LEVERAGING BUSINESS INTELLIGENCE IN SECURITY STRATEGY

SECURITY
MANAGEMENT

iViewSYSTEMS
Security | Surveillance | Solutions

Today, nothing is more critical to security and loss prevention operations than meaningful data. Every department within the operation bears the responsibility to not only provide useful data, but to continually improve the value of that data. Business Intelligence (BI) is used to help companies gain insight into their operations; segment and target information to improve customer security, safety, and experience while finding anomalies in the heaps of data to run more efficiently and effectively.

This white paper explores how to change the game for companies. Learn how to collect and leverage data to achieve effective loss prevention, risk mitigation, efficient fraud detection, incident analysis, and monitoring.

HARNESS BIG DATA

Today, the sources and volume of data collected have exploded. Security operations collect every event and incident from every transaction from various sources including telephone/radio calls, alarms, environmental sensors, intrusion-detection systems, and video surveillance.

The modern security department uses a set of processes and supporting technologies for data management to allow security practitioners greater flexibility in cobbling together disparate systems into a unified security information system that enables Security Directors to know exactly what's going on, in real-time while providing analysis to generate actionable items that can give security operations the agility it needs
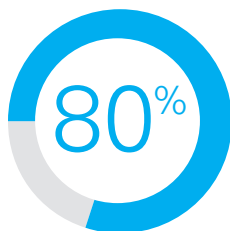
CAPITALIZING ON BIG DATA:

Strategies outperforming companies are taking to deliver results

Leaders are

166%

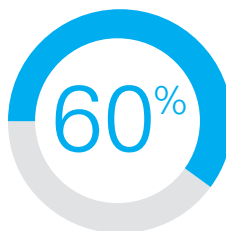more likely to **make most decisions based** on data

And are

2.2x

more likely to have **formal career path** for analytics

75%

of Leaders cite **growth as the key source of value** from analytics

80%

Leaders **measure the impact** of analytics investments

60%

Leaders have **predictive analytics** capabilities

85%
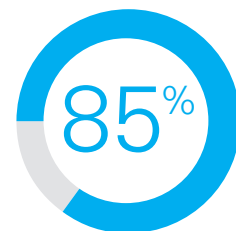
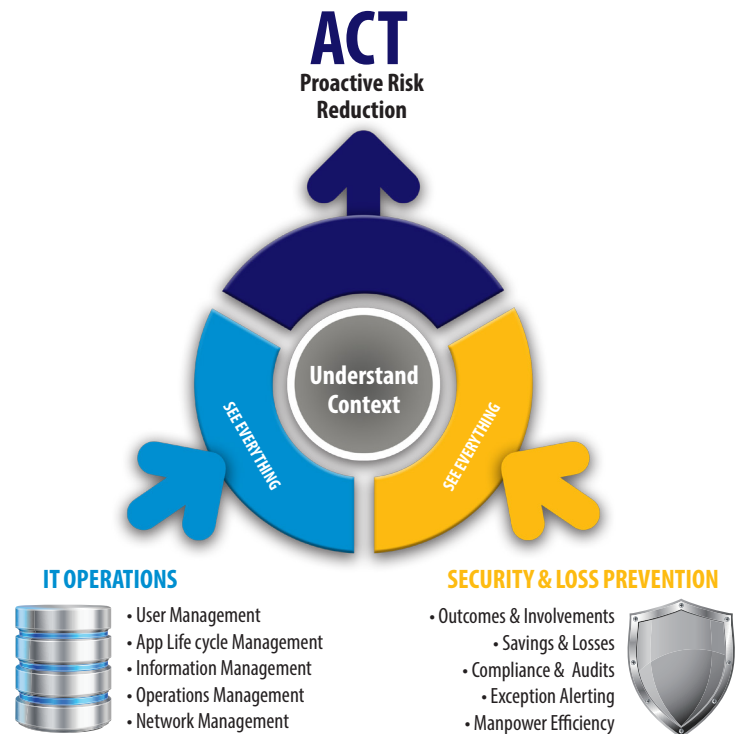Leaders have some form of **shared analytics resources**

in times of crises.

We define "big data" as a capability that allows companies to extract value from large volumes of data. Like any capability, it requires investments in technologies, processes, and governance.

There is no doubt that business intelligence software provides the ability to analyze a multitude of transactions and information on one centralized platform, empowering users to capture, analyze, and glean actionable insight from the layers of data within the enterprise. Data-driven risk management requires situational awareness that can only come from a systemic and holistic approach. True value comes from correlating large amounts of incident and security data and presenting it in a visually appealing format, whereby users are able to quickly draw conclusions and act on them in a timely manner.

Nowhere is this more true than in the security function, where protection can only be as complete as situational awareness. By giving safety, security, risk management, and loss prevention managers the ability to track, organize, and analyze their data via configurable dashboard visualizations, BI software can provide context and comparison of security-related information. This context moves the risk capabilities of an organization toward prevention from a traditional reactive reporting and documentation function, providing the ability to show causality and structure, while giving insight into security and safety-related issues.

More than 86 percent of respondents to a June 2016 survey by *CIO Insight* now say that BI is important to their company and intrinsic to their role. Global revenue in the business intelligence and analytics market will grow more than 5 percent in 2016, reaching $16.9 billion this year according to a recent Gartner forecast. But it is only now that BI and analytics have matured enough that the market is offering easy-to-use, agile products designed for specific business functions. Off-the-shelf software products provide a way for data to be incorporated into larger enterprise BI. They are grounded in specific functions in a way that fills the gap between the promise of BI and the

ACT
Proactive Risk Reduction

Understand Context

SEE EVERYTHING

SEE EVERYTHING

IT OPERATIONS
• User Management
• App Life cycle Management
• Information Management
• Operations Management
• Network Management

SECURITY & LOSS PREVENTION
• Outcomes & Involvements
• Savings & Losses
• Compliance & Audits
• Exception Alerting
• Manpower Efficiency

reality of its application in the business unit and in small to medium-sized businesses. For the purposes of this paper, we will consider the iTrak® Business Intelligence package available from iView Systems. While there are many competitors in the BI field—many of which are already in use in organizations that have not adopted BI for security—iView software is built specifically for the needs of security, surveillance, and loss prevention. Unlike SAP, Microsoft BI, IBM Cognos, and other enterprise-level BI solutions, iTrak® is not a software that needs to be bent to the task of security and loss prevention through extensive customization and programming, but one that can be immediately deployed to produce results.

BUSINESS INTELLIGENCE WITH ROOTS IN SECURITY AND LOSS PREVENTION

BI is not shaping just the practice of security and loss prevention, but also their overall role in the enterprise. "In the security and related risk fields, data comes in an unending stream from every device and direction," says Martin Drew, president of iView

Systems. Harnessing that data provides operational insights that create greater organizational efficiencies. The investment in security is no longer just about protecting assets—but about leveraging those capabilities to create a financial return that is directly attributable to that investment.

Security practitioners have long competed at a disadvantage with other departments that made demonstrable connections to the financial bottom line. As the IT function became more integrated with security operations, the requirement to "make a business case" became the challenge for every upgrade or new investment. But as Avi Perez, the chief technical officer for Pyramid Analytics writes, the best practices of business intelligence are not about making business cases, but about solving problems.

The iTrak® BI application was built explicitly for the security function and is rooted in just that—detecting anomalies in the data to solve problems. The first and most obvious return on investment BI makes is in the reduction of manual security processes. Fully 76 percent of midsize or larger companies (more than 500 employees) relied on manual processes for exception alert reporting from physical security systems as recently as two years ago according to ASIS International research. Fewer than 30 percent of these same organizations had invested in business intelligence at that time. Considering that fully 71 percent of companies were using BI in some aspect of their operations as early as 2012, this represented a comparatively slow adoption rate by security practitioners. When iView Systems committed to change these statistics with its iTrak® BI it found one of the most ready sectors to be the gaming industry.

90% of information transmitted to the brain is visual and is processed 60,000 times faster in the brain than text. Companies can buy back time using compelling visuals and eliminate the noise of spreadsheet reporting.

"Casinos would spend as much as five days of every month just doing required manual reports," says Giselle Chen, senior business intelligence analyst at iView Systems. Automating that process can virtually eliminate that time requirement and improve the accuracy of reports, while speeding the dissemination of the information to all identified stakeholders by simply scheduling the reports to run at whatever required interval.

