformly. In this way, there is limited damage due to water pressure.

Sprinkler distribution must be designed with many factors in mind, among which include the:

- Stored merchandise.

- Maximum load dimensions.

- Packaging, boxes, plastics (not only those that wrap the merchandise, but also those around in its casing), wood pallets...

- Storage method: outdoors, in pallet racks, in racks with solid shelves, etc.

How Can We Prevent Fire in a Warehouse

1. Periodically inspect warehouses for potential fire hazards, including electrical issues and storage practices.

2. Train warehouse staff in specific fire safety protocols, including emergency response and hazard management.

3. Organize warehouse storage to minimize fire risks and ensure clear emergency access.

4. Implement advanced fire detection systems tailored to warehouse needs for early fire warning.

5. Install suitable fire suppression systems, like sprinklers, in line with the stored materials and integrate with detection systems for quick action.

Height of the storage systems and the building.

Sprinklers can be installed in the ceiling of buildings that are up to 13.5 m high, but are not recommended when they exceed this height. The reason is that the energy from the hot gases evaporates the water droplets before they reach the fire. To fix this situation, sprinklers can be placed in intermediate levels of the racks.

In regards to automated warehouses, sprinklers are installed in the ceiling and in-rack sprinklers in the blocks. It may be necessary to place sprinklers in each of the levels, more specifically, in the spaces between the loads that act as funnels so hot gases can rise. In its initial phase, a fire propagates vertically.

The control and smoke extraction systems are as vital as the automatic firefighting elements. The smoke and toxic gases from a fire rise to the ceiling of the building, where they accumulate and thicken, filling the area, until they reach where people are (which complicates evacuation measures).

The elevated temperatures of the hot fumes, gathering in the upper parts of the building, significantly undermine the strength of the structure's cladding and the building itself, to where it could collapse.

Smoke extraction can be carried out easily, by opening aerators in the cladding that help expel fumes, as well as hot, toxic gases from the fire. Moreover, smoke extraction combined with the intervention of automatic sprinklers will help keep the temperature of these gases below levels that would otherwise damage the structure.

Some warehouses contain unique features, either for the stored goods, or due to environmental or constructive conditions, which entail the inclusion of customised firefighting and safety systems.

For instance, in warehouses with combustible or flammable liquid products it is usual to incorporate foam fire safety systems. Typically, water-foam deluge valves or foam-forming liquid injectors are installed in the sprinkler system.

On the other hand, frozen storage chambers require special care. Since they operate below 0 ºC, it is not possible to install a standard automatic sprinkler system. Nonetheless, there are three alternatives:

- Install a 'dry' automatic sprinkler system, with pressurised air. Prime it with water and only vent it if a fire occurs.

- Install a pre-actionable automatic sprinkler system. It activates when the thermal cover breaks and, also, when an automatic detector (for example, one for smoke) confirms that there is actually a fire. It is very effective in warehouses where accidental water discharge could be detrimental.

- Install air reduction systems (especially in frozen storage chambers where no people are working). This system injects nitrogen into the warehouse in a controlled manner, diminishing the oxygen concentration, which prevents a blaze from spreading.

Protecting personnel and guaranteeing safe operations in the warehouse must be the top priority of everyone at a company.

Fires happen, and are not a phenomenon that can be completely avoided, as there is always a risk a fire can occur. For this reason, design and prevention are crucial in reducing the consequences brought about by fires, smoke, heat or even the water used to put a fire out. Passive and active protective measures are essential to fit out installations with a proper level of safety for both personnel and the goods being stored, minimise losses and keep a business up and running.

Euralarm calls for smoke alarm exemption from EU battery regulations

Euralarm urges the European Commission to extend the Article 11(3) exemption of the Batteries Regulation to include smoke alarm devices, carbon monoxide alarms, and gas alarms.

According to Euralarm these products should meet the following criteria:

• Life Protection: Explicitly designed to protect human lives within living environments.

• EN Product Standard: Tested and approved according to valid EN standards.

• 10-Year Battery: Powered by a portable battery that reliably supplies the device for at least 10 years.

• Recycling Safety: Easily removable batteries to ensure safe handling in recycling centres.

Only products meeting all four conditions should be considered for exemption. These devices explicitly serve to safeguard lives

While it is often beneficial to have portable batteries that users can remove and replace using commercially available tools throughout the

product's lifespan, there are cases where this may not be appropriate and could even compromise user safety and appliance functionality. One such scenario applies to devices like smoke alarms, carbon monoxide detectors, and gas alarms.

These safety devices are designed for use in residential settings, alerting occupants to fire, smoke, or hazardous gases (especially during sleep) so they can respond appropriately and evacuate if necessary. To ensure proper operation, all these products incorporate a portable battery. Notably, a significant number of these devices in Europe (particularly smoke and CO alarms) come with permanently soldered 10-year batteries.

This category of products explicitly serves to safeguard human lives within their living environment and includes:

• Smoke Alarms (according to EN 14604)

• Carbon Monoxide Alarms (according to EN 50291-1)

• Gas Alarms (according to EN 50194-1)

Points that justify the call

1. Life-Saving Purpose: The primary function of these devices is to safeguard lives within residential environments.

2. Sensor-Based Service Life: Unlike conventional product design considerations, the service life of these devices relies solely on physical sensors. It is determined by physical conditions and limits.

3. 10-Year Batteries: A significant subset of these devices operates on a single battery throughout their entire 10-year service life. This level of sustainability and efficiency is remarkable.

4. Permanently Soldered Batteries: Given their purpose and longevity, it is neither practical nor necessary for end-users to replace batteries. Consequently, 10-year batteries are now permanently soldered.

