

## Opportunities galore in IP Surveillance

Increasing awareness of the benefits of IP surveillance as well as the growing need for real time security and surveillance in the country is driving demand for this technology and channel partners are cashing in.

**By Manjari Juneja**

The IP surveillance market in India is growing rapidly. Recurring terrorist activities are necessitating round-the-clock intelligent surveillance of public infrastructure, sensitive installations, enterprises as well as residential communities. Today, due to advances in technology, video surveillance cameras are better than ever and can be used along with computers to handle complex situations.



Going by the current trend, the deployment of IP surveillance systems is growing significantly as compared to that of conventional analog CCTV security camera installations. The advantages of IP surveillance include better performance, ease and versatility of use, flexibility and, of late, cost-benefits. Unlike traditional analog CCTV systems that transport analog signals to a centralized video recording device, IP surveillance employs a decentralized data encoding system that sends binary data over a wired or wireless Internet Protocol (IP) network.

Network video or IP-based surveillance technologies are maturing and improving due to a higher level of integration. Moreover, the possibility of accessing video remotely with IP cameras has helped spawn innovative applications.

Subhasish Gupta, Country Manager - India & SAARC, Allied Telesis, said, "Surveillance is applicable to most industry verticals. We see a decent shift from analog to IP-based surveillance and that's because, as enterprises grow, they realize the advantage of having surveillance based on IP as opposed to analog."

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**Subhasish Gupta**  
Country Manager - India & SAARC,  
Allied Telesis



Mohamed Nasir, Senior Manager - Marketing, Consumer System Products Division, Canon India, said, "The demand for IP cameras is rising. These cameras are more efficient tools for purposes such as crime prevention, traffic safety, industrial safety and home safety. In addition, wireless video surveillance cameras are commonly used at home and small offices for surveillance. Recording and viewing images from a security camera is nothing new but what is new is the ability to do this conveniently from any location within a wireless network."

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Vikas Khattar, General Manager & Country Head, Infocom and Security Systems India Pvt. Ltd., said, "IP surveillance is a growing market for us as well as for our OEMs. Four years back, it was a challenge to sell surveillance cameras. Today most people are aware of it. It is gaining an edge over analog systems. This technology is evolving at a rapid pace. Infrastructure project companies, transportation, defense, highways, refineries and power plants are some of the verticals that are driving the growth of this category."

Sectors contributing to the growth of IP surveillance	
<b>Industry vertical</b>	Uses IP surveillance for
<b>Government &amp; PSUs</b>	This sector has high demand for security cameras for various activities including city surveillance.
<b>Education &amp; Banking</b>	These sectors are using IP surveillance for security as well as for long distance communication. E.g. Universities use a variation on this technology to deliver lectures to remote campuses.
<b>Real Estate</b>	The sector is enjoying an upswing; builders and promoters are using surveillance product as a part of a total package for a flat. NRIs who are getting their house constructed in India, can keep an eye on on-site activities via IP cameras.
<b>Source: Canon</b>	

**The market:** Frost & Sullivan estimates put the IP surveillance systems market including IP cameras, NVR, decoder/encoder and associated software at \$45 million for 2010. The IP cameras market by itself is estimated to be about \$21-22 million. The IP surveillance systems market is expected to grow at a hefty CAGR of 46.3% till 2015 clocking revenues in excess of \$300 million by 2015.



The IP surveillance market accounted for 30% of the entire video surveillance market of \$145 million in 2010. Its rate of adoption indicates that, by 2015, it would be a major contributor representing in excess of 60-65% of the overall video surveillance market by revenue.

The country is witnessing strong demand for high-end security solutions from both the public and the private sector. The government is taking stringent measures to enhance the country's security infrastructure. Additionally, large enterprises and educational institutes are investing on securing their premises from external threats.

Deepa Doraiswamy, Industry Manager, Automation & Electronics Practice, Frost & Sullivan, South Asia & Middle East, said, "We are witnessing a major transition of legacy analog systems that are converting to IP without replacement of all of the existing hardware. This is achieved by including encoders that convert analog signals from existing cameras to digital output for IP surveillance. While this is the first phase of a transition, these systems are eventually expected to be converted to full IP. Bandwidth being the most critical resource for IP surveillance, its availability is the defining element for IP adoption and growth to a large extent. The evolution of IP has also changed the character of the surveillance industry. Earlier, it used to be governed by the operations/security departments in the public and private sectors. However integration with the IT department becomes essential with IP surveillance. Going forward, integration with other activities such as linking with billing through PoS in retail, linking with biometrics (time and attendance) in the enterprise and commercial segments etc. are anticipated."

Enterprises across verticals are moving towards IP-based surveillance. They are also looking at moving more of their services to the IP platform. In a recent market study, IMS Research found that over 1.1 million security cameras were sold globally through the retail channel in 2010. According to the report, the network video surveillance market in India is currently valued at \$26.1 million and is poised to grow to \$89.2 million by 2013. The projections clearly depict the huge growth being witnessed by this segment.

Currently, in India, the market is more project driven where it is difficult to classify demand in terms of user requirements. Although the government sector is the biggest user of network video, manufacturing

units, retail outlets and malls are a few other segments that are seeing increased demand for security equipment. Hence, it is the latest advances in technology and simplification of use that are driving the growth prospects for this segment, along with cost-effectiveness. Surveillance is the need of the hour across verticals, which can be used for various applications apart from just physical security.

