

Video Analytics: Enabling Retailers and Casinos To Build Brand Loyalty, Increase Competitive Advantage, and Improve Customer Service

Believe it or not, retailers and casinos have a lot in common. Each has thousands of consumers moving through their facilities every day. Because of this, providing the best customer experience possible is critical to building brand loyalty and competitive advantage. Both are also working hard to grow sales by improving customer service without increasing payroll. Rapidly emerging capabilities in digital video analytics combined with dramatically decreasing prices are leading to successful pilots with sales increases of up to 26 percent.¹

Video Analytics Emerging as Viable Solution

To increase conversion rates in today's challenging economic environment, retailers know they must improve customer service, consistency of store execution, and employee productivity—all while minimizing costs. Yet, only about one-third of retailers think they can overcome these challenges.² The Cisco Internet Business Solutions Group (IBSG) believes this view exists because many retailers are unaware that recent advances in digital cameras and emerging video analytics technologies are already helping leading retailers and casinos.

Affordable “smart” digital surveillance and “eyeball” cameras (now enabled by sophisticated algorithms) can monitor core processes in store operations, merchandising, and marketing by tracking motion, dwell time, product movement, and gaps. These analytic cameras can also identify gender and age, and send out real-time alerts for customer service or security needs. When combined with an IP network, video from these cameras can be easily retrieved, shared, integrated, and analyzed within the store and across the enterprise.

Business-focused video analytics is still in its nascent stage. There are numerous vendors, limited awareness of solutions, relatively expensive analytic services, and less than 100 percent automated accuracy. Even so, industry experience with video analytics is growing rapidly, sophistication is increasing, managed services can be affordable, and automated accuracy (often as high as 95 percent) is effective for many store purposes. For leading retailers that want to compete more effectively post-recession or that have planned surveillance upgrades, video analytics offers many new possibilities to improve customer loyalty and grow basket size by delivering an improved experience for shoppers.

Six Video Analytics Opportunities

Cisco IBSG believes there are six significant video analytics opportunities for retailers: 1) strengthen loss prevention and tighten security, 2) optimize staffing and ability to approach customers sooner, 3) improve product availability and ensure the right product assortment, 4) strengthen processes and employee productivity, 5) increase display and digital advertising effectiveness, and 6) gain customer insights and improve store layout.



Cisco Internet Business Solutions Group (IBSG)

Even a minimal investment in video analytics can lead to significant improvements. For example, one camera with analytics to monitor traffic can rebalance staffing and reduce wait times at counters, checkouts, and in high-value departments.

More significant investments can reduce out-of-stocks by monitoring product gaps on shelves and enabling reengineering of key store processes. By correlating display product pickup or signage viewing with point-of-sale (POS) data, marketers can raise their return on investment. In addition, customer behavior questions like “How many customers come into my store for services, but never buy anything?” or “Was my investment in that costly fixture worth it?” can now be answered more frequently and at a lower cost.

Optimal Solution Can Increase Net Margins by 9 Percent per Year

An optimal video analytics solution combines a single, open IP-based video platform capable of capturing multiple video feeds from various digital and analog sources. The platform should also use best-of-breed metadata, storage, viewing, and video analytics applications to take advantage of all opportunity areas.

By placing intelligence where it adds the most value to the organization (in cameras, routers, servers, or the data center), and by choosing the right business model (enterprise, managed services, automated, or human verification), a retailer can exploit video analytics in a way that achieves its particular business goals. Furthermore, there is a beneficial investment level for every retailer. A typical \$20 billion retailer with an IP infrastructure could consider per-store spending scenarios ranging from a one-time investment of \$9,000 with \$0 ongoing costs, to a \$35,000 investment with ongoing service and broadband costs of \$13,000.

In any one of the scenarios described above, potential increases to annual contribution from video analytics could range from 0.5 to 5 percent with payback in 10 to 18 months. In fact, Cisco IBSG believes combining benefits from all six opportunity areas could increase the net margins of a typical retailer by 9 percent per year.

Real-World Retail Examples

Using video analytics, Macy's reduced its time spent reviewing loss incidents by 75 percent.³ Adidas reduced payroll 20 percent after six months.⁴ Cabela's increased sales 26 percent in high-value departments by monitoring its time to serve customers and then using training to improve performance.⁵ And finally, Jumbo Supermarkets has used video analytics to lower fresh bread out-of-stocks from 35 percent to 6 percent.⁶

Next Steps

To experience similar results, first assess what video analytics can do for your business by asking, “What's possible in this quickly emerging area?” and “Which areas of my store hold the greatest benefit promise?” Next, get your technology platform in place by establishing a suitable IP network and developing your technical architecture approach. Finally, start experimenting with pilots to identify what will work for you.

To learn more about video analytics while you are at NRF, visit Cisco's booth #2529 or listen to the Big Ideas session on January 11, 2009 at 3 p.m. Eastern Time.

Sources: ¹Cisco IBSG, 2009; ²RSR Research, 2008; ³Cisco, 2007; ⁴*South Florida Business Journal*, 2009; ⁵Scopix, 2009; ⁶*Ibid.*