

✓ 37.5°

Mask
✓ Access Granted

342
✓

Getting back to work with Covid-19

14 Ways Video Technology Can Strengthen Your Pandemic Response

Insights and inspiration on how to apply video management solutions to run your business safely and create healthier environments

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◆ milestone

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Not a cure — but a future-proof solution

Let's face it. The world was not prepared for Covid-19. People and businesses were vulnerable and have been heavily impacted by the pandemic. However, from challenges rise new ideas, solutions and ways of building a stronger business.

Hand sanitizers, social distancing and other human-dependent remedies have only been able to take your business so far. In order to create a safer working environment and be better prepared going forward, businesses need to change current operations. Some have already started this journey, while others are still in the run-up. There are no shortcuts and no silver

bullets. The question every business should ask itself is: How can we uphold normalcy and stay in business in the face of a pandemic? And more specifically, how can we make it safe and reassuring for both employees and customers to handle their business in a safe physical setting – knowing that Covid-19 may not be the last pandemic in our lifetime?

This e-book is the ultimate guide to running a safer business. You are presented with 14 easy-to-implement, video-based technologies that can help you:

- Handle the challenges of a pandemic
- Become less vulnerable by being better prepared
- Comply with given regulations
- Help employees and customers feel safe

14 video technologies that can protect your business during Covid-19 and beyond

The intelligent use of technology can help ensure continuity in your business – even in the face of a pandemic.

Video technology with advanced analytics is one of the most efficient tools for current and future challenges. Many businesses already have a video management software (VMS) solution that can be updated and optimized to handle a wide range of new challenges, such as:

- Preventing and detecting virus spread
- Ensuring compliance
- Meeting social distancing requirements
- Managing crowds and people flow
- Approaching and guiding people

14

We've selected 14 areas where video technology can help you and your business make people and places safer. While none of the presented technologies is a cure for Covid-19, they all represent a hands-on measure of compliance and safety.

1. Distance detection
2. Thermal maps
3. Queue management
4. LiDAR sensor
5. People counting
6. Access control
7. Door control
8. No-touch door control
9. Elevated skin temperature detection
10. Contact tracing
11. Mask detection
12. One-way routes
13. Automated cues
14. Digital signage

Enable social distancing with distance detection

In congested areas, it can be difficult to ensure that social distancing guidelines are being followed at all times. But, in the face of a pandemic, it's absolutely crucial. So how can you prevent close contact without affecting individual well-being or overall customer experience? The answer lies within your video solution.

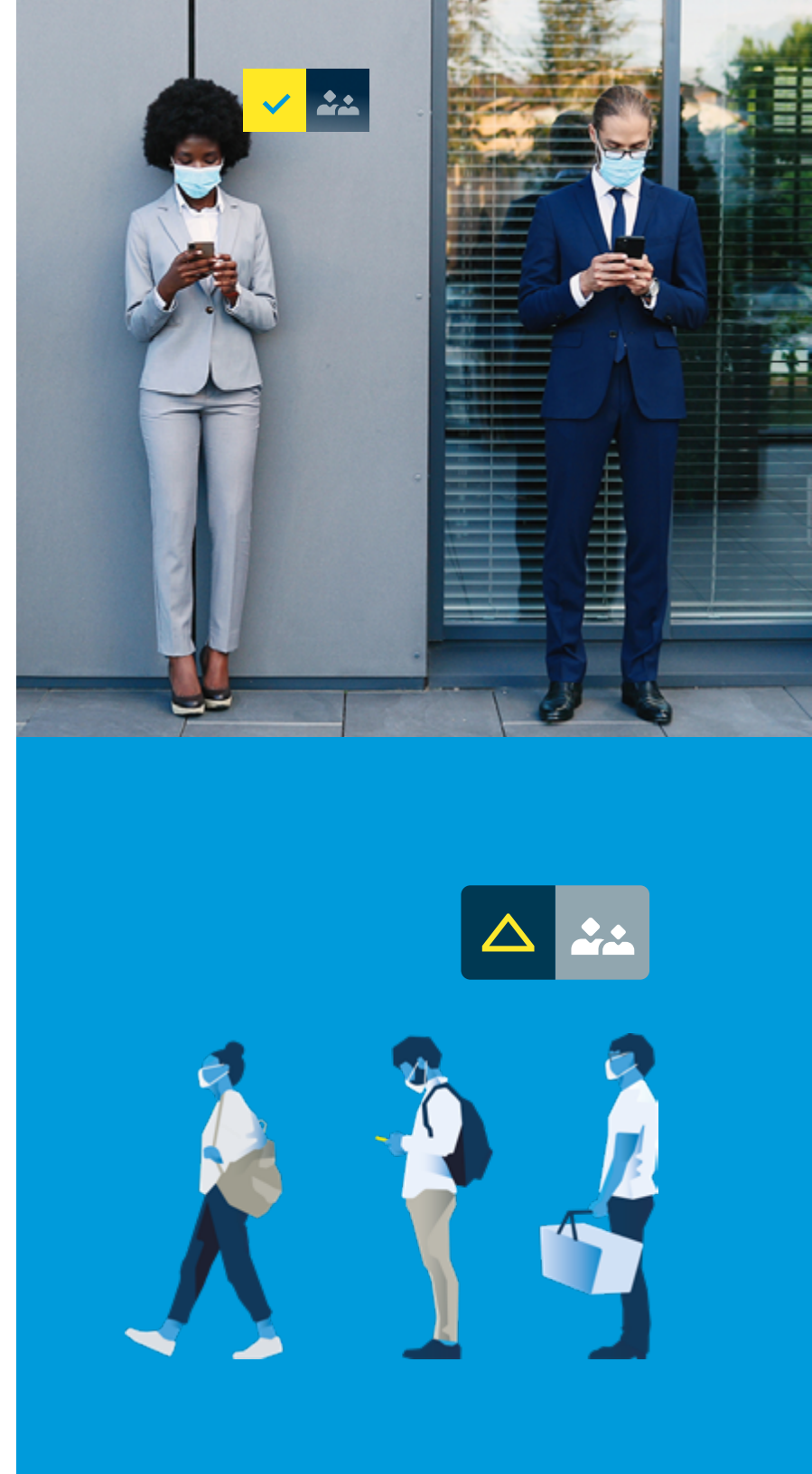
With distance detection as part of your video solution, you can detect where density arises and react accordingly using precautionary measures. You will be notified immediately if social distancing measures are compromised. That way, you can quickly resolve the situation by dispatching personnel to the location or remind people of the safe distance with automated cues or display notifications.

