

Iowa 80 Group, United States of America



Iowa 80 Group – High-Resolution coverage of each of their Truck Stops

The Iowa 80 Group, a chain of the largest truck stops in the world, has been serving the professional truck driver since 1964. With locations in Iowa, Missouri and North Carolina, the Iowa 80 Group provides a variety of amenities, which include everything from fuel, truck accessories and truck washes to chiropractic, dining and hair-cutting services, that truly make its locations an oasis for truck drivers to relax and refresh in a single stop. Iowa 80 Group prides itself on understanding that a driver's time literally is money, and the company strives to operate quickly and efficiently so truckers can get back on the road as soon as possible.

Challenge

The Iowa 80 Group truck stops see a ton of traffic each day as thousands of truckers pass through their facilities for the wide variety of services offered by their dozens of business units. Throughout its locations across the country, the company had installed analog surveillance cameras to help combat shoplifting, enhance employee efficiency and, most importantly for the Iowa 80 Group, reduce liability concerns.

However, the poor image quality of the analog cameras failed to control liability fraud or theft, as company officials couldn't identify shoplifters and employees due to the grainy image quality. In addition, the system wasn't user-friendly, leading to cases of user error.

"If someone claimed to have been injured on our property and we could review footage and determine that person wasn't here on the day they claim, that saves us a lot of time and money," said Burke Strand, Network Manager, Iowa 80 Group. "But we didn't have the proper picture quality to identify people's faces, and therefore, our original system didn't help reduce liability at all."

To better control risk, the Iowa 80 Group needed to obtain high-resolution coverage of each of their truck stops. However, the massive size of the facilities – the main building in Walcott, Iowa, is more than 100,000 square feet – makes full surveillance coverage exceptionally difficult. Furthermore, each location features a football field-sized chrome showroom that displays full-sized

semi-trucks. As much as it needed to enhance security, the Iowa 80 management team also wanted to maintain the aesthetic integrity of these facilities by featuring cameras that blend with the existing environment.

"They originally had 2.5-foot cameras with smoked domes trying to cover areas the size of football fields," said Rob Benson, Project Manager, Dakota Security Systems, the security systems integrator that worked with Iowa 80 to develop a new high-resolution surveillance solution. "Iowa 80 Group is focused on maintaining a welcoming environment to its customers, and the previous cameras didn't fit the bill."

Solution

With the remodeling of their truck stop in Kenly, N.C., the Iowa 80 Group seized the opportunity to scrap their archaic, underperforming surveillance solution to test an IP-based system that could provide a blueprint for use in their other locations. Dakota Security Systems won the bid for the project, and developed and installed a comprehensive surveillance solution consisting



Cost Savings, Long-Term savings and the picture Perfect Image Quality is impressive

of MOBOTIX cameras and Dell servers for video storage.

Dakota Security Systems installed MOBOTIX Q24 cameras within the massive showroom at the Kenly location. The Q24 is an elegant, compact and weatherproof IP camera that leverages MOBOTIX's advanced panoramic software to create a 360-degree field of view. A single camera is capable of capturing the image of an entire room. Since one MOBOTIX camera with 3.1 megapixels records up to 30 times more detail than traditional CCTV cameras, Dakota Security Systems leveraged the MOBOTIX cameras to cover the warehouse, but at a much lower camera count than if traditional fixed cameras were used. The discreet Q24s also maintain the aesthetic appeal of each showroom because they easily blend into the environment. Dakota Security Systems also leveraged the subtle Q24s in Iowa 80's retail shops, where their "smoke

detector-esque" appeal helps the cameras blend in while the high-resolution image quality has helped identify shoplifters.

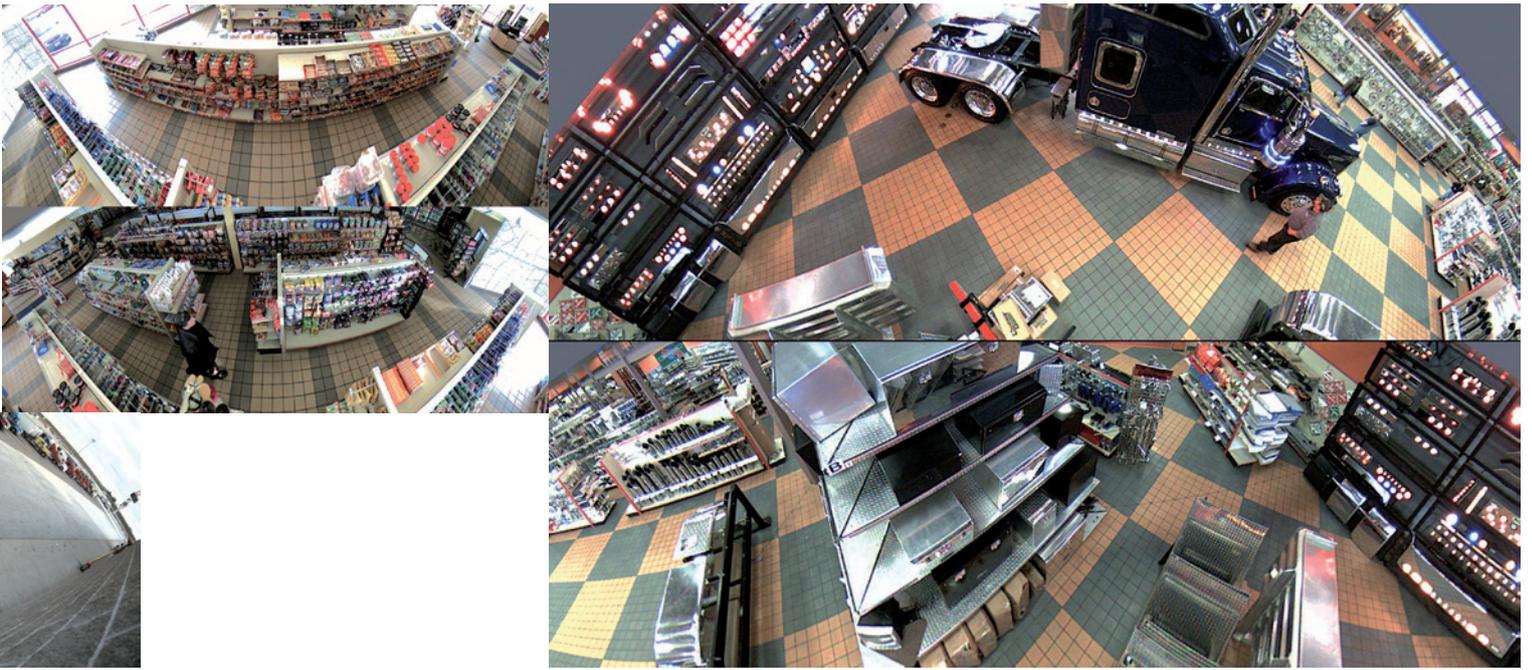
"That is a lot of square footage to cover and the MOBOTIX cameras allow us to do the work of two or three cameras, which saves us a lot of money and provides us more coverage and better image clarity than we had before. We now have complete coverage, where before we had to pick and choose what was most important," Strand said. "The 360-degree views delivered by the Q24 allow us to really slice and dice our coverage so we don't miss anything. They have also helped us in the retail shops because they are so small but give us perfect images."

The Iowa 80 Group and Dakota Security Systems found additional camera-count reduction in the deployment of the MOBOTIX D14 DualDome for use on the exterior sides of buildings. The

D14 is a high-resolution, dual-lens camera that produces a 180-degree field of view of up to 6.2 megapixels.

"Using just one D14 camera, we are able to cover the entire side of a building when that would probably take two, maybe three cameras to pull off with traditional solutions," Benson said. "We are covering entire sidewalks with just a few cameras and, on top of that, the edge devices are producing high-quality images that leave no room for questions on what occurred."

