VOLUME 1 | NUMBER 1 | SPRING 2006

PERVASIVE RETAILING JOURNAL

A PUBLICATION OF FUJITSU TRANSACTION SOLUTIONS INC.

RETAILERS TO INCREASE POS SPENDING IN 2006

By Greg Buzek
President, IHL Consulting Group

More than 60 percent of retailers expect their annual IT budgets to increase in 2006, according to the recent Store Systems Study 2006 published by the IHL Consulting Group and *RIS News*.

The third annual survey of retailers examines technology spending trends related to store systems, and addresses current industry uses and future trends for point-of-sale (POS) systems and other store technology.

While previous studies have shown recent growth in general IT spending among retailers, this year's study specifically reveals strong growth in spending at the store level. In fact, 87 percent of respondents now view the POS as a more evolved store system, with applications ranging from inventory visibility, cross-channel sales and customer returns at the cashier level, to employee email and a delivery mechanism for company policies and procedures at the central store level.

The survey shows that overall need and desire for this POS "store system" hardware is on the rise, with 49 percent of retailers in the survey planning a hardware purchase in the next 18

"Increase Spending," continued page 5

INSIDE THIS ISSUE

INTOUCH WITH RETAILING™

SOLVING THE INTEROPERABILITY CHALLENGE

An explosion of consumer-facing devices, in and out of the store, is driving a pervasive retailing future – where consumers increasingly expect personalized interaction on the device of their choice, anywhere, any time and every time.

In an ideal world, all of these devices would enable real-time interoperability. But in the "real" world, these pervasive devices and the applications that create value from using them come from many different vendors on multiple platforms. Getting these disparate elements to work together effectively has historically been an enormous challenge, especially when integrating them with legacy systems.

While meeting this challenge is a daunting task, the benefits are significant. Offering consumers the opportunity to shop and buy when and where they want, and recognizing them as individuals with personalized interactions, creates huge opportunities to differentiate the shopping experience and drive increased loyalty and sales.

This vision is not a new one, but most people assume it is still out of reach. In fact, it can be – and is being realized – *today*.

STORE SYSTEMS VS. POS SYSTEMS

The first step to solving the real-time retailing interoperability challenge is to break some current paradigms about traditional point-of-sale (POS) systems. Available technology has forced retailers to buy discrete point solutions for their stores – such as POS, self-checkout and kiosk – and then create point-to-point integration. This approach is time-consuming and results in a system of patched-together software and devices, making future additions or upgrades a time-consuming and costly headache.

More often than not, potential market innovations are left on the drawing board because the enabling interoperability is too difficult and costly.

Connecting stores to the enterprise, Web and each individual customer demands a "store system" with capabilities far beyond a traditional POS approach. Such an environment requires a unified framework of software, tools and services, all based on open standards that simplify the interoperability of disparate components.

But a true "store system" can only be achieved with the right combination of engi-

"Interoperability," continued page 5

Pervasive Interaction: A Model for Transforming the In-Store Customer Experience

By Robert Garf, AMR Research

Current in-store applications, such as Point-of-Sale (POS), inventory management, and replenishment systems, help ensure product availability and transaction efficiency, but retailers need to complement these investments with customer- and employee-facing advanced selling technologies. Doing so distinguishes their in-store experience from competitors' and provides the service that customers demand. AMR Research has published a comprehensive Report entitled, "Transform Your Stores: Enhance Customer Interactions with Advanced Selling Technologies." This Report introduces the leading process concept of Pervasive Interaction (PI) and how an Advanced Selling Technology (AST) framework can create a PI as part of a retail store experience.

The Bottom Line: Retailers that quickly adopt a PI model, by investing in AST, will revolutionize the store experience in the minds of consumers, thus satisfying their high expectations, increasing sales and margin, and improving long-term frequency and loyalty.

What It Means: Retailers spend an estimated $113B annually developing and executing advertising, marketing, and promotions to increase store traffic. With 70% of actual buying decisions made only after the customer is inside the store, retailers risk missing an opportunity to increase investments that enhance the brick-and-mortar shopping experience and significantly increase conversion rates. The core of that investment is the formation of an operating environment of PI. This model uses customer insights from cross-channel shopping interactions, provides access to consistent product content, and allows for timely and relevant delivery of information to employees and customers. It changes the shopping paradigm by establishing a closed-loop interaction model that supports employees and services customers throughout each stage of the consumer's shopping experience, as we explain below.