"Several dashboards can eliminate virtually hundreds of reports and provide the ability to quickly drill down from the highest summary to as many established groups and sub-groups as required—even down to individual incidents," says Chen. The investigation is not conducted through reams of paper, but by highly intuitive paths navigated by the simple click
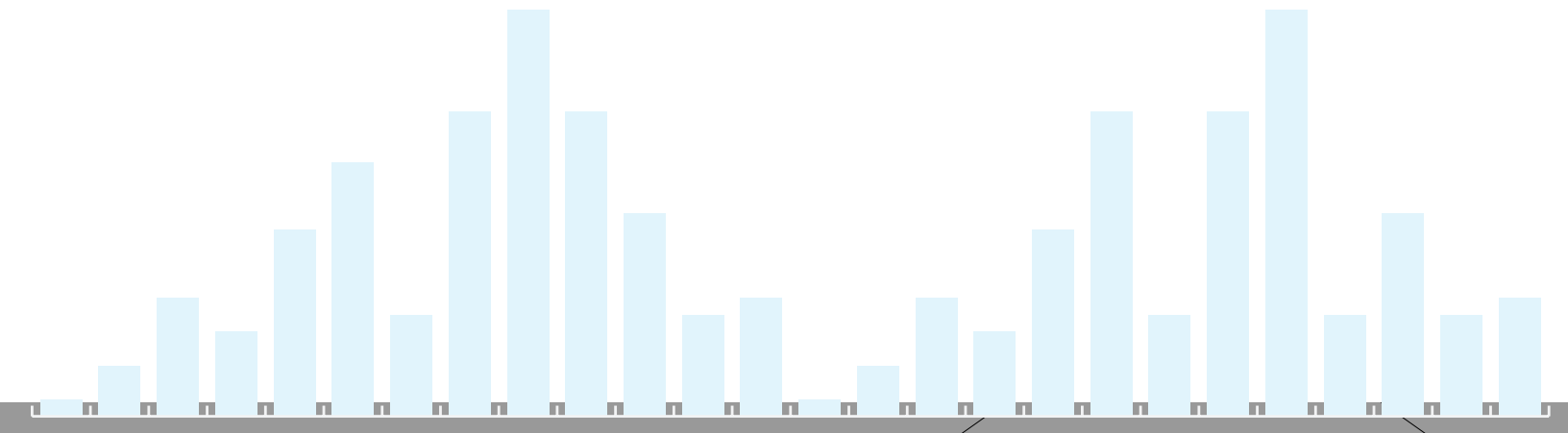
of a mouse. An international organization such as a hotel would be able to identify gaps in efficiency as the aggregate effect impacts the overall organization. Users can also expect a substantial decline in errors. While errors will always occur, through BI they can be addressed at a systemwide process level and fixed once. With manual reporting, a certain persistent level of error exists mostly at the incident report level. Training and active monitoring can help to reduce these, but human error is simply the cost of doing business with manual processes.
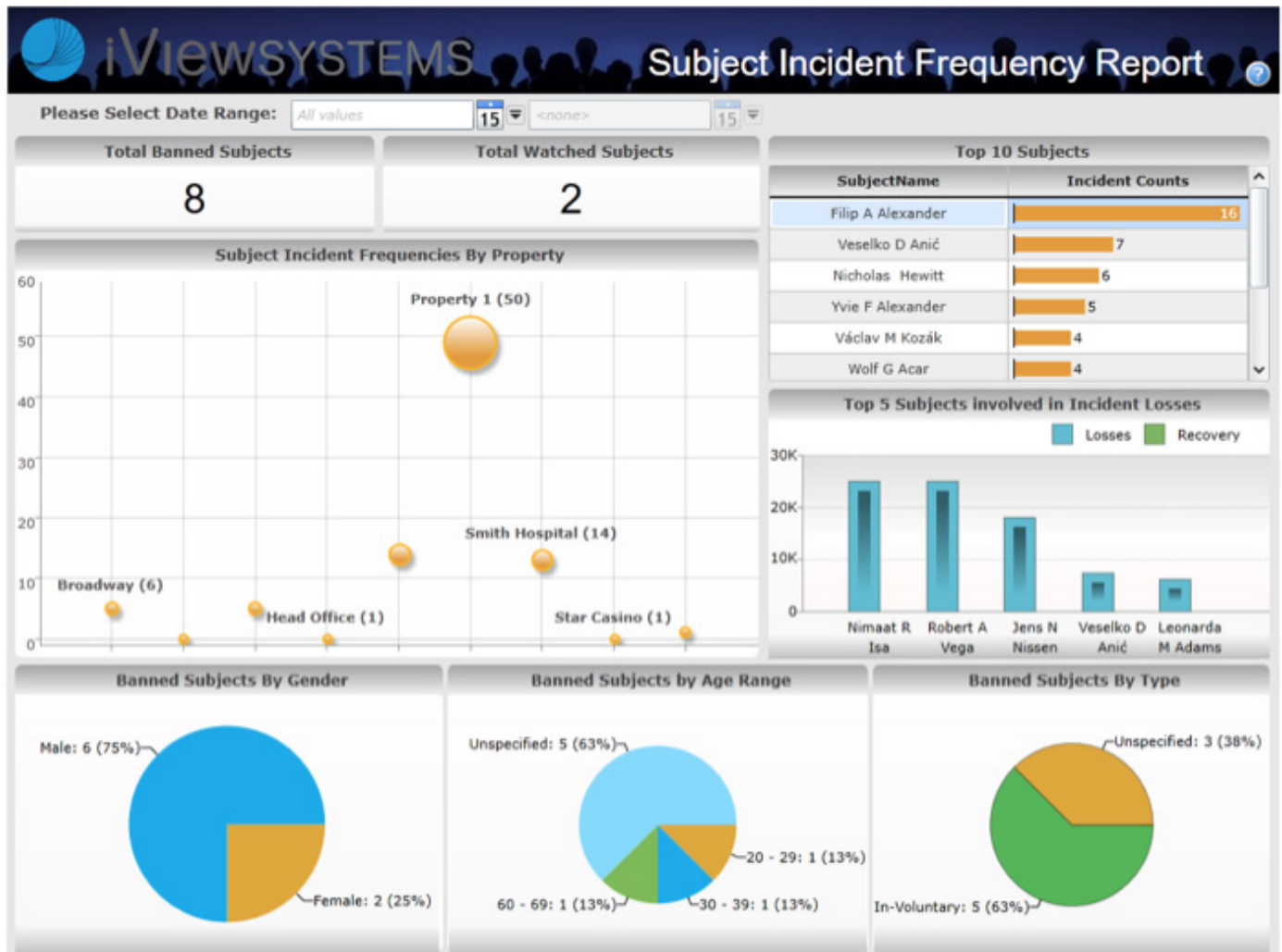
DATA VISUALIZATION: A NEW VIEW.

From this larger awareness, gaps can be explored

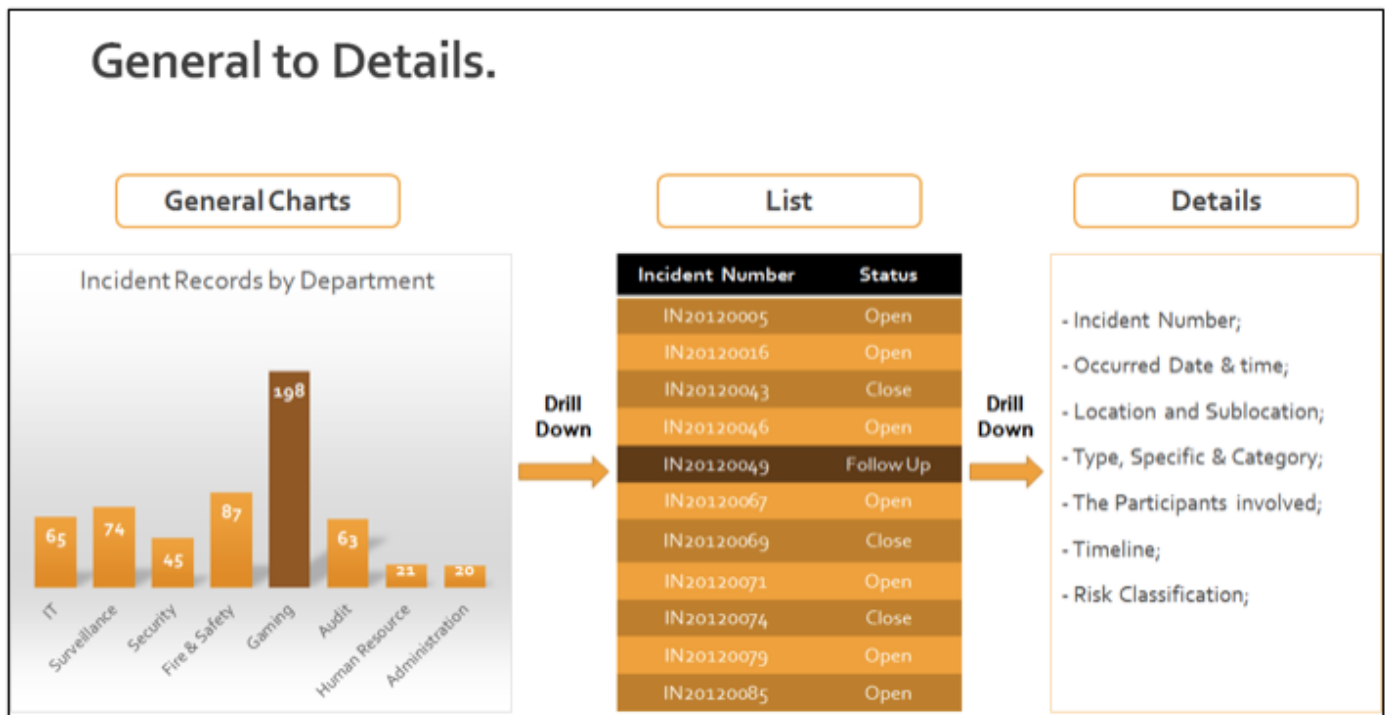**Several dashboards can eliminate virtually hundreds of reports**

and analyzed by specific regions, types of properties, or seasons of the year. This is the nature of how BI and analytics provide established reports and dashboards to raise situational awareness while providing ad hoc reporting to investigate the source of problems. Throughout the process, data visualizations depict the rows and columns of raw data in an intuitive format. Incident reports presented as bar charts immediately draw the eye to anomalies. Pie charts, heat maps, and bubble graphs all create pictures that more directly engage the problem-solving capacity of the human brain.

By filtering out all the steps it takes to get from raw data to the dashboard display, BI software makes

General to Details.

it easier and faster for end users to understand the information and how it relates to their department and operations using customizable data visualizations and dashboards.

SHOWING THE BIG PICTURE AS WELL AS SUPPORTING DETAILS

Another key benefit in every security environment is reducing the impact of false alarms. "As much as 80 percent of any front-line security officer's day can consist of responding to false alarms," says Chen. The high rate of false alarms inflates the number of personnel required to guard a facility and can reduce the response time to actual incidents—increasing costs, while lowering efficiency.

With BI, supervisors have a real-time awareness of how their resources are allocated—where officers are dispatched, which officers are on break—while distinguishing proprietary from contract staff and armed from unarmed officers.

SELF-SERVICE BUSINESS INTELLIGENCE (SSBI)

Self-Service BI enables business end users to rapidly design, deploy, and analyze reliable data, at a

relatively low cost to a business unit, with less dependence on IT.

"Reports are highly customizable and the training to use the BI toolset can take as little as 10 minutes," says Chen. "Once a system is implemented, much of the data is already customized according to the requirements of the facility and the organization. The data, entered once, can serve many purposes without the burden of multiple entry in different systems.

From there, end users can create and customize dashboards and reports with a simple drag-and-drop. This ad hoc capability to create new scenarios, combine disparate data sources, and explore a variety of permutations and parameters of data are all part of a mature BI system that no longer requires extensive programming competencies.

The key to the success of iTrak® BI is the fact that users don't need IT experts by their side to work with the data presented in the dashboard. Users can access the dashboards, manipulate and analyze data, and bring in other members of a team to work together on certain data analysis projects.

MOVING FROM REACTION TO PREVENTION AND PREDICTION

The value proposition for BI in the security sector is not limited to creating efficiencies. Oft-cited in the industry literature is the capability for retail facilities to mine surveillance systems to better understand traffic patterns and position products with a data-driven understanding of their environment. Surveillance systems can also be used to monitor and enforce safety practices in warehouses and other environments where injuries are common. Access control systems and computer log-ins can provide international businesses with better awareness of how remote facilities are being used and create savings through fine-tuning HVAC systems and even reducing and increasing office footprints according to actual needs.

A LOOK AHEAD AT BI

Data is the water we swim in today. We are creators and consumers of data and wielders of the intelligence it provides. The most substantial impact in 2017 will be the continued deployment of specialized BI platforms from analytic packages which come with an integrated set of tools, data schemas, business views, and predefined reports and dashboards that significantly accelerate the time it takes to get a BI solution up and running.

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Packaged applications like iTrak®BI allow organizations to deploy BI on a small scale for a single department and then expand seamlessly to support other departments using the same model and platform, delivering a consistent view of enterprise information.

BI will move increasingly to cloud deployments and mobile platforms with data security as the prime governor in the transition, and the total cost of ownership will continue to drop while the realized return on investment will continue to grow quickly

Within a decade, the way we did business 10 years ago will be unrecognizable. The fundamentals of security and loss prevention will remain familiar, but how their function partners with other departments and contributes to the mission of the organization as a whole will be limited only by the imagination of the practitioner.

Companies that use Business Intelligence (BI) for decision-making ultimately save money and increase profit.

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