5. Safety Risk: Introducing replaceable 10-year batteries would not only be futile but also pose safety risks similar to those associated with hearing aids.

Hexagon, RapidSOS introduce Digital Alerts solution to speed fire response in El Paso

Hexagon's Safety, Infrastructure & Geospatial division and RapidSOS announced a Digital Alerts solution for enabling firefighters to respond to commercial building fires and emergencies faster and with more accurate data. El Paso County 911 District in Texas is the first to deploy the new solution, bringing more efficient and informed emergency response to their community.

With Digital Alerts, emergency communication centres (ECCs) receive fire dispatch information from commercial building monitoring centres in real time, eliminating the need for a phone call.

When a building's fire panel communicator issues alarm signal data, it is assessed by a central station automation system for accuracy, and a Digital Alert is routed by the RapidSOS Intelligent Safety Platform and received at the ECC by Hexagon's computer-aided dispatch (CAD) system.

The Hexagon CAD system automatically creates an incident, bypassing the initial call to a 911 telecommunicator, thus eliminating manual handoffs and reducing response time.

The new solution delivers critical data to field responders and 911 telecommunicators, including triaging the type and severity of the hazard and the location within the building.

"In a commercial fire, seconds can cost lives," said Bill Campbell, Senior Vice President of Global Public Safety/North America for Hexagon's Safety, Infrastructure & Geospatial division.

Bill Campbell adds, "Integrating RapidSOS' groundbreaking Digital Alerts with Hexagon's CAD system provides a critical head-start that first responders need. El Paso County 911 is the first to deploy this time- and life-saving integrated solution, and we anticipate many more deployments at ECCs across the country."

"RapidSOS created Digital Alerts to reduce response times and the errors that can occur in manual handoffs," said Karin Marquez, Chief Public Safety Brand Officer at RapidSOS.

Karin Marquez adds, "Through this integration, we're able to deliver the information from the sensor to the monitoring centre, then to 911 digitally from end-to-end for an efficient and effective response."

"The district is proud to be the first to deploy RapidSOS' Digital Alerts technology integrated with Hexagon's CAD system," said Scott Calderwood, Director of El Paso County 911 District, adding "Any time we can give first responders more time and information heading to an emergency, it's a win for public safety."

Improve facility management with the KL10 public function lock by Codelocks

Codelocks has introduced public functionality to its KL10 KitLock. The mechanical lock now provides multiple users with keyless access to shared storage at public facilities like gyms, sports centres, spas, retail stores, offices, and shared workspaces.

The KL10, a durable and compact mechanical lock, is designed for easy use and is accessible via a four-digit code. Originally released with Private Function, the new KL10 Public Function allows multiple occupancy facilities to offer simple short-term storage to multiple users.

To operate the lock, the user simply enters a personal four-digit code to lock it. The same code is entered once again to unlock it and then the lock remains open ready for the next user to set a fresh code. The lock has a black powder-coated finish for a simple and stylish look and an easy grip outer on the handle for effortless opening. In the case of a forgotten code, the code can be retrieved using a code-finding key. This simple mechanical lock allows for up to 10,000 unique combinations.

The KL10 KitLock by Codelocks is built with simplicity in mind which means convenient mechanical access to lockers and cabinets. Any facilities that experience several visitors or members a day and want to offer a short-term storage solution may consider installing this new KitLock by Codelocks.

Setting up new codes is largely self-sufficient which means the KL10 Public Function lock is straightforward for users to operate and incredibly easy for facilities managers to oversee.

Codelocks' KL10 Public Function mechanical locks are straightforward to install or retrofit and codes can be reset while the lock is still on the door. The retail product comes with all the required fixings: a straight cam, cranked cam, hex nut, metal clip, washer, and three screws.

Resideo Bolsters First Alert VX Series with VX5 Indoor Camera

Resideo Technologies, a global provider of solutions for home comfort, security and safety, recently unveiled its First Alert VX5 Indoor Camera.

The indoor camera is the latest addition to the company's First Alert VX Series, which includes the First Alert Outdoor Camera and Video Doorbell. Resideo states the VX5 Indoor Camera incorporates artificial intelligence (AI) event detection, a feature the company calls, a unique automated privacy mode, and flexible installation options that Resideo emphasises, meets the needs of professional security dealers.

Some of the options the indoor camera offers include:

• Advanced event detection: Intelligent capabilities detect people, pets and vehicles, helping to keep family and belongings safe and secure even when users aren't at home.

• High-quality video and audio: Sharp, two-megapixel resolution provides both day and night vision, a wide field-of-view, and two-way talk to enable user engagement and interaction.

• Privacy mode: The VX5 Indoor Camera allows users to select the product's "Privacy Mode" from the app or by pushing a button on the camera to activate its built-in privacy shield, which prevents the camera from recording video and audio. According to Resideo, by integrating with the ProSeries security panel, the privacy shield opens effortlessly when the system is armed and closes when the system is disarmed.

• One-App control of the connected home: Resideo points out that its Total Connect 2.0 app puts control of the home security system in the hands of users to provide homeowners easy access to arm, disarm and check alerts for their security system.

