

Retail Loss Prevention (LP) Systems

Q3, 2009

Discover the Best-in-Class Vendors Who Can Help You Achieve Success

The Aberdeen AXIS provides:

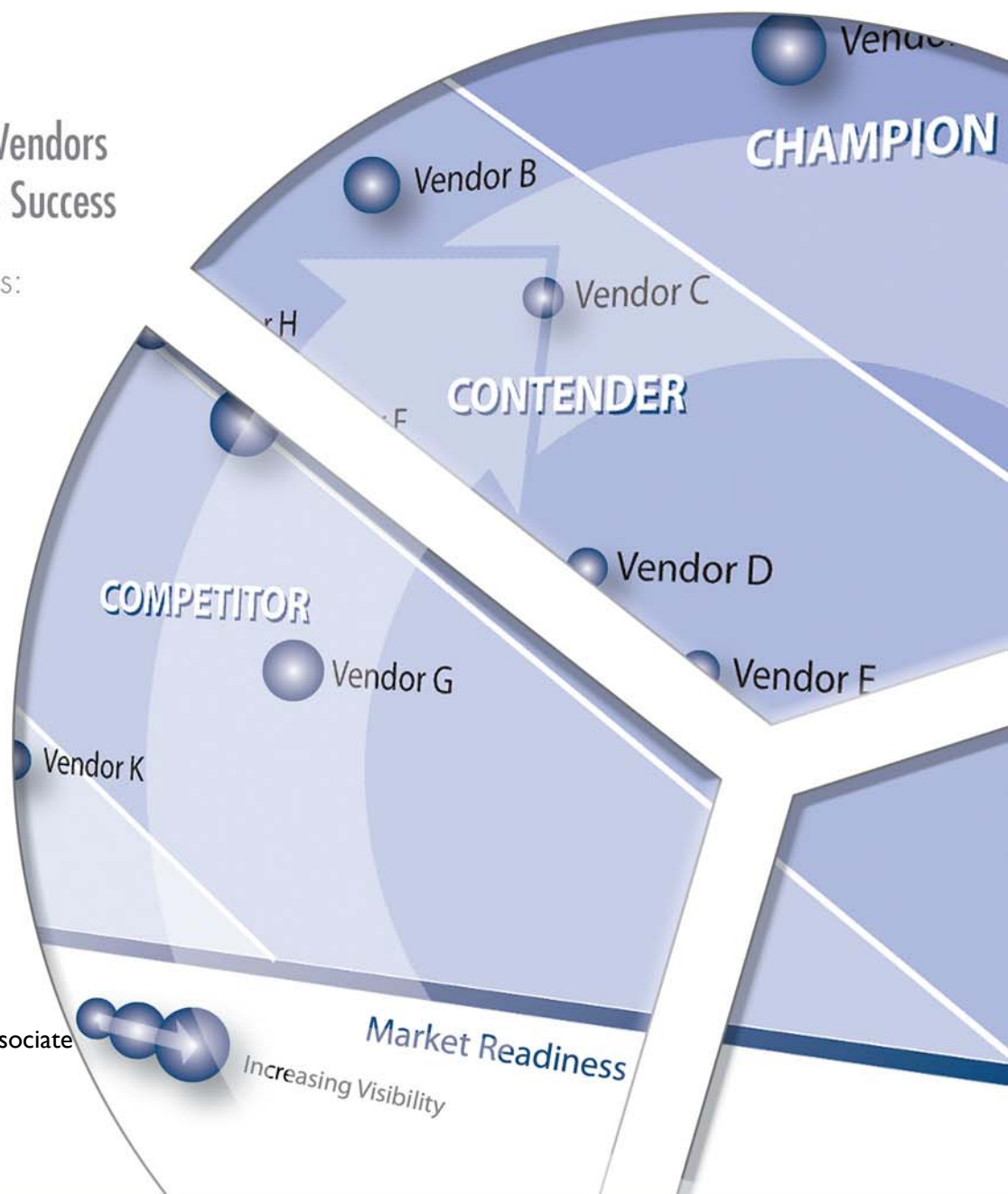
- Best-in-Class performance evaluations of vendors based on KPIs from Aberdeen's benchmark studies
- An assessment of each vendor's market readiness determined by over 250 evaluation criteria

Presented by:

Sahir Anand, Research Director

With:

Chris Cunnane, Senior Research Associate



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Executive Summary

Introduction

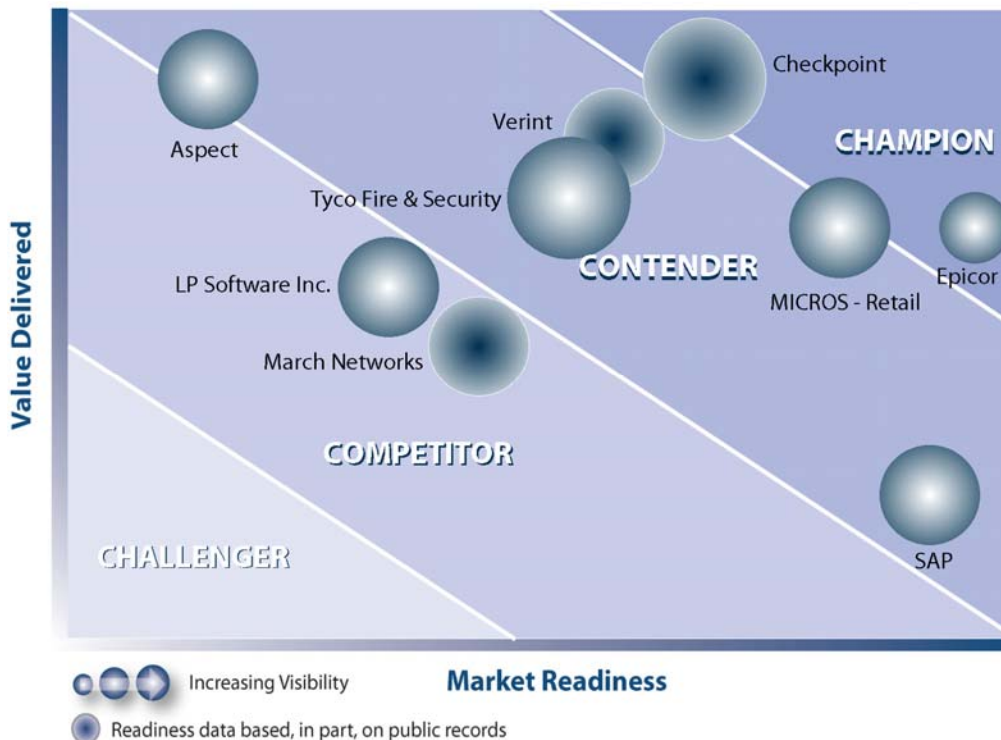
Retail losses in the form of stolen, damaged, or lost merchandise and transaction fraud as a percentage of sales continue to occupy a sizeable share of the cost of operations for retailers. Aberdeen research reports that 60% of retailers recorded a year-over-year write-off of 1.75% of the total inventory (as a percent of sales), further compounding existing theft and fraud-related problems. In addition, almost a third of retailers (30%) have reported unauthorized and fraudulent customer transactions between 2% and 6%. These metrics indicate that retailers are currently faced with a high transaction fraud incidence due to data loss, dishonest employees, and organized retail crime.

This AXIS Report assesses retail loss prevention (LP) software solution vendors from the perspective of market readiness and customer value delivered. This report is to facilitate an understanding and selection of LP solutions for retailers, specifically in the areas of exception reporting, case management, video intelligence, and Electronic Article Surveillance (EAS) intelligence. Hence, Aberdeen has identified **Epicor, Checkpoint Loss Prevention, MICROS-Retail, Verint Systems, and Tyco Fire & Security** as the top performing LP software solution providers.

Contents

Executive Summary.....	1
Chapter 1: Analyst Insights.....	2
Chapter 2: Recommendations.....	5
Chapter 3: How to Read the AXIS.....	9
Table 1: Aberdeen AXIS Vendor Breakdown for Retail Loss Prevention Applications	11
Chapter 4: Vendor Snapshots.....	12
Appendices	21

The Retail Loss Prevention Systems AXIS



Source: Aberdeen Group, Q3 2009

Chapter I: Analyst Insights

Transactional fraud and merchandise theft committed by employees or shoppers define retail's loss prevention problem. Over the years, retailers have attempted various loss prevention techniques to reduce the incidence of fraud that has negatively impacted their net profit margin. This report focuses on the following four software applications that comprise most of the loss prevention software implementations in the retail industry:

- Transaction exception reporting
- Loss prevention case management
- Video camera intelligence
- Electronic Article Surveillance (EAS)

The following sections provide an overview of the benefits, challenges, and typical deployment paths for these software solutions.

Loss Prevention Software Solution Benefits

Aberdeen research shows that top performing retailers are using loss prevention processes and solutions to reduce merchandise theft and fraud-related financial losses. These retailers attain the following benefits:

- Reduced chain-wide shrink rate of 0.83%
- Improved chain-wide loss prevention audit compliance rate to 90%+
- Reduced chain-wide invalid transactions to < 2%

Centralizing Loss Prevention in Retail

Fifty-four percent (54%) of retailers report that internal theft (merchandise theft, cashier shortages, and deposit discrepancies) and the identification and investigation of organized retail crime cases are the most critical loss prevention-related business challenges facing the industry today. Aberdeen research shows that retailers have approached these challenges by centralizing loss prevention data, implementing loss prevention process compliance, and establishing training requirements. These result in an enhanced ability to offer effective countermeasures. Currently, 92% of top performing retailers have found that a centralized loss prevention strategy managed at the retail headquarters provides tighter control and tends to minimize fraud and theft cases with minimal labor expense.

A centralized Loss Prevention (LP) strategy of top performing retailers consists of three primary areas:

- A centralized LP data repository for field or store-level loss prevention case data analysis, transaction alerts, and exception reporting
- A mandated daily or weekly audit of store loss prevention
- Web-based loss prevention training requirements mandated by headquarters for each store

Aberdeen AXIS

The Aberdeen AXIS is an objective, fact-based vendor assessment methodology, based on vendor performance in KPI benchmarks from Aberdeen's domain-specific research, and the *Market Readiness* of the organization determined by over 250 evaluation criteria.

Sector Definition

Loss prevention is defined as a process that controls merchandise and transactional fraud, as well as overall store safety.

Analyst Insight

Aberdeen data shows that, on average, 60% of retailers surveyed recorded year-over-year shrink or write-off of 1.75% of their total inventory (as a percent of sales), further compounding existing theft and fraud-related complexities in retail.

Headquarter mandates in these three areas will ensure overall loss prevention policy compliance. For example, 88% of the top performing retailers conduct individual store transaction analysis at the headquarter level to identify transaction risks. Top performing retailers are also striving to improve LP data used for exception-based reporting to aid in identifying fraudulent transaction trends unique to individual stores. By using clean and centralized LP data, companies can identify trends related to the invalid use of credit, debit, check, gift card, and coupons by customers and employees. Data improvement extends to the high risk Point-of-Sale (POS) by monitoring returns, exchanges, refunds, and voided transactions.

Video camera footage collected from stores and product-level EAS data is also sent to a central location and stored for analysis. Film analysis is used to construct defensive techniques to secure transactions on a day-to-day basis for each store. Video intelligence that captures shopping patterns is helping to create additional capabilities for a store to predict and react to shop lifting trends, internal theft, and organized retail crime.

Key Loss Prevention Capabilities

Certain capabilities can dramatically impact effective loss prevention efforts. Some of these key capabilities are:

- **Internal collaboration.** Aberdeen research reports that 74% of top performing retailers implement internal collaboration processes between internal departments at headquarter locations for developing their LP campaign. Top performing retailers are 1.7 times more likely than the worst performing companies in retail to use internal collaboration for loss prevention. Store operations, asset protection, and loss prevention team's work together to coordinate the overall approach towards maintaining a secure shopping experience for customers. For instance, the sales audit team and LP teams oversee the administrative tools and functions required for regular LP compliance. The store operations team management teams ensure execution of optimum inventory shrink control procedures and merchandise optimization. Besides internal departmental collaboration for core LP planning and execution requirements, internal collaboration includes processes such as mapping of store LP solutions and store resource strategies, which includes the allocation of personnel and other resources such as training and development.
- **Training.** Top performing retailers realize that one of the best forms of theft deterrence is enhanced enterprise-wide training and awareness around theft incidence, risks, and incident management. Currently, 75% of top performing retailers are using enterprise-wide training tools (such as e-training) to ensure that employees are aware of the presence of LP technology. These retailers are two times more likely than the worst performers in retail to currently use e-learning LP training tools. This ensures that a level of theft and fraud deterrence exists in every store through employee and manager loss prevention awareness and alertness.

Analyst Insight

Video camera footage collected from stores and product-level EAS data is sent to a central location and stored for analysis. According to nearly half (47%) of top performing companies, these analyses are then converted into actionable defensive merchandising and secure transaction techniques for day-to-day store execution.

- **Transaction data loss prevention.** In addition to the developments seen in the industry due to the data security guidelines provided by the Payment Card Industry (PCI), the ability to measure, analyze, and monitor transaction data in real-time is improving. Our data shows that 88% of top performing retailers regularly store transaction management reporting consisting of different types of threat-level transactions (e.g. returns, gift cards, coupons, manager exceptions, cash refunds, cash back, register withdrawals, and chargebacks). The top performing retailers are 1.4-times more likely to pursue regular transaction reporting compared to the worst performers; thus leading to a granular focus on transaction-related fraud and chargebacks that can end up saving millions of dollars for a large chain of stores.

Aberdeen research shows that 76% of top performing retailers use some form of data mining and exception-based reporting tools to organize data analyses and help build a knowledge culture around loss prevention. Fifty-three percent (53%) of top performers have now established real-time alert triggers for various transactions, customer interactions, and POS procedures providing their field employees with loss-related information and alerts that can prevent fraud incidence.

These triggers are based on thresholds placed on register till limits, transaction types, chargebacks, and identity verification. When these limits are crossed, an e-mail and / or pager alert is sent to the regional loss prevention and store teams. The speed of information and alerts to the stores often deters an incidence of internal and external fraud.

Aberdeen research shows that 42% of top performing companies are measuring the unit and category level impact of fraudulent transactions through advanced analytics. Whereas, 82% of the worst performing retail companies are not measuring the unit and category-level impact of loss prevention. As a result, these companies overlook the indicators that may improve store performance and lead to a positive payback on loss prevention investments.

- **Performance management.** Currently, 77% of top performing retail enterprises are sharing LP best practices with their stores in an effort to improve shrink control, audit compliance, POS procedure compliance, and reduce chargeback rates. Top performers are 1.5-times more likely to share best practices and shift LP execution processes based on these best practices when compared to the worst performers. This leads to a level of LP standardization across all stores in the chain. These companies also generate LP metrics and include LP performance in store employees' monthly, quarterly, and annual incentive programs.

In summary, it is critical for retailers to establish an environment where both store and headquarter teams have visibility into LP results. Visible performance metrics for shrink, chargeback, and audit compliance computed on a weekly or daily basis will enable stores to set corrective action which can positively impact the overall sales and customer service environment.

Chapter 2: Recommendations

Eighty-five percent (85%) of retailers have identified point-of-sale, low-visibility shopping aisles, and the backroom (inventory storage area) as high risk locations for loss prevention incidences. These locations are the most likely breeding grounds for internal and external merchandise theft, illicit POS data access, and customer transaction fraud.

Retailers have found it difficult to contain losses in merchandise, cash, and transactions because of store layouts, poor loss prevention training, customer demographics, and inadequate budgeting. Aberdeen research finds that 75% of existing loss prevention systems are older than five years, which compounds this problem. However, Aberdeen research also indicates that the road to recovery is attainable if a centralized approach to data, compliance, and training is adhered to. Store asset protection, real-time video and transaction data intelligence, and data access controls are some of the pillars around which retailers across different sub-segments can build an agile and responsive loss prevention environment.

Retailers need to consider the following recommendations prior to undertaking loss prevention system and process improvements:

- **Establish a cross-functional LP team for internal collaboration.** Retailers need to improve the inter-department collaboration on loss prevention. Aberdeen research indicates that two-thirds (74%) of the top performing companies have cross-functional teams for integrated decision-making on loss prevention initiatives. Cross-functional teams must include senior executives and business-line managers from store operations, information technology, human resources, loss prevention, revenue and finance, sales audit, and inventory management. Such teams and collaboration enable poor performing retailers to take a holistic view on loss prevention and provide the means to lay out plans to review and improve loss prevention performance by store, region, and in total. Internal collaboration also helps to coordinate other retail functions that are indirectly impacted by loss prevention such as merchandise, product placement, task management, sales, and customer service.
- **Enforce enterprise-wide training requirements to improve loss prevention awareness.** Training is the first step towards alleviating risks associated with internal and external threats both from a merchandise and transaction standpoint. Retailers have been slow in developing LP training modules, guidelines, and in establishing quarterly or annual training attainment goals. Currently, 75% of top performing retailers have training requirements implemented for their stores and critical departments that include loss prevention compared to 36% of the worst performers. Retailers must overcome the historical cultural inertia of traditional manual LP training and develop a comprehensive web module so that associate training completion can be accessed, monitored, and tracked easily for compliance reasons. Every store and

headquarter employee must be 100% trained on in-store loss prevention. Moreover, retailers should work with human resources and service providers to develop improvements and updates to loss prevention training as new triggers and threats arise.

- **Implement loss prevention Business Intelligence (BI) and predictive tools to comprehensively measure, analyze, and report theft and fraud data trends in real-time.** Currently, only 53% of top performing retailers conduct comprehensive real time merchandise theft, sales audit / transaction analysis of high-value, voided, gift card, coupon, and return transactions using POS transaction data, video data, or EAS data. The worst performers in retail are twice as less likely as the top performing retailers to possess a central data analysis group for all of the different loss or fraud-related areas mentioned above. All retailers must be in a position to monitor, predict, and identify merchandise theft and transaction fraud-related events. An LP data intelligence strategy is an absolute "must" if retailers intend to reducing losses related to shrink, customer data theft, and day-to-day transaction fraud.

By implementing BI tools such as real-time online fraud monitors, risk rating tools, exception-based reporting and case management, retailers can improve data mining, analyses, reporting, and performance management. Retail LP teams can then predict upcoming events based on the level of risk so that alerts can be delivered to field operations teams in real-time for swift response to possible fraudulent credit card use, or cash or merchandise theft. These BI tools should be able to work on rules-based and risk rating mechanisms that provide real-time updates on investigations, case resolution workflow, and other procedures for resolution. One of the criteria for considering LP analytics is its ability to expand the solution in the future.

- **Improve video intelligence to support loss prevention, and non-fraud related functions such as merchandising optimization and product placement.** Currently, 55% of top performing retailers possess the ability to gather real-time video intelligence to support loss prevention at the store-level, as well as other retail functions such as merchandising and product placement. These companies are 1.5-times more likely than the worst performers in retail to utilize video intelligence tools for LP purposes. Such applications use records and patterns of CCTV images from stores (POS, aisle, and backroom) and analyze the unit and category-level impact of merchandise theft and POS transaction fraud behaviors. By implementing video intelligence in an existing video surveillance infrastructure, companies are able to not only help predict, track, and monitor internal and external theft in real-time, but also use the data for optimizing merchandise mix and product placement in the aisles. Currently, IP-based video intelligence tools are gaining traction amongst retailers due to ease of use, accessibility, and cost of deployment.
- **Increase the focus on building processes and solutions to control organized retail crime.** Top performing retailers anticipate

that organized crime is likely to worsen further and present a formidable operational challenge to their enterprise within the next 12 to 18 months. Moreover, top performing retail enterprises are spending 35% or more of their team time focusing on identifying and investigating organized crime cases. Further, the loss prevention success of the best performing retailers lies in controlling the risks associated with organized crime. Therefore, retailers need to build capabilities such as reporting processes for stores that document and share theft incidents, offer guidelines for documenting cases to facilitate prosecution and for sharing evidence and working with law enforcement. On the systems side, retailers can consider covert video and surveillance equipment (cameras, recording devices, etc.), and centralized database / tracking software to capture incidents.

