



Modern security systems

**How can your
business benefit?**

Do you feel you're **aware** of the **capabilities** of modern surveillance?

Are you **confident** your system can do what it needs to, when you need it most?

Is your system easy to operate?

These are some worthwhile questions to ask, as security systems often take a backseat when it comes to running a business. The purpose of this ebook is to raise awareness on the benefits of taking a proactive approach to security, and we will cover:

- > The advantages of an intuitive system
- > How the occasional user can benefit from a modern system
- > Increasing image quality
- > Improving your ROI
- > Integrating cameras and other IP products into your network ecosystem





Introduction

Smartphones have quickly become an essential part of everyday life. It's predicted that by 2019, there will be more than 2.5 billion smartphones in use all over the world. This is a staggering figure, considering that the world population stands at around 7.5 billion. It's a growing industry where technology is constantly evolving, with the ultimate goal of giving the user the best experience possible.

What's at the center of the technological innovations? More often than not, it's a mix between connectivity, and the capabilities of the camera. To millions if not billions, when we're looking for a new phone, the quality of the camera, as well as its ability to upload high quality pictures and videos instantly, is one of the most important things to look for. Now think about the other cameras used by millions all over the world: those used for surveillance.

It's rare that the same eye for detail is used when shopping for surveillance systems, and it's understandable. After all, we look at our phones almost constantly, but surveillance video only tends to be checked when it needs to be.

This raises an important question: if you had to check your surveillance video, would it be fit for purpose? Surveillance is constantly evolving and making innovative, useful technology available, and as the cost of components drops, the solutions are getting more affordable. Modern software ensures that systems are intuitive and easy to use too, which is crucial for when you need to access the recordings or simply add a new camera to the network. More often than not, phones are upgraded every year or every other year, and are constantly visible, but surveillance operates in the background. That doesn't mean that upgrading your system should be at the back of your mind though.

If you have to refer to your surveillance video, it's essential for you to be able to find the information you need. The good news is, it's easier than ever to modernize your surveillance system. In this ebook, we'll cover the action points for you to consider when looking to implement a modern security and surveillance solution.



Capable doesn't need to be complicated.

No matter how advanced a system is, operators won't want to use it if it isn't intuitive and doesn't offer essential features like live viewing and simple ways to export data. This is why it's crucial to get the security solutions that best fit your requirements, and invest in something that the main operator understands.



What this looks like will vary from business to business. Some corporations will have security teams in place that are familiar with equipment on a deep, technical level, but for most businesses the reality is that the person who looks after the surveillance and security also has a number of other roles to fill.

When you're considering a new surveillance system, here are some features to look for if you want a simple, yet modern and capable solution:

1 An intuitive video management system

Whenever you're upgrading anything that you're comfortable with, one of the top priorities is usually how easy it is to use. You don't want to have to spend time learning a complicated system from scratch, so it's essential that everything that you need is clear from the beginning, and immediately intuitive. This is especially true with surveillance systems, as it's likely that you don't use the system too often. When you choose to upgrade, you need to be certain that you can use the system straight away.

With modern video management software, this is often the case. A lot of time has been spent ensuring that these systems are logical, simple, and allow you as a user to be able to get the most out of them without any major investment of your time. This covers everything from managing your network, to accessing video, to event management.

2 Security is about more than surveillance

Often, when you think of a security system, you immediately think of cameras. However, the modern system can include so much more than that, helping you to run your business smoothly and efficiently. Your next security solution could include things like:

- > **Access control.** If you have areas that are off limits to the public, or to certain personnel, you can complement your security system to control and monitor access.
- > **Audio systems.** If you have network cameras, it makes perfect sense to upgrade to an IP audio system too. You can control the type of audio and where it's played, from the same software that you control your cameras from. This can mean matching the music to the right section of the store, or even using pre-recorded audio announcements triggered by events seen by your cameras.

For instance, if a perimeter is breached, a recording could warn the intruder to leave the area!

- > **Smart analytics and applications.** These can help to further strengthen your security and help you to take early action through the use of notifications. For instance, a notification triggered by someone who is loitering will allow you to check your live video, and this will give you a better picture of whether to treat it as a threat to follow up on. This cuts down on both time and costs in the long run, as you only need check your surveillance system when it matters.



3 A simple user interface for the occasional user

With surveillance, it's really important to be able to find what you're looking for quickly, or to be able to operate the equipment in a smooth and efficient manner. This is where the user interface comes in. Most modern systems will be controlled from a central hub, even if this is just a standard computer in your office. Look for a solution which comes with software that's clear, easy to navigate, and doesn't put too many demands on the computer itself.