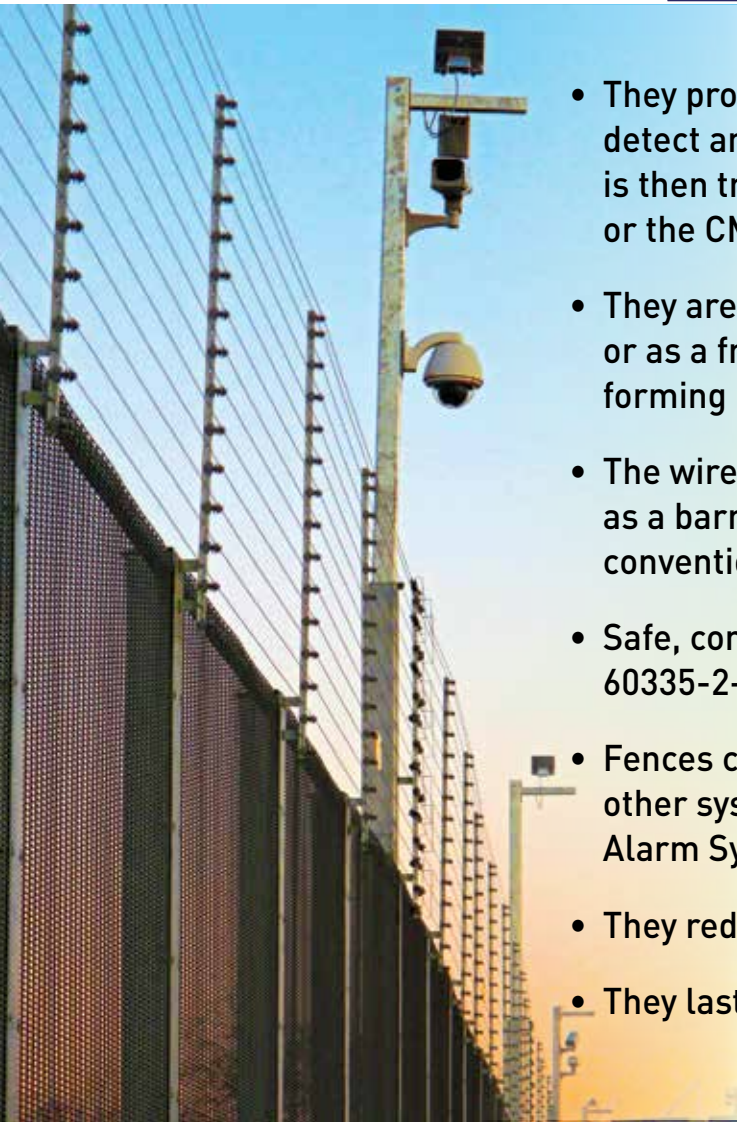The company asserts the First Alert VX5 Indoor Camera complements its existing professional

YOUR SECURITY BEGINS WITH YOUR PERIMETER

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DETER, DETECT & DELAY INTRUDERS.
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- They provide a higher level of detection capability to detect an intrusion attempt and set off the alarm which is then transmitted to the security personnel, police or the CMS.

- They are installed easily on existing walls or fences, or as a free standing secure energy perimeter fence, forming your first line of defence.

- The wires of a free standing secure energy fence serve as a barrier, alleviating the need to erect another conventional fence or wall, reducing cost.

- Safe, complies with International IEC Standard 60335-2-76

- Fences can be remote controlled and integrated with other systems such as,Perimeter Lighting, CCTV, and Alarm Systems.

- They reduce cost of security personnel.

- They last for years and have low maintenance cost.

APPLICATIONS:
BUNGALOWS, FARM HOUSES CAMPUSES, PRISONS, GOVERNMENT & MILITARY SITES, CRITICAL INFRASTRUCTURE FACILITIES...

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security offerings and it provides a whole-home awareness, intrusion and security platform. Through the product dealers can offer flexible installation options and a variety of AlarmNet 360 video service plans to increase their recurring monthly revenues.

Matrix introduces SATATYA NPC430: The most user-friendly camera controller powered by 4D joystick

Matrix Comsec, a pioneering provider of cutting-edge security and telecom solutions, has introduced SATATYA NPC430 - Network PTZ Controller with 4D Joystick. This CCTV accessory is designed to complement Matrix's range of PTZ Cameras, and Cameras with Motorised Varifocal Lens (MVL) offering users a convenient solution for camera monitoring.

For many organisations, the task of controlling and managing the viewing angles of PTZ cameras poses significant challenges. Traditional methods, like relying on NVRs, VMS systems, or navigating through each camera's webpage, often exacerbate these difficulties. The complexity and time-consuming nature of these approaches become apparent, particularly when dealing with multiple cameras across various locations.

Faced with these obstacles, organisations struggle to maintain effective surveillance operations, risking gaps in security coverage and operational inefficiencies. Recognising the pressing need for a simpler and more intuitive solution, Matrix has introduced its IP-based PTZ Keyboard Controller to revolutionise surveillance management.

Matrix IP-based PTZ Keyboard Controller offers a host of features designed to simplify surveillance management.

• The 4D Joystick Control allows users to effortlessly navigate Pan, Tilt, Zoom, and Focus functions, providing precise control over camera positioning and monitoring. With intuitive joystick movements, users can easily adjust the viewing angles to capture critical areas of interest.

• The Smart Keyboard offers convenient access to Preset, Patrol, Pattern, and Scan functions. Users can configure these functions with ease, ensuring smooth and seamless monitoring of multiple camera feeds.

• The Intelligent LED Display provides a user-friendly interface without the need for accessing web pages.

With clear and intuitive controls displayed on the LED screen, users can navigate through options effortlessly, reducing the time required for setup and adjustment.

• The Matrix IP-based PTZ Keyboard Controller supports both IP and Analog camera versions concurrently, allowing users to connect and remotely monitor up to 999 cameras. This versatility ensures compatibility with a wide range of camera

models, enabling seamless integration into existing surveillance systems.

