



Mug-Shot Imaging Systems

By JOHN J. PAVLIS

woman walks into a police substation to meet with a detective. The victim of a robbery, she knows that she has seen the suspect before and believes that she knows his first name. Along with this information, she gives his race, approximate age, height, and weight. She expects to spend time looking through mugshot books like those used on television police shows. Instead, the detective sits down in front of a computer workstation, types in the basic identifying information the victim has provided, and brings up a series of pictures on a high-resolu-

tion screen. When she sees the third picture, the woman exclaims, "That's him!"

A mug-shot imaging system, used to identify the suspect in this case, is a new investigative weapon in today's law enforcement technological arsenal. This article discusses the traditional photo identification process, the evolution of photo imaging systems, and how to train personnel on these systems.

Traditional Photo Identification

In Orange County, Florida, all arrested persons are booked through one central booking facility. Until 1988, mug shots were taken of each prisoner, and the film was sent to the photo lab for processing. When the color negative was returned to the facility (in approximately 4 days), it was microfilmed in black and white, and the color negative was placed in the defendant's criminal jacket, along with the fingerprint card.

However, the black and white microfilm oftentimes prevented detectives and witnesses from making positive identification during lineups. Therefore, it was necessary for identification personnel to send the color negatives of certain suspects out to be processed into color prints. The minimum processing time was approximately 4 days, and if retakes were necessary, the process was delayed even further.

Additional delays were also common because the sheriff's office is comprised of four geographical substations that cover a territory of over 1,000 square miles. Detectives from all of the substations were required to drive to the centralized records section to pick up any copies of photographs requested. This made it even more difficult to obtain photographs within a reasonable period of time which, in turn, slowed down investigations.

In order to alleviate many of the problems associated with traditional photo identification, officials considered several options to streamline the mug-shot photographic process. They believed imaging technology to be the most viable option.

Imaging Technology

Mug-shot imaging is a system of digitizing a picture and storing that image on a computer so that it can be retrieved at a later time. The picture is taken with a video camera and is then transferred to a color video monitor, where it appears as an electronic image.

When the computer operator obtains a suitable image on the monitor, the command is given to digitize the image. The image is then filed to an optical disk housed in a jukebox that the computer accesses when it goes into a search mode for information requested. When the image is filed, the operator enters the identifying data, such as race, gender, date of birth, and the case number of the suspect.

Identifying data, along with the location of the image on the optical disk, are recorded on an index file. The data entered and tied to the picture are saved in a database that allows for search and retrieval of any information or parameters requested. The computer records are then integrated with other information taken at the time of booking. Officers at any substation can then access the data bank to view or print images.

Another important feature of the mug-shot imaging system is that it is menu driven. The menu consists of a screen display that presents users with a number of options and allows them to choose whatever options they need. Officers need only read what is on the screen and follow the instructions given. This makes the system less intimidating to officers who have limited knowledge of computer operations.

Training

Unless employees are thoroughly trained on a new system, they are unable to appreciate its capabilities and will fail to use it to its fullest. Therefore, all sheriff's office employees were trained to use the imaging system.

Training from the vendor was written into the initial purchasing contract for the imaging system. The individual training incorporated the various available training methods, such as handouts, audio visuals, hands-on training, etc. This training was carefully scheduled so that the sessions coincided with the implementation of the system.

In addition to proper training, a changeover from a manual system to a computerized system required advanced planning. Specific problems needed to be identified and possible solutions to these problems were proposed during the training sessions.¹

<text><text><text>

Benefits

It is imperative that law enforcement agencies collect, report, and analyze information quickly and accurately and distribute it to all other components in the system. Computer imaging of mugs shots has proven to be an effective tool to accomplish this.

Once the system was online within each geographical sector, a demonstration was provided to all patrol officers and detectives, who though the initial plan addressed the needs of the Orange County Sheriff's Office, other city agencies are now online with terminals of their own to access available information as opposed to sending officers to the sheriff's office to obtain photos.

POSSIBLE APPLICATIONS

Today, more law enforcement agencies are using mug-shot imaging technology. Although it is

66

Mug-shot imaging is a system of digitizing a picture and storing that image on a computer so that it can be retrieved at a later time.

saw firsthand how quickly the information and pictures they requested could be retrieved. The mug-shot imaging system provides officers with improved efficiency over the 70mm snapshot photograph system, a much improved selection of suspects by eye witnesses, and more timely and accurate identification of offenders.

At the same time, the department benefited by providing a better investigative tool to its officers. The new system has not only reduced the number of workhours needed to process mug shots and photo lineups but it has also reduced the transportation costs of officers driving to one central location for photographs.

The surrounding Orange County area benefited as well. Al-

primarily being used in office/ document automation systems that agencies develop to store and handle the increasing amount of information gathered, other uses of this technology are practically limitless.²

For example, the Orange County Sheriff's Office is presently using this system with a laser printer to produce wanted flyers for those sought on warrants. The pictures on these flyers are very clear, with excellent resolution.

Other possible uses include:

 Photos of missing children/ persons (These could be quickly digitized and sent to all locations that have imagery workstations. Quality pictures could then be distributed to personnel in the field in a timely manner.)

- Photos of all police employees (These could be digitized and kept in separate files for use in internal affairs investigations instead of using employee photos that are often of poor quality. Current digitized photos could be added periodically to keep the records timely.)
- Digitized photos of wanted individuals (These could be sent to other agencies via the computer instead of fax machines, which sometimes produce poor quality photos.)

In addition, some law enforcement agencies are currently working to provide mug-shot imagery and fingerprint transfer from patrol cars.³ This would allow officers to fingerprint individuals while in the field and transfer the print back to a designated location. If an identification is made, a mug-shot photo (if available) could be sent back to the officer to further assist in the investigation.

Conclusion

A mug-shot imaging system can make a positive impact on police departments nationwide. The technology is available. Now, it is up to police departments to make use of this computerized investigative tool. \blacklozenge

Endnotes

¹ Management Evaluation of Software Packages (Wellesley, Massachusetts: QED Information Services, Inc., 1985), 139.

² Richard Rubin, "Computer Trends in Law Enforcement," *Police Chief*, April 1991, 20-24. ³ Product Spotlight, *Law and Order*, November 1989, 104-105.