# Research Brief

Upgrading POS Systems in Small to Mid-Size Retail: Strategies for Success

Small to Medium Business (SMB) retailers find themselves straddling the line between the old and the new in POS technology. Aberdeen data shows that more than half (52%) of POS systems in SMB retail are in the legacy mould, preventing these companies from maximizing customer service and operational efficiencies. Transitioning from these legacy point-of-sale or point-of-service systems to the present generation of systems requires cautious planning and due diligence. This research brief details the current POS complexities, planned improvements, and actionable recommendations to address the impending need to upgrade the most critical customer touch point in retail.

Compelling Reasons for Change

Key procedures fulfilled at the POS include scanning of products and applying loyalty credits and promotional offers such as coupons and payment processing. Aberdeen's November 2007 report, *The Roadmap to Successful Contactless Payment Implementation*, showed that the average time taken to complete a transaction from scanning and bagging to payment by Best-in-Class companies is one to three minutes. However, complex and time-consuming transactions are resulting in longer than average wait times for customers shopping at SMB locations (Figure 1).

Figure 1: Factors Behind POS New Deployment Initiatives
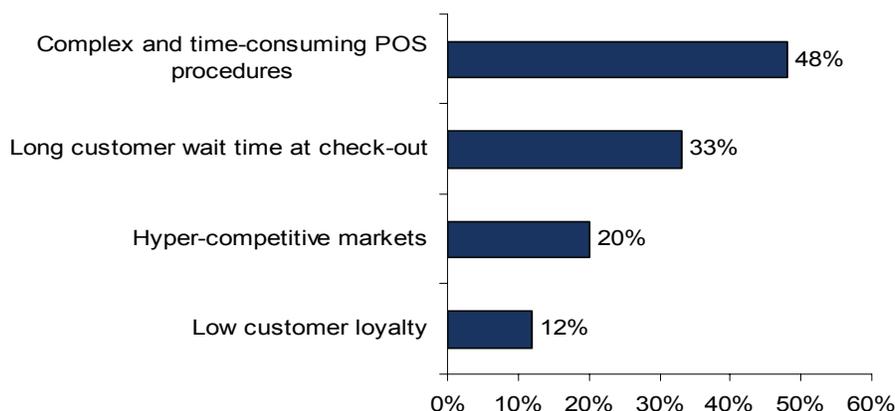
Source: Aberdeen Group, June 2008

Complexities such as longer payment processing times, poorly designed POS interfaces, and legacy system malfunctions lead to POS checkout delays that result in customer dissatisfaction. According to results from the

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Research Brief

Aberdeen's Research Briefs provide a synopsis of the principal findings derived from primary research, including key performance indicators, Best-in-Class insight, and vendor insight

Small-to-Medium Size Retailer Demographics

√ Revenue size: <$500 million in annual revenues

√ Geography: Americas (58%), EMEA (21%), and Asia-Pacific (21%)

√ Major segments: small-box specialty, supermarkets, grocery, drug and convenience stores, and consumer electronics

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Migrating to Customer Centric Point of Service Benchmark Report, currently 66% of SMB retailers report lower than 70% customer satisfaction, primarily attributed to POS experience.

Figure 1 shows that 48% of SMB retailers surveyed have identified complex and time-consuming POS checkout procedures as the major pressure impacting customer POS experience. These results defy a classic myth that exists among retailers that a lack of consistent store execution of POS processes is the reason for dissatisfaction of customers at POS. On the contrary, a major factor for customer dissonance at the POS is an outdated POS infrastructure that lacks timely replacement or upgrade of POS software, peripheral, and hardware technology as well as related customer processes (Table 1).

"We are always looking to do away with the complexities surrounding out POS system. Flexibility in upgrading our POS system towards different forms of payment, promotional programs, and security data are the strategic initiatives that we have planned in the coming months."

