

## IP cameras on the cusp of bigger market share

**The annual growth rate of network, or IP-based cameras, is more than 30 percent with rapid growth to follow**

By Joanne Friedrich, contributor

It's not a matter of if they will be adopted by the market, say those who deal in network cameras, but it's definitely a matter of when.

With all the buzz surrounding IP cameras for security, the actual switch to such cameras from an analog-based system is still minute.

At this stage, said Paul Smith, chief operating officer at DVTel, users are more focused on the network video system than they are on the cameras themselves. The difference being, he said, that systems can still employ analog cameras as long as they talk to the video management system via an encoder.

If network video management is 10 percent or less of business today, Smith said, network cameras as a part of that are less than 10 percent, ending up with the cameras still being a very small part, maybe 1 percent, of the overall picture.

However, Smith noted, as new cameras are employed in video management systems, end users are putting in network, or IP-based cameras versus an analog camera and encoder. "So the gap is diminishing between the two."

In fact, he said, network video management is now growing at an annual rate of 30 percent to 40 percent, and network cameras as a percentage of that business will grow more rapidly in successive years.

"All said, we've got a lot of business and this is the business to be in for the future," he said.

The security market has been slow to adopt network cameras, pointed out Joe Cook, network camera sales manager for Toshiba America Information Systems. "The fastest growth area for network cameras has been the PC reseller rather than the security reseller," he said.

But as the security market shows more potential, Cook said companies such as Toshiba are altering their products to fit the needs of the more sophisticated security customer. For instance, he said, Toshiba's initial product, aimed at the IT market, was an all-in-one network camera with lens, but newer models "are designed for security people with things they understand" such as different power options and vari-focal lens, he said.

Network technology has definitely caught people's attention, said Joe Moore, director of global marketing and business development at Infinova. "The hot item or buzz word now is IP for CCTV," he said. "People are very curious about it."

And a big part of that, he explained, "is that they don't want to be left behind."

Moore predicted the growth wave for IP will be similar to that experienced by the DVR market. As with the DVR, he said, "the advantages are so strong that the new technology will have to be adopted."

Looking even further back, Al Cavagnero, chief executive officer of Inetcam, said first the multiplexer had its run, then came the DVR. He predicted the industry is about halfway through the DVR's 10-year cycle and in the early stages of network camera usage.

"We're starting to get to the point where this thing will take off," he said. "If you presume it will be the same curve (as the DVR), we're about two to three years into the cycle."

Jim Voss, marketing manager-imaging systems at Pelco, said as customers transition into network cameras over the next five to seven years, manufacturers continue their own balancing act, supporting both the traditional analog business while "making a tremendous investment in IP."

"Companies that will be successful," he said, "are those that will provide transition products." With big investments in analog cameras and infrastructure, customers are waiting to transition, he said, especially until problems get addressed.

"If the value proposition was there, they'd switch over," he said.

As with any new technology, Cavagnero said, there are "bleeding edge" people who take on the systems even before all the bugs are worked out.

Those who spoke with Security Systems News said early adopters of network cameras include schools, government agencies, seaports, airports and other sectors that typically have an IT infrastructure in place.

As to the problems, Cavagnero said, those include quality issues such as low-light capabilities, bandwidth usage and the system's exposure because it resides on the IT network, where more people have access to it.

On the positive side, however, Cavagnero said IP-based cameras require less cabling and are very smart, with more and more intelligence being built into the camera itself.

Still, Cavagnero pointed out, analog cameras have been the mainstay for companies over the years with improved features for



*The talk of the security industry continues to be the role the IP camera will play in the future of this industry.*

pan/tilt/zoom, low light and day/night usage. "You know what you're going to get," he said.

Voss said it won't be any one thing that sparks a spike in network camera usage, but rather the overall improvement in different vectors.

He likened it to the rapid growth in MP3 players. "It wasn't any one thing (that caused them to take off)," he said, "but it was continuous improvement."

"IP will be like this - all these vectors (cost, compression, bandwidth, intelligence) have to come together."

Infinova's Moore said one of the biggest barriers is thinking it's an all or nothing proposition. "If you want all IP, it can be a tremendous amount of bandwidth," he said, which in turn, "would be a nightmare for the IT guys, especially if you run on their network."

So Moore said most companies are transitioning, using matrix switchers with built-in video servers that enable analog cameras to be viewed through the network.

"You're switching to IP," he said, "but in an economical and efficient way." In the meantime, he said, work continues on IP PTZ cameras and other products, especially software, that will further the transitional process.

DVTel's Smith agreed network cameras aren't a "passing fancy," so manufacturers need to deal with practical issues if they want to hasten their usage.

Bandwidth is one of the factors holding back more network camera usage, explained Cliff Franklin, president of Sabre Integrated Security Systems. "We're getting an increased call for IP cameras," he said, adding "they're a great concept. But video data is bandwidth hungry."

Franklin said because of the bandwidth issue, customers are still running two networks - one for their general data needs and one for security. Or, he said, clients are opting to use cheaper network cameras bought via the Internet rather than investing in security-grade network cameras or even more expensive analog cameras that can be converted to digital via an encoder.