**Getting commoditized:** The SMBs sector is a fast growing segment for IP surveillance cameras. As markets mature, there is always a certain amount of commoditization that creeps in. The requirements and demands of the SMB segment are unique and diversified (depending on the sector) and, hence, product differentiation that meets each individual's requirement is definitely needed. With IP surveillance, a lot of newer applications for SMBs could emerge ensuring that this solution category doesn't get commoditized.

Basic models are more commoditized in the SMB segment, as they are looking for industry relevant solutions which vary depending upon the application.

Tushar Sighat, CEO, D-Link (India) Ltd., said, "The surveillance market has just started to open up for IP surveillance in India and it is yet to gather the momentum that's required for it to reach a full blown stage. All products go through a cycle of first reaching a peak before getting commoditized. The deployment of surveillance solutions is still at an early stage and the market has not matured completely. Therefore, there is still time before we can claim that the surveillance market is commoditized, be it in any segment."



**Growth verticals:** The Indian security market is witnessing immense growth from sectors such as city surveillance, public transport, hospitality, airport security, BFSI, retail, BPO, manufacturing, college campuses, infrastructure companies and education.

The government, in general, has been observed to be the biggest segment in terms of volume demand. PSUs are also a vertical with significant demand. The private sector, enterprises as well as SMBs, shows potential although consumption here is dwarfed by that of the government sector.

State police departments that are adopting IP surveillance for traffic monitoring as well as for securing public infrastructure are expected to be key demand creators for IP surveillance systems.

Investments in public infrastructure such as airport modernization and expansion, rail network expansion, metros etc. are expected to drive significant demand for IP systems.

### **Opportunities for channel partners**

The opportunities for channel partners are immense. With enterprises coming out with converged requirements, which include a single network being able to integrate building management, access control and physical security along with a surveillance network on the same IP platform, it becomes important for channel partners to build additional skill sets.

Surveillance cameras are sold as part of a total security solution and therefore these are sold by specialist partners who have the knowledge and technical expertise to install and execute the same.

Subhashini Prabhakar, Chief Technology Manager, Dax Networks, said, "Our products and solutions provide a competitive advantage to our partners, allowing them to provide greater value to their customers. We have a wider range of options starting from basic to premium camera models and provide flexibility to our partners. We are also planning to train and educate our partners on the benefits of IP surveillance products and solutions. Seminars will be a part of our channel strategy. Surveillance products will create fresh business opportunities for our partners."

"3G and video analytics will be the technology trends in the IP surveillance industry."  
**Subhashini Prabhakar**  
Chief Technology Manager,  
Dax Networks



IP surveillance is creating a new market for networking resellers and integrators. Despite this, a minuscule percentage of networking partners in India are focused on the surveillance segment. This can be attributed to various causes including the lack of expertise and know-how on surveillance solutions design, implementations and other technical knowledge etc. Therefore, there is an enormous opportunity for all of the networking partners that is still to be explored and, in turn, adds to their revenues. With this, partners now have an opportunity to be part of the new technology growth wave.

Khattar of Infocom and Security Systems commented, "The surveillance market is moving from analog to IP. Earlier, it was difficult to integrate the system but now complete integration is possible on one backbone. The other major benefit is that of cost savings with regard to the laying and installation of cables as the entire communication happens over fiber. Maintenance is easier as cables are fewer."

The overall outlook for IP surveillance in India looks positive and promising, as consumers are making the shift from traditional analog CCTV to IP surveillance. There is huge market opportunity for both vendors and partners, which is still to be optimally explored.

**Channel challenges:** At the initial stage, a partner may face challenges in terms of the lack of technical expertise as it may not be fully prepared to understand customer queries.

With customers increasingly asking for the integration of various services on an IP platform, few partners today have the skill sets that are needed to address these requirements in their totality. A typical IT partner might not have great expertise on the physical security or building management system and the converse is equally true.

Channel partners are already providing varied networking solutions to their customers including routing, switching, cabling etc. For them, it is about taking that extra step and offering IP surveillance solutions to the same customer.

**Future directions:** The market in India is warming towards the fact that security is important. The transition from analog to IP systems is expected to happen at a rapid pace in the coming years. The hospitality and government segment have taken the lead in driving this transition, which is expected to unfurl in other segments such as industrial, residential etc. The residential segment, which has hitherto been a poor adopter of IP surveillance, is also expected to boost its usage of this technology. Most mid- and high range apartments have started incorporating IP surveillance as part of the architectural design. With growth in volumes, the indigenous manufacturing of IP surveillance systems is expected to be encouraged. Currently, there are just a handful of companies involved in manufacturing/assembling surveillance cameras in the country and this is expected to change. As more indigenous manufacturing occurs, the price of IP systems is expected to drop considerably thereby boosting their affordability.

Even today, there is a big chunk of market that continues to use analog surveillance equipment. However, there is a strong and steady conversion to IP-based surveillance. Progressively, the IP-based pie is

increasing in the Indian market. Also, with more services getting converged onto IP-based platforms, the trend is definitely moving towards a bigger slice of the pie for IP surveillance.

Dax's Prabhakar said, "3G and video analytics will be the technology trend in the IP surveillance industry. 3G module integrated cameras can operate even in a cable free environment for video broadcasting and streaming from the 3G IP camera to a 3G mobile phone. Advanced features in video analytics such as people counting, object counting, face detection and crowd detection are an additional benefit."

Added Khattar, "The market will be growing now because it is seeing a shift from analog to IP. Going forward, the complete system will move towards wireless technology."

The market outlook suggests that high import duties and taxes may be reduced in the wake of increasing security concerns while IP and video analytics technologies will see greater adoption. The participation of private equity in the broader security systems and services market is also covered and is an indicator of growing investment interest in the industry.

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