~ Director of IS Support, SMB Specialty Retailer (Americas)

Table 1: Impact of Lack of Updates to POS Customer Service Operations Technology in SMB Retail

POS Function Classification	Major Types of POS Procedural Problems	Where Outdated Technology is to Blame
Order Management	▪ Scanning inaccuracy ▪ Price inaccuracy ▪ Promotion offer inaccuracy ▪ Errors in populating orders ▪ Error in order submission	▪ Lack of software updates ▪ Frequent touch-screen failure or outage ▪ Screen, receipt printer, and keyboard malfunction ▪ Lack of 2-D scanning capabilities
Payment Processing	▪ Payment non-acceptance or delays ▪ Payment authorization failure issues ▪ Identity verification failure issues	▪ Lack of payment software upgrades and updates ▪ Magnetic card reader and check scanner malfunction ▪ Lack of pin entry device for payment self-service ▪ Lack of 2-D scanning capabilities for signature capture and returns verification ▪ Poor network management leading to high downtime
Loyalty Programs and Guided Selling	▪ Rewards non-acceptance ▪ Lack of promotion execution ▪ Absence of up-selling and cross-selling procedures	▪ Magnetic card reader and barcode scanner malfunction ▪ Lack of software upgrade that provide promotion updates and guided selling prompts

Source: Aberdeen Group, June 2008

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Definitive Actions of SMB Retailers to Solve POS Woes

SMB retailers are encountering significant POS process and system-upgrade related challenges. The three primary challenges can be summarized as follows:

- Lack of adequate network bandwidth due to prevailing use of dial-up networks, lack of network visibility or optimization. Without the adequate network capabilities, retailers are unable to use web-based POS tools such as web order management, order look-up or e-mail functions as well as other web-based enterprise-level applications that can be accessed from POS registers.

- Forty-eight percent (48%) of SMB retailers lack adequate integration between point-of-sale, and back office, inventory and cash management applications leading to a lack of data updates that cause operational complexities in the areas of sales, budgeting, resource planning, and workforce management.

- Fifty-one percent (51%) of SMB retailers lack centralized customer, product, and location data management leading to data integrity-related roadblocks that add complexity around data integration for seamless inventory optimization, order tracking, drop, ship, and pick-up options for customers. Moving towards centralized information repository enables development of consistent product messaging, coordinated cross-channel promotions, and customer loyalty programs.

- Fifty-three percent (53%) of SMB retailers do not possess a PCI-compliant data security infrastructure to protect cardholder data access by external entities and fraudulent use of data by internal employees.

Despite these business pressures and challenges, SMB retailers have found some ways to overcome the infrastructure-related drawbacks that have increased POS and customer experience complexities. The foremost strategy adopted by more than a third (36%) of companies is developing a planned approach to improve store POS infrastructure in the areas of network upgrade, centralized data management, and POS integration with other enterprise applications (Figure 2).

Best-in-Class Criteria
√ Customer satisfaction goal attainment
√ Average POS checkout time
√ Average transaction size

Figure 2: Small Retail Strategy in Line with Best-in-Class
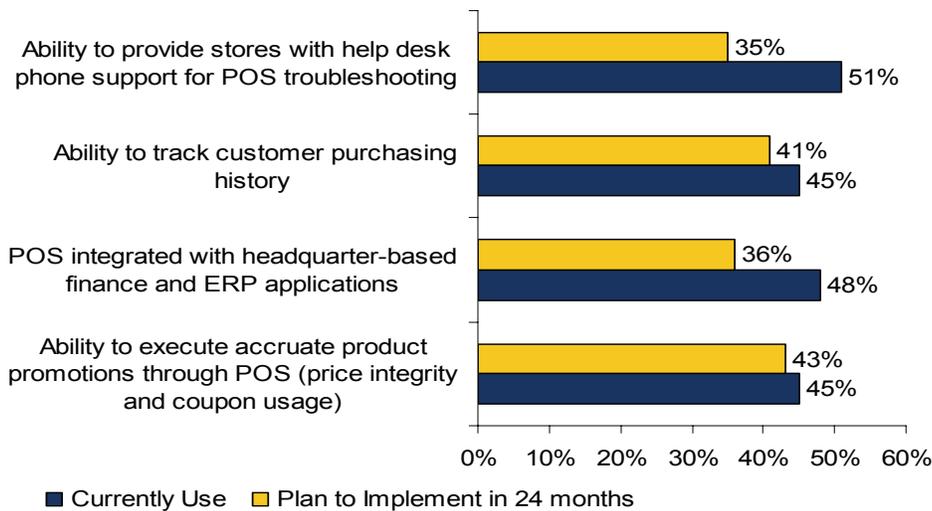