DEFINING THE FIVE-STAGE SHOPPING PROCESS

While process and technology improvement should focus on the store, where most of the customer interactions occur today, you must understand how each stage of the closed-loop selling process interrelates to make the most of investments at multiple levels. Here are the stages in order:

Research – Often occurs on the Internet prior to entering the physical store; in fact, according to comScore, 35% of in-store purchases are first researched online

Entering – When a customer actually comes into the store

Browsing – When a consumer locates and determines what to buy

Checkout – Buying of the product

Post-purchase – Includes product assembly and warranty submission

Each of these unique process steps is an opportunity for a retailer to optimize customer interactions and improve store experiences to distinguish you from competitors.

ADVANCED SELLING TECHNOLOGIES ALLOW FOR PI

The only way that each stage of the shopping process can be fully supported is for retailers to invest in a technology framework that uses functionality from existing systems, such as POS, but establishes a new technology foundation that allows the seamless introduction of a broad set of employee-assisting and customer-facing devices and software.

This AST framework is broken into two layers:

AST architecture – The foundational layer supports the integration of legacy systems and new consumer-centric capabilities. The architecture includes a device management abstraction layer, standards-based content delivery and capture services, multichannel content and order management platform, data repositories and analytical tools, secure hardware and communications, and infrastructure. The primary goal of the architecture layer is to provide flexible integration with customer-facing systems that deliver personalized and contextualized information to shoppers and store employees.

AST customer-facing systems – These products consist of hardware devices and software that actually drive the new transactions. Examples of newer AST devices include mobile handhelds, cart-based tablets, kiosks, self-checkout systems, electronic shelf labels, and electronic signature capture terminals. Examples of software applications include guided and comparative selling tools, personal shoppers, product locators, dynamic promotion displays, customer loyalty management applications, customer surveys, and traffic tracking applications. The most valuable customer-facing systems will be those that can adjust formatting and delivery to multiple output platforms while maintaining an extremely high level of usability.

The Benefits: Early adopters of AST strategies looked to enhance customer interactions. They are seeing improved operational efficiencies as well as increases in simultaneous transaction size and trip frequency. For example, a specialty retailer reports close to $90 per order in incremental store sales from customers that chose to pick up their online order at the store, while an apparel retailer reported a 20% increase in spending from customers that received personalized promotions on their cell phones. One grocery retailer reports a 60% increase in overall customer satisfaction with the shopping experience because of direct investments in myriad customer-facing devices, including portable shopping devices, kiosks, and self-checkout.

Conclusion: In this hyper-competitive industry, retailers must establish a new operating model that ensures customer satisfaction and loyalty. That model is PI aided by AST. Focusing on the store experience and each stage of the shopping process is the opportunity for the greatest impact. To equip retailers with actionable insight on adopting PI, consult the AMR Research Report "Transform Your Stores: Enhance Customer Interactions with Advanced Selling Technologies."

PERVASIVE RETAILING
TRENDS

U.S. RETAILERS SEE KIOSKS AS MULTI-CHANNEL SALES CATALYSTS

Retailers can use kiosk installations to attract multi-channel shoppers by luring customers who use the Web to research intending purchases into making their actual purchases on the spot. As kiosks must support the closing of transactions at the store for this strategy to work, the number of payment-enabled kiosks in use is expected to increase during 2006.

SOURCE: OPENPAYNEWS.COM – WWW.OPENPAYNEWS.COM/NEWS /1140443517622215212.HTML

SNEAK PREVIEW: MORE CONSUMERS READY FOR CELL PHONE MUSIC AND VIDEOS

According to a recent report from The Diffusion Group, a research consultancy focusing on the digital home and connected consumer, more consumers are warming up to the idea of listening to music or watching videos on their cell phones. The report confirmed that 42 percent of consumers in Internet households would be comfortable listening to music on their cells, while 30 percent would watch TV or movies.

SOURCE: THE DIFFUSION GROUP

The Retailer, the Customer and the New Retailing Paradigm

By Austen Mulinder, President and CEO, Fujitsu Transaction Solutions Inc.

