

July 7, 2008 | Updated: July 23, 2008

Retail Multichannel IT Road Map

by George Lawrie
for Business Process & Applications Professionals



July 7, 2008 | Updated: July 23, 2008

Retail Multichannel IT Road Map

How Can Retail IT Support Multichannel Trading Without Ripping And Replacing Everything?

by **George Lawrie**

with Sharyn C. Leaver and Varun Sedov

EXECUTIVE SUMMARY

While many retailers still trade via isolated channels, sometimes even referring to the online channel as “store 999,” consumers demand a complete shopping experience across channels that includes interactions such as researching or reserving merchandise online and picking it up in the store. To create a superior cross-channel experience for consumers, retail business process and applications professionals must overcome the roadblock legacy of conflicting use cases and channel-specific metrics, inconsistent inventory and merchandise master data, and channel-specific customer and order data. To avoid the cost and risk of wholesale applications replacement, savvy retailers must develop a road map of incremental IT investments that links each investment to the firm’s strategic objectives and the quantitative business case for individual cross-channel interactions.

TABLE OF CONTENTS

- 2 **Surprise! Consumers Expect A Consistent Cross-Channel Experience**
 - 3 **The State Of IT Support For Multichannel Retailing: Gaps Galore**
 - 5 **Use Both Tools And Processes To Master Cross-Channel Interactions**
 - 10 **Create A Cross-Channel Road Map**
- RECOMMENDATIONS
- 14 **Sequence Cross-Channel Interactions Using A Risk/Reward Ratio**
 - 16 **Supplemental Material**

NOTES & RESOURCES

Forrester interviewed 29 vendor and user companies, including: Atos Origin, B&Q, EDS, Infosys Technologies, IVIS Group, Microsoft, Nau, Oracle, SAP, and Tchibo.

Related Research Documents

[“The Inevitable Convergence Of Retail Channels”](#)
May 17, 2007

[“The Interaction Platform”](#)
October 4, 2004

SURPRISE! CONSUMERS EXPECT A CONSISTENT CROSS-CHANNEL EXPERIENCE

It's no surprise that consumers don't constrain themselves to a single retail channel. In fact, two-thirds of online shoppers rank the retail store as their preferred shopping channel.¹ Consumers are most likely to shop across channels for durable, big-ticket items such as consumer electronics, major appliances, and computer hardware.² They expect a consistent brand experience to support their need to:

- **Research online and pick up in store.** Depending on the category and the shopping mission, consumers often prefer to research online and pick up in store, especially for time-sensitive purchases such as birthday gifts.³ Consumers cite “price comparison” as one of their primary reasons for researching online and “immediacy” as one of their primary reasons for picking up in store.⁴ Offline purchases influenced by online research amount to almost double the value of online purchases. Research online and pick up in store is the most important cross-channel interaction for consumers making considered purchases of consumer electronics, appliances, and computer hardware.⁵
- **Transact online or with a call center for home delivery.** For bulkier purchases, such as furniture, or for less-immediate requirements, consumers prefer home delivery but struggle to understand retailers' delivery charges and delivery slots.⁶ Two-thirds of consumers say that they are more likely to shop at a retailer that offers free shipping. Almost half of consumers prefer the convenience of online shopping because they can have gifts shipped to recipients or because they can avoid crowds and lines.⁷
- **Browse the catalog but research online.** Just as brick-and-mortar retailers can use the Web to extend the range of merchandise that they can offer, so smart catalog operators can reduce catalog distribution and print costs by driving readers to Web sites for less-photogenic merchandise. This strategy works, as more than two-fifths of catalog shoppers report that they also buy from online stores.⁸
- **Accumulate and redeem loyalty and promotion credit across channels.** Consumers can easily compare price and availability using a wide range of sources. For example, they can access price and availability from their cell phones with services such as “txtbux” that deliver competitive data while they are right in the store. Retailers need processes and applications that centralize pricing promotion management, enabling them to set different prices in different stores and channels with full visibility of their revenue and margin impact.⁹ Forrester has published research identifying the potential for cross-channel loyalty and promotion to drive insight, revenue, and margin.¹⁰
- **Return online or catalog purchases in the store.** Some merchandise categories, such as footwear and apparel, incur high rates of return, and online and catalog buyers expect retailers to accommodate returns with free shipping.¹¹ Half of US online households believe that it's a

hassle to return items purchased online, and more than a quarter of them prefer to avoid the hassle of returns by not buying online.¹² Some consumers expect, as a matter of convenience, to be able to return merchandise in stores.¹³

THE STATE OF IT SUPPORT FOR MULTICHANNEL RETAILING: GAPS GALORE

To support first-generation multichannel forays, many retailers bought integrated commerce platforms, such as Inter Shop or Microsoft Commerce Server, that provide standardized order and content management and personalization as well as the ubiquitous shopping basket functionality.¹⁴ Now into their second- and third-generation solutions, catalog and brick-and-mortar retailers have also invested in specialist content as well as customer or order management solutions and have worked to integrate these tools with their legacy apps. But they have been unable to justify replacing all their in-store and fulfillment applications to support multiple cross-channel interactions. Retailers report that the most difficult interactions for them to support are:

- **Registry.** Most specialty retailers offer some form of gift registry because this is common function in point of sale (POS) standard applications. But few can share the gift registry across store, online, and call center channels.
- **Order tracking.** Between one-quarter and one-third of retailers give poor ratings to their ability to take orders and manage returns online.¹⁵
- **A personalized in-store experience.** Although linking an ATG personalization engine and in-store systems enables retailers to use a consumer's online activity to drive store associate interactions and dialogue with that consumer, Forrester spoke with only one retailer that had this provision on its road map. For most retailers, the insights gained in one channel are simply lost when the consumer chooses to interact via a different channel.
- **The reserve online, pick up in store capability.** We spoke with only one retailer that had developed a highly scalable solution. Yet one big box retailer told us that 25% of visitors to its Web site reserve merchandise online for in-store collection. This retailer reported that its consumers are so keen on this interaction that they drive past competitors' outlets and past other branches of the same retail chain to make their collections. And once in the store, they spend on average an additional 25% on items other than the considered purchase that they reserved.

Data Issues Sabotage Retailers' Cross-Channel Efforts

The root causes of these multichannel struggles are:

- **Failures of organization.** All our interviewees remarked on the dangers of channel-specific organization and incentives. They cited pitfalls ranging from demotivating store operations by crediting the online channel with store kiosk sales to reserving inventory for stores that could have been sold by the catalog or online channel.

- **Merchandise-data problems.** Every interviewee remarked on the fact that, while retailers have worked to drive supply chain efficiencies by synchronizing with manufacturers' basic data — such as weight and cube definitions — to drive supply chain efficiencies, consumers demand much more data. For example, they want to know the salt and calorie content of prepared food, the method of use for consumer durables, and the conditions of manufacture for T-shirts and trainers. Multichannel interactions need to expose such data to consumers to help them in their decision-making, but much of the data is inconsistent or composed of esoteric abbreviations such as “blck” for “black” and is simply not presentable to consumers. Channels such as the Web, POS, store-label printing or display, and catalogs also require different formats, sizes, and resolution for text and images. The result? Retailers maintain large teams engaged in “data enrichment” but still present inconsistent data across channels.
- **Inventory-data issues.** Most retailers hold in their merchandising apps an “on hand” inventory balance by store and by stock-keeping unit. They use shipments to stores and store POS uplink data to maintain inventory balances. But it's useless to share this level of data with a consumer looking for her nearest store with a particular size 12 red dress. SKU data is not sufficiently detailed because it generally doesn't show store balances by size and color. The challenge of exposing inventory availability to consumers is yet greater for those North America replenishment-items retailers that have yet to implement perpetual inventory disciplines and that currently keep book inventory continuously in agreement with on-hand stock.
- **Customer-data problems.** Many retailers have inconsistent customer data in multiple apps. Some POS apps in high-touch retail manage customer data, but few can easily share this information with online and call center channel colleagues or have technology to transfer a customer from self-service to personal service.¹⁶ But effective multichannel interactions also need to drive customized presentation of merchandise to online consumers, just as retailers plan to tailor store assortments to specific consumer communities.¹⁷ Our research uncovered only moderate B2C success in driving online interactions by referencing specific consumer attributes such as size and no retailers that use inferences about a consumer's store purchases to drive online merchandise presentation to that consumer.¹⁸
- **Order-tracking problems.** Consumers interact indiscriminately among a retailer's stores, call center, and Web sites and expect the brand as a whole to be aware of their histories, preferences, and orders. As one outdoor-apparel retailer said, “Consumers expect you to know what their order was and when it was placed.” But this is a challenge for store associates that have no access to online or catalog orders and no simple method of identifying the consumer.
- **Conflicting use cases.** Each retail application has been designed around a set of use cases such as “return goods in-store.”¹⁹ Cross-channel interactions introduce use cases that conflict with the use cases that drive the data models and processes on which legacy channel-specific apps are built.