• Furthermore, the controller is compatible with the ONVIF protocol, facilitating interoperability with various surveillance devices and systems. This compatibility ensures flexibility and ease of integration, allowing users to leverage their existing infrastructure while expanding their surveillance capabilities.

• Additionally, the controller features Power Over Ethernet (PoE) support, enabling hassle-free integration and configuration. With PoE support, users can power the controller and connected devices through a single network cable, simplifying installation and reducing cable clutter.

Overall, the Matrix IP-based PTZ Keyboard Controller offers a comprehensive solution for surveillance management, combining advanced features with user-friendly design to enhance security effectiveness and operational efficiency.

PureTech Systems' PureActiv geospatial AI-boosted video analytics

With decades of innovation and fielded systems, PureTech Systems' PureActiv geospatial AI-boosted video analytics offers an unrivalled probability of detection while nearly eliminating nuisance alarms for critical infrastructure perimeter protection and

border security.

Based on 16 patents, PureActiv geospatial AI-boosted video analytics provides real-time autonomous intrusion detection, classification, tracking, alerting and deterring. The advanced AI algorithms are trained to detect a wide range of behaviours including, zone entry/exit, moving too fast or too slow, stopping, crawling, walking, running, loitering, crowding, wrong direction of travel, travel path, Autonomous PTZ camera tracking of ground and drone targets, thrown, removed and object left behind, person & vehicle tailgating, and counting.

Designed with versatility in mind, PureActiv geospatial AI-boosted video analytics are integrated with a comprehensive selection of perimeter sensors, including visible and thermal cameras, radars, fence sensors, access control systems and more, allowing for an effortless integration into new or existing security infrastructures.

Advanced tracking capabilities and precise target geolocations of objects of interest are displayed on a real-time map directly into your Network Video Recorder (NVR) via an ONVIF video feed, facilitating immediate situational awareness without the need for additional integration efforts. PureActiv's robust geospatial AI-boosted video analytics are highly adaptable, capable of running on edge devices, servers, or in the cloud. This flexibility ensures that regardless of your system architecture, you can greatly enhance your perimeter protection.

G-MAK Fog Machine and Home Edition

The G-MAK Fog Machine is designed to provide an immediate response to unauthorised entries and seamlessly integrates with existing security systems. Within seconds of activation, it fills the area with a dense, non-toxic fog, obstructing intruders' visibility and making it virtually impossible for them to navigate or locate valuables.

The Fog Machine's powerful fogging system, coupled with its health and safety compliance and ease of installation, ensures a swift and effective defence mechanism for various environments.

In parallel, G-MAK introduces the G-MAK Home

Edition, a comprehensive home security system that combines multiple defence mechanisms to safeguard residential properties. This product activates within one second of a trigger and incorporates a high-output stroboscope, dense fog screen, and a loud siren to deter intruders effectively.

With its smart integration capabilities and user-friendly interface, the Home Edition offers flexible protection tailored to individual needs, providing homeowners with peace of mind.

Aperio wireless locking extends support for mobile access

Compatibility with a range of credential technologies can be a critical factor when selecting access control. As organisations across the world explore a move to mobile keys for access, it is more important than ever.

Aperio's open technology platform has been built on compatibility. Its range of battery-powered access hardware for integration with third-party access control systems can secure almost any opening.

Customers have a choice of wireless Aperio handles, escutcheons, cylinders, security locks, server rack locks and new cabinet/cupboard locks. With Aperio, it is straightforward to control all access points digitally.

And with the rapid growth of mobile adoption in security, Aperio is extending support for mobile credentials, to keep offering high convenience and

security benefits to customers.

Changes in end-user demand are reflected in Assa Abloy's survey, the Wireless Access Control Report 2023, which suggests 29% of organisations already use mobile credentials — instead of or alongside RFID cards — while another 40% of respondents anticipated deploying them within the next two years. According to the company, the single most important factor when considering a switch to mobile, according to Report data, is convenience.

Aperio native mobile access is built on HID Seos, a next-generation platform with class-leading cryptography, authentication and privacy protection. Seos Mobile Access supports both NFC and BLE. Unlocking an Aperio device by phone is easy and intuitive: users simply present their

phone to the reader, just like a smart card. They don't even need to open an app.

In response to growing demand for mobile solutions, Aperio has also integrated cutting-edge mobile access credentials from Gallagher and Stid. With this, Aperio broadens the range of options available, facilitating seamless integration with mobile devices and enhanced flexibility.

In addition, to increase flexibility, Aperio locks can handle multiple credential technologies at the same site: Security managers may gradually roll-out mobile access while RFID cards already issued remain valid. Aperio's credential compatibility has grown in tandem with the platform. Aperio wireless devices now unlock via the widest range of RFID technologies, in both Online and Offline mode. Aperio users can effortlessly transition to the latest mobile credential technologies without being tied down, ensuring they are always equipped to meet evolving security demands and new challenges.

Release of Gallagher Security's Command Centre v9.10 unlocks new era of security tech

Gallagher Security has announced the latest release of their award-winning security site management software, Command Centre v9.10, marking a significant evolution for the security platform trusted to protect some of the world's most critical sites.

Mark Junge, Chief Executive at Gallagher Security explains, "Customers and Channel Partners of Gallagher who take advantage of this upgrade will benefit from a fast-evolving ecosystem of Gallagher Security technology that sets them up for the future."

Digital wallet solutions further expand Command Centre's credential capabilities, offering a seamless access experience and leveraging native technologies within ever-present smartphones, while automatic configuration for Gallagher's next-generation Controller 7000 offers streamlined upgrades and enhanced cyber protection.