- **Improve real-time LP monitoring and alert capabilities further.** Fifty-three percent (53%) of top performing retailers currently use real-time LP monitoring and alert capabilities for their field management and stores which leads to improved LP response time and case resolution. Top performing retailers are 1.7-times more likely to possess this capability compared to all other retailers. Companies operating in every retail segment must improve the use of real-time data and video monitoring capabilities and issue timely alerts for faster field management response to merchandise, cash, and transaction fraud. Top performing retailers have established real-time triggers for varied types of transactions, customer interactions, and point-of-sale procedures. These benchmarks for register till limits, transaction types, chargeback, and identity verification provide e-mail and pager alerts to regional loss prevention teams and store teams in the case of a suspected trend or ongoing investigation. The speed of information and alerts to the stores deters internal and external fraud incidence.
- **Instill innovation in transaction fraud risk management by partnering with suppliers, credit associations, financial institutions, and other retailers.** Retailers must constantly invest in innovation related to risk management strategies and reduce transaction fraud risks by collaborating with all business partners and stakeholders. One method is to partner with stakeholders that might face similar problems such as the supplier or consumer product companies. Companies can also consider sharing best practices, new process, and solution improvements with financial institutions, credit associations, and other important stakeholder. For example, retailers can get assistance from credit associations to optimize their fraud data management strategies. This can be done by regular reviews of the central data analysis strategy, asset protection guidelines, PCI guidelines, and in establishing real-time or near-real-time case management capabilities.
- **Combine EAS hardware with EAS analytics.** There is a need to bridge the gap between EAS hardware and EAS data analysis that can be utilized for improving shrink and inventory control. Integrating EAS-generated data intelligence with other business applications can fill the

void for 72% of EAS system users. For example, in companies with over \$1 billion in revenues, 70% of retailers currently use EAS systems; however less than a third (28%) derive actionable business information from that system (such as a data log that enables tracking of shoplifting events). Even in the case of top-performing retailers, 37% of companies use EAS analytics which nearly half of the 61% that use EAS hardware (e.g. tags and readers). EAS analytics can prove to be yet another useful tool in tracking and reducing controllable merchandise theft-related losses at the point-of-service, which is the most risky LP-related retail store location.

Chapter 3: How to Read the AXIS

Aberdeen AXIS provides an objective, fact based, vendor assessment looking at the provider's history of *Value Delivered* (Y-axis) and their *Market Readiness* (X-axis). The results are based on relevant survey responses from hundreds of enterprise end-users, responding to questions relating to their experiences with the respective solution or services. Vendors represented on the AXIS are illustrated by their performance against the various axes as well as the visibility they received from the market as part of the research.

Aberdeen's research is predicated on primary survey responses with follow-on telephone interviews. All responses are blinded and follow Aberdeen's published methodology. Data collected is reviewed and interpreted by the respective Aberdeen research team and draws upon information typically collected over the prior 24-month period.

Based on business-user survey responses from qualified candidates, vendors have been positioned in one of four categories in the Aberdeen AXIS chart:

1. **Champion:** The vendor has demonstrated superior proficiency in delivering both real value as well as the ability to serve and support its installed user base.
2. **Contender:** The vendor has consistently delivered on ensuring that users achieve a measurable value for their investment as well as the ability to continue to support and service its customers.
3. **Competitor:** The vendor is progressing toward delivering a balance of value and service / support / sustainability. Additional opportunities remain to enhance the value realized by its customers as well as its ability to meet the ongoing needs of the market.
4. **Challenger:** The vendor has achieved market visibility but has an opportunity to assist customers in achieving the value they're looking to realize from the investments made. Vendor readiness remains a concern.

Value Delivered (Y-axis)

The **Value Delivered** by a vendor is determined by the percentage of survey respondents using the solution that achieves Best-in-Class performance.

Over the past 24 months, Aberdeen has surveyed 675 end-user organizations on the subject of loss prevention. The responses were analyzed based on stated strategies, Key Performance Indicators (KPIs), and business outcomes. Using Aberdeen's proprietary Pressures, Actions, Capabilities, and Enablers (PACE™) methodology, business users are placed into three performance maturity groups: the top 20% of performers are considered "Best-in-Class," the middle 50% "Industry Average," and the bottom 30% are "Laggards." Survey respondents, as part of the process,

Aberdeen AXIS

The Aberdeen AXIS is an objective, fact-based vendor assessment methodology designed to assist organizations in making technology purchasing decisions.

The assessment is based on vendor performance in KPI benchmarks from Aberdeen's domain-specific research, and the *Market Readiness* of the organization determined by over 250 evaluation criteria.

identify the various products and services they have deployed. The aggregated performance of a technology vendor's business users, complemented by live interviews, determines the relative *Value Delivered* to the market.

Market Readiness (X-axis)

Market Readiness is a critical assessment of the technology vendor's current ability to serve the market based on over 250 objective assessment criteria.

Vendors are provided a standard questionnaire that seeks to thoroughly assess their ability to support their installed base, to bring new products to market, to serve the global community, and to sustain economic cycles, among other KPIs. This survey is augmented by customer interviews and independent research to validate the findings. Vendor briefings may be conducted to provide additional clarification and insight. Each vendor's risk and reliability, strengths and challenges, historical performance and future outlook are evaluated and a weighted score is determined. The result is represented as a numerical outcome on the **AXIS** by way of *Market Readiness*. Solid circles on Table I represent solution providers from which comprehensive data was made available for review and validation; reverse-shaded circles represent vendors from which response or available information (i.e. public records) was limited in scope.

Rather than project the suitability of a particular feature or function, the **AXIS** is a customer-centric view of the success organizations have had with various providers and the potential risk, or lack thereof, associated with the vendor's ability to meet their current and future obligations. These obligations include, but are not limited to, service, support, product updates and upgrades, staffing (e.g. customer service), and financial stability. Vendors falling into the Champion or Contender categories are logical partners for future projects. Those identified in the Competitor and Challenger areas are also strong potential suitors for consideration with additional investigation.