When social distancing is no longer required, you can use distance detection to gather insights about crowd density and people flow on your premises, enabling improved in-store experiences for customers.



Key benefits

- Understand where social distancing issues can arise
- Prevent breaches with better guidance
- Secure quick reactions once guidelines are compromised
- Improve planning and forecasting of operations



Identify busy areas with thermal maps

For people to uphold the rules of social distancing, their environment must allow it. Here, businesses have a responsibility to do area management. Enhanced video analytics can help with crowd control and redirect people into less busy areas.

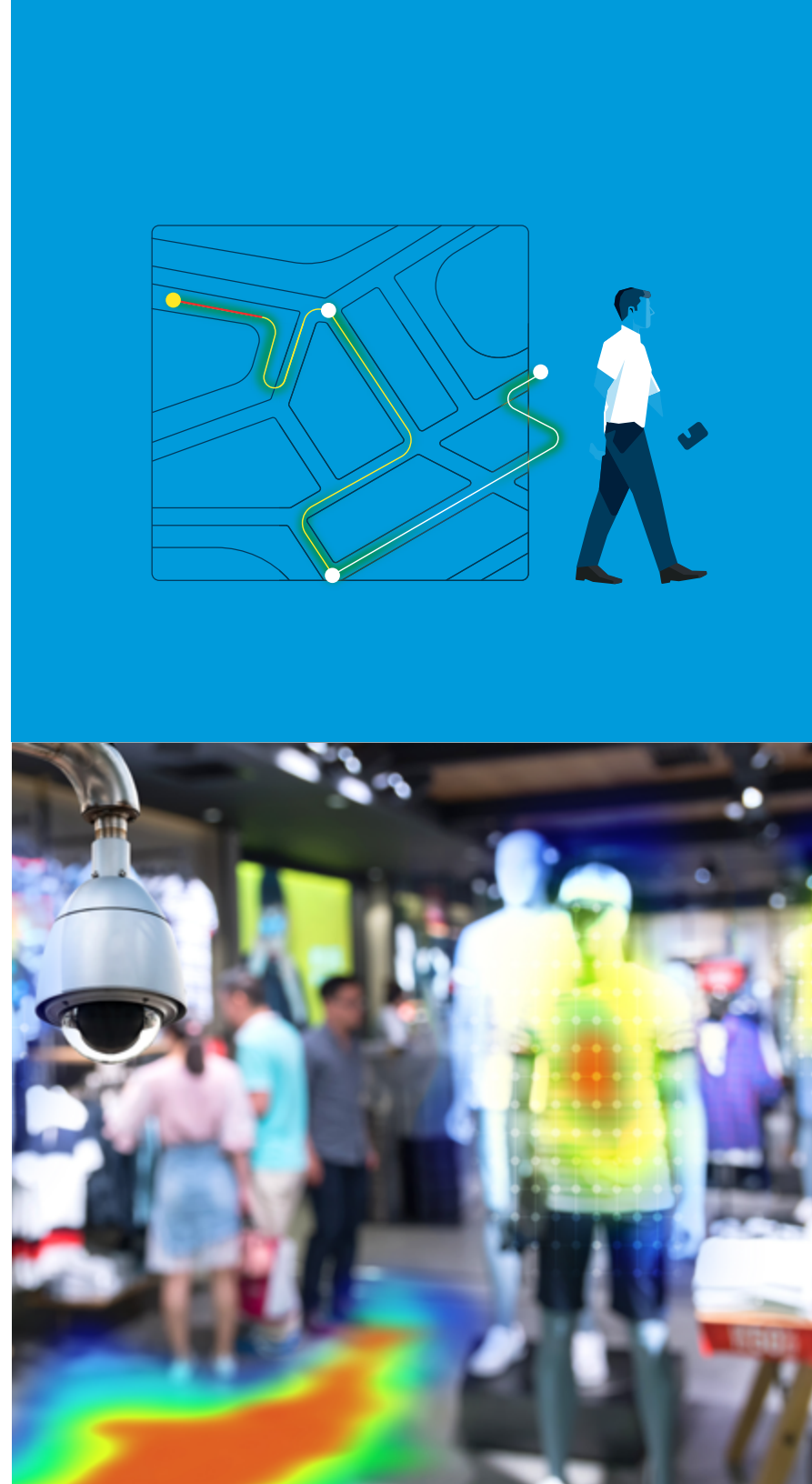
It's important to understand the flow of customers and density levels on your premises by recording the length of time people browse, where they linger and how they choose to exit and enter, etc.

Using the power of video, you can identify which areas of the premises typically have the highest occupancy rates. This can be done by using heatmaps to create occupancy statistics based on the captured images. That way, it's easy to optimize operations by deploying preventive measures and increasing personnel in busy areas.



Key benefits

- Define where and how to place guide displays
- Improve in-store structure for better customer experiences and customer flow
- Allocate personnel for efficiency in peak periods



Limit long lines with queue management

Standing in line has always been a bother. But in the face of a pandemic, it's also a potential health risk. Long queues at checkouts, store entrances, the canteen or the train station can create a risk of transmission if left unchecked.

To prevent and manage long lines, a video management system can record the number of waiting customers and inform your staff in real time. This enables store staff to react to customer demand as quickly as possible.

Also, you can promptly identify customer flows and call in the team needed during the busiest spots, so you don't keep people waiting.



Key benefits

- React quickly to enforce proper distancing
- Gather insights on customer flows
- Increase customer satisfaction by limiting long lines
- Manage and point staff to where they are most needed



Empower your video solution with LiDAR Sensor

The key to ensuring proper social distancing is understanding and anticipating how people move around. This is where LiDAR sensor technology can greatly empower a video management system.

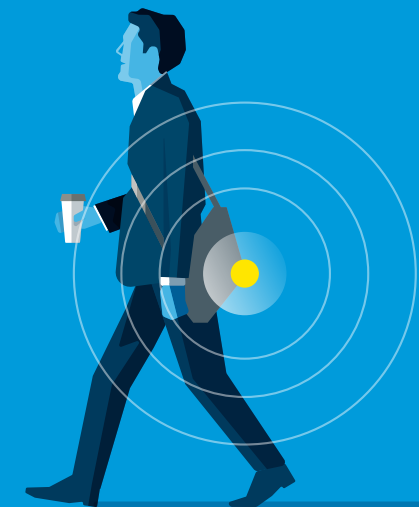
LiDAR sensors are an advanced 3D-sensing technology used to determine the movement, range and angle of moving objects via laser beams. With a LiDAR sensor, you can accurately measure the location of and distance between people, as well as the number of people in a given location. The sensor technology can also help enable accurate counts of people entering and exiting common areas, such as conference rooms, and provide automatic notifications if the maximum allowed number is exceeded.

Paired with thermal cameras, LiDAR sensors can even help identify individuals with elevated body temperatures. The technology complies with GDPR because it doesn't capture personally identifiable information.



Key benefits

- Obtain accurate and reliable data
- Deploy surveillance in challenging environments
- Get access to easy-to-interpret data
- Integrate with numerous applications and data sources



Keep track of the headcount with people counting

Whatever your line of business, it's crucial that staff, customers and passengers feel safe and comfortable at all times – while keeping the proper social distance. To do this, you must avoid overcrowding by counting the number of people entering and exiting your premises and designated.

People counting is a video solution that can help prevent any given location from getting too crowded. With real-time video analytics, you can be notified automatically as soon as a set limit of people is reached.

It also allows you to identify trends such as peak hours and down time, enabling you to optimally adjust staffing or safety measures to match the volume of people. People counting can be combined with AI IoT sensors to lower costs and avoid GDPR privacy issues while maintaining accurate counting across multiple sensors.



Key benefits

- Manage density levels in real time
- Adapt easily to guidelines or regulations
- Optimize staff during peak hours
- Get insights on customer patterns



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Welcome



Safeguard your premises with access control

Access control is more than gates and locks. Beyond getting people through a door, it's also about ensuring their health. Managing how many people enter a site is key to upholding distancing regulations and reducing the risk of virus spread. It requires agility and the ability to control access.

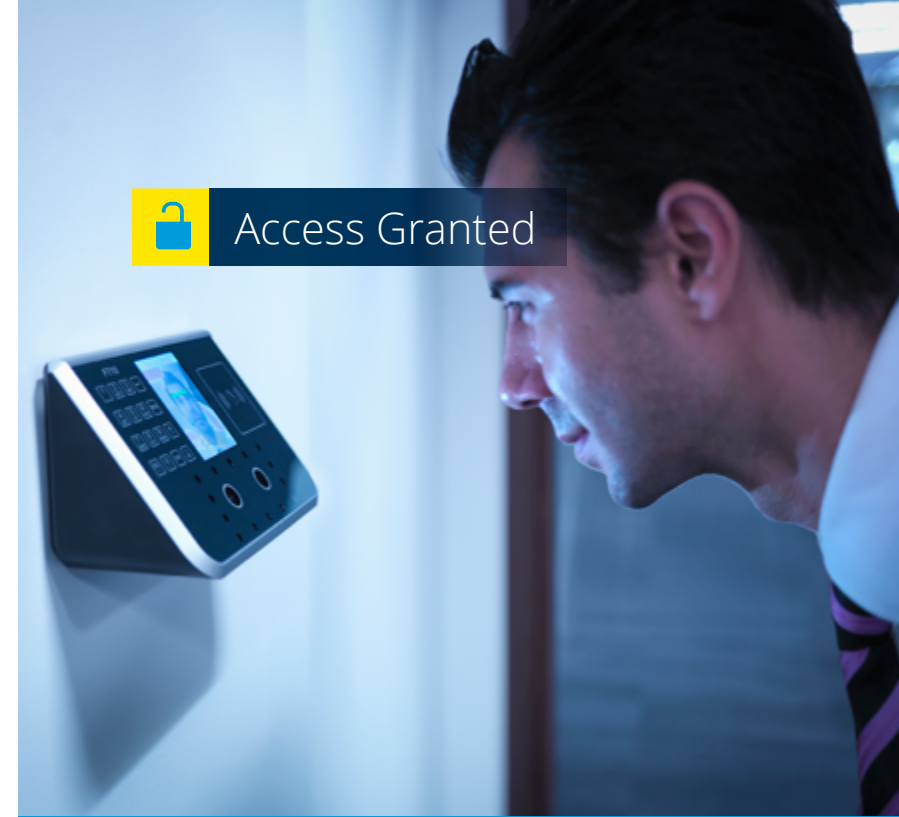
An access control system can help safeguard people and assets. With access control integrated with the video management software, you can remotely manage, monitor and control who or how many are allowed into any given location, all in real time. Using integrated facial recognition technology, the system enables control over who enters and exits, and can also limit crowd volume by managing a "one in, one out" policy.

Access control can be combined with a variety of other technologies, from automatic doors and no-touch access systems to skin temperature screening and contact tracing.



Key benefits:

- Become aware of your premises' situation
- Ensure frictionless entry and exit points
- Increase efficiency and automate your processes
- Provide a safer and healthier environment



Access Granted



Control how many enter and exit with door control

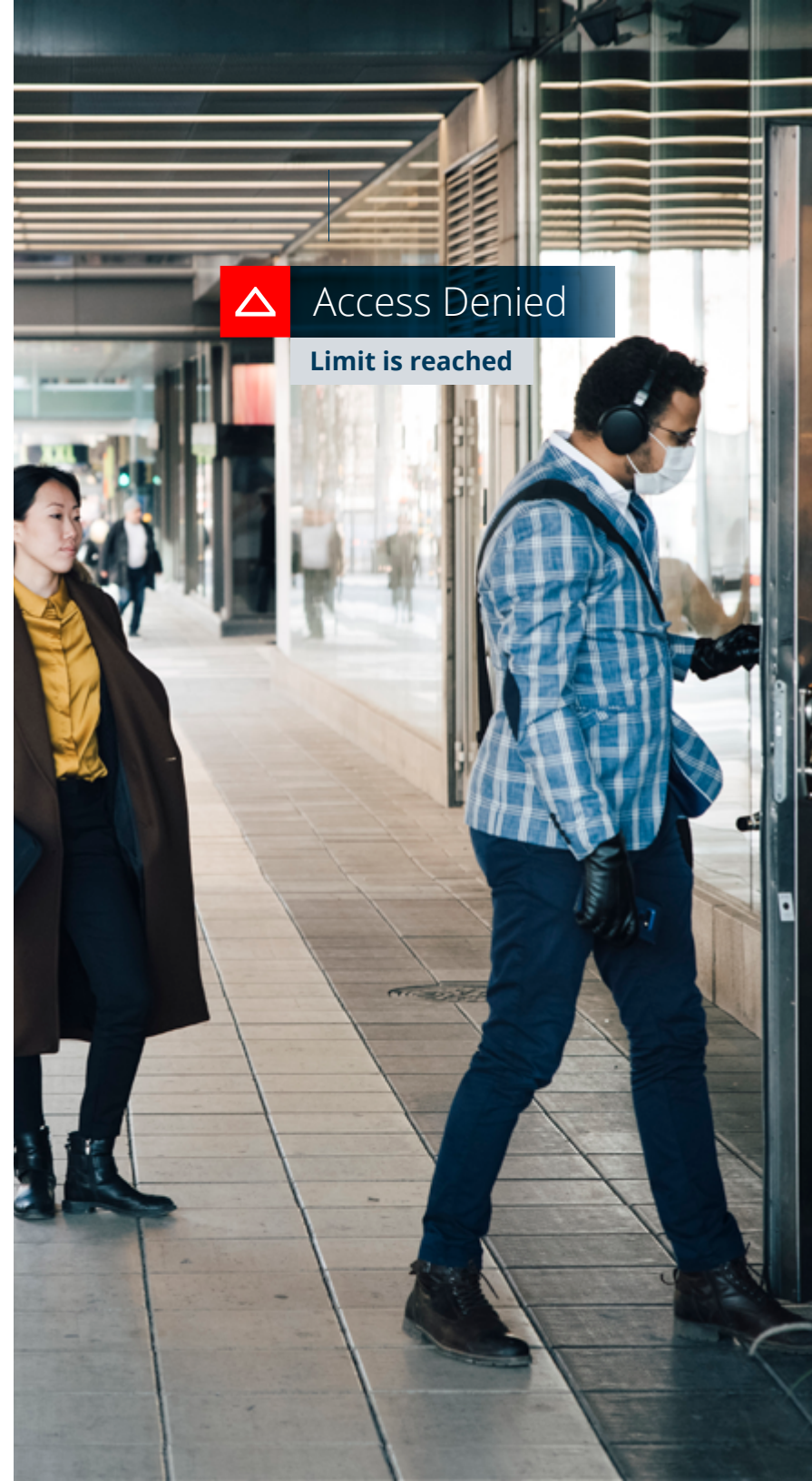
Busy areas often reach maximum capacity in the face of regulations – especially during a pandemic. However, by utilizing door control, you can prevent too many people from entering your premises by simply closing the door automatically when the maximum number of people is reached. Automated door control goes hand in hand with access control.

This technology is especially relevant if you have automatic doors because it offers you control from an integrated door control system. If the video management system detects that the maximum number of people has been exceeded, either via people counting or access control, the automatic doors will no longer open for additional entries.



Key benefits:

- Automatically close doors once a limit is reached
- Notify customers and clients at the entrance
- Set a threshold and control it in real-time
- Avoid employees confronting customers
- Get insights on people volume on your premises



Reduce physical touch points with no-touch door control

Pressing door handles and pulling or pushing doors not only disrupts flow, it also presents a high risk of surface contamination and potential virus spread. Automatic, no-touch door control, enabled by video management, can help create convenient access while minimizing potentially unhealthy contact points.

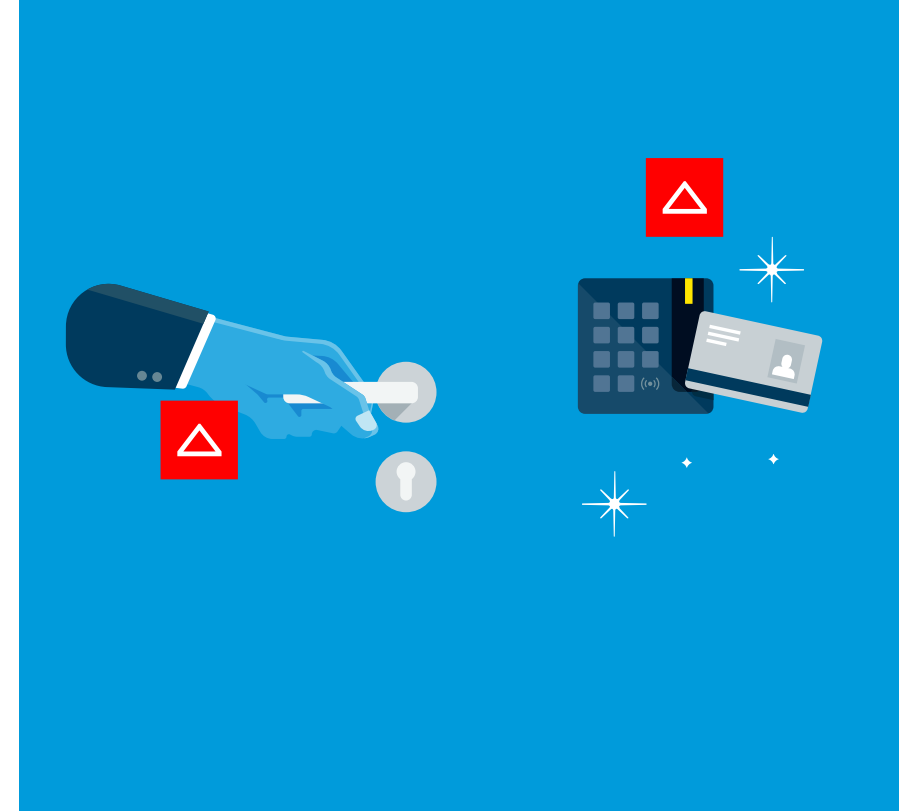
To create a healthy environment, it's important to reduce physical contact with devices and surfaces, including doors, card readers, touch screens and more. Hands-free access is one way to do it. By integrating access control with smartphone applications or facial technology, you can automate motorized door entry systems while enhancing security.

Intelligent no-touch access control is a technology that is increasingly being applied in various settings. It will remain beneficial even once the pandemic is over, as it may also help limit the spread of the common cold and flu.



Key benefits

- Achieve optimal hygiene conditions
- Reduce cost and manual workload for monitoring
- Efficiently manage entry and exit points
- Optimize people flow and density



Make non-intrusive screenings with elevated skin temperature* detection

The ability to identify potential virus carriers early is key to breaking the chain of contagion. Monitoring elevated skin temperatures can be one of the most accessible indicators.

The challenge is monitoring in a way that ensures people are comfortable and can move around with ease. Integrated thermal camera screening can provide a means of quickly detecting potentially ill individuals during outbreaks. The cameras use no-contact infrared thermometers to screen individuals for potentially elevated skin temperatures.

This technology can be applied in environments with high people volumes, such as office buildings, critical infrastructures, healthcare etc. where it is essential to minimize risk of infections.

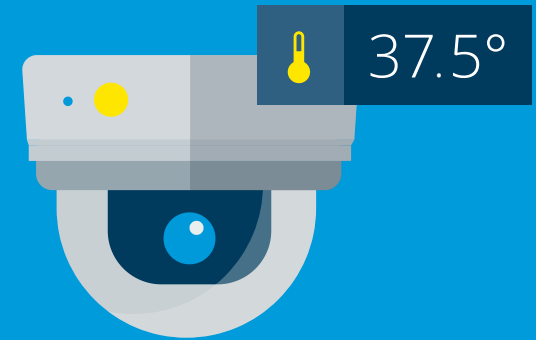
* Be aware!

It is important to carefully consider the objectives, use and application of this technology. Temperature screening should only be used in places such as office buildings, where people have provided their consent to be screened. Other infections or conditions may cause elevated temperatures and elevated skin temperature detection is not a diagnostic tool in itself. Thermal cameras do not detect viruses of any kind. They can only give an indication of elevated skin temperature. Those persons whose temperature is above the threshold should be examined by a medical professional to identify if the individual is infected with Covid-19.



Key benefits

- Minimize intrusions too ease the flow
- Make people feel safe and comfortable
- Prevent and detect possible health risks



Trace contact points with contact tracing

To find out where a person has been, you can use facial recognition as part of your video management solution (provided you have consent). This will enable you to scan and analyze all footage within minutes, presenting you with a clear overview of a person's whereabouts and contact points. In terms of Covid-19 the technology can be used to minimize the risk of contagion and optimize containment.

Once an individual has been confirmed to have Covid-19, it's crucial to quickly trace contact points to minimize any potential spread. Knowing where the person has been and who they have been in contact with may seem like an arduous task, but with video management, it becomes possible to assist the authorities.

The objectives and use of this technology must be considered carefully in the light of GDPR restrictions, and we urge you to seek our advice on how to best integrate the technology into your system. This technology is primarily suited for places such as office buildings, where people have provided their consent to be screened.



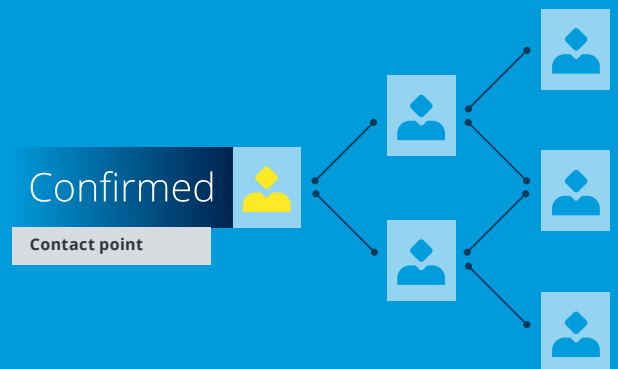
Key benefits

- Be proactive to limit risk of virus spread
- Identify critical contact points
- Assist authorities with reliable data



Confirmed 

Contact point



Ensure the use of protective face masks with mask detection

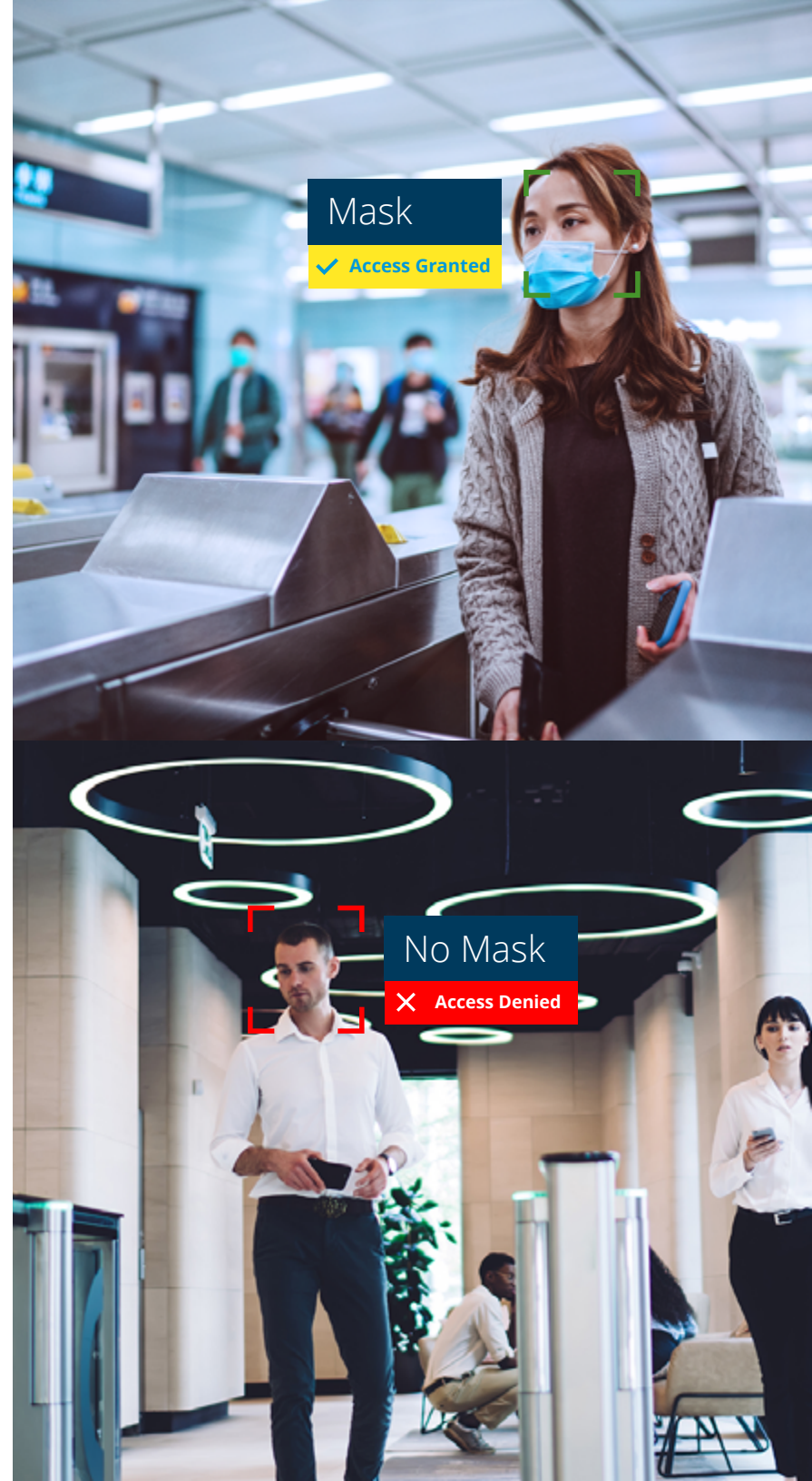
Face masks have already become a staple of life in many areas across the globe and will likely continue to be in the near future. As such, more pressure will be put on measures to check and increase usage. Video-enabled face mask detection is among the most efficient routes to ensuring safety and compliance.

Wearing face masks and other protective face gear in public has been introduced by governments globally to manage the pandemic. Video technology can help identify whether people are complying to mask regulations using the same technology core as facial recognition. However, the goal is simply to anonymously detect if individuals are wearing a mask or not. This way it's possible to be quickly alerted, helping ensure mask compliance and obtaining data on usage.