The IP camera installation is a remarkable success at the Kenly location, providing the Iowa 80 Group with the images they need to control shoplifting and liability issues, while enabling managers to ensure the efficient operations of their employees. Due to that success, and the cost-effectiveness delivered by the MOBOTIX solution, the Iowa 80 Group has installed the



same system at two more of its locations and now operates about 350 cameras throughout its enterprise, which consist of approximately 100 MOBOTIX cameras and other traditional devices. However, without the MOBOTIX cameras, Benson believes that count would be a lot higher and, therefore, so too would the system cost.

“If we tried to do this same installation without the MOBOTIX cameras, we probably would need about twice the cameras that we were able to use,” he said. “The cost savings from the initial investment in infrastructure, long-term savings and the picture perfect image quality is impressive. There’s nothing that the superb German engineering of the MOBOTIX cameras cannot do.”

Results

The high-resolution MOBOTIX cameras have lifted a heavy burden off of the shoulders of

the Iowa 80 Group and, therefore, passed their most important test in a landslide. The high-resolution video offers Iowa 80 the ability to zoom-in without images becoming pixelated, distorted or grainy, providing officials with the evidence needed to combat liability claims and control risks.

“Once, with the old analog system, we had a guy who claimed he fell. We went back and checked the tape but the video was of such poor quality that you couldn’t tell what happened,” Strand said. “With the new IP system and the MOBOTIX cameras, no detail is missed.”

Thanks to MOBOTIX, Iowa 80 has complete surveillance coverage of their showrooms, a circumstance they never thought possible, and the discreet Q24s provide an excellent avenue for preventing retail theft, controlling liability and streamlining employee management.

The Iowa 80 Group plans to move forward with the implementation of the same system at its fourth location, and looks forward to grabbing hold of the same benefits of megapixel surveillance at its other sites.

“I don’t understand how we ever got by with the cameras we had before,” Strand said. “The MOBOTIX cameras we have now are unbelievably strong and provide unmatched benefits.”

MOBOTIX has developed and manufactured IP video systems, video management and analysis software in Germany since 2000.

MOBOTIX stands out for its **high level of reliability**. All outdoor cameras are subjected to a stress test for temperatures between -30°C and +60°C (-22°F and +140°F). Without additional components, without heating or cooling and with no moving parts (for example auto iris), they are virtually maintenance free.

MOBOTIX delivers a **perfectly matched package**, starting with the microSD card for storage management and HD audio (microphone and speaker) with VoIP telephony through video analysis, a professional video management system and motion detection software reducing false alarms.

The **decentralized architecture** means that a central computer is not required and the network load is minimal. The intelligent cameras from MOBOTIX process and store image data themselves, trigger events and, in the event of remote access, manage the frame rate and resolution depending on the available bandwidth.

The **6MP Moonlight sensors** and complementary **thermal imaging technology** ensure reliable detection of moving objects, even under the most challenging light conditions and over long distances. As a result, it is possible to cover large areas with just a few cameras. Less power cabling, less IT infrastructure and fewer additional light sources are needed. MOBOTIX cameras are powered using standard PoE and do not require more than 4-5 watts.

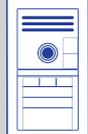
An intelligent IP video system from MOBOTIX allows you to **reduce total costs**. The investment pays for itself after a short time and the free-of-charge software and updates ensure it is a future-proof investment.

Outdoor Dual Lens			Thermal	
M15/16 AllroundDual	S15/16 FlexMount	D15/16 DualDome	M15/16 Thermal	S15/16 DualThermal
				
Robust for extreme conditions	Flexible dual camera	Modular dual camera	Thermal dual	Thermal dual

Outdoor Single Lens			
M25/26 Allround	S15M/26 FlexMount	Q25/26 Hemispheric	D25/26 Dome
			
Robust for extreme conditions	Discreet, video analysis	Discreet, video analysis	Modular Fix dome

Indoor			
i25/26 Panorama	c25/26 Hemispheric	p25/26 Allround	v25/26 MiniDome
			
180° hemispheric	Discreet, video analysis	Modular ceiling camera	Vandalism camera

Door Modules			MxDisplay+
Camera	BellRFID	Keypad	Remote Station
			

Door Sets			
Double Frame		Triple Frame	
			

Retailer information: