

Santa Barbara Sheriff's Department wields innovation to fight fraud and inefficiency.

Overview

■ Challenge

Santa Barbara Sheriff's Department (SBSD) had to find a way to balance rising law enforcement demands and increasingly tight budgets—all the while keeping the public safe.

■ Why Become an On Demand Business?

SBSD needed to transform the way it gathered and managed crime and incident-related data to get more out of its scarce resources and to protect itself from legal vulnerabilities.

■ Solution

SBSD engaged IBM to build a highly innovative crime data management system whose automation, flexibility and security provide a quantum leap in effectiveness while providing a solid deterrent to fraudulent legal actions.

» On Demand Business defined

An enterprise whose business processes—integrated end-to-end across the company and with key partners, suppliers and customers—can respond with speed to any customer demand, market opportunity or external threat.



With approximately 275 sworn deputy sheriffs, 200 sworn correction officers and 200 civilian employees, the County of Santa Barbara Sheriff's Department (SBSD) provides law enforcement as well as custody and court services for California's Santa Barbara County. The jurisdiction of SBSB covers more than 2,744 square miles.

■ Key Benefits

- *Projected 90% reduction in legal fees and 40% reduction in time officers spend in court*
- *Avoidance of millions of dollars in potential settlements through secure, tamper-proof evidence management*

Demographic change is one of the few constants in American life. In the past several years, one of the most prominent trends has been a gradual shift in the nation's center of gravity to the South and West. Within these high-growth regions, many cities and towns have faced an increasing challenge in meeting the sharply rising demand for basic public services.

“Protecting the public and ensuring the safety of our citizens is our top priority. IBM's digital video surveillance solution will help enhance our ability to fight crime, while providing our deputies with a tool to improve training and reduce costs.”

— Tom Jenkins, Commander, Santa Barbara Sheriff's Department

On Demand Business Benefits

- Projected 90% reduction in legal fees
- Projected 40% reduction in time officers spend in court, enabling more time protecting the public
- Millions of dollars in potential settlements avoided through secure, tamper-proof evidence management
- 70% reduction in officers' time spent filling out redundant reports
- More law enforcement capability extracted from the same personnel resources
- Ability to handle future law enforcement needs in the face of tight budget resources

Despite its critical importance, law enforcement is no exception. While a recent study by the RAND Corporation pegged the optimal ratio of sworn police officers to residents at 2.0 per 1,000, western states—among the fastest growing—fall well below this benchmark, at roughly 1.7 to 1.85 per 1,000 (based on recent FBI statistics). Continuing population growth will only accentuate this disparity and further stretch resources. While the issue of safety always looms in the background, the real message in this data is the need for cities and towns to adapt their law enforcement practices to the long-term reality of tighter budgets and limited resources. It means fulfilling a growing mission even if the growth of resources doesn't keep pace. The key to success is innovation.

The Santa Barbara, California Sheriff's Department (www.sbsheriff.org) is a powerful case in point. With approximately 400,000 citizens in its jurisdiction, the Santa Barbara Sheriff's Department (SBSD) had long followed a set of standard practices that were firmly entrenched within law enforcement across the nation. Among the most basic yet important was the manner in which it recorded and reported the actions of officers in the course of traffic stops, arrests, accidents or other incidents. In the field, officers input information textually through dash-mounted mobile data terminals. At the end of their shift, they would then transfer the data to the department's databases via removable media. Additionally, officers involved in car accidents were required to fill out a mountain of paperwork, much of it redundant with its in-car system data. With administrative staff required to store, maintain and access these reports, the SBSB's backend processes compounded the inefficiency. On the whole, inefficient systems and processes prevented the SBSB from getting the most out of its core resource—its officers on the street.

Clarity of evidence

The SBSB was also grappling with a number of issues related to the way information was used as evidence in cases. The most prominent was the SBSB's inability to quickly and decisively refute spurious civil liability claims (e.g., wrongful arrest, police brutality) that sometimes arose from police calls. Forced to respond to frivolous lawsuits and liability claims, the department incurred substantial legal fees, while officers spent much of their time making court appearances, giving depositions and filling out reports—all of which further sapped resources that could otherwise be applied to law enforcement activities. While the SBSB knew intuitively that a video-based solution would address the need for irrefutability, it also saw the need to factor in its broader requirements, improved efficiency being the most obvious. Less obvious, though equally important, was the need to enable a more seamless chain of evidence within the SBSB—an issue which itself presented a potentially high degree of legal exposure. For the solution's attributes, this meant a mix of strong security, flexibility and manageability that only digital video could provide.

Transforming incident data management

After an exhaustive review, SBSB selected IBM Global Services–Integrated Technology Services to implement an in-car digital video solution based on digital video technology from IBM Business Partner Coban Research and Technologies (www.cobantech.com). The new solution automatically captures high-quality video images of traffic stops and criminal activities, in the process generating a “digital watermark” that ensures the integrity of the images by preventing video files from being manipulated. The solution’s key innovation was to combine digital video technology with wireless technology from IBM Business Partner Proxim (www.proxim.com), which gave SBSB the means to completely transform the way its officers manage their case information.

The most basic benefit is increased flexibility, since officers can now automatically upload video (SBSB also plans to put in place the ability to upload incident reports anytime they’re located in a coverage area—a capability that would have been impossible with an analog-based video solution). From there, the solution’s functional benefits multiply based on the inherent manageability of digital media. Like the “black box” on an airliner, the SBSB’s in-car terminals can record and track incidents along with valuable metadata in parallel with the video recording, ranging from the time, date and GPS location of the incident, to speed radar readings and weather conditions. With richer data at their fingertips, SBSB can more readily respond to—and if necessary refute—frivolous or contradictory claims resulting from incidents. Moreover, by enabling law enforcement staff, attorneys or other authorized users to search clips using metadata variables, the solution reduces the administrative costs associated with case follow-ups.

Another planned innovation enabled by the solution’s wireless connectivity is the ability to perform remote realtime monitoring of what may be termed “high-risk” locations or establishments, such as casinos and banks. This telemetry capability will lay the groundwork for SBSB to transform its practices in two key ways. First, by enabling officers to provide more intensive coverage with the same resources, it will increase the department’s overall efficiency and deliver more protection for taxpayers’ dollars. Second, in the event of an incident, having a realtime wireless feed will be able to provide SBSB with a means of coordinating its resources to respond accordingly. In keeping with the true definition of innovation, SBSB is moving toward using wireless digital technology to fundamentally change the way it protects citizens, and is doing so in a way that gets the most from its resources.

The solution’s core digital video management software runs on a pair of fully redundant IBM @server xSeries 346 servers, one running at SBSB headquarters, the other at a remote location for backup and disaster recovery purposes.

Key Components

Software

- IBM Tivoli® Storage Manager for System Backup and Recovery V5.1
- IBM Director
- Coban Digital Video Management System (DVMS)

Hardware

- IBM @server® xSeries® servers
- IBM TotalStorage® McDATA Fibre Channel Switches
- IBM TotalStorage DS4100
- IBM TotalStorage 3584 Ultrium UltraScalable Tape Library

Services

- IBM Global Services–Integrated Technology Services

Business Partners

- Coban Research and Technologies
- Proxim

Time frame

6 months

“IBM didn’t just hand us the solution. They took the time to train our staff to ensure that we got the most out of our investment. Its commitment to our success helps us deliver on our commitment to keeping the public safe.”

– Tom Jenkins

The SBSB selected the xSeries server due to its strong remote diagnostic and management capabilities which enable the department to easily and cost effectively manage its backup server. To handle the all-important storage of its video files, the department demanded reliability while at the same time balancing cost and access speed. Under the solution configured by IBM, the SBSB uses a cost-efficient mix of disk and tape drive storage on the department's external storage area network (SAN). IBM TotalStorage McDATA Fibre Channel Switches and IBM Director software manage the connectivity between the xSeries servers and the SAN. In the short term, files are stored on an IBM TotalStorage DS4100 device. After remaining in short-term storage for a preset period, the system automatically transfers them to IBM TotalStorage 3584 Ultrium UltraScalable Tape Library storage devices for archiving using IBM Tivoli Storage Manager for System Backup and Recovery software. Tivoli Storage Manager will also be used to automatically backup all data to offsite storage.

Instant payoff

With IT budgets tight and cost justification key, SBSB needed to make a solid business case for investing in the new system. It wasn't long before that value became obvious. By providing a secure platform for gathering and managing visual evidence, the digital video solution is expected to steeply cut frivolous lawsuits against the department, leading to an estimated 90 percent reduction in legal fees and a 40 percent reduction in the time officers spend in court. When combined with the value of settlements averted, the potential dollar savings run into the millions. The transformation of policing practices enabled by the solution has also led to substantial improvements in the productivity of the department's officers—which ultimately translate into more time spent protecting the public. The department has seen a 70 percent reduction in the time officers using the system have spent on administrative reporting, which had previously been a notorious source of waste.

Discussing the solution's payoff, SBSB Commander Tom Jenkins sees the willingness of the IBM Global Services team to go the extra mile as a big reason for the project's success—as well as a key reason for its selection. "IBM didn't just hand us the solution. They took the time to train our staff to ensure that we got the most out of our investment," says Jenkins. "Their commitment to our success helps us deliver on our commitment to keeping the public safe."

For more information

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