USE BOTH TOOLS AND PROCESSES TO MASTER CROSS-CHANNEL INTERACTIONS

Retailers add value to merchandise by holding the right quantity in the right place at the right time but also by presenting the right data to the right consumer in the right format and via the right channel. Retailers agree that they need to integrate applications in their portfolio because there is no out-of-the-box technology that can support all the cross-channel interactions that their consumers demand. But technology alone is never the answer, and multichannel retail is no exception. If retailers want to succeed in their multichannel interactions, they have to be sure that process alignment accompanies their data management and integration technology adoption efforts.

Use The Tools Of The Cross-Channel Trade

The most important tools for retailers to select and deploy to support cross-channel interactions are:

- **An enterprise service bus.** Smart retailers with complex apps portfolios will select and implement an enterprise service bus (ESB) as a foundation for cross-channel retail interactions.²⁰ They do this because they choose information-as-a-service (IaaS) architecture to manage the data integration challenges that arise when managing online content in apps such as MS Commerce Server and supply chain item master data in apps such as SAP's. Information-as-a-service also reconciles the conflicts that arise when cross-channel retail serves multiple use cases.²¹ Migrating to IaaS architecture will help retailers centralize data and processes, such as customer insight and loyalty, that different channels must share. Retailers that fail to invest in such migration risk isolating data and processes that are fundamental to cross-channel interaction for either in-store systems or channel-specific eCommerce apps.

Retailers' decisions about messaging and data integration will be influenced by their legacy. For example, IBM's Store Integrator and Data Integration Facility technologies enable retailers to expose and orchestrate the POS logic in its ACE, Supermarket Application, or General Sales Application solutions to support home shopping or portable shopper applications. PoS vendor PCMS, for example, delivers its own customer ordering and returns functionality but can integrate with a retailer's legacy order management and delivers out-of-the-box integration with SAP using Process Integrator (PI) or by calling ABAP code from within BeanStore using "Remote Functions Calls" (RFCs). PCMS has also embedded SAP "Retail Store" into the POS process on BeanStore.

- **Customer hubs.** Our interviewees faced customer data held in commerce servers such as ATG Commerce Suite, in online marketing tools such as Axcion, and, in some cases, in POS apps with clienteling functionality such as those offered by Tomax.²² Some have even invested in CRM tools such as Oracle Siebel or in clienteling apps such as those offered by Retailigent's applications. The pioneers we talked with have spent heavily on integrating these apps; however, many asserted that if they were to start from scratch, they would consider selecting and implementing a customer hub to orchestrate customer data in the different apps. Our

interviewees mentioned the attractiveness of “contextual data” about a consumer’s demand — not just her buying history but also the occasion or event that motivated the purchase — but no retailers had systematically implemented applications to manage such data.

