

The Case for the “Smart-Phone” on the Retail Floor

The Retail Opportunity

Broadband and VoIP (voice over internet) technologies are penetrating the retail environment, creating an opportunity for a new kind of network access device that can be made available to customers and employees. The IP-Phone, or “smart-phone”, uses the store’s network infrastructure to deliver many functions in one small space. Given the challenges facing retailers, such as long lines at the register, finding inventory, accurate and timely customer services, and employee access to critical systems, what is the value proposition for deploying “smart-phones” on the retail floor?

The Business Challenge

Leveraging Business Intelligence

According to the recent benchmark report, *Business Intelligence in Retail: Bringing Cohesion to a Fragmented Enterprise*, 76% of retailers are actively using BI in their organizations. The top three motivators for this focus on BI are improving the customer experience, tracking merchandise, and improving the effectiveness of promotions. However, even the very best business intelligence is useless without a vehicle for its delivery in a timely and meaningful way, to the organization and its employees and to the customers. Translating the top motivators into action priorities on the floor, it could be said that the top three business process priorities in the retail store are:

- Rapid and accurate responses to customer needs and inquiries;
- Managing and locating inventory
- Communicating business-critical information among employees.

Best in Class retailers have spent considerable resources integrating data across channels to create a unified view of customer information, product and inventory data, and transaction history. Management uses the integrated data to create portal-based dashboards, consolidated reports and real-time alerting to improve marketing strategies and guide the company toward improved profits. Despite these efforts, communication from the headquarters to the stores and within the stores themselves remains a challenge; high-demand inventory goes into the markdown bin because it was not found when the customer wanted to buy it; and customers wait in long lines to get answers to simple questions. Given the priorities above, much can be done to accelerate the delivery of critical messages and other data into the store.

Responding to Customer Inquiries

Arguably the single most important differentiator among retailers is their ability to deliver high-quality customer service. After staff training, the most common enabler of quality customer service cited by retail management is access to real-time data. Whether the customer is asking

Announcement

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about a particular product, about a recent transaction made at the store, or about an upcoming promotion, if the employee does not have access to the information, then either the question will go unanswered, the wrong information will be delivered, or the customer will be forced to wait.

The same is true for customer calling into the store on the phone. If the phone rings more than three or four times, or if the customer is placed on hold for more than a minute or two, the relationship and its potential for sales is greatly diminished.

Ideally, most customer inquiries could be handled by a self-service system, leaving the staff available to address the more complex interactions. The system should be intelligent enough to route incoming calls to the appropriate staff within the first three or four rings.

Managing Inventory

One of the most troublesome challenges facing retailers is managing inventory and reducing out-of-stock situations. In the worst-case scenario, the inventory system indicates that an item is in stock but, due to theft, damage or misplacement, the item is not on the shelf and cannot be located in the back room. The buyer at the corporate headquarters will not place a re-order as long as the inventory system says there is quantity on hand; and the business executives find it mysterious that a product which sold well in the early days suddenly stopped selling. Customers asking for the item are told, “*We only have what’s out there,*” or “*Just minute I’ll check in the back,*” and the issue is never investigated. It is not until weeks later, when a physical inventory is taken, and after the first round of markdowns, that the problem is corrected. By then, customer demand has moved on.

Ideally, whether in the store, calling from home, or using the Web, a customer should be able to locate the desired product easily if it exists anywhere in the enterprise. If it is in stock in a nearby store, the customer should be instructed where to find it. If the customer prefers, shipping arrangements could be made. If the item is not in stock, information about the item’s disposition in the supply chain should also be available to the customer. For example, if the item is on-order or en-route, the customer should be able to find out when it is likely to arrive. At the very least, the system should note the fact that there was an unsatisfied customer request and send a pro-active message to store management alerting them of a possible discrepancy in the inventory or out-of-stock situation.

Optimizing Employee Communication

Retailers are not anxious to rely on email correspondence or Web-based portals for employee-facing task management for two reasons:

1. It is risky to give employees access to Web-based applications. Employees with access to email or to the Internet from a terminal in the store are likely to use it for non-job-related activities.
2. Typically, the user-interface is a PC located in the back office of the store. Encouraging employees to use the system for regular tasks is asking them to spend time away from the sales floor.

To address these problems, many retailers are adopting closed-loop portal solutions, collaborative software which handles inter-store communications and workforce management functions without exposing the users to email. In the last two years, Aberdeen Group has seen a dramatic improvement in the communication and collaboration capabilities that enterprises are offering to the individual stores. Systems are being deployed to handle employee scheduling, store-level marketing, promotion initiatives, and day-to-day sales management activities. While

this solution addresses the first concern, the terminal is still usually located in the back office. Thus, the messages from headquarters reach the store manager who must then communicate offline with each of the employees to convey the messages.

Ideally, the retail staff should be able to get answers to their questions, receive critical business communications, and participate in training programs without leaving the sales floor.

Network Access Points on the Sales Floor

Aberdeen Group has seen some retailers deploy networks of single-function devices on the retail floor. Infra-red sensors in Home Depot and IKEA allow customers to scan an item and get pricing information on demand. Aberdeen has also seen elaborate touch-screen kiosks in Border's Bookstores and J.C. Penny Stores. While these devices offer answers to many customer questions, Aberdeen research shows that they tend to be underutilized, difficult to maintain, and they take up valuable retail space. Neither of these types of devices is of any use to the employees.

The ideal retail network access point is a seamless combination of Web, IVR and access to a live customer support agent, reducing customer wait time, allowing staff to perform administrative functions without leaving the sales floor, and respecting the value of the retail floor space.

Freeing up the Point of Sale Terminal

In most retail environments, there is already a networked device on the sales floor. It is the point of sale terminal. Modern POS terminals can answer many of the basic questions that an employee or a customer might have: "Do you have this item in my size?" "How much money is left on my gift card?" "How many loyalty points are in my account?" "What shift am I working tomorrow?" "How much have I sold so far today?" The problem with using the POS terminal to answer these questions is that the POS system gets tied up with jobs that do not produce revenue. Many leading retailers, realizing this, set up a non-POS "information desk," or customer service counter. While this solution does reduce the line at the cash register, it must be staffed by trained personnel and often results in just one more line in which the customer has to wait. An effective technology would address all of these issues in a single self-service application.

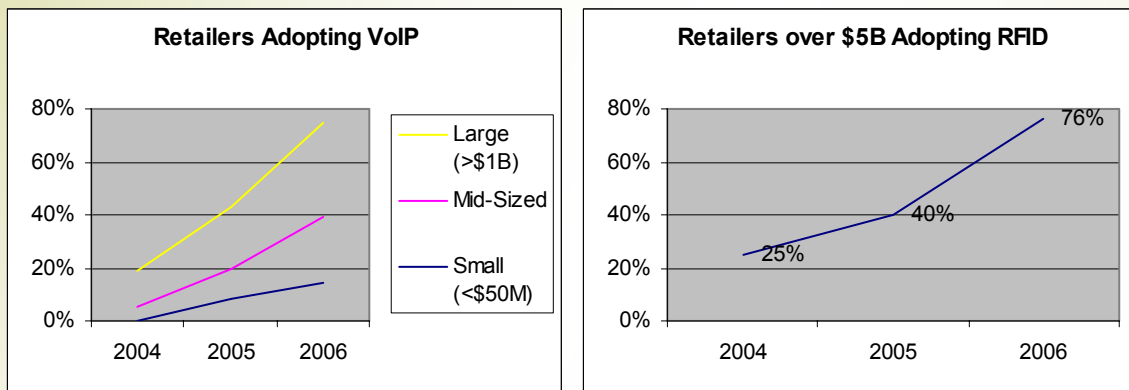
Self-Service and Call-Center Applications

Voice-enabled self-service call handling applications have matured noticeably in the last two years. Leading with a simple question like, "How can I help you?" the system can recognize key words and phrases and make assumptions about the nature of the call which are accurate more than 90% of the time. Simple transactions can be handled completely without the use of a live agent. For example, if a customer walks into a store to return an item and only has a gift receipt as proof of purchase, the customer should be able to retrieve the value of the item and the return policy information before making a decision about whether to buy another product or request a refund.

If it is the establishment's policy to answer an outside call before the third ring and no sales associates are available to take the call, the call should bounce seamlessly to the call center or to another store and be transferred to the correct customer service representative before the customer is made to wait. Furthermore, if the customer is in the store, looking for an item or trying to get an answer to a question, it should be possible to pick up a courtesy phone and connect to an employee. The best practice in this scenario would be to leverage the mobility of the sales staff with portable, hands-free, phones so that the conversation can begin even before the sales person arrives.

The Perfect Multi-Function Device

The perfect multi-function network access point addresses all of the issues raised thus far without compromising store security, without being prohibitively expensive, and without taking up a lot of space. It should also be expandable and adaptable so that as the retailer grows more sophisticated, the access point can too. For example, many retailers are embedding product information in bar codes or RFID tags attached directly to the products. In addition to the self-service call center applications listed in the preceding section, the access point should be able to be fitted with a scanner so that a customer can get immediate access to pricing, inventory information, special instructions for use, promotions, cross-sell and up-sell notices related to the product in hand. If the store offers a loyalty card or pre-paid gift card, the device should be able to respond to a card swipe and deliver balance information, even re-charge the pre-paid account from another credit card account. It should be able to process employee time-card transactions, logging the real time that the employee entered and left the sales floor. It should also be able to deliver clear, detailed and prioritized messages from headquarters or from the store manager directly to the staff.



The “Smart-Phone”, a Best-in-Class Enabler

Best in Class retailers can address the challenges and take full advantage of the opportunities by installing IP-enabled multi-function phones on the sales floor. Phones offer many advantages over other technologies:

- Phones are small, relatively inexpensive and easy to service or replace;
- Everyone is comfortable using a phone;
- Voice offers a rich, powerful medium for interaction, with immediate feedback;
- Phones can be fitted easily with card-readers, scanners and other sensor technology;
- Call-routing technology allows for a seamless customer experience;
- IP-enabled phones deliver Internet content, data and applications to users.

Based on the challenges and opportunities described in this document, it makes sense to consider deploying a network of IP-enabled phones in retail stores. Smart-phones meet all the criteria for delivering high-value customer and employee service without taking up space. They are friendly and familiar and can be expanded to include sensor technology and graphical displays to deliver rich media on-demand. Voice interface is another opportunity to touch customers with a branded

message and convey relevant information about promotions and other products. Speech-recognition technology allows users to conduct their business in their own language without the aid of a human operator. When an operator is required, the session can be handed seamlessly to a call-center customer service agent who already knows the content of the session and can move to action quickly. Phones are useful for delivering messages from headquarters or from the store manager and can convey an escalation of urgency when tasks are ignored.

Recommendations for Action

Best-in-class retailers who already have robust data-driven online systems and broadband in the stores can develop prototype solutions and begin proof-of-concept testing in stores without much investment.

Average and laggard retailers should already be developing business intelligence systems to achieve a unified view of customer, product, inventory, and transaction data across channels. When reviewing workforce automation and customer call-center technology, consider the network endpoint and evaluate the cost-to-opportunity ratio of selecting a smart-phone as the access point.

Recommendations for Action

- √ Evaluate the readiness of key information sources and software for collecting and distributing critical business messages and data.
- √ Survey the retail space to determine the best method for enabling broadband connectivity in key areas.
- √ Select network access point technology that will be easy for the customer to understand, respect the value of the floor-space, and provide broad functionality.
- √ Implement data-driven applications at the access point to reduce the transaction load on the POS system and improve the customer experience.

Conclusion: IP-Enabled Phones Improve the Retail Environment

Smart-phones are not a replacement for a helpful sales staff. However, they do represent an opportunity to improve the customer experience, improve the efficiency of the staff, and optimize communications between staff and management. Coupled with a strong data management system and a call center, smart-phones can perform most customer and staff-related service functions without imposing a burden on the point of sale.

Related Research

[*Business Intelligence in Retail: Bringing Cohesion to a Fragmented Enterprise*](#); June, 2006

[*The Multi-Channel Retail Benchmark Report: Where is the True Multi-Channel Retailer?*](#); December, 2005

[*The RFID Benchmark Report: Finding the Technology's Tipping Point*](#); December, 2005

[*What Works: Significant Voice Over IP Deployments of 2001*](#); May, 2002

[*Best Practices in Store Performance and Customer Service Management*](#); September, 2005

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