In 1999, in an article written for Texas A&M's Center For Retailing Studies, I projected that within three to five years, retailers who cared about delivering quality customer service would be changing everything – their culture, processes, systems, organizational structures, roles and responsibilities – to become truly intimate with their customers.

I believed then – and it is now evident – that innovative retailing advances are driven primarily for customers through the explosion of e-commerce and self-service devices to meet their individual needs. The possibility of satisfying these needs arises from technology and its ability to harvest huge quantities of customer data – solutions that were, in fact, more visionary than real in 1999.

But since then, technology advancements have given retailers a synergistic view of their customers across departments, and recent innovations have enriched traditional demographic data with individualized customer information, allowing retailers to create a holistic perspective of the shopper's unique needs and wants.

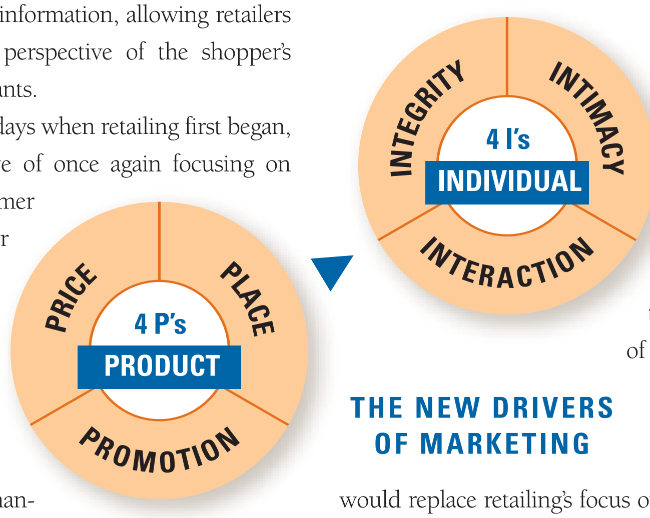
In short: like the days when retailing first began, retailers can conceive of once again focusing on selling to *each* customer individually, rather than to *many* customers at once. Looking ahead, it will be technology, rather than the salesperson per se, that enables and manages meaningful contact – and ultimately the interaction – with individual customers.

THE NEW RETAILING PARADIGM

Consumers have discovered their power. Whether it's having grown accustomed to shopping the global marketplace via the Internet; self-ordering at kiosks; adopting self-service and mobile computing tools in growing numbers; or demanding alternatives for shorter wait times, consumers have not only come to expect, but to demand, the ability to shop whenever, wherever and however they want.

As a result, retailers are working even harder to connect themselves with consumers via technology and its vast potential to offer the individualized service shoppers are demanding and receiving online. More than ever before, leading retailers are listening to their customers as individuals; understanding their personal needs and wants; creating customized offers; and interacting on the customer's terms to deliver a consistent and personalized shopping experience.

Now the critical question has become: "How do retailers adapt to a retailing environment where the established 4 P's of the marketing mix – Product, Place, Promotion and Price – no longer serve as the primary drivers of marketing success?" The answer, like retailing itself, requires a paradigm shift that lays the groundwork for success without jettisoning the retailer's investments in legacy systems, management and marketing approaches.



THE NEW DRIVERS OF MARKETING

In 1999, I proposed that a new way of thinking would be required, one that moved beyond the traditional 4P's toward the concept of "the 4 I's" – Individuals, Integrity, Intimacy and Interaction. These would replace retailing's focus on marketing *to customers* via established broadcast retailing channels with a model that essentially begins *from each customer individually.*

What seemed like a bold prediction seven years ago is becoming a reality. Technology now makes it possible for retailers to shift from a traditional product-centric approach to a strategy focused on and driven by the individual. It also allows retailers to demonstrate integrity, increase customer interaction and build intimacy in ways that will attract and keep loyal – and highly profitable – shoppers for a lifetime.

"New Retailing Paradigm," continued page 4

"Paradigm," continued from page 3

FROM PRODUCT TO INDIVIDUAL

Consumers are increasingly turning to technology to satisfy their needs…quickly. Millions of people surf the Internet daily for information and entertainment. Cell phones are so commonplace that countless public places post signs restricting their use. Self check-in at airports is fast becoming the norm; and PCs, laptops and wireless devices have become bona fide entertainment centers.

As a result, consumers now expect – and demand – similar experiences when they shop. Finding the right product at the right price remains important, but it is not enough. Reducing the personal time, effort and risk involved in purchasing the right product at an attractive price is becoming more important. By providing shoppers with real-time interactions tailored to their own preferences, emerging enterprise-wide solutions can give retailers the power to focus directly on the needs of individual shoppers. The benefits include greater customer loyalty and higher profits in the short- as well as the long-term.

FROM PRICE TO INTEGRITY

The concept of retailing integrity has traditionally revolved around price as well. Every shopper, sophisticated and novice alike, looks for value, and a fair price is the ultimate arbiter of whether retailers have delivered on their promise. If shoppers believe they have been taken advantage of, they simply won't be shoppers for long.

With fair price as a given, the integrity of the offer is shifting to the shopping experience itself. State-of-the-art solutions now allow retailers to demonstrate integrity more proactively and much more broadly than ever before. Smart shopping carts, for example, not only alert consumers to sale items as they shop, they can even tell shoppers in which aisles to find them. And electronic shelf labels can update price changes in real-time, eliminating unintentional discrepancies that could cause customer dissatisfaction.

To maintain real customer integrity in today's world requires a holistic view of the customer across multiple sales channels, while engaging the customer across each of those channels with a uniform process. Technology is driving this process. The result can build customer trust and loyalty, while simultaneously driving sales.

FROM PLACE TO INTIMACY

Location is still important, but shoppers can now order a multitude of goods with the push of a button, often wherever they happen to be. They also receive more and more deliveries at home, and if their tastes include fresh seafood or even something as specific as Norwegian salmon, today they can satisfy their desires quickly, whether they happen to live on the coast or in a desert.

Consequently, the key to building sustainable relationships no longer lies in location or brick and mortar alone, but in how well the retailer is able to understand and satisfy the needs of individual profiles, both in and out of the store.

If, for example, a shopper is buying perfume at a cosmetics counter and the salesperson has access to the shopper's previous purchases, her skin allergies and a list of items specially made for her type of skin, the impact of suggesting products she should also consider will actually increase the retailer's intimacy with the customer. Not to mention add-on sales.

FROM PROMOTION TO INTERACTION

Realigning retailing away from traditional mass demographic marketing to individualized interaction is the cornerstone of the pervasive retailing revolution. With technology that offers the ability to interact with each shopper on a one-to-one basis, retailers will no longer need to rely on generic campaigns or mass marketing strategies that communicate watered-down messages.

To achieve individualized interaction – whether physical or electronic, real or virtual, in-store or out-of-store – in a way that continues to build customer intimacy and demonstrates integrity, technology must be integrated and supported as a single, common and continuous process that engages customers whenever, wherever and however they choose.

Retailers now have the technology needed to make it a reality. The new paradigm is here, and leading retailers are beginning to shift from a product- and supply-focused approach alone to a demand-driven strategy that truly puts the customer's needs at the forefront of their operations.

Seven years ago I predicted the four I's of retailing would replace the four P's of marketing. Today, I predict the pervasive retailing environment will become the engine that drives new retailing approaches – and successful retailers – for decades to come.

PERVASIVE RETAILING

TRENDS

ONLINE RETAILERS TO MAKE SITE AND STRATEGY IMPROVEMENTS IN 2006

In recent years online retailers have become increasingly sophisticated in their marketing and merchandising strategies, and this trend is expected to continue in 2006. Retailers' priority lists in 2006 are likely to include often-overlooked components of the retail cycle, such as the checkout process, fulfillment methods and security measures that address increasing consumer concern about the safety of online purchases.

SOURCE: TRENDS 2006: ONLINE RETAIL, FORRESTER RESEARCH, INC., DECEMBER 2005

THE GROCERY STORE GETS A FACELIFT

The return of customer service in grocery stores will extend beyond health and wellness, fueled by technology.

With front-of-store applications, such as scanners and self-checkout becoming commonplace, look for savvy retailers to place experienced employees in the aisles, assisting customers with purchasing decisions and recommendations.

SOURCE: ACNIELSON

"Interoperability," continued from page 1

neering know-how to fully exploit five key technologies required to integrate this complex mix of multi-vendor devices, applications and platforms:

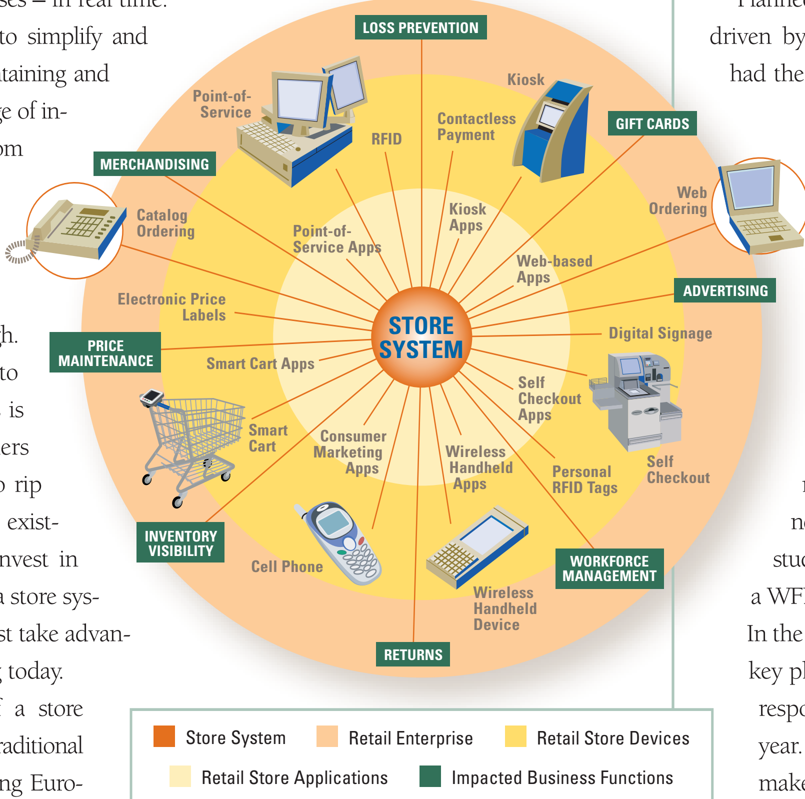
Software Engineering to build and/or integrate applications that enable all aspects of store operations with full interoperability between applications and devices, and between the enterprise, online channels and the store.

Hardware Engineering to integrate and deploy devices and systems that make it easy for consumers to shop wherever they want, whether at home, on the go, or in a traditional store setting.

Mobile Engineering to incorporate the latest hand-held devices and mobile phones, so retail personnel can better serve the shopper.

Network Engineering to assure the security and privacy of networking solutions that connect devices within the store, to the enterprise, to the Internet and, of course, to the shopper who wants answers – and purchases – in real time.

THE PERVASIVE RETAILING ENVIRONMENT



Lifecycle Services to simplify and lower the cost of maintaining and supporting a wide range of in-store technologies from multiple vendors.

These five engineering disciplines, in and of themselves, however, are not enough. Understanding how to extend legacy systems is also required. Retailers cannot be expected to rip out and replace their existing systems as they invest in newer ones. Building a store system for tomorrow must take advantage of what's working today.

As an example of a store system, rather than a traditional POS approach, a leading European grocer cut its self-checkout system installation time in half. The grocer used a virtual point-of-sale messaging framework – or software code – that significantly enhanced communications between the front-end cash registers and self-checkout systems. By embedding this software code into the retailer's POS, the self-checkout system went live in just 57 days after vendor selection.

Another leading retailer can now access its corporate headquarters inventory data to find the correct size, color and style of a garment in real-time at another store, thus selling that item right then to the customer, who either picks it up at the other store or receives it in the mail.

Taking a standards-based "store system" approach to the traditional POS system decision enables retailers to transform the shopping experience by delivering compelling, personalized interactions that inspire more shopping – and buying. And with a platform designed to leverage legacy systems and integrate with pervasive devices and applications, the benefits include a happier base of shoppers and a higher technology ROI.

"Increase Spending," continued from page 1

months. More than 69 percent of those interested in a new purchase during the next 12 months have the purchases already funded or budgeted. The largest retailers – those over $1B in sales – are showing the most interest and have the most budgeting completed for a purchase this year.

POS software also shows strong potential. Fifty percent of respondents who are planning a purchase in the next 18 months and 50 percent of those who are planning a purchase this year are already funded. The grocery segment shows the strongest upside with a predicted replacement at twice the rate of typical years. Retailers with more than $1 billion in sales also demonstrated heavy interest in new software.

Planned decisions on CRM/Loyalty applications, driven by strong interest among Specialty retailers, had the highest software interest in the study with 74 percent of the sample considering implementing new systems, or replacing/augmenting old systems in the next 18 months. These retailers are learning that CRM is a key to success in a shopping model that continues to move more and more to mass merchants on one side and luxury retailers at the high end.

Workforce management (WFM) also continues to be hot, with 62 percent of respondents planning a decision within the next 18 months, up significantly over last year's study, when 44 percent of respondents indicated a WFM decision within the same timeframe.

In the Food/Grocery segment, self-checkout is the key planned system purchase, with 40 percent of respondents planning to make a decision this year. Overall, 12 percent of retailers plan to make a self-checkout purchasing decision in the next 12 months and an additional 30 percent will make a decision 12-18 months from now. This includes retailers in other segments than Food/Grocery.

The Store Systems Study 2006 was developed in the fall of 2005 and is based on results from 77 respondents with in-depth information about their current and future store systems. The summary report appears with the January 2006 issue of *RIS News*, or can be obtained by going to www.risnews.com. A more detailed study is available for purchase by contacting Greg Buzek with IHL Consulting Group at (615) 591-2955.

Higher Usage is Critical to Maximizing Self-Checkout ROI

A well-developed best practices program can increase customer use, lower front-end labor costs and boost the return on your investment

Self-service shopping has achieved mainstream status in supermarkets, super centers and home improvement centers, generating transactions worth $161 billion in 2005, according to a recent study from IHL Consulting Group. The study also forecasts sales to be as much as $450 billion by 2008.

Given this projected increase, retailers are focused on enticing more consumers to use self-checkout solutions to achieve a greater return on investment (ROI). The objective is to persuade customers to perceive self-checkout as a better option than fully staffed checkout lanes. This objective is difficult to realize unless all of the enticement opportunities have been identified and addressed. Simply installing self-checkout without implementing associated best practices will fall short of financial objectives and damage customer perceptions of store service and shopping satisfaction.

Retailers who have gained experience with self-checkout are finding that a program to define and implement best practices can increase the number of customers using self-checkout. When these practices are shared and validated across the organization, consumer acceptance increases, generating an attractive ROI.

Retailers can share their growing experience with self-checkout as a means to discover and implement best practices. When doing so, the following areas should be considered:

- ***Attendant Certification*** Speed and accuracy is key to achieving the expected benefits
- ***Managing and Reducing Interventions*** Throughput is determined by many factors, especially the accuracy of PLU and item UPC tables
- ***Reducing Maintenance Costs*** Consistent practices minimize the effort of repairs and support
- ***Determining and Optimizing Self-checkout Configurations*** Customer counts and demographics have a significant impact
- ***Store Operations and Manager Training*** Customer satisfaction, labor planning & process consistency drive ROI
- ***Selecting and Prioritizing Stores for Installation*** Transaction mix and neighborhood labor availability are considerations
- ***Facilities Planning*** Traffic patterns and store location heavily impact ROI
- ***Measuring and Managing Performance*** Deming says, "… you can't manage what you can't measure"

By executing these self-checkout best practices, retailers can ascertain, calculate and derive manageable goals; strengthen their self-checkout model; increase customer usage and satisfaction; and generate a greater ROI.

AUTHORED AND SUBMITTED TO THE PERVASIVE RETAILING JOURNAL BY
TOM MURPHY, PRESIDENT, PEAK TECH CONSULTING LLC

WELCOME TO THE FIRST ISSUE OF THE PERVASIVE RETAILING™ JOURNAL (PRJ). PUBLISHED BY FUJITSU TRANSACTION SOLUTIONS, THE PRJ WILL BE A QUARTERLY PUBLICATION FOCUSING ON TRENDS AND NEW DEVELOPMENTS THAT IMPACT THE PERVASIVE RETAILING ENVIRONMENT. FOR COMMENTS AND ARTICLE SUGGESTIONS, PLEASE CONTACT DAVID NAUMANN, EDITOR, AT DNAUMANN@FTXS.FUJITSU.COM.

FUJITSU

us.fujitsu.com/retailing | 800.340.4425

Pervasive Retailing Journal

2801 NETWORK BOULEVARD
FRISCO, TEXAS 75034