- **Order hubs.** We spoke with retailers that have directly interfaced commerce servers such as ATG Commerce Suite with the order management function of ERP solutions such as those that SAP offers. In all cases, they did this not to meet an urgent need but to enable greater future flexibility to evolve their business and to provide order visibility both across channels and across multiple supplying partners. To replace different components at different times, they will also need to consider deploying order management hubs.²³ Most retailers lack the pick, pack, and ship functionality common to ERP solutions deployed in B2B enterprises; they need not only order management but also fulfillment functionality that firms such as Sterling Commerce provide.²⁴
- **Product information management applications.** All of our interviewees remarked on the need to stage repositories managing data sync with suppliers and to support retailer “enrichment” of data about merchandise. Many interviewees drew our attention to the question of what exactly constitutes “content.” They explained that some content concerns strictly the attributes of merchandise offered for sale, while some content is “editorial” and provides the context — from catalogs, Web sites, and store-associate interactions — in which the consumer experiences the merchandise offer.

Rethink The Processes For Cross-Channel Interactions

Retailers must also rationalize processes to support common cross-channel interactions (see Figure 1). They should:

- **Revitalize IT governance.** To best conserve their budgets, retailers should ensure that changes to any elements of their apps portfolio, including routine maintenance, move the elements closer to an architecture in which all processes and all data are equally adapted to existing and prospective channels. This means paying close attention to store and headquarters apps’ openness to integration (see Figure 2). It means that any change to eCommerce platforms should be toward more openness to integration (see Figure 3).
- **Synchronize operations evolution.** Our interviewees told us that they make cross-channel operations policy decisions that have a significant impact on their supporting systems. For example, most grocers allow substitutions, which means that they have to manage processes and systems that facilitate substitutions that take into account a consumer’s expressed and inferred preferences as well as the attributes of the merchandise ordered and the merchandise available for dispatch or collection.
- **Demand management, merchandize planning, and inventory allocation.** There should be no such thing as a channel-specific demand. Many retailers — and especially those that

franchise their brand and act as wholesalers — implement demand management processes that plan to satisfy all consumer demand regardless of the channel in which it is expressed or fulfilled. Our interviewees told us that cross-channel retailers must also understand how the range and assortment presentation should vary by channel, depending on consumer behavior and fulfillment practicalities — although one interviewee told us about a consumer who had reserved online a complete kitchen for in-store collection. Our interviews indicated that most retailers resist hard allocation of inventory to channels because it frustrates a flexible response to channel-agnostic demand.

- **Improve fulfillment.** Retailers told us that they have to make strategic decisions about substitutions when fulfilling catalog or on online orders. The degree of consumer satisfaction with any substitutions that they make will depend heavily on the processes that populate merchandise attribute data — determining which items are good substitutes and which are poor ones. Retailers also told us about their need to balance the requirement for specialist fulfillment against the cost of holding duplicate safety stocks in each channel, an issue that channel-agnostic processes such as those from Sterling Commerce address by pooling safety stock across channels.


Figure 1 Common Cross-Channel Interactions

Selling		Service	
<ul style="list-style-type: none"> • Allow customers to reserve or buy online and pick up in store. • Provide consistent, clear, and transparent pricing. • Take orders online, then manage and track them to in-store fulfillment. • Let customers redeem 2-D barcodes sent to their mobile phones. 		<ul style="list-style-type: none"> • Offer customers a service choice when browsing online. • Provide service channels with full and real-time visibility into orders and customer information. • Give call center agents visibility into relevant cross-sells, up-sells, and promotions. • Offer an integrated inventory at the store level to allow orders from other stores or the Web. • Optimize service options for customer satisfaction and low cost based on the value of the customer Web. 	
Measurement and metrics		Organization and metrics	
<ul style="list-style-type: none"> • Measure multichannel customer growth/satisfaction. • Use a loyalty program or store credit card to track customers across channels. • Use surveys to gather insight on multichannel consumer behavior. • Track the gross margin by category instead of channel. 		<ul style="list-style-type: none"> • Provide incentives to help channels coordinate efforts and support multichannel initiatives. • Have combined buying groups for online and stores. • View the online channel as more than just another store. • Nominate an executive champion for multichannel initiatives. • Operate all channels under one P&L. 	
Customer experience			
<ul style="list-style-type: none"> • Returns from any channel are accepted in all channels. • Catalog-related activities are accessible via the Web. • Call centers have access to Web customer transaction data. • The Web site tells customers which stores have specific products in stock. • Customers have the ability to purchase online and pick up in store. 		<ul style="list-style-type: none"> • In-store kiosks offer access to customers' Web accounts. • The Web site shows detailed product information on all products that are carried in stores. • Customers can use a Web/phone/kiosk for self-service. • Store clerks have basic customer data available at the POS. • Email and Web coupons are redeemable at the store POS. 	

45392

Source: Forrester Research, Inc.

Figure 2 In-Store Support For Cross-Channel Interactions



Breadth of functionality


Vendor	Product name	Release	Reserve online, pick up in store	Cross-channel returns	Cross-channel store orders
Fujitsu	GlobalSTORE with StoreCENTER*	3.3.1	●	●	◐
IBM	IBM General Sales Application!† IBM Supermarket Application† IBM SurePOS Application Environment†	1.0 2.0 6.2	◐	◐	◐
JDA Software Group	JDA Point-of-Sale	7.5.3	◐	◐	◐
Junction Solutions	JunctionISS	4.2.2	◐	◐	◐
MATRA	MATRA FREEDOM Enterprise Edition	5.2	●	●	◐
NCR	Advanced Store	5.x	◐	◐	◐
NCR	Advanced Checkout Solution	6.x	◐	◐	◐
Oracle	Oracle Retail Point-of-Service, Returns Management	13.0 2.0	●	◐	●
PCMS	PCMS Vision Portfolio‡	3.84	●	●	●
Retailx	Retailx StoreLine Retailx Head Office (HOST4) Retailx NetPoint	8.550	◐	◐	◐
SAP	SAP Store Merchandising and Inventory Management SAP POS SAP ePOS	ERP 6.0 EhP3 2.1 3.1	◐	◐	◐
Tomax	Tomax Retail.net	5.3.3	●	◐	◐

*Solution includes ReturnCENTER module.

†Solution requires IBM Data Integration Facility (DIF) and Store Integrator (release 2).

‡Portfolio modules include Vision BeanStore and Vision Interactive.

Figure 3 Commerce Engine Support For Cross-Channel Interactions



Breadth of functionality →

Vendor	Product name	Release	Reserve online, pick up in store	Cross-channel returns	Cross-channel store orders
ATG	ATG Commerce Suite	2007.1	●	●	●
BroadVision	Commerce Agility Suite	8.1	◐	◐	◐
Escalate Retail	Escalate e-Commerce Escalate Order Management Escalate Retail CRM	10.0 10.0 10.0	●	●	●
IBM	Websphere Commerce Server	6.0	●	●	●
Microsoft	Commerce Server	2007	◐	◐	◐
Oracle	Siebel E-Commerce/E-Support, Customer Order Management	8.1	◐	◐	◐
SAP	SAP Sales	ECC 6.0	◐	◐	◐
Sterling Commerce	Sterling Catalog and Offer Management Sterling Order Management	8.0* 8.0*	●	●	●

*Sterling Gift Registry, Selling Advisor, Deliver and Service Scheduling, and Store Inventory Management are other Sterling Commerce products included in our cross-channel evaluations.

45392

Source: Forrester Research, Inc.

CREATE A CROSS-CHANNEL ROAD MAP

For some retailers, a few cross-channel interactions are clear priorities.²⁵ Retailers that seek short-term opportunities to support a handful of cross-channel interactions can make relatively simple investments to support each interaction individually (see Figure 4). But if they plan in the end to support a full repertoire of multