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Top 7 Trends to Watch in the Physical Security Industry



2024



Executive Summary

The world of physical security is evolving rapidly, and 2024 is poised to see transformative shifts driven by rapid advancements in Artificial Intelligence (AI).

While generative AI and ChatGPT helped advance acceptance and deeper understanding of the power of AI in 2023, the reality is we are only just scratching the surface when it comes to the potential use cases for AI to protect people, places and profits.

We've consulted with a number of industry experts and professionals to examine the key trends and forces that will shape the future of security, in 2024 and beyond.

The Top Seven Trends:

- 1** **Generative AI Will Transform Video Surveillance**
- 2** **AI-Powered Analytics Will Offer Real Value to End Users**
- 3** **"Wise Adopters" Join the Cloud Party**
- 4** **Integrated Solutions Beyond Security Will Emerge**
- 5** **The Cloud Moves from Luxury to Necessity**
- 6** **The Rise of Decision Intelligence**
- 7** **AI Innovation Will Transform Security Across Multiple Industries**

Let's dive in!

1

Generative AI Will Transform Video Surveillance

Unless you've been hiding under a rock far from the reach of WiFi for the past few years, you know that AI is already critical to a virtually endless number of everyday tasks, encompassing learning, reasoning, problem-solving, perception, and language understanding.

In 2023 generative AI went from being relatively unknown to a conversation topic over the Thanksgiving dinner table. In 2024, the applications for generative AI will continue to unfold and, in the case of video surveillance, could potentially eliminate the need to scan through hundreds of hours of video footage for end users.

Arcules CTO Jeff Kunzelman explains how generative AI will transform video surveillance:

"Aspirationally, with cloud-based video surveillance, a person should not have to waste their time manually looking at video. The ability of AI-driven visual intelligence takes us to a point where the primary function of video surveillance is 'search.' Take a use case of a missing backpack in an office setting. Simply by typing in queries in a search bar, a video surveillance system driven by generative AI can communicate with a user to track that object across all footage almost instantly, and identify the last place it was seen, with almost no time taken by a human. The ability to take an understanding of the intent of language and tie that with large sets of data in order to produce an answer that solves a practical problem is a game-changer.

This transformation is happening faster than anything I've seen in my lifetime. The speed at which generative AI is growing and evolving, and the speed at which we're going to see it showing up in products we use every day is going to blow everybody's mind. It's going to show up everywhere, on everything."



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AI-Powered Analytics Will Offer Real Value to End Users

The rise of analytics in video surveillance marks a transformative shift in the security landscape, one that will reach its apex in 2024. While traditional video surveillance relied on manual monitoring, the emergence of AI has enabled us to automatically analyze video data, extracting meaningful insights in real-time.

As AI-powered analytics advances more real-world use cases will emerge.

Alex Knapik, Senior Product Manager at Arcules, believes that 2024 is the year that we will discover what value analytics can truly provide to improve security and business operations:

“As more organizations adopt cloud VSaaS and analytics, we need to assess what the real-world benefits are. Object detections and deep searches make for cool demos, but how does that translate into value for your security and business operations?

With cloud VSaaS, every camera can do analytics, but what does that mean for you? Does it help you prevent, detect, or respond to incidents faster? Do they guide you to better ways to protect or optimize your business? Answering these questions is key to unlocking value.”

Ben Rowe, Head of Emerging Technologies, agrees:

“Over the next year, I expect to see companies productizing the AI experiments they’ve been running, leading to further innovation, changing the way we interface not just with information but with applications and systems holistically.”



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3

“Wise Adopters” Join the Cloud Party

The physical security industry is experiencing a notable surge in the adoption of cloud-based technology solutions, revolutionizing the way organizations manage and deploy security systems.

Up until now, the cloud has primarily been embraced by “early adopters” in the security industry. As the benefits and concrete business value of the cloud becomes more evident, a new type of user is making the switch.

As Alex Knapik puts it, 2024 may be the year where early adopters give way to “wise adopters” when it comes to security in the cloud:

“Something exciting that we started to see in 2023 and expect to see more of in 2024 when it comes to cloud adoption is a shift from early adopters to what I’m calling ‘wise adopters.’

There’s a lot of people that have bought cloud VSaaS over the last couple years that wanted to have the latest and greatest. They’re early tech adopters in their IT organization. That’s fantastic! But now we’re seeing a little bit more of the skeptic come in and that’s really important. It’s customers that don’t have to have cloud but customers that are strongly considering it. This is a much more interesting conversation to me - we’re talking a lot more about the true value to the organization. And they can be harder conversations, but ultimately these are ones that make our industry stronger and facilities smarter and safer.”



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Integrated Solutions Beyond Security Will Emerge

There are a lot of moving pieces to the security technology landscape, and the goal of a unified, 'single pane of glass' solution that brings all the various parts together in perfect harmony has long been a shared vision among vendors, end-users, and integrators alike. That vision is poised to finally become a reality in 2024, and thanks to advancements in AI and analytics, integrated security solutions will offer value that goes beyond what we would traditionally define as "security."

