SAFETY

Networking for a safer world

Public and Urban security today are amongst the most sensitive issues of the world. A robust public and urban security infrastructure not only secures communities, it is also critical for their economic development. Companies like Cisco are deploying technologies to make communities around the world more secure and prosperous.

Governments around the world are seeking strategies to proactively prepare and respond to disaster and emergency situations. Apart from being an important government responsibility, urban security has far reaching benefits for all stakeholders. Communities that succeed in creating secure urban environments attract more residents and businesses, fueling economic development. Politically as well, this is a sensitive topic. Security of the people and critical national assets is today considered a basic tenet of an effectively governed state and hence plays a critical role in deciding the fate of any political establishment.

The rising complexity

The last two decades have seen the rise of terrorism alongside heightened tension in geo-political relations around the world. Natural forces also continue to follow their own unpredictable trajectory of unleashing wrath on scores of human settlements around the world. The heightened complexity of the global urban security environment today, demands for a collaborative and technologically advanced approach for effective management.

Technological developments in spheres like information technology, forensics, optics and medical disciplines have made it possible for communities to prepare themselves against emergency situations. Governing regimes around the world have been incorporating advanced technological tools to protect their citizens and critical assets at every stage of this technological evolution. While this has certainly added strength to our defense and response to emergencies when compared to the past, it can certainly get better.

Information is the key

When disasters and emergencies occur, response organizations and government public safety agencies require immediate communications support to save lives, establish relief operations, and provide ongoing assistance in affected communities. When encountering a public safety challenge, most critical to the responder is accurate and complete situational awareness. Public safety teams need essential information to make critical decisions and effectively execute their response strategies. Precise, real-time information and communication is paramount to the proper speed and sequence of the response.

Therefore a robust urban security infrastructure ensures communication of the right information at the right time to the right people. It is therefore so critical that all important units of the urban security framework, right from the government, civic agencies, disaster response teams to the ordinary citizens are networked together through an efficient communication platform like the Cisco Open Platform for Safety and Security.

Using the power of the IP

Government public safety and security agencies worldwide are building IP network based capabilities to tie together their different security and communications systems, automate incident detection and response, and enable collaboration with other government and private organizations. This not only reduces time between incident detection and response but also empowers field personnel to make better decisions based on all available information. Utilizing the advances in the field of networking companies like Cisco are redefining and systemizing urban security architecture.

The Cisco Open Platform for Safety and Security for example has been a great success in ensuring better physical security of key national assets around the world. Utilizing advanced IP based networking architecture Cisco's solutions help agencies, governments and citizens prevent, prepare for, respond to, and recover from emergency incidents. The framework comprises six building blocks: Command and Control, Mission-Critical Network, Incident Collaboration, Sensing and Actuation, Mobile Force, and Citizen-Authority Interaction.

How to do it?

Right from capturing and acting on suspected activity on high definition CCTV footage to ensuring a quick response through highly efficient communication networks and remotely controlling doors and locks of important national buildings, IP technology today has integrated diverse yet converging technologies.

Choosing the right technology partner

Realizing the use of technology in redefining urban security infrastructure is easy; it requires a trusted partner to see this technology come to play. Cisco as a leading networking company of the world has successfully worked with several governments and civic agencies to make their urban safety infrastructure more strong and agile. Cisco has worked within the public sector for more than 20 years, helping agencies deploy technologies that improve government services and operating efficiency. Cisco is the recognized market leader in unified communications, providing mission-critical data, voice, and video solutions across all levels of government and private industries.

By combining voice, data, and video systems through a comprehensive architecture, Cisco video surveillance solutions allow public safety organizations to integrate IP video surveillance, access control, and emergency response solutions with existing network infrastructures and legacy technology, where necessary.

Through a holistic approach, Cisco provides the strategies, tools, and resources public safety agencies need to improve information management, enhance citizen communications, and increase organizational collaboration for better use of limited resources. Cisco solutions support major federal agencies as well as mission critical networks, including NIets, the International Justice and Public Safety Information Sharing System. With Cisco advanced networking and surveillance solutions, public safety agencies can more effectively meet their key metrics in serving both existing and future community needs.

CASE STUDY

Delhi Duty Free - Smart + Connected Physical Security Solutions

The T3 Terminal at the Indira Gandhi Airport is truly a world-class gateway into India for thousands of tourists and travellers around the world. It boasts of a retail environment that can't fail to impress any of its visitors. Delhi Duty Free Services Pvt. Ltd (DDFS), a joint venture company between DIAL (Delhi International Airport Private Limited), IDFS Tradings (P) Ltd. and ARI (Aer Rianta International) manages a large section of the retail presence at the T3 Terminal. The DDFS shops operate 24 hours a day, 7 days a week and employ large number of retail staff. The shops also stock more than 15000 stock-keeping units (SKUs) of liquor, tobacco, fragrance, cosmetics, and confectionery products. Not only is this a brilliant retail outlet but also a wonderful model for how advanced networking technology alleviates challenges with respect to public and urban security. Let's explore how ,through the DDFS story.