Source: Aberdeen Group, June 2008
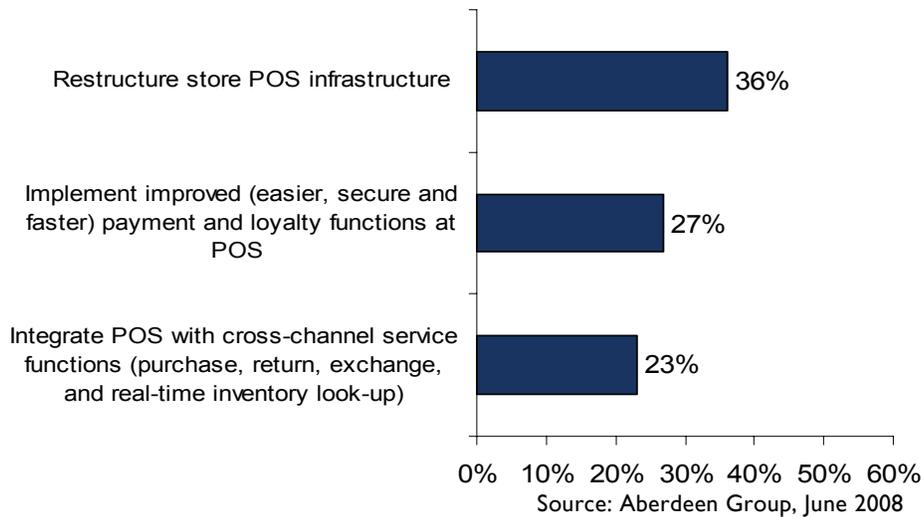
Other actions that a quarter of SMB retailers are implementing is improving the payment and loyalty functions to improve customer focus. For example, in retail segments such as convenience, grocery, and petroleum stores where loyalty programs are not as prevalent as specialty, SMB retailers are expanding multiple levels of services for customers through perks, coupons, and convenient payment initiatives such as the introduction of integrated debit, credit, and contactless payment acceptance. These companies are gradually expanding the acceptance of new forms of payment such as gift cards, contactless payments, and adopting faster payment processing standards through the adoption of payment software upgrades, network enhancements, and pin entry peripherals.

Further, the third major strategic action being currently adopted by SMB retailers is the integration of cross-channel functions at POS for customer services such as unified purchase, return, exchange, and inventory look-up for customers that shop on the web, catalog, and make in-store purchases in retail segments such as specialty, general merchandise, and apparel. This strategy has enabled companies to convert POS into a single hub, one destination for multiple services for all channels - a unified POS or extended POS.

Capabilities that Enable POS Improvements

Figure 3 outlines the top four capabilities (current and planned) required for POS improvement by SMB retailers. Traditionally, SMB retailers fell behind the Best-in-Class retailers in adopting these capabilities. Lack of awareness and resource constraints are the two likely reasons for slower adoption.

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Figure 3: Small Retail Strategy in Line with Best-in-Class

Source: Aberdeen Group, June 2008

According to 43% of retailers, the top rated current and planned capability (in the next two years) for improved POS experience is the ability to execute accurate product promotions through POS. Coupons, discounts, rebates and other promotional offers are critical components for enticing customers to shop in stores as shown in the Aberdeen's February 2007, *The Changing Dynamics of Retail Promotions* report. However, one of the contributory factors for customer dissonance at POS is related to non-acceptance of promotions at POS or delayed processing due to lack of pricing updates to the individual store servers from headquarters.

The SMB retailers that currently possess this capability have established a detailed headquarter to store POS promotion updates process. These updates to the store-level POS software, on a daily or weekly basis, enable consistent price integrity and promotion processing for customers. In effect, a robust process for POS promotions reduces the possibility of price adjustments that are undertaken by store managers. These price adjustments negatively impact margin as well as customer satisfaction.

Are Small Retailers Using the Right Applications?

Capabilities and technology go hand-in-hand in building a customer-centric POS environment. The preferences of SMB retailers can be assessed on current and planned adoption within the next two years. Our results show that any upgrade plan for POS systems has to include a combination of software, hardware, and peripherals.

Current adoption is centered on POS updates, related PCI compliance and multi-channel capabilities such as product information, order management, and customer fulfillment. Both PCI and multi-channel updates can be software, peripheral, and hardware related. In the case of PCI, the updates most commonly used are PCI-compliant pin-entry devices, data storage,
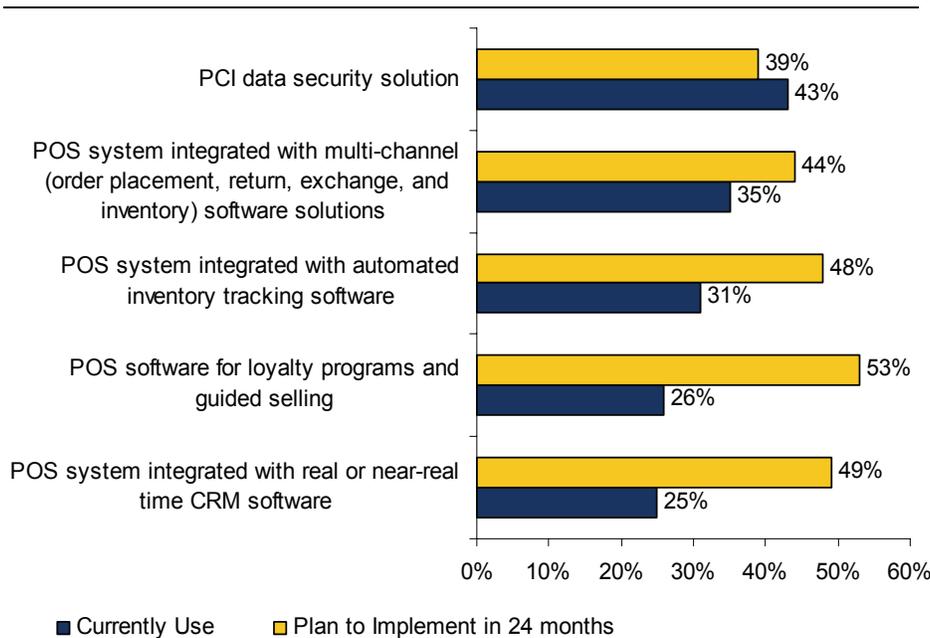
auditing and updates to applications in relation to access control tools such as restricted access to sensitive customer or financial data.

The multi-channel updates are primarily software updates with new web modules, web server / network bandwidth enhancements to accept web orders, order tracking, and order processing. This POS update includes the ability to purchase, exchange, return, and ship customer purchases across all channels. Best-in-Class companies also undertake multi-channel improvements at the point of service by installing web-order kiosks in stores.

Within the next two years, SMB retailers plan to make significant investments in updating legacy POS in three primary areas:

- Providing loyalty programs such as customer referral programs, coalition marketing, in-store and web-based personalized promotions

- POS register application enhancement to include inventory management software for improved optimization and visibility of inventory

- POS register application enhancement to include dynamic CRM tools and functions such as customer demographic information updates for relationship marketing programs, gift registry, loyalty or reward sign-ups

Figure 4: POS-related SMB Technology Landscape

Category	Currently Use	Plan to Implement in 24 months
PCI data security solution	43%	39%
POS system integrated with multi-channel (order placement, return, exchange, and inventory) software solutions	35%	44%
POS system integrated with automated inventory tracking software	31%	48%
POS software for loyalty programs and guided selling	26%	53%
POS system integrated with real or near-real time CRM software	25%	49%

■ Currently Use ■ Plan to Implement in 24 months

Source: Aberdeen Group, June 2008

"We have a few problems with our POS upgrade. We do not have perpetual inventory, we have an arcane network, and a franchisee of stores that have limited budgets. Yet, I believe upgrading our POS systems is the best way forward for our customers and franchise's future growth. We will deploy new POS registers in all our stores within the next six to 12 months."