"The beauty of upgrading to Command Centre v9.10 is the total solution benefit that can be realised by our customers. It unlocks Command Centre Web subscription-based licences where Cardholder Administrators can be swiftly and easily updated in the cloud. It also realises the value of HBUS devices for improved speed, data protection, and automated scalability," adds Mark.

Enhancements to the customer experience are also delivered via digital wallet solutions. Command

Centre v9.10 supports employee badges in Apple Wallet for a quick, intuitive, and simple access experience at Gallagher readers for users of iPhones and Apple Watches. Businesses can quickly and painlessly issue access credentials to their employees with in-app provisioning via Gallagher's Mobile Connect App.

An integration with Transact delivers university campuses a mobile-centric student experience that streamlines access and administration with integrated payments, campus ID, and commerce solutions. Mark

summarises: "With our firm focus on the best quality hardware today that provides a pathway to the best tech developments of tomorrow, our customers can be sure their investment in Gallagher Security is safe."

Nexus and STid: Bridging the gap between physical and digital access

Nexus and Stid have developed a joint solution with the goal of simplifying digital and physical identity management for organisations of all sizes. The solution will empower all authorised users – employees, visitors, and contractors, to access corporate premises as well as digital resources with trusted Mobile IDs.

While most organisations are evaluating moving to smooth and secure authentication mechanisms for digital access, physical access management is still done in silos and relies mainly on cards and key fobs. This approach brings numerous hassles, such as significant complexities of managing multiple systems, administrative and cost overhead for managing physical ID cards, and leaves organisations vulnerable to security breaches.

"Our partnership aimed to introduce a solution that would make physical access and digital authentication seamless. With mobile virtual smart cards already being used for digital authentication, extending them to grant physical access was the obvious step to achieve this goal, says Olivier Dussutour, CEO and Business Head for Workforce Identities at Nexus.

With the Nexus and Stid joint solution, organisations will be able to issue PKI-based digital identities stored on a mobile virtual smart card in the user's mobile phone. This Mobile ID will allow users to identify themselves visually, access doors

via Bluetooth or NFC, log onto digital resources, sign digital documents, and encrypt emails.

"The solution will enable organisations to streamline their identity management processes. Using one single system allows them to be in control of the issued identities and roll out well-defined access management policies for all their users across the physical and digital domains," explains Vincent Dupart, CEO at Stid. "Organisations often use smartcards as identity trust anchors. Using smartcards with mobile access cards contributes to a smooth user experience as well as provides a fallback access mechanism if a user misplaces or forgets to bring their physical tokens. From the end-user perspective, the ease of using their smartphones to gain access encourages successful adoption across users," he further adds.

The system is designed to integrate seamlessly with legacy physical access readers and systems that organisations might be reluctant to replace, thus minimising disruptions. On the other hand, it has been developed to be future-proof and to remain compatible with the evolving technology landscape and standards.

"An important aspect we considered while designing the solution is compliance requirements. A common concern highlighted by a majority of our customers is adherence to a plethora of regulatory frameworks governing data privacy and security. As vendors with ANSSI-qualified solutions, our customers can be assured that our offering meets the highest security requirements and complies with EU regulations," Olivier emphasises.

"By breaking down silos, our solution offers organisations a chance to bolster security, streamline operations, enhance user experience, and adapt to the evolving needs of the modern workforce," concludes Vincent Dupart.

Sensera Systems launches complete monitoring and security solution for construction jobsites

Sensera Systems, a provider of solutions for real-time jobsite intelligence, announced the launch of its complete site security solution. The full solution includes the compact solar-powered SiteWatch Pro3 camera, the newly released TalkDown deterrence kit, and professional monitoring services all enabled through Sensera's SiteCloud software. Sensera Systems now offers comprehensive jobsite security coverage and meets risk compliance for projects of any size.

"Construction costs continue to rise across the board — and tools, materials, and equipment must be protected on the jobsite," said Robert Garber, CEO Sensera Systems. He adds, "General contractors and

project managers need the power of jobsite intelligence to meet builder's risk insurance requirements and give their customers peace of mind. Sensera Systems' energy-efficient solution, complemented by our cloud-based technology, provides contractors with the simple-to-deploy monitoring and security they've been asking for."

According to industry estimates, construction theft costs hundreds of millions of dollars a year. Furthermore, fluctuating material costs and evolving project complexity continue to stress builder's risk insurance policies, pioneering to rising premium costs. As a result, site security, real-time site monitoring, and verified security dispatch have become immediate priorities for construction professionals.

Sensera Systems' complete security solution brings together detection, deterrence, and response in one flexible, reliable, and affordable offering. This means simplified site coverage and a lower cost of implementation for contractors, eliminating complexities that can result from patching disparate security features together.

Sensera Systems' professional security monitoring gives construction site professionals confidence in protecting their assets while meeting builder's risk insurance requirements.

Sensera Systems' complete site security offering delivers the following benefits to customers:

• Complete monitoring support through the combination of video, audio, and automation technology alongside human interactivity.

• Sustainable construction practices through solar power, preventing the need to run costly trenches along a site for power.

• Flexibility and portability through simplified setup, requiring no professional installation of cameras during construction.

• Central command and control through integration with SiteCloud.

• Reduced dispatch costs through thermal sensing, threat verification and TalkDown deterrence.

Hanwha Vision launches the industry's first dual sensor BCR camera

Providing logistics companies with a convenient way to reduce costs, minimise losses, and improve efficiency, Hanwha Vision is introducing the first dual lens Barcode Reader (BCR) camera, which combines barcode recognition and video capture all in a single device.

