

How to Shop for Analytics

Two issues can result in a disgruntled user — repeated fine-tuning and poor integration with video management software. Users typically have minimal software comprehension but high expectations. This, on top of the high cost, presents additional hurdles for analytics providers.

BY ROSA CHEN

Overpromising the ease of adding analytics is catching up to the industry. Vendors have realized limitations must be communicated at the onset, or else they risk increasing user distrust. Difficulties in testing and fine-tuning procedures, as well as integration with video management software (VMS) have been notoriously underestimated until actual installation.

TESTING AND FINE-TUNING

With all the things that could go wrong, an experienced integrator is needed during deployment. Most deployments require an initial setup, testing and fine-tuning stage.

TESTING

Users are quick to accept video content analysis (VCA) if it passes the initial test. “End-user tests are often successful because everyone on site is fully alert to the surroundings, but as time passes, problems in performance arise,” said Nicolas Jdanoff, Sales Director of IPVision (a Hymatom company). For example, a directional algorithm can be tested with one or two people deliberately walking in the wrong direction, while in reality, countless other variables affect the scene.

Users should bring in consultants or security managers for larger installations to oversee and ensure real-life testing, Jdanoff said.

FINE-TUNING

Careful tuning ensures effective monitoring. “Once the requirements and objectives are defined, an adjustment period of at least two to four weeks is needed, in

the sensitivity of VCA and the importance of proper tuning procedures.

For traffic monitoring applications, traffic patterns during peak hours and weekends can differ, requiring different rule sets, said Zvika Ashani, CTO and co-founder of Agent Video Intelligence. The same holds true for seasonal weather changes.

INTEGRATION WITH VIDEO MANAGEMENT SOFTWARE

Most analytics deployments integrate existing VMS. “Analytics are usually considered a separate purchase, so it becomes a big effort to add another system to the mix,” said Ed Troha, MD of Global Marketing at ObjectVideo.

However, most VMS providers cannot support deep integration with video analytics. In many cases, two separate servers are required — one for VMS and one for VCA, said Justin Schorn, VP of Product Development at Aimetis. This complicates maintenance and increases total cost of ownership.

If the VMS and VCA are separate products, full analytic features are often not available in the main video management interface, Schorn said. This means a third-party analytics product can do little more than notify



▲ In places with seasonal weather, manual tuning and recalibration is necessary, creating an added complexity for users. (Image courtesy of UTS)

which integrators must work with users to optimize each algorithm’s coverage,” said Patrick Lim, Director of Sales and Marketing at Ademco. “Our biggest problem is not with individual VCA systems, but with trying to remedy poorly deployed systems by customers who have been ill-advised.”

Most calls made to service centers are from users who have shifted a camera’s field of view, said Pauline Marin, Marketing Manager of Keeneo. This emphasizes

the VMS that an event has occurred.

Attempts to bring these two platforms together at a user level are limited, as customers need to be trained on two separate interfaces.

Some VCA providers like Aimetis and iOmniscient develop their own VMS, which offers native support for analytics.

“Funnily, the most questions asked by users are not about setting up the analytics software, but about connecting with the VMS,” said Dirk Owerfeldt, Senior VP of Viasys Intelligent Video.

The process can be time-consuming. “For analytics-enabled edge devices, often you need to add the cameras to the VMS, via clicking, dragging and dropping into

a folder. You then need to enter data on the VCA side, so that the analytics knows to send the information to the VMS. From there, protocols, IP addresses and port numbers must be configured on both sides,” Owerfeldt said. This process is repeated for every camera.

More partnerships must be developed between VMS and analytics providers, so the VMS can configure and edit VCA rules and display alerts, Troha said. The introduction of a communication protocol for not only VMS integration, but other hardware too, may mark a turning point.

Without more industry effort, true growth will be hindered regardless of how sophisticated or accurate VCA

becomes.

PRICE

The price of analytics varies, depending on volume, algorithms and region of deployment. Licenses per channel can range from US\$100 to more than \$2,000.

“To reach the mass market, the easy answer is to lower the price,” Owerfeldt said. As standards have yet to be set, few parameters can be drawn to determine “fair pricing.”

However, as the market grows, prices will drop. For faster commercialization, technical issues must be considered. Users will continue to hesitate if tuning and integration remain difficult and demand an installer’s intervention. 