Key benefits

- Quick identification through automated face mask check
- Decrease personnel cost with focus on peak periods
- Enable immediate action with alerts in real-time
- Document alignment with regulations



Guide crowds with one-way routes

A challenging situation for social distancing arises when people need to walk in the opposite direction of one another. One simple fix is to establish one-way routes in stores, on platforms and in offices – and ensure that the directions are respected.

To avoid close contact and the risk of congestion, you can control one-way passageways by using one-way detection based on video analytics. That way, your system detects when people are moving against the prescribed walking direction and can, for example, trigger an acoustic signal via the loudspeaker system reminding customers of the correct walking route with the help of digital signage.



Key benefits

- Guide people through your location
- Monitor pre-defined routes
- Avoid unnecessary face-to-face interactions
- Get insights to optimize designated paths



Remind people of safety regulations with automated cues

During a pandemic, any breach of guidelines requires immediate action. However, it can be challenging for employees to know when to react, as some situations may require additional resources. Automated cues are a less intrusive, yet effective way of reminding people of guidelines.

A video management system can enable other systems to automatically react with cues everytime there is a breach of guidelines. The real-time cues enforce quick action from personnel or, even better, with an automatic video or audio response. For instance, you can program your system to send automated audio messages or visual cues reminding customers of regulations in real time, without needing to place customers in an unpleasant situation by addressing them personally.



Key benefits

- Get real-time notifications of inappropriate behavior
- Enable quick action
- Avoid having employees handling uncomfortable interactions



"Remember to keep your distance"



Notify people with digital signage

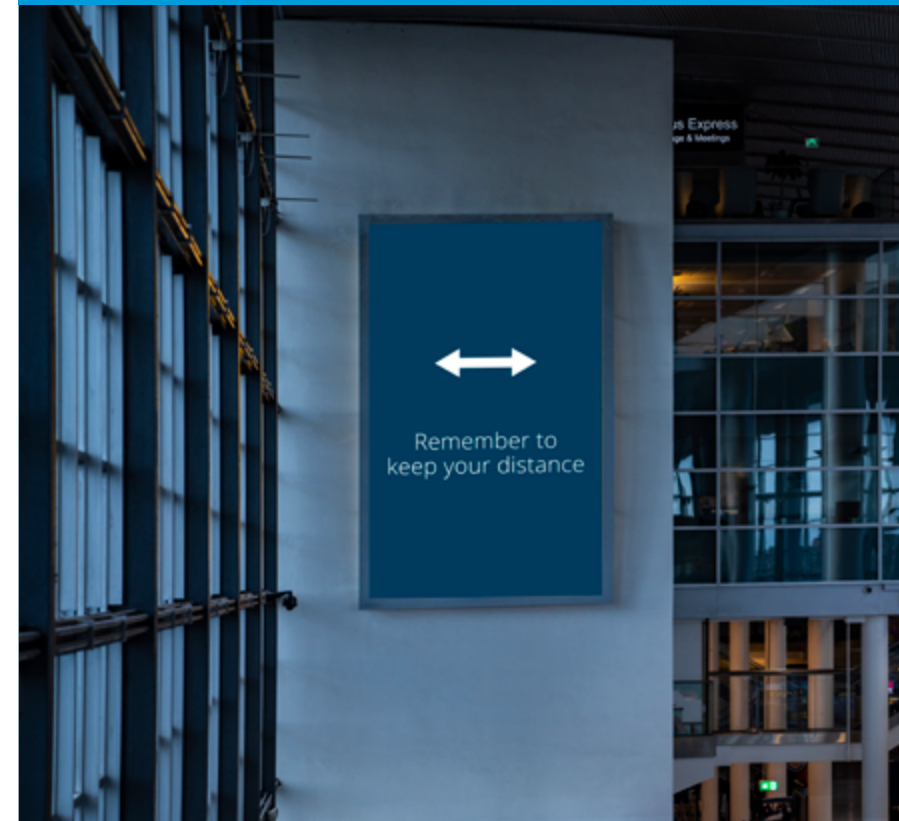
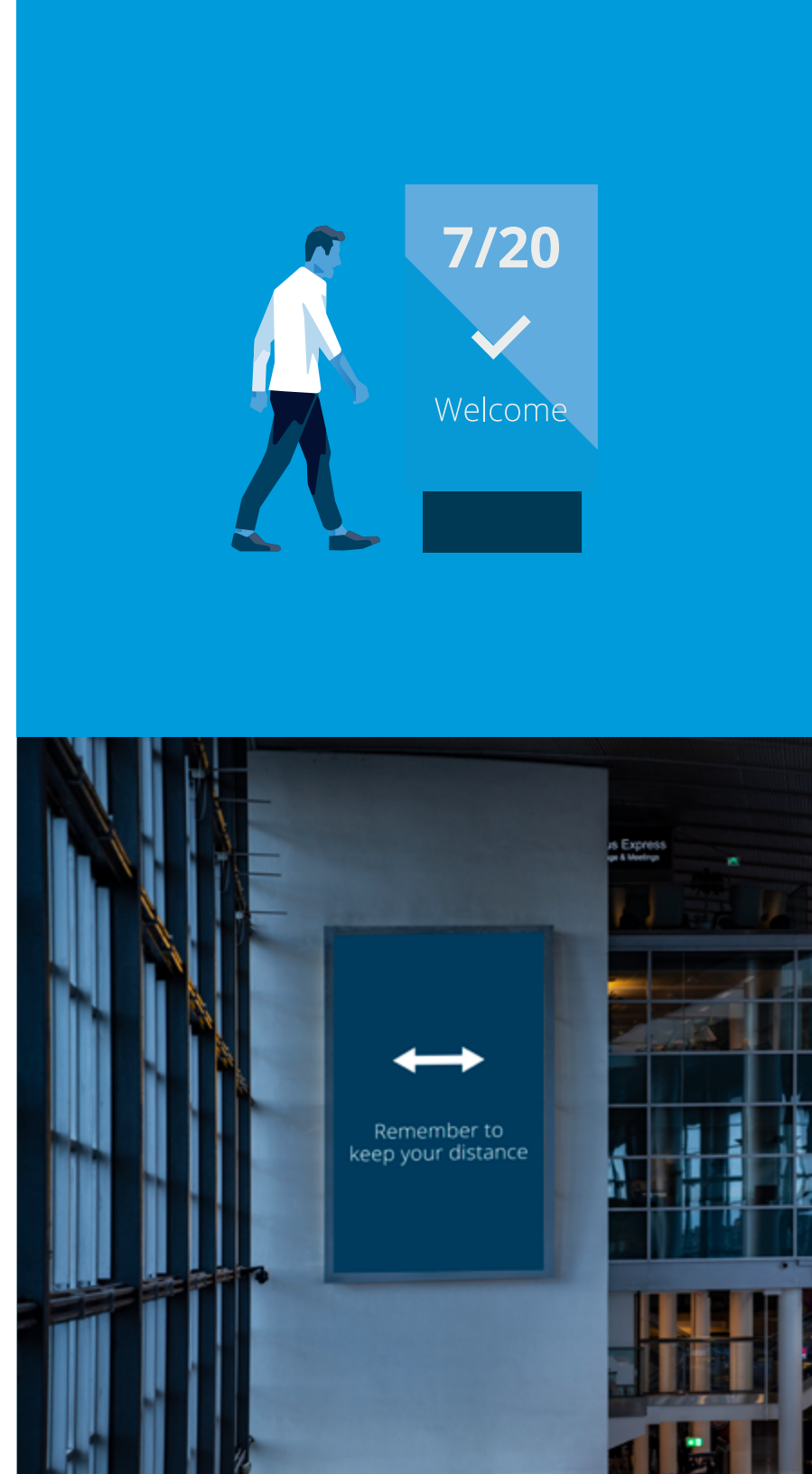
Keeping both employees and customers well informed is a cornerstone of managing the measures surrounding Covid-19. Individuals need to understand how to comply with preventative measures, such as knowing about available workspaces or the right way to access a store.