The AI-enabled BCR camera accurately tracks and recognizes parcel barcodes on high-speed conveyors at a speed of 2m/s. The image sensors for barcode recognition and video monitoring offer 4K resolution and a wide Field of View (FoV) with a 25mm lens. The camera can also be integrated with Hanwha Vision's innovative Vision Logistics Tracking Software (VLTS).

As a single device, the unit can help lower

installation and maintenance costs compared to conventional systems that require barcode readers and surveillance cameras to be installed independently.

Powering productivity with AI-enabled VLTS (Vision Logistics Tracking Software) Integrating the BCR camera with Hanwha Vision's VLTS, can help companies boost productivity, improve efficiency, and reduce theft or damage.

With an integrated logistics system (WMS) and CCTV system (NVR), the Hanwha Vision VLTS enables operators to easily track a package and access video playback by simply scanning the invoice barcode.

By comparison, with logistics and CCTV systems typically operating separately, employees are forced to check the last location and time through a barcode search every time an event occurs. Then, they must revert to the surveillance system to view a recorded video to see what happened at that precise time and location.

The new dual lens BCR camera is just one part of Hanwha Vision's complete range of edge-based AI offerings that make up Hanwha Vision's comprehensive and fully-integrated Logistics Solution set, covering every part of inbound and outbound package delivery, receiving, handling, shipping, and tracking.

Other management systems within the company's Logistics Solution set, which can be integrated with the VLTS, include:

• Packing Video Management: Quickly matches videos with work history and helps operators respond effectively to customer claims for errors, omissions, or damage throughout the packing process.

• Dock Safety Management: Edge-based AI camera oversees the safety of dock loading and unloading, helping operators to minimise hazards and easily document and report on compliance with all safety and industry regulations.

Kidde Commercial Optica Duct Smoke Detector

Kidde Commercial, an industry leader in fire and life safety for over a century, has announced the launch of the Optica Duct Smoke Detector which features a revolutionary new design, specifically created to address unique HVAC System smoke detection challenges while reducing nuisance alarms. Optica's New Duct Smoke Detector design is built to address the moisture and dust challenges found in the HVAC environment and provide best-in-class detection that customers can trust.

The Optica Duct Smoke Detector is specifically designed for HVAC smoke detection, bringing enhanced confidence to site managers and end-users who have struggled to find smoke detection solutions that meet their needs and address the moisture and dust challenges of the HVAC environment.

The Optica Duct Smoke Detector addresses these concerns and delivers performance that sets a new standard for HVAC smoke detection – reshaping the future of fire and life safety in commercial buildings.

• Specifically designed for the challenging HVAC environment with a free-flowing chamber, dual-wall construction, and anti-fog coating across the complete sensing area to enable greater performance, durability and reduce nuisance alarms.

Key Benefits to Service Providers:

• Features Optica's patented technology to reduce nuisance alarms. Optica uses dual wavelengths, multiple angles, and detection algorithms to differentiate between nuisance particles, like dust or

steam, and serious threats.

• Ensures backward compatibility and easy upgrades by utilising the same entry and exit pipe locations as the legacy SuperDuct Detectors.

"This new Optica Duct Detector sets a new standard for HVAC smoke detection," said Wally Ortiz, Global Kidde Commercial UL Product Director. "Combining the Optica technology with this bold new design creates a highly differentiated duct smoke detector specifically designed to meet the moisture and dust challenges found in the HVAC environment. This innovative, new design unlocks capabilities that are essential to fire and life safety system solutions, even for environments that face dust and moisture accumulation challenges."

The Optica Duct Smoke Detector is being introduced this week at ISC West and will be available starting in June. ■

MOBILE CREDENTIALS
Gaining Ground In
ACCESS CONTROL

For centuries, keys have been the primary method for locking and unlocking doors. However, security professionals have continually innovated, enhancing this fundamental function. Today, beyond simply granting or denying access, they offer increased convenience, advanced features, and improved control. This includes audit trails, video verification, credential management, and the ability to handle electronic access control from an on-site operations centre or a remotely accessible cloud-based analytics platform.

For over a decade, access control vendors have promoted the introduction of mobile credentials as a revolutionary technology that will accelerate the adoption rates of cutting-edge equipment in facilities worldwide. Mobile credentials consist of virtual data that are downloaded onto smartphones, and they can be utilised as alternatives to traditional physical credentials such as ID cards and badges. This credential data can then be delivered by the user's smartphone to a mobile-capable reader through Near-Field Communication (NFC), Bluetooth, Wifi, or cellular transmissions.

The world is adopting new technologies at an astounding rate, and as a society we are becoming more reliant on digital devices. When it comes to managing access control, mobile credentials are gaining popularity across a wide range of industries and applications. The proliferation of mobile devices makes them a natural fit for extended identity applications, and the incremental adoption of mobile credentials continues - with 72% of respondents calling out mobile identity as a top 3 trend, according to the latest findings from the HID 2024 State of the Security Industry Report. The report gathered responses from 2,600 partners, end users and security and IT personnel worldwide across a range of job titles and organisation sizes representing more than 11 industries.

A mobile credential is a digital access key that sits on a smart device such as a smartphone. This replaces a traditional credential such as a key, a fob, or a card. A mobile credential allows you to authenticate with your smartphone and use it as your key to gain access to a building, room or location.

Passwords alone are no longer acceptable in the cyber world, as they can be shared, stolen and copied – just like some keys. The only way to overcome this issue is to verify the identity of the individual attempting to gain access. Identity verification has become standard practice in society, for example when shopping or banking online. Consumers are familiar with having to enter a verification code when using a shopping app to confirm their identity, and this offers peace of mind that their details are secure

Mobile credentials utilise on-device passwords and biometrics such as fingerprint, voice and facial recognition, to keep unauthorised people or groups from accessing the key stored on the smartphone. This is seen as a significant advantage over a physical key, fob or card credential.