You need to be able to access recordings swiftly, and easily switch between live feeds when necessary. If you upgrade your system, you should look for a user interface you're comfortable with.

4 IP-based system

If you already use an IP-based surveillance system, you're probably aware of the benefits. If not, there are some real benefits to adopting one. Firstly, network-based cameras mean you can access your recording from anywhere, without needing physical access to a storage device. They're also easy to install and extremely easy to expand.

It's also important to look at this investment as a way of future-proofing your surveillance system. Analog solutions may be cheaper initially, but the technology is slowly dying out, and the systems are much harder to update. With IP systems, it's possible to get new functionality through software updates, so your cameras can improve without you having to do anything.

5 Reliability

In addition to allowing for easy updates, an IP-based system means you can expand your security system beyond surveillance. It's easy to integrate things like network audio systems, or controlled access points, and have it all working together in one simple ecosystem. As these systems become more common, costs are coming down too, so the initial investment may not be as big as you think.

If you're investing in a new system you need to be sure that it's reliable and secure. This means minimal downtime, as well as being reliable in the sense that you know you will be able to access what you need, when you need it. It also needs to be fully protected against cyber threats, to ensure there are no weak links in your network.

Modern network-based systems can address these concerns. Depending on your needs, you can easily find a system that's a validated end-to-end solution from one reliable supplier, and lets you see surveillance video exactly when you need to. The system needs to be reliable, but so do the suppliers. If there is a problem, you need to know it will be solved swiftly.

6 Simple event management

It's useful for any business to be able to set up certain events which will trigger responses or notifications for the surveillance system. This isn't only useful in case of theft or damages to property and staff protection, but it can also help to have a positive effect on your business.

It's now possible, with a modern system, to set up live notifications based on automated live analysis. For example, if you could benefit from queue management, you can implement software which can recognize heavy queues and notify the staff through network audio, allowing for a quick resolution to the problem. There are countless other ways this combination of analytics and triggers can help your business run more smoothly, whatever industry you're in.

7 Full service solution

An end-to-end solution from one supplier is important. It ensures consistent reliability, functionality, and means that the system is easier to maintain. Through working with a partner and a single equipment supplier, you can rest assured that your entire solution is optimized to meet its full potential, as well as knowing how you can get the most out of it. What your solution looks like is up to you, but this covers everything from the cameras and recorders, to your video management system and other connected IP products.



Clear resolution for identification.

After finding the system that suits your business best, the most important considerations in any camera are the image quality, how they can operate in changing environments, and how easy it is to identify people or events regardless of the time of recording. It's essential that you can clearly be able to see, and analyze, whatever has been recorded without having to worry about whether the surrounding conditions were suitable.

If you go back a few years, how many times would you see a security video with a plea asking for help with identification of a person. The problem was that the only distinguishing parts of the person clear on the video would be the color of their clothes, or whether they were wearing a hat at the time of whatever incident had taken place. It was staggeringly common, and to an extent, it still is.

Now, with the capabilities of modern surveillance systems, image quality does not need to be an issue. As high-quality cameras are so readily available now, the costs have come down significantly. If you need a security and surveillance system, you must start on the basis that you will need high definition image quality (1 or 2 megapixel cameras are common, and provide more than enough detail), with a smooth frame rate (which would be at least 30 frames per second).



Looking for these features will cover the basics, and from there you need to ask yourself a few questions about what you need from a security system:

Do I need a solution that performs well 24/7?

For most, a camera that works in all light conditions, taking into many external variables into account, is a top priority. If your surveillance needs to cover external areas, and your business is in a region with huge differences in light conditions, then you may need to consider cameras with a wide dynamic range. These are also useful indoors where lighting conditions can change based on what's happening outside, as these cameras can adapt to ensure any backlighting doesn't blind the image. However, if your cameras need to cover areas where the lighting is fairly consistent, a more basic camera will be able to perform the job you need it to.

What about storage?

There are a number of different storage solutions available to match your particular needs. Some businesses may need continuous recording, as well as the capability to store videos for a long time. In this case, you'd need to purchase a lot of storage space which can be costly.

For most businesses, the optimal solution in terms of cost and capability is to record only when motion is detected. This cuts down on the need for storage space and will only record when there's something worth seeing. You can further reduce the need for storage space by investing in a solution with video compression.

Do I need to cover every inch of my premises?

For businesses like banks, it's essential to cover most, if not the entire property. Any blind spots can be exploited, and that can potentially lead to huge issues if it ever comes to identifying people or incidents. For many businesses, it's more about having the right cameras in the right areas. The more cameras you have, the more storage and bandwidth you need.

What kind of system fits my needs?