Having video management as a core solution provides the benefit of issuing visual messaging through digital signage systems. You can integrate all your data sources and use digital signage to inform people in real time. With a powerful rule engine you can control what will be presented on displays, just as you can employ both audio messaging and listening.



Key benefits

- React in real time
- Inform customers or employees of breaches
- Prevent exposing employees or customers to unnecessary risk



Let's get started on your solution

Software is at the core of a solution that creates ongoing value by enabling all the other components — even those not yet needed. Once the core is there, components can be integrated as you see fit — when you see fit.

Ready to get started?
Please reach out to us [here](#).



Choose Milestone XProtect® video management software

If we have learned one thing from this pandemic, it's that change is inevitable. This is why you should always choose an open platform solution that can easily change with you, preventing any loss of initial investment. Further, when you invest in a video surveillance system, you invest in the safety of your business, passengers, staff and assets. That's why you should invest in Milestone XProtect – one of the world's leading video management solutions. There's a solution for whatever your current infrastructure or technology requirements are, whether it be a full cloud, on-prem or hybrid version.

With Milestone's XProtect video management software, you can take your pick of pretty much any type of hardware on the market, adding all the applications and analytic layers you need.

→ **500,000+ INSTALLATIONS WORLDWIDE**



Find your solution through Milestone Marketplace

We have more than 1,000 Technology Partners who have developed a wide range of flexible, scalable and future-proof video solutions. Through the Milestone open platform, our partners offer endless integration opportunities, including many that allow you to increase safety for passengers, make operations more efficient and decrease the need for service staff.

→ **1,000+ TECHNOLOGY PARTNERS**

The protection of data privacy

Because video technology processes personally identifiable information, data protection and privacy must be considered when video technology is used to assist in public areas. Europe's General Data Protection Regulation (GDPR) helps ensure that all systems deployed comply with the rules and legislation of data protection, data processing and privacy. Depending on the domain (private or government) and the use case, GDPR may or may not apply. Requirements can also vary from country to country, and it is advised to seek legal advice.



Responsible use of technology

At Milestone Systems, we are proud to see how video technology is coming to the forefront as a major means of support for businesses, workers, governments and citizens. At the same time, we take the responsible use of technology very seriously, as stated in the Copenhagen Letter.

We encourage all Milestone Systems partners and end-users to respect local laws regarding data protection and data privacy, and we may terminate the entire license for a product with immediate effect if it is used in a way that we consider to be a material breach of our end-user license agreement. Innovations in technology should be celebrated, but we must acknowledge our role in developing new technologies responsibly.

copenhagenletter.org

The Copenhagen Letter

It is time:

- Time to take responsibility for the world we are creating.
- Time to replace the empty rhetoric with a commitment to real action.
- Time to organize, and to hold each other accountable.

Because Milestone's business is shaping technology for the future, this message inspired us to act. The letter clearly speaks to Milestone's culture and core values, People First is how we describe our management style, putting humans at the center of technology development. Having helped create the letter, Milestone responded with real action through an initiative to guide how we innovate and use technology; we call it the Responsible Use of Technology.

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Any questions?

Please reach out to us [here](#) if you have any questions or inquiries.



For more information visit:
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