Examining the report further, two-thirds of organisations (64%) reported some level of mobile ID deployment, with that number expected to increase to 79% within the next five years. In addition, the survey found that industry partners are optimistic in their outlook, stating that 94% of their customers will have deployed mobile IDs in the next five years.

Although phones have made significant advancements in offering keyless access options in recent years, widespread adoption remains challenging, particularly as this technology transitions from homes, where it found initial traction, to small businesses and large enterprises undergoing digital transformation. This shift towards a cloud and mobile-first approach is profoundly altering how end users perceive access control.

While adoption of mobile credentials is on the rise, there is still a perceived need for physical identity cards in some sectors, with 46% of end users saying they need a visible image on their ID badge, and 59% of industry partners reporting their customers also have this requirement, according to the report.

But, as researchers note, this tends to be industry-specific: For example, high numbers of end user respondents in government (25%), healthcare (27%), transportation (29%) and hospitality (26%) say the need for their ID to remain visible at all

times impacts their use of mobile IDs.

Despite some of the barriers mentioned above, mobile credentials / ID continues to gain traction in many industries, with 59% of respondents saying it's more convenient for users, 45% lauding its added security and 35% saying it's more convenient for administrators.

Diving deeper, companies with more than 50% mobile credential deployments will see significant growth over the next 5 years. Looking at what percentage of their physical access control (PAC) credentials are mobile IDs, the rate is likely to go from 4% currently to 18% in 5 years. And for companies with more than 70% mobile credential deployments, those numbers will go from 10% currently to 21% in five years.

In an article published by securityinfowatch. com Bevan Hayes, Business Strategy Director for Mobile at HID Physical Access Control Solutions (PACS), observes that the use of mobile devices for identity verification is gaining significant momentum.

"The trust comes from using the same modality for payment. As a user, I have control because it's in my digital wallet rather than a potentially intrusive app, which helps build trust. Additionally, by collaborating directly with mobile phone providers, we gain access to capabilities that wouldn't be available otherwise," Hayes explains.

Hayes goes on to say that power reserve mode or low battery mode in these wallets also help with the conundrum that existed in the past when someone's phone battery died and they could not get into a building or their dorm room, for example. "In the past that could have been a scary situation," he explains. "But now you can still gain access for about 5 hours, so you can have a blank screen and still use the phone."

Another inconsistency that has been addressed is the use of NFC technology by both Apple and Google, so the user experience is the same and frictionless across the board. "So, it's that same tap-use case that you would have for a transit, tickets, payment, or entry for example," he notes.

Aiding in mobile's rise within security is the ability to add or remove credentials as needed, providing greater flexibility and control for end users.

With all these advantages, it's easy to forget there is still a need to manage mobile keys. Mobile credentials can be convenient and flexible, and in some cases practical for external applications, but it's not the credential that's providing the actual security. The credential provides confirmation that the holder is authorised to access a site or open a lock - and that's where the practicality issues come

into question.

The credential is seen as the answer to no physical keys, which has been a challenge for most businesses to manage. The reality is, a mobile credential still needs to be managed, and this is a factor that needs to be planned in.

"In the new ecosystem where we have a wallet deployed, one can log into their iCloud account, for example, and actually say I lost my phone, and it goes and decommissions or voids the credential from the access control system," Hayes explains. "So, you can instantaneously shut down access versus the world of a physical card where you have your picture on it and potentially your company name, and there's this potential big delay and security vulnerability."

Moreover, the report confirms what HID has been tracking for some time now as many SMB and enterprise-level companies look to simplify access control. "Over the next few years, it is going to accelerate because we've gone past the pure-play early adopters," says Hayes.

"We've had a lot of people test it and now we're seeing a significant amount of expansion in accounts and it's not just the tech companies. We're seeing big expansion in corporate real estate and big expansion and rollouts in higher education – even banks and other types of entities that were risk averse in the past."

He continues, "We're seeing success in the more complicated environments like corporate real estate or entities that have more than one location, as well as traction from the global 2000 or Fortune 100 organisations that would typically be pretty risk averse because of their scale and scope of operations but are now going through a sort of digital transformation."

Researchers point out that organisations are steadily upgrading legacy hardware in favour of

ANOTHER FACTOR THAT IS DRIVING INCREASED ADOPTION OF MOBILE SOLUTIONS IS THE CHANGING WORKFORCE, WITH GEN Z STARTING TO REPLACE MILLENNIALS AS THE BIG DECISION MAKERS.

multi-tech readers that can handle both plastic and mobile device-based credentials. Moreover, mobile devices are increasingly used to support multi-factor authentication (MFA) and other use cases across the network security landscape.

"Mobile ID authentication can identify a mobile phone user, reliably and securely, through a greatly simplified user experience, reducing friction for the user without compromising security," the Mobile Technology Alliance notes in the HID report. "Applications in payments, government identity, and access control are likely just the beginning of a long list of services to be securely simplified via mobile identity authentication."

Three key takeaways to increased adoption from the report:

• End users appreciate the convenience that comes with authenticating themselves via a device they already carry.

• Administrators find it easier to manage identity and valuable data via smart devices and software.

• Mobile devices are less likely to be lost or stolen, and their built-in security safeguards mean that even if they are misplaced, one's identity likely won't be compromised.

As the phone continues to gain trust around its security, Hayes says this could be the final piece – to go with the convenience factor – that helps mobile solutions gain even more traction within security.