As with all technology, when it comes to surveillance solutions there are a huge range of options, and it's only going to evolve further. If you were going to buy a car solely for a short daily commute in heavy traffic, would you buy a Porsche? Or would you go for a car that's compact and fuel efficient?

The same applies to choosing a surveillance system. While future proofing your security is essential, you also need to consider whether you require the most advanced technology. If you invest in something but only use 10% of the available functionality, you aren't using the item to its full potential. Invest in line with your own needs, rather than investing in what may be available but with no practical use for you. Just bear in mind that your system needs to be able to scale up as your business does, and you need to be sure that your partner and equipment supplier are both going to be around in the long term.

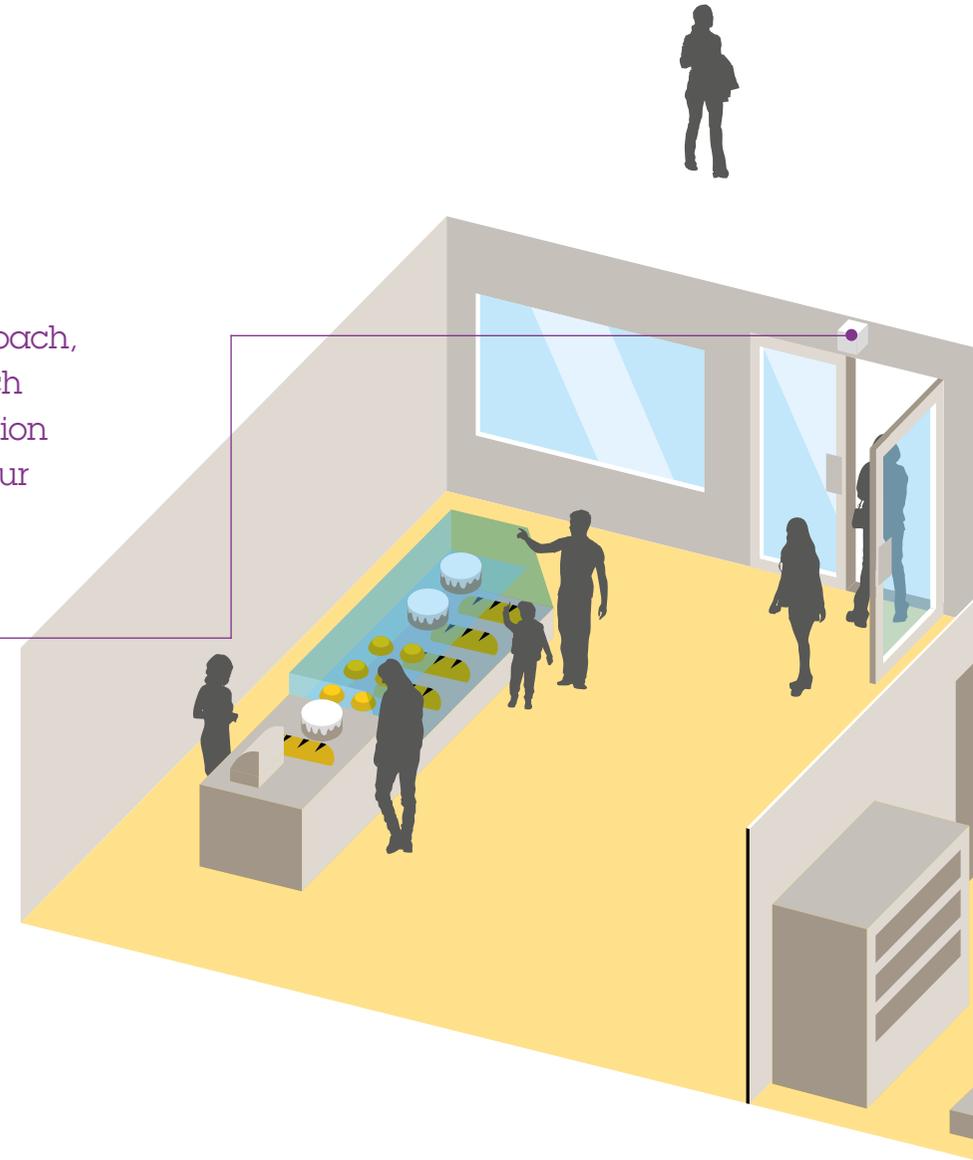
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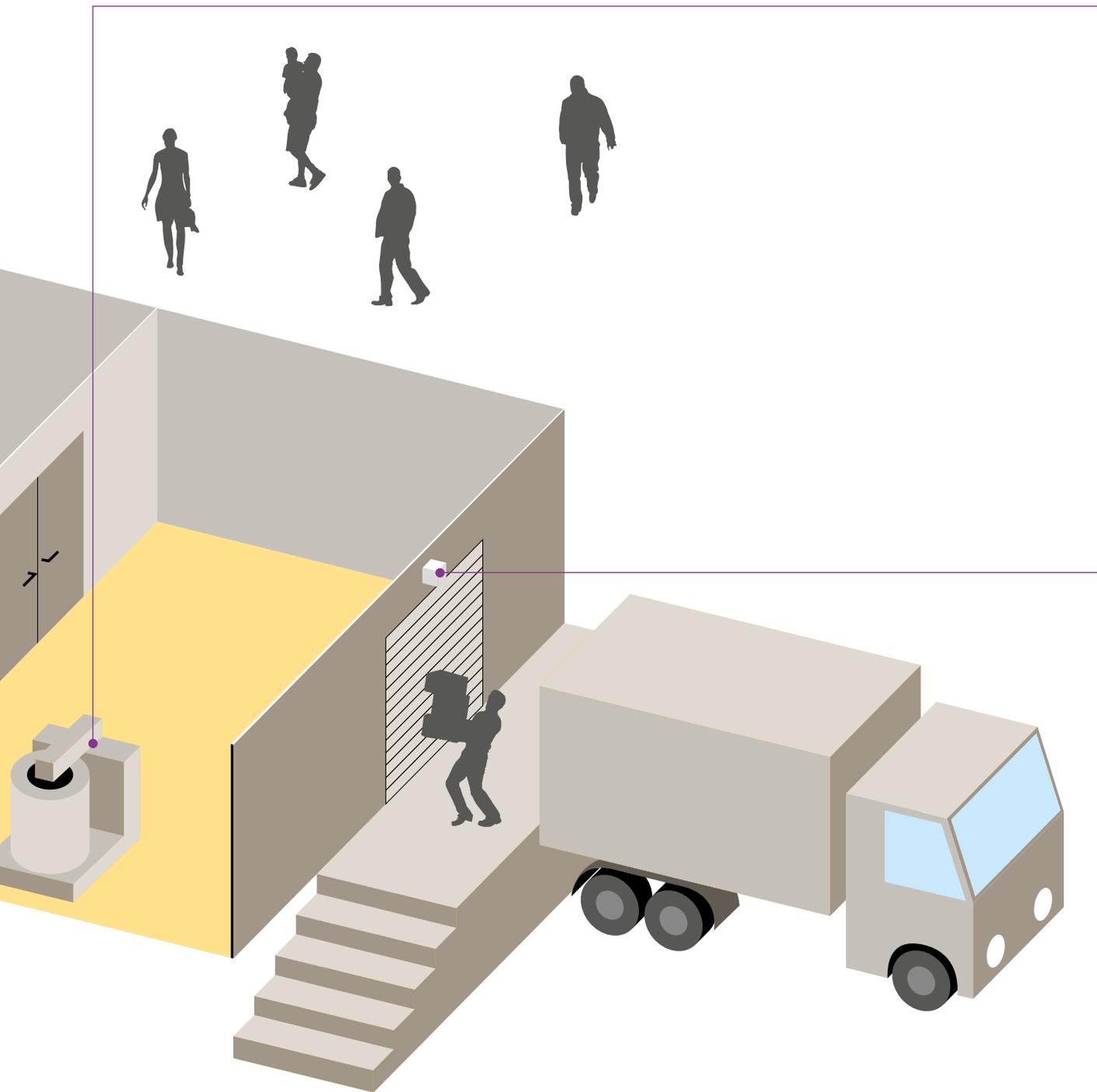
Many businesses see surveillance purely as a cost, but with the right approach, it can offer real benefits to your bottom line. The most obvious way in which your security system offers a return on investment (ROI) is through prevention of theft and damages to your property. Here are a few scenarios where your ROI can become much clearer though:

Analyzing your in-store traffic and optimizing conversion rates

With online business, constant analysis and optimization helps to drive revenue up, as well as improving the customer experience. Now physical retail premises can take inspiration from this, as advances in video technology can allow for real time analysis and future optimization.

More specifically in this case, would be the use of a people counter. The functionality is more reliable and accurate than ever, so you can get a clear picture of how many people have entered your store at any given time. From there, you can see how many transactions took place to get an idea of what your conversion rate is (amount of people compared to amount of purchases made). Once you have this information, you can test different offers, or alter the number of sales assistants on the shop floor to try and improve this ratio. It can give you valuable insights into how your business is performing, and it can allow you to set clear targets for the future.





Detecting problems before they become critical

Manufacturing plants are full of complex, constantly operating machinery. Although the premises may be full of staff with plenty of resources for maintenance and upkeep of equipment, it can be a challenge to stay on top of everything. Sometimes, if there's an issue with the machine, it only becomes apparent when the machine is close to the point of a critical failure. Having cameras focused at crucial points in the manufacturing process can help identify potential issues or blockages in the production line quickly, but it's possible to invest in more sophisticated technology if necessary.

For example, cameras with thermal imaging can help detect minor issues before they become major by allowing you to see if machinery is running at increased temperatures for extended periods of time. If this is the case, you can have the machine serviced more thoroughly to ascertain whether there's an underlying issue, and fix it before it impacts production or worse.

Smooth delivery handling for distributors

For warehouses and distributors, and businesses in general, the arrival of deliveries of all shapes and sizes are a constant. For some, this means having staff on the move all the time, letting the deliveries in, or signing people out. There are quicker and more efficient ways to do this though, which can be facilitated through your security system.

If you install a door station with an integrated camera, you can control entry remotely, as well as being able to communicate with the person delivering the goods. This can save valuable time, speeding up the delivery process, which in turn allows you to send the goods out quicker, potentially increasing your turnover.

A photograph of two men in business attire standing in a server room. The man on the left, wearing a blue shirt and dark pants, is pointing at a tablet held by the man on the right, who is wearing a light blue shirt and jeans. They are surrounded by rows of server racks. The image is partially obscured by a white diagonal graphic element.

Creating partnerships.

Modern surveillance holds so many opportunities for businesses, and the key is to be able to understand the potential before approaching a partner who can deliver the system you need. You don't need to know how to install a system, or all of the most detailed technical specifications, but from the knowledge and understanding you've gained here, you can analyze what you need and find an appropriate partner in your area. As a first step, you may want to take a closer look at different manufacturers, and start to select a partner based on who can supply your preferred security systems.

The right partner can help you to find the right equipment and installers, as well as ensuring you end up with a future-proof modern security ecosystem that meets every one of your specifications. It's important to have a consistent partner that's there from the design and installation phases all the way through to training and maintenance. A good partner can also ensure that your system is running consistently well while updating software. This ensures that the time you spend with it is valuable to you and your business.

Proactive protection for a secure future.

As mentioned earlier, most businesses are happy just knowing the surveillance system is there, and only use it after something has happened. One of the benefits of updating your technology is ensuring you're proactive in the face of potential risks. If done correctly, this would mean there will be less incidents to respond to, which is great for your business. There are a number of different things you can do with surveillance analytics, all geared towards making your business smoother, safer, and more profitable.

For example, you can analyze the times when certain areas of the premises are most busy and increase security accordingly. You can even use this information to set up an appropriate message to play over the loudspeaker to further deter any potential crimes. People counting through surveillance systems is more accurate than ever, which means your cameras can offer valuable information to help you run your business more efficiently. For example, if there are more than four people in a queue, an additional member of staff can automatically be called.

Motion detection can be used to track the movement of people, but also whether there are individuals loitering in a specific area. If this is the case, the system will trigger an alert to staff to ensure everything is as it should be. This not only increases the visibility of your staff, but it can also diffuse potential crisis situations.

Modern surveillance systems are extremely effective for monitoring the exterior of your premise too. Cameras are now providing more detail than ever before; with the added capability of recognizing number plates, or tracking movement of unauthorized personnel on or near your premises. This could be essential if there's ever a need to follow up on an incident, but it can again help you to analyze peak times for your business and arrange additional security or staffing to ensure you're prepared to meet your business needs.



Conclusion

Security and surveillance are vital components of any successful business, and as with all other tech based solutions, they are constantly evolving. If you want to ensure your business is safe, efficient and productive, taking a look at your own security solution is a good place to start.

This guide has covered the basics you need to consider, and has hopefully given you some inspiration for innovative, new ways to utilize modern security technology for your own benefit.

If you'd like to know more, please contact your local Axis representative.





Contact details

Want to get in touch or discuss questions you might have about security and protecting your business?

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About Axis Communications

Axis offers intelligent security solutions that enable a smarter, safer world. As the global market leader in network video, Axis is driving the industry by continually launching innovative network products based on an open platform - delivering high value to customers through a global partner network. Axis has long-term relationships with partners and provides them with knowledge and ground-breaking network products in existing and new markets.

Axis has more than 2,700 dedicated employees in more than 40 countries around the world, supported by a network of over 90,000 partners across 179 countries. Founded in 1984, Axis is a Sweden-based company listed on NASDAQ Stockholm under the ticker AXIS.

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