Aaron H. Simpson, President & CTO of Stone Security, believes this is the year where integrated solutions will provide meaningful value across the security value chain:

"2024 will be the year for top integrators to stand out by taking the intelligent solutions that are market ready and delivering solutions that go beyond security. This will require creativity and means really listening and partnering with customers to solve problems and improve processes. Engaging with Sales, Marketing and Operational stakeholders to educate them on the resources that their organization likely already has at their disposal is a must. Customers should see the camera as the most versatile and capable device at their disposal. Traditional on-prem platforms that wish to stay relevant will need to modernize this year or risk being left behind. These providers will continue the heavy lift of adapting their platform to leverage cloud resources. End users on legacy systems should expect to see modernization of their system or start looking for a new solution."



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The Cloud Moves from Luxury to Necessity

The aforementioned surge in AI applications, coupled with the escalating need for substantial processing power, will prove a driving force behind the increasingly widespread adoption of cloud computing in the coming years.

As Mike Sherwood, Vice President of Customer Experience at Arcules, explains:

“I really believe that the speed of change and adoption around generative AI will be a catalyst for customers to adopt cloud, in part because cloud vendors will adapt to those changes much more quickly than others. Processing elasticity will become more of a factor for everyone ... there simply won’t be enough processing power at the edge, and cloud resources will need to be leveraged to deliver full customer value. Simply put, there will be a major cascade effect from the proliferation of generative AI. It’s the primary catalyst that will move video into the next generation of business value, but it has a really wide range of impacts on the surrounding technologies and market.”



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The Rise of Decision Intelligence

The term “decision intelligence” has become a popular buzzword for analysts and industry pundits, and 2024 will be the year where that concept becomes reality for businesses of all kinds. Gartner underscores decision intelligence as an area where human judgment meets the computational power of technology, aiming to constantly refine decision models and processes.

In 2024, the interplay between human insight and technological advancements is more crucial than ever.

Steve Prodger, Chief Revenue Officer at Arcules, predicts the blend of human intelligence and technology will prove transformative in the year ahead:

“Looking to the future, we expect to see decision intelligence continue to revolutionize the physical security space. While human oversight will remain crucial in the security space, decision intelligence will help augment human decision making by arming security and IT professionals with essential and actionable insights so they can take swift action to protect people, places and profits. There will also be more exploration around automated decision making that follows a well-defined process and requires less human intervention. The industry will proceed cautiously here and weigh pros and cons, but in some cases automation may be more prudent when humans can’t respond as quickly to an imminent threat or danger.”



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AI Innovation Will Transform Security Across Multiple Industries

Commercial Real Estate

As AI-driven innovation proliferates across the security technology value chain, we will see the evolution of new and exciting use cases that move beyond security across multiple industries.

In **Commercial Real Estate**, the rise of remote work is poised to significantly impact the physical security and video surveillance needs. With a larger portion of the workforce operating remotely, businesses will need to reevaluate their physical security infrastructure.

Mike Sherwood believes technology-driven solutions will need to adapt to the changing dynamics of the modern work landscape:

"In the commercial real estate industry, video surveillance needs will be increasingly impacted by work from home and flex work environments. Leveraging video for smart buildings is something we're already seeing as workspaces are morphing more into collaboration spaces, as opposed to a single unified office space. At its core, the focus will be on bringing the highest value to the employee while they're in the office. It's not just about optimizing their time in the office but also their comfort, enjoyment and sense of safety."



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Education

Physical security in the **education industry** has, rightfully, become a critical topic that crystallizes how fragile and ephemeral the very notion of "safety" can be in today's world. Safeguarding students, faculty, and staff against very real threats has never been more important, and the emergence of AI has the potential to raise the level of security in our schools to new heights.

Julie McGregor, Director of Customer Experience at Arcules, believes that technological innovation will lead to a more proactive and layered approach to school security:

"Securing our schools has been a long-standing challenge we have been unable to solve for. Through the use of sensors, analytics, and now AI, we can build a layered approach that not only allows us to respond more quickly to critical events, but truly augment decision making in ways that pivot us to a proactive state, finally allowing us to avoid threat altogether. As AI continues to expand into all areas of our lives, the traditional world of security will also be impacted. Video surveillance will evolve into a watchful eye, constantly searching and detecting not just what has happened, but predicting what likely will happen. I can't think of a more deserving space than education, for AI to augment life in ways that create a truly safe environment where people can engage freely, in order to reach their greatest potential."

A circular portrait of Julie McGregor, a woman with dark hair, wearing a dark blazer over a light-colored collared shirt, smiling.

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A Pivotal Year for a Changing Industry

2024 is shaping up to be a year of great change and progress for the physical security industry. The inescapable ubiquity of AI, coupled with the increasing power of analytics, is poised to transform the way we think about and use security technology across the board.

The combination of human intelligence and next-generation technology to produce unique, actionable business insights will provide a whole new level of value to organizations.

And all these exciting technological advancements will drive even greater adoption of cloud computing, resulting in more integrated, streamlined, and cost-effective solutions that, ultimately, improve our ability to create safe, protected environments that enable us all to unlock our full potential.

Here's to an amazing year!



Request a Consultation

Want to see firsthand how Arcules can take your business to the next level? Schedule a personalized consultation for your unique enterprise and needs.

Call **+1 888.244.5154** or visit us at **arcules.com**.