"The phone is really secure to the point where if we look at it from that initial use case of losing the phone versus losing a physical card – there's a value that we can put around the reduction of risk," he points out.

"But then we also look at encryption and horsepower on the phone, which can do several things around confirming that a person's where they say they are or who they say they are, because we can enforce rules like multi-factor authentication to unlock your phone before you enter a certain part of the building.

"And for another part of the building, it may use what we refer to as express mode, for example, where it's the simple tap on a locked screen, which could then prompt face ID. What's great about mobile is we put together a set of tools that our partners can go and innovate with and drive these great experiences."

There is also a case that can be made for leveraging the data the phone is producing to provide benefits in areas such as business intelligence, operational efficiencies and better overall management of facilities, personnel, and resources.

"The companies that are really innovating in this space are the ones that are getting the traction," says Hayes, noting that it goes beyond just effortlessly locking and unlocking a door. "They may want to turn it into a tenant experience in one setting or create a visitor-type Disney experience in another building, or make sure that a building is super smart, efficient and valuable to the owner and those who are occupying it so that it turns into a higher net operating income for the building owner."

In the real estate and multifamily worlds, this translates into higher retention rates, higher leases, and a better overall experience for owners and tenants, he adds.

Another factor that is driving increased adoption of mobile solutions is the changing workforce, with Gen Z starting to replace millennials as the big decision makers. "Gen Z is going to be 27% of the workforce by next year and these are the folks that are digital natives," Hayes explains. "We're not talking millennials anymore – we're talking digital natives, and there's a certain increased demand now for a mobile-first approach to things. There's also a heightened expectation around 'doing good,' which is where the sustainability piece comes into play as that continues to rank high in our survey."

The interoperability piece may be the one that really pushes increased adoption, especially with continued widespread support of Matter (formerly the Consumer Standard Alliance), a new standard for interoperability that the industry is getting behind, notes Hayes.

"It's something that's already happened at home, and in the next few years we'll see the emergence of some of these standards in multifamily and SMB and then potentially in the enterprise space. And I think we'll also see others that were fearful of that change to mobile finally transition to mobile and be pushed because of the interoperability, or the promise of interoperability," he says.

The aforementioned workforce change combined with progress in the areas of trust, consistency, and interoperability, is going to create "a snowball effect around use cases and seamless experiences in the workplace, making sure that that workplace is as efficient as possible," Hayes asserts. "And we in the access control space have the ability to influence that in a number of ways, because you're going through certain challenges from the front door, through the elevator, through the physical space each day. As we incrementally improve on that experience, I think that adoption will continue to accelerate there as well."

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Convention Center
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www.esxweb.com/

UK
04-06 June 2024
Infosecurity Europe
Excel
London
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www.infosec.co.uk/

UK
19-20 June, 2024
Security & Counter Terror Expo
- SCTX 2024
Excel
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United Kingdom
https://ctexpo.co.uk/

INDIA
04-05 July, 2024
International Police Expo 2024
Pragati Maidan
New Delhi
www.internationalpoliceexpo.com

INDIA
04-05 July, 2024
8th India Homeland Security
Expo
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New Delhi
www.homelandsecurityexpo.in

INDIA
05-06 July, 2024
SAFE South India
Chennai Trade Centre
Chennai
www.safeindiaexpo.com/

HONG KONG
10-12 July 2024
Fire Asia 2024
Hong Kong Convention Centre
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https://fireasia2024.com/en/index.
html

USA
14-16 August 2024
IAFC Fire-Rescue International
Kay Bailey Hutchison
Convention Center, Dallas
www.iafc.org/fri

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22-24 August 2024
FSIE 2024
JIO World Convention Centre,
Mumbai
http://www.fsie.in/

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12-14 September 2024
IFSEC Bangladesh
Hall 4 (Naboratri), ICCB
Dhaka
https://ifsecindia.com/bangladesh/

GERMANY
17-20 September 2024
Security Essen 2024
Messe Essen, Norbertstrasse 2
Essen
www.security-essen.de/impetus_
provider/

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23-25 September 2024
Global Security Exchange (GSX)
Orange County Convention Center
Orlando
Florida
www.gsx.org

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24-25 September 2024
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Olympia
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www.internationalsecurityexpo.com

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25-27 September 2024
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World Trade Center Metro
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www.adas.ph

Saudi Arabia
01-03 October 2024
Intersec Saudi Arabia
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Events
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intersec-ksa.ae.messefrankfurt.
com/ksa/en.html

Bosnia & Herzegovina
09-10 October 2024
ADRIA Security Summit
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www.adriasecuritysummit.com

Turkey
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www.isaffuari.com/en/

UK
17 October 2024
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Hilton Hotel, Terminal 5
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PRESENT

TOP INDIAN WOMEN INFLUENCERS IN SECURITY

Stay Tuned

Globally women are playing a key role in the advancement of the profession of security in all sectors, verticals and levels of the industry.

In order to recognise and honour the accomplishments, value and contributions of women in this vital sector of the economy, SECURITY TODAY & SECURITY UPDATE in association with Infosec Girls and WISECRA announce the "Top Indian Women Influencers in Security" recognition for the year 2024.

In 2020, this accolade was developed to help recognise women in security in India who made significant contributions in shaping the industry and shaped the path for future generations of professionals. 20 torch bearers were recognised from 272 nominations received in a virtual ceremony by the nation's 1st, most famous & iconic lady IPS officer, Her Excellency, Dr. Kiran Bedi, the then Hon'ble Lieutenant Governor of Puducherry. Distinguished senior people from different sectors were carefully chosen as 'members of the jury' for this event.

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