The challenge

Taking note of huge losses faced by global retail companies from shoplifting and theft, DDFS sought a physical security and theft control solution that provided detailed reporting and the ability to see every item in the stores. Abhay Pandey, Manager IT, DDFS says, "Theft is a big problem for retailers, big and small around the world. We knew that we must control theft to tolerable levels if we are to leverage this massive opportunity at the T3 Terminal."

Abhay Pandey,
Manager IT, DDFS

The key was to have a system that could enable to prevent theft and catch the culprits in time. The solution had to operate without downtime and provide high scalability, so that DDFS could add IP security cameras for future expansions. To establish the DDFS command and control center, the solution also had to integrate with the primary airport network, which included numerous legacy systems. The solution had to enable the staff to monitor, assess, and deliver information reliably and securely across its locations while maximizing staff productivity. All this and a stringent deadline of 2 months alongside the operational nightmare of functioning at a heavily securitized location made this a real challenge for DDFS to transcend.

The solution

DDFS chose Cisco and Cisco Services to help it implement a sophisticated security and theft control system. As part of Cisco's Smart + Connected Communities initiative, the DDFS project uses the network as the service delivery platform to transform physical communities into connected communities. The Cisco Services team initially conducted a Customer Requirement Definition workshop to identify DDFS' requirements. With this data, Cisco Services began its Plan, Design, and Implementation services for the five shops, together with a central command and control data center in the airport.

The Cisco solution included a cohesive integration of Cisco LAN, Cisco Unified Communications, Cisco Unified Wireless, Cisco Video Surveillance, and Cisco Physical Access Management solutions, all of which are connected over the network. DDFS initially installed 250 Cisco Video Surveillance IP Cameras, including high-definition and standard definition box and dome cameras. The Cisco Physical Access Control solution and Cisco Physical Access Manager enabled DDFS to connect door hardware, locks, and readers to the network. The system led to ease in monitoring building access, increases situational awareness, and easily integrate with IP applications and data storage.

Business driven results

Although the primary purpose of the solution was to eliminate theft, secure merchandise and protect customers, it was also aligned with retail business objectives. The high-definition cameras today deliver outstanding image quality and can capture the smallest details at point-of-sale counters with high resolution. This enables stores to track and validate sales records against video footage. Business intelligence data also supports ongoing reporting and trend analysis, enabling DDFS to modify store topologies, present high-value goods more effectively, and formulate marketing strategies to boost sales.

Outlining the business impact of the Cisco Solution, Arun Barathi, COO, DDFS said, "Our association with Cisco had been extremely rewarding. Our investment in superior IT surveillance infrastructure has helped us reduce theft considerably and hence save on a big corpus. We hope to take this association to a new level in the near future."

Mr. Avinash Purwar, Senior Vice President, Sales, Cisco, India & SAARC, talks about how technology is changing the Urban Security scenario around the world.

Avinash Purwar,
Senior Vice President, Sales,
Cisco, India & SAARC

The urban security scenario around the world has undergone a big change. At Cisco, how are you addressing this change?

These are indeed times of great vulnerability and insecurity. Governments around the world are striving hard to respond strongly to the complex public security challenges with technology as the key enabler. We at Cisco understand this situation and address these challenges through multiple products under the umbrella of Smart + Connected Communities architecture. This architecture is an intelligent & integrated architecture designed for modern cities and towns. In this architecture we have advanced networking solutions working to empower security & decision-making agencies in multiple ways. Right from enabling real time video surveillance to providing seamless access to accurate and timely information on our IP based communication solutions, this architecture supports its users to assess and react to urgent situations in a superior way. At the same time Cisco is building intelligence into the network, whereby video analytics can be done in real time, thereby enabling the preemption of a situation or avoidance of disasters. The same intelligent ecosystem also helps in making the monitoring process automated, thereby reducing human error.

What is the single biggest challenge, in rolling out advanced solutions with reference to Public and Urban Security in modern day cities?

Convergence and compatibility of existing solutions with the new ones is the biggest challenge in the present context. Civic agencies around the world have several security solutions working in isolation and they are of little use unless converged with other solutions to draft a comprehensive picture. But with limited budgets it is impossible to overhaul the entire Public security infrastructure for implementing a new solution. Therefore it is critical that the new solutions being rolled out are compatible to the ones already existing. We at Cisco are addressing this challenge by building superior legacy support capability in our products and solutions so that new solutions talk to the existing ones and facilitate better interoperability for its users and that too at an economical cost.

What are the key factors that put Cisco ahead of its competitors in the Public Security and Urban Security space?

Cisco Open Platform for Safety and Security is our biggest competitive advantage. It is a comprehensive architecture framework for building solutions that prevent, prepare for, respond to, and recover from incidents and is clearly ahead of its competition in almost all respects. Secondly, Cisco's leadership in IP networking technology is a big plus given the widespread adoption of IP based communication solutions by civic agencies around the world. Lastly, I think our global expertise and our team of seasoned engineers gives us a big edge over others when it comes to aiding government and civic agencies.