The goal of the **AXIS** is to provide the competitive intelligence business users require to make smart, informed decisions about their technology initiatives.

Research Methodology

Aberdeen applies a unique methodology to benchmark research that evaluates the business Pressures, Actions, Capabilities and Enablers (**PACE**) that drive corporate performance.

The success of business strategies are determined by a Competitive Framework in which the top 20% of achievers are **Best-in-Class**, the middle 50% are **Industry Average**, and the bottom 30% are **Laggards**.

Companies that identify the most influential pressures and take the most effective actions are most likely to achieve superior performance. The solution providers that help enterprises achieve this Best-in-Class performance are recognized in the Aberdeen **AXIS**.

Table 1: Aberdeen AXIS Vendor Breakdown for Retail Loss Prevention Applications

Company: Total Scores	Market Readiness	Value Delivered	Total Score
Epicor	35	57	92
Checkpoint Systems	29	62	91
MICROS-Retail	32	57	89
Verint Systems	27	59	86
Tyco Fire & Security	26	58	84
AVERAGE SCORE	27	56	83
SAP	34	48	82
Aspect Loss Prevention	18	62	80
March Networks	24	53	77
LP Software	22	55	77

Source: Aberdeen Group, Q3 2009

Vendor Exclusion

Vendors may be excluded from the **AXIS** report for various reasons including:

1. Failure to achieve adequate market visibility within the context of the surveys
2. Failure to provide requisite *Market Readiness* information
3. Inability to validate *Market Readiness* information (i.e. customer interview responses are inconsistent with vendor representation)

Chapter 4: Vendor Snapshots

The vendor snapshots provide an overview and insight into the specific vendors identified within the AXIS report landscape. It is based on primary research from end-user surveys and interviews and vendor briefings combined with analyst team insights.

Epicor

Overview

Epicor was founded in 1984, and is now a global provider of integrated Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), Supply Chain Management (SCM) and enterprise retail software solutions—loss prevention, Point-of-Sale (POS), planning, sourcing, merchandising, replenishment, store inventory, warehousing, and financial systems. It focuses on mid-sized businesses across many industry verticals, such as retail, hospitality, manufacturing, and distribution. Epicor’s loss prevention solution for retailers includes modules for POS data analysis and sales audit as well as a central database for reporting tools and case management. Epicor targets its LP solutions at all major retail segments including apparel, entertainment, department stores, grocery, and drug / pharmacy. Its customer list includes companies such as Reitmans, Vitamin Shoppe, DKNY, and Lamps Plus.




Observations

Epicor's web-enabled loss prevention transaction and case management solution includes sales audit, case analysis, and reporting tools. Its solutions are primarily based on the .NET architecture and Microsoft reporting tools along with Oracle database objects. These solutions are built to enable retailers to reduce total incidents of loss prevention cases and POS transaction fraud such as post void, gift card, and refunds. Aberdeen’s assessment of Market Readiness and Value Delivered to customers positions Epicor with the top collective score of 92. This company shares the premier position as the “Champion” on the Loss Prevention AXIS 2009 with Checkpoint Loss Prevention.

The Epicor Market Readiness value was markedly higher than the average score. The company's value delivered score was also higher than average as well. This company's generally superior performance was due to:

- The provision of two alternative delivery models that include license on-premise LP software and multi-tenant on-demand / Software-as-a-Service (SaaS). These options offer a choice to retailers who can decide among delivery models according to ROI, maintenance and support, IT cost, and ease of operations.
- A well dispersed development, support, marketing, and professional services staff in the Americas and Europe, Middle East, and Africa

Key

-  Higher than average score
-  In line with average score
-  Lower than average score

AXIS Benchmark: Epicor

Market Readiness

Score: 35

Average Score: 27

Value Delivered

Score: 57

Average Score: 56

“Epicor’s loss prevention solution is user friendly in its reporting, but can also limit productivity. We have found good results for our cash refunds and cash post voids, but have been challenged in our card refunds. As we utilize more video surveillance, we need to migrate to the new release with video compatibility. Ease of use is very important to our organization. Our best results have come in terms of cash refunds and cash post voids. Moving forward we are planning to place a heavier emphasis on video surveillance, and need to ensure that our LP solution can evolve with us and provide video compatibility. ”

~ LP Analyst, Large Specialty Retailer, North America, and Current Epicor User

(EMEA) that serves diverse customer needs and creates shared best practices between retailers which Epicor tracks and assesses and then trains their customers on those deemed to be truly best.

- Epicor's next major release, 5.0, includes improvements based on customer requests. Among other improvements, this release will provide web enablement for flexibility, data processing, easier accessibility of the application's functions in the field and headquarters. This indicates that there is an open feedback loop that exists for feature and function improvement cycles between Epicor and its current customers.
- Aberdeen research indicates that the primary reason for current Epicor LP deployments is due to the replacement of legacy or home-grown systems. This signifies that Epicor is addressing the legacy gap that exists in retail LP solutions. Currently, 74% of LP software and hardware deployments in retail are older than five years. With continued enhancements up to version 4.7 and the expected web-related improvements in the upcoming version 5.0, Epicor is likely to continue developing updates towards comprehensive case management, analytical tools to identify case activity, improvements in application exception-based and alert-based LP mechanism.

Epicor's LP applications support multi-language product localization, C++, .NET platform, MS Visual Basic, and Oracle database Objects. However, a notable missing option is Java / J2EE platform compatibility. Java and .NET are expected to be neck-in-neck in terms of platform preference in retail over the next 12 to 24 months.

Epicor must also consider adding video intelligence and EAS solutions as an increasing number of retailers are evaluating these technologies for supporting existing transaction and merchandise fraud infrastructures in high-risk locations. These enhancements will create an Epicor product with an end-to-end LP solution stack.

Checkpoint Systems

Overview

Checkpoint Systems was founded in 1969. It is a global provider of loss prevention, labeling and merchandising solutions that secure consumer goods, and tracks merchandise in the supply chain. This vendor's Radio-Frequency (RF)-based loss prevention and asset tracking solutions target both retailers and manufacturers. Checkpoint's range of loss prevention products and services in retail consists of EAS, theft incident reporting and analysis, auditing, case management, along with other solutions. The company provides EAS systems and tags using RF and Electromagnetic (EM) technology; source tagging security solutions, secure merchandising solutions and Acoustic-Magnetic (AM) technology, as well as branding tags and labels for apparel, retail display, and hand-held labeling systems. Its customers range across different segments of retail including supermarkets, hypermarkets, hard goods, and apparel companies. Albertson's, H.E. Butt, Giant, Sainsbury, Winn-Dixie, Toys R Us, Staples Walgreens, Big W, Pep Boys, Nautica, Target, and Kohl's are some of Checkpoint's current customers.