~ Owner & President, 50-Store Convenience Store Franchise, North America

Case in Point

Take, for example, the case of Mahoney Garden Center. This family-run SMB retailer operates eight full-service garden center stores in Eastern Massachusetts. Mahoney's also operates a wholesale growing greenhouse in Woburn, MA. This specialty retailer's seasonal selling during the months of April and May is significant. Their business problem was related to a legacy POS system which was installed in all the stores. Mahoney's stores were facing frequent system break-downs causing incessant customer checkout delays, lost sales opportunities, and unhappy customers. Moreover, Mahoney did not have inventory control processes in place at the POS as the store associates were entering department codes instead of bar-codes at the registers. This led inventory related discrepancies as well as lack of alignment between inventory, POS, and overall business goals. These factors can lead to ineffective enterprise financial planning, workforce planning, and daily sales budgeting-related issues.

Based on an internal assessment of their POS-related woes, this retailer undertook a POS transition strategy in 2007. Their need was centered on a robust POS system for eight stores and 52 terminals. Their needs were very specific. They needed a system that would be ideal for their rugged garden center environment, specifically during the peak selling months of April and May. In terms of feature and functions, the new POS system had to provide software, hardware, and peripherals to support inventory control process, product bar-code scanning, order management, and speed of transaction. In terms of ruggedness, Mahoney required all POS terminals to be equipped with rodent proof components.

Mahoney Garden Center adopted a POS system for a solution provider that has domain expertise in addressing needs of a company their size and requirements. This retailer was also provided help desk and depot repair services by the solution provider in case system support was needed by the employees in case of a technical snag.

Since the adoption, this SMB retailer has begun measuring and tracking key performance indicators such as speed of transaction, on-hand inventory, gross margin, and system uptime in an effective manner. The results that they have so far attained are attributed to the new POS system. "We are pleased with the uptime. On an average, Mahoney has attained 95% or more uptime for all their POS terminals. The new POS system ensures speed of transactions leading to extremely satisfied customers. Moreover, compared to the troubleshooting required on our legacy POS system, we need to use our help desk / depot services may be once every couple of months", says, Martin Cawsey, CFO, Mahoney Garden Center.

Recommended Actions

Aberdeen data shows that SMB retailers have to address a unique set of challenges and enterprise-wide attributes to develop a winning POS environment. This would require that companies follow a roadmap to attain cross-channel nirvana. This roadmap must include the following steps:

- Re-structure the point-of-service architecture at stores based on a discovery analysis of speed of transaction, uptime, and customer satisfaction.

- Define the store and customer operations-based improvements aligned with software, peripherals, and hardware aspects. Segment the improvement plan in three primary stages including planning, implementation, and evaluation phases of an POS upgrade initiative.

- Create cross-functional collaboration between IT, marketing, and store operations to improve focus on POS knowledge sharing and setting the path POS experience improvement. Both steps will improve customer focus and revenue growth.

- Consider a one to three year plan for retro-fitting, or a rip and replace across software, hardware, and peripherals that could potentially improve customer experience and increase revenue. In evaluating any software or hardware upgrade, one of the criteria should be the flexible architecture of the solution for future upgrades.

For more information on this or other research topics, please visit www.aberdeen.com.

Related Research	
Technology Strategies for Multi-Channel Integration; May 2008 *21st Century Retailer*; January 2007	*Retailers Fall Short on Multi-Channel Integration: Is There a Way Out?*; March 2008
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