

# INVESTOR'S BUSINESS DAILY

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## INTERNET & TECHNOLOGY

### As Crime Fighters Study Data, SPSS Steps In

#### Spotting Crime Trends

Firm's analytics software spreads, helping lift its stock to a five-year high

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INVESTOR'S BUSINESS DAILY

Companies have long used predictive analytics software to anticipate the needs of customers. Now many law enforcement agencies are using similar techniques to ferret out criminals.

That's great news for Chicago-based SPSS<sup>SPSS</sup>, whose software helps detect fraud and other criminal activity. Police departments and other groups are turning to SPSS to study their vast information banks — a process called data mining.

The new systems sift through crime data to spot crucial trends, says Colleen McCue, former supervisor of the crime analysis unit of Richmond, Va.'s police department. After the 2001 terror attack, there's been growing pressure to adopt the technology, she says.

"Data mining is used a lot in the business community, but law enforcement is still challenged by the format," said McCue. "After 9-11, it was frustrating to realize that Wal-Mart<sup>WMT</sup> has better analytics for their stores than any police department in the country."

As law enforcement steps up its efforts, SPSS could see a windfall. The company has specialized in statistical analysis and fraud detection since 1968. As such, its software is a natural fit for crime prevention, says SPSS Chief Executive Jack Noonan.

"It's the same thing if you're

using our software for the public sector or for business," Noonan said. "In both cases, it's about the good guys finding the bad guys."

Public-sector sales have helped spur growth at SPSS over the past year. The new contracts also have given SPSS more credibility among business customers, Noonan says.

In its third-quarter report on Tuesday, SPSS said earnings rose 108% to 27 cents a share, excluding one-time items. Sales grew 9% to \$58.3 million.

Shares of the company soared 21% Wednesday, closing at 26.54. That puts the stock at a five-year high.

Wall Street investors were pleased that new software license revenue grew 22% over the prior year's quarter. That's a strong indicator of future sales growth, says Steve Ashley of Robert Baird & Co. He has an outperform rating on SPSS stock, which equates to a buy.

"They're creating new nascent markets for predictive analytics such as crime-fighting, and that's an interesting business," Ashley said.

It's also a tough business, as online crooks adjust their tactics to elude detection. Law enforcement officials must play a constant game of cat and mouse. Analytics software can help by identifying subtle changes in criminal behavior.

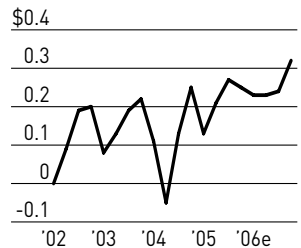
"The technology pores through massive amounts of data, so you no longer need to rely on gut instincts to make decisions," Noonan said.

For example, the U.S. Army's Homeland Infrastructure Security Threats Office, or HISTO, uses SPSS to track

#### Analyze This

Amid rising sales of its analytics software, SPSS has seen profit surge in recent quarters

SPSS quarterly sales, in millions



Source: Thomson First Call

cyberattacks and network intrusions. The software's algorithms can discover patterns and relationships.

That helps HISTO predict and control hazards that may threaten troops and supplies, says Army Maj. Jeffrey Newhard, the agency's director. He was understandably vague when asked to describe some specific uses for the software.

"We're looking at who's attacking us or who has the greatest means of attack," he said. "We're seeking to learn the approaches of state-sponsored entities or rogue groups and how they gather information."

The Bureau of Justice Statistics relies on SPSS to analyze crime figures from the Justice Department. And the Defense Department uses predictive analytics to screen the best candidates for its toughest jobs, such as in the Navy's Sea, Air, Land (SEAL) special forces unit.

The Navy seeks to understand the personal qualities of its most successful SEALs. In this way, it can target recruits who are more likely to handle the extreme pressures of combat.

The software weighs such factors as school grades, sports and hobbies, and whether a recruit's parents served in the military.

"Based on such data, you can create a picture of somebody who is more apt to have a favorable outcome," said Noonan.

At the municipal level, the police department in Richmond, Va., uses analytics software to gauge local crime trends.

The software helps police captains make better decisions about when and where to deploy officers.

In years past, Richmond police covered the streets on New Year's Eve in hopes of reducing random gunfire. That often led to overkill, "with so many officers standing around cold and bored," said McCue, who left the police force last year to become a senior scientist at RTI International, a research group.

SPSS data-mining software revealed that the gunfire problem was worst from 10 p.m. to 2 a.m. in certain hot spots. So instead of the whole department pulling an all-nighter in 2004, some officers were heavily deployed to the trouble zones between 8 p.m. and 4 a.m.

As a result, complaints of random gunfire fell 47% from the year before. Recovery of weapons went up 246%. And 50 fewer police officers were needed to staff the eight-hour shift.

That saved the city \$15,000, says McCue.

"Prevention is always cheaper than dealing with crimes after the fact," she said. "Being able to put an analytical output into the hands of our officers and special agents makes an incredible difference."