Observations

Aberdeen analysis establishes Checkpoint Systems as one of two companies (along with Epicor) that shares the "Champion" position on the Aberdeen 2009 Loss Prevention AXIS. Its aggregate score is 91 and the company outperforms from a Value Delivered basis all other vendors except for a tie with Aspect Loss Prevention (62). However, it falls somewhat short of Epicor in Market Readiness (29), but is still higher than the average vendor. Continued RF-based product innovation adapted to retail and warehouse shrink control is a key strength as well as an opportunity. Over the course of the past decade, Checkpoint aggressively sought growth in retail adding about 100 large (\$1 billion+) retail customers. In 2009 growth has somewhat slowed down, specifically within the company's shrink management solutions. This is due to a general slackening in retail growth and slower chain-wide shrink solution roll-outs. Despite revenue blips during Q1, 2009, shrink management solutions remain the company's most profitable product.

Checkpoint's shrink management solutions, including RF-based solutions, will continue growing in the long term if it identifies specific solution improvement opportunities. Aberdeen research finds that while the company has several hundred marquee customers in retail, they are not generally utilizing RF-based EAS data or systems in stores to:

- Compare daily data reporting to customer counts and compliance data trends
- Analyze daily and weekly patterns of high-ticket product sales and shrink

AXIS Benchmark:
Checkpoint

Market Readiness

Score: 29

Average Score: 27

Value Delivered

Score: 62

Average Score: 56

"EAS analytics adoption is the next step of evolution required for the effective use of EAS readers and product tags in the stores. It is vital for our loss prevention teams to start assessing data related to authentic and non-authentic EAS alarms that are caused due to cashier oversight or errors. EAS analytics can enable store teams to identify the root cause of a lack of EAS effectiveness or validate whether EAS systems are actually impacting shrink control in stores."

~ Regional Loss Prevention
Manager, Major Consumer
Electronics Retailer (Americas),
and Current User of
Checkpoint EAS Tags and
Readers

- Execute store layout and merchandising changes based on EAS data trends to minimize case incidence
- Combine EAS analysis with exception reporting, employee theft alerts and video surveillance data to find missing links in store fraud detection

The RF-based EAS systems currently installed do possess the ability to generate valuable data and KPIs such as those cited earlier. This data can be integrated into other retail applications for business improvements such as cashier efficiencies in deactivating EAS tags, alarm response or even observing customer shopping behavior. Eighty-two percent (82%) of current Checkpoint users report using RF-based EAS tags and readers, but only 35% consistently use software that enables EAS-data generated information for the identification of high-theft instances, inventory control, store compliance of EAS processes, and shrink reduction.

MICROS-Retail

Overview

MICROS Systems, Inc., headquartered in Columbia, Maryland, is a developer of enterprise applications. The company provides table service and quick service restaurants, hotels, leisure and entertainment companies and specialty retail stores with complete information management solutions that include software, hardware, enterprise systems integration, consulting, and support. MICROS Systems, Inc., distributes its products through subsidiaries, independent dealers / distributors, and company-owned sales and service offices worldwide. This global network consists of over 4,800 employees, more than 80 wholly or majority-owned subsidiaries and branch offices in major markets, and 115 distributors in 45 countries. MICROS Systems, Inc., solutions are constructed of products acquired from Datavantage, CommercialWare, RedSky IT, Fry, Inc., and eOneGroup during 2007 and 2008. . MICROS Systems, Inc., solution stack includes loss prevention, POS, Customer Relationship Management (CRM), order management, e-commerce, sales audit, gift card, supply chain management, inventory broker, and website design and consulting, pricing, and promotions management. In the area of loss prevention, Datavantage XBR is the MICROS Systems, Inc's flagship LP product. XBR is an exception-based reporting tool aimed at minimizing internal and external theft, fraudulent returns, and other store events. MICROS Systems corporate office also makes XBR available overseas. However, MICROS-Retail, which develops and supports XBR, sells directly to retailers in North America.

Observations

In 2008, MICROS Systems, Inc., formally added Datavantage XBR into its core retail application Xstore. While the two applications integrate well but have to be bought separately by a retailer as they are not part of packaged offering. Aberdeen research indicates that this addition enabled MICROS to achieve higher than average scores for both Market Readiness and Customer Value Delivered. MICROS Systems, Inc., had the third highest

AXIS Benchmark: MICROS
Retail

Market Readiness

Score: 32

Average Score: 27

Value Delivered

Score: 57

Average Score: 56

"We have used Micros's XBR application for the last two years. It is a successful and robust tool for us as it delivers on its promise. It enables us to identify internal theft, and allows us to process a whole host of queries and data mining. We have executed two upgrades so far and the additional functionality has facilitated a more effective LP environment overall. "

~ Robert LaCammare, LP
Director, Tween Brands, and
Current User of the Micros
XBR Application

aggregated AXIS score of 89, following closely behind Epicor (92) and Checkpoint (91).

The greatest strengths of XBR include its deep analytical capabilities that identify suspected fraudulent activity down to the store-level and can correlate transaction data with other loss prevention methods (such as video intelligence), thus allowing fraudulent transactions to be tracked along with video images. XBR has been deployed primarily in the Americas (96%) with a strong focus on large companies with over 1,000 employees. In 2009, XBR can be delivered on-demand in retail and food-service industry that could reduce IT infrastructure and system operations costs. One of the improvements that MICROS Systems, Inc. should undertake is research and development for adding other LP modules featured in this report such as EAS.

Verint Systems

Overview

Founded in 1994, Verint Systems provides solutions for enterprise security intelligence and workforce optimization. Verint's networked video and loss prevention solution is its video surveillance portfolio that consists of video management software, video analytics, POS analysis, wired and wireless edge devices, IP cameras, and DVRs. This solution and analysis capability can link multiple retail locations and deter fraud and theft incidents through live and stored video and related business intelligence. Verint's retail customer list includes Best Buy, Home Depot, ABC Fine Wine and Spirits, and Redstone Federal Credit Union.

Observations

Verint's networked video intelligence loss prevention solutions are rated slightly higher than average in Value Delivered and on-par with the average Market Readiness scores of other solutions. Verint's Nextiva solution combines several business connectivity and performance technologies such as video networking, Internal Protocol (IP), remote video and data management, enterprise DVR viewing and management, and BI. Nextiva provides multi-location retail loss prevention incident tracking of transactions and store events. Verint solutions can be configured such that loss prevention teams can get access to incident alerts to people entering restricted areas in stores or parking lots. This real-time access to video images, data, and alerts enable offsite LP teams to use web-based multi-site investigation tools.

Some of Verint's clients, such as Home Depot, have deployed Nextiva for transaction and video monitoring at self-check out stations in stores to identify possible fraudulent activity. Verint's part on-premise and part SaaS model has facilitated remote management of voice, video, and data modules, thereby reducing the IT infrastructure costs. Aberdeen analysis shows that while Verint has a particularly effective video intelligence offering that is

AXIS Benchmark: Verint

Market Readiness

Score: 27

Average Score: 27

Value Delivered

Score: 59

Average Score: 56

"We have seen significant savings both on the hard and soft costs associated with security and investigations. The Verint System has helped us reduce shrinkage and internal staff issues."

~Corporate Director of Safety and Security, US-based Mid-Size Specialty Wine Store Chain and Current User of Nextiva (Specialty Retail Product)

integrated into the POS transaction environment, it has not been effective in adding other loss prevention modules such as EAS.

Tyco Fire & Security

Overview

Tyco Fire & Security is a business segment of Tyco International Ltd., a large conglomerate that reported \$20.1 billion in revenue in 2008. Tyco Fire & Security provides electronic security and fire protection solutions in over 100 countries and across many industries. Its products include anti-theft solutions, fire detection, commercial, industrial, and government security, fire suppression, home security, personal safety equipment, radio frequency identification, healthcare and public communications, and traffic and transportation management. Tyco's anti-theft solution suite is comprised of electronic article surveillance, store business intelligence, source tagging, and integrated video, access, and intrusion capability. Tyco's portfolio has an array of retail loss prevention and security solutions covering all four software components including EAS, video intelligence, exception reporting, and case management. Tyco has combined product offerings from companies it acquired or merged with in the last few years into its existing LP product set. These companies include ADT, Sensormatic, Retail Expert, and Intellivid.

Observations

The Aberdeen AXIS lists Tyco as an above average LP solution provider in Value Delivered (58). However, its Market Readiness score (26) was a bit below average. In essence, while Tyco possesses the industry's most diverse LP product set, it does have to tighten its product integration strategy.

However, this giant company has two distinct advantages fulfilling LP requirements. First, Tyco has the distinction of possessing a complete set of robust and customizable LP offerings covering end-to-end retail LP applications, including ADT's retail store security solutions, Sensormatic EAS, case management, Retail Expert exception reporting and analytics, and Intellivid's video intelligence.

Second, when compared to its competitors, Tyco has a well established and worldwide installed base that includes at least 100 large (\$1 billion+) retail customers, which bodes well for cross-selling and up-selling opportunities and creating deeper relationships that support additional revenue streams. Currently, Tyco's customer renewal rate is at 90%. As one of the largest vendors in this space, this level of renewal is a boon to Tyco's market positioning.

A diversified global customer base also works to Tyco's advantage. With 58% of its customers based outside of the Americas, Tyco is able to hedge market diversification and mitigate revenue growth risks in the Americas where large chain roll-outs have been substantially curtailed.

AXIS Benchmark:
Tyco Fire & Security

Market Readiness

Score: 26

Average Score: 27

Value Delivered

Score: 58

Average Score: 56

SAP

Overview

Over the past 10 years, SAP has expanded its solutions into retail, business intelligence, and CRM. The company has also enhanced focus on mid-sized retail customers. SAP built its retail capability through acquisition of Dacos (1994), Campbell (1999), Triversity and Khimetrics in 2005. The Triversity solution includes POS enabled reporting systems such as FraudWatch, which conducts POS data mining and identifies high risk actions and transactions, and audit watch, which processes and validates sales information.

Observations

SAP rates higher than average in Market Readiness, but below average in Value Delivered. The SAP-Triversity POS loss prevention solution is both user-configurable and customizable. In addition, it supports product localization. Although it allows open architecture integration with POS and back-end applications, it only supports an ASP language platform. The advantage of hosting on ASP is that it enables a rapid implementation and potentially lower costs. On opportunities, clearly video intelligence, case management, and EAS are missing from the LP stack. FraudWatch, when combined and integrated with video intelligence, can serve the diverse and complex retail needs in a more effective manner in high risk retail store locations. It is entirely plausible that SAP Retail is fulfilling the need for the missing pieces of the LP puzzle from ecosystem partners. Finally, SAP needs to develop Java and .NET versions of its LP analytics product. This exclusion limits more broad-based adoption possibilities.

AXIS Benchmark: SAP

Market Readiness

Score: 34

Average Score: 27

Value Delivered

Score: 48

Average Score: 56

Aspect Loss Prevention

Overview

Aspect Loss Prevention provides exception based reporting solutions to minimize shrink, fraud, and training deficiencies, and software to sync surveillance video. Aspect Loss Prevention also provides consulting services for security and asset management, risk analysis, loss prevention training, and awareness programs. Current customers include DSW, REI, David' Bridal, Dick Sporting Goods, Cabela's, TJ Maxx, and Children's Place.

Observations

Aspect is rated higher than average in Value Delivered, but substantially lower than average in Market Readiness. The company's primary customer focus is on North America (90%), while the remaining focus is directed to Europe (10%). Its current LP tools are user-configurable and customizable. Unlike other competitive software products, Aspect has built its Essential, Elite, and Auto Mind products on Java, .NET, and ASP platforms. This provides the user with flexibility in their choice of platform delivery requirements, user-interface, and deployment ease. Aspect has the opportunity to broaden its LP portfolio beyond just exception reporting and integration by incorporating video surveillance data. EAS analytics and case management can add to its portfolio and widen product revenue opportunities. Ninety-five percent (95%) of Aspect customers are large retailers (greater than \$1 billion in revenues or over 1,000 employees). This is currently a risky revenue and market growth strategy in North America as large retailers are less likely to undertake large chain roll-outs of LP solutions in the near future.

March Networks

Overview

March Networks is a global provider of video management solutions across numerous industries including retail, finance, transportation, industrial, government, and education. March Networks' provides an array of products such as video management software, video and data analytics, IP cameras, encoders and decoders, hybrid recorders, and mobile devices. Within the retail loss prevention arena, this vendor's solutions include video management systems, fixed surveillance, video analytics, and reporting on case files. Its customers include companies such as Nike Retail, Dunkin' Donuts, Indigo Books, and United Supermarkets. March's value proposition is focusing on reducing shrink, addressing the associated LP risks, and improving overall store performance.

AXIS Benchmark:
Aspect Loss Prevention

Market Readiness

Score: 18
Average Score: 27

Value Delivered

Score: 62
Average Score: 56

"We initially implemented our LP solution for a complete analysis of all transactional data. The solution captures all data at the POS, and we are able to query tables and kick out any anomalies that may indicate fraud. The flexibility of the solution has allowed us to move beyond our initial needs, and use the solution in a variety of departments within our company. Our accounting department, for example, now uses the solution as a sales audit tool."

~ Joe Matthews, VP Loss Prevention, Academy Sports, and Current User of Aspect Applications

AXIS Benchmark:
March Networks

Market Readiness

Score: 24
Average Score: 27

Value Delivered

Score: 53
Average Score: 56

Observations

March Networks scored below average in both Market Readiness and Value Delivered. The company has a robust product set that can essentially be compared head-to-head with the likes of Verint and Intellivid. March's VideoSphere retail solution offers IP video systems and analytics and web-based reporting. Currently, 45% of all retailers indicate they are using video analytics with their video surveillance systems. Therefore, the market for video analytics is ripe for further advancement in adoption and usage. March Networks also provides its customers with SaaS-based deployment options which can potentially reduce the IT infrastructure burden of retailers and improve speed to deployment. However, its product strategy roadmap and growth emphasis in the retail segment needs to be overhauled further as retail LP needs continue to diversify. Despite some marquee large and mid-size customers, the current install base in retail is low. Moreover, March Networks has not expanded its LP portfolio products beyond its primary focus on video management analytics into other LP software segments such as EAS, case management and compliance audit, and exception reporting.

LP Software, Inc.

Overview

LP Software, Inc. offers solutions for loss prevention management, compliance auditing, employee relations management, and database reporting. The loss prevention solution is available on both a Windows and web platform as a corporate-wide incident reporting and tracking solution for internal theft, shoplifting, fraud, accidents, and human resource incidents. LP software's customer list is comprised of companies such as Kohl's, The Finish Line, Abercrombie & Fitch, Publix Supermarkets, and Sports Authority.

Observations

LP Software has been rated below average in both Market Readiness and Value Delivered. LP Software's main advantage rests in its case and audit product which is both user-configurable and customizable. This company's LPMS Windows case management and audit tool is built using a published Application Programming Interface (API) while offering .NET and ASP platform options. ASP-based hosting likely paves the way for rapid implementation and possibly lower costs.

LP Software also possess approximately two-times the number of customers compared to that of other reporting solutions, including Sensormatic (analytics), Epicor, and SAP's Fraud Watch. Compliance auditing is a stand-out offering in its product set considering that 75% of all LP vendors currently do not offer compliance auditing as a standard-feature in their solution set. LP software's near term market growth strategy is somewhat risky, as 99% of its install base resides in North America and 90% of its current customers are large companies.

AXIS Benchmark:
LP Software, Inc.

Market Readiness
Score: 22
Average Score: 27

Value Delivered
Score: 55
Average Score: 56

Appendices

Aberdeen AXIS Methodology

About this Aberdeen AXIS

Focused on Aberdeen's retail loss prevention, this AXIS Report is based on 675 respondents from two benchmark studies conducted between January, 2008 and June, 2009. Follow-up interviews were conducted with the evaluated vendors in April through June, 2009. Validation interviews were conducted with the vendors and their clients in April through June, 2009.

About Aberdeen

Since 1988, Aberdeen's research has been helping corporations worldwide become Best-in-Class. Having benchmarked the performance of more than 644,000 companies, Aberdeen is uniquely positioned to provide organizations with the facts that matter — the facts that enable companies to get ahead and drive results. That's why our research is relied on by more than 2.5 million readers in over 40 countries, 90% of the Fortune 1,000, and 93% of the Technology 500.

As a Harte-Hanks Company, Aberdeen plays a key role of putting content in context for the global direct and targeted marketing company. Aberdeen's analytical and independent view of the "customer optimization" process of Harte-Hanks (Information – Opportunity – Insight – Engagement – Interaction) extends the client value and accentuates the strategic role Harte-Hanks brings to the market.

For additional information, please visit Aberdeen Group at www.aberdeen.com or call (617) 854-5200. To learn more about Harte-Hanks, please call (800) 456-9748 or go to www.harte-hanks.com.

The Aberdeen AXIS Methodology

The Aberdeen AXIS is an objective and fact-based vendor assessment methodology designed to assist organizations in making technology purchasing decisions. The Aberdeen AXIS assesses vendors using two criteria: 1) Best-in-Class status (*Value Delivered*) based on key performance indicators drawn from Aberdeen's domain-specific body of primary fact-based research; and 2) *Market Readiness* of the vendor organization determined by over 250 evaluation criteria, including: vendor questionnaires, public records, vendor briefings and customer interviews.

- **Vendor selection:** Vendors appearing on an AXIS have been identified by Aberdeen and the marketplace as having a relevant solution.
- **Vendor omission:** Vendors may not appear on an AXIS for typically one of three primary reasons: 1) the vendor failed to supply requisite data for analysis; 2) the vendor failed to have sufficient market representation as part of the analysis (i.e. insufficient customers

identified the vendor as a provider); or 3) the vendor's solution or service did not align with the particular AXIS.

- **Data collection:** Data for the Y-Axis (*Value Delivered*) is extracted from relevant Aberdeen benchmark research reports published in the proceeding 12 months (typically). All of the benchmark reports are predicated on Aberdeen's PACE methodology, using primary field research in which end-users are polled via standardized survey. Information collected is analyzed using Aberdeen's formulaic approach to determining Best-in-Class performance. Data for the X-Axis (*Market Readiness*) is a by-product of a vendor-fielded questionnaire containing over 200 key questions, public records, customer interviews and vendor briefings. A weighting algorithm, maintained in confidence to prevent response gaming, is applied to determine respective vendor scores.
- **AXIS recommendations:** The relative positions of the vendors on the AXIS, as well as the insight provided in the report, represent an assessment of the vendor score for *Market Readiness* and *Value Delivered*, interpreted via published methodology and analyst insight.

An Aberdeen AXIS is published once a year (typically) for each of the 22 research practices covered by Aberdeen.

Further Reading

- [Data Loss Prevention: Little Leaks Sink the Ship](#); June 2008
- [Real-Time Loss Prevention: Changing the Game in Fraud](#); Jan 2008
- [Effective Loss Prevention Methods: The Specialty Retail Story](#); Jan 2008
- [Making Progress in PCI Compliance: Assessing Risk](#); August 2008
- [Mobile Payments in Retail: Next Wave in Customer Centricity](#); September 2008
- [Migrating to Customer-Centric Point of Service](#); February 2008

For information on updates or publication schedules, please contact:
AXIS@aberdeen.com.

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Authors: Sahir Anand, Research Director, Retail,
sahir.anand@aberdeen.com

Chris Cunnane, Senior Research Associate, Retail & Hospitality
chris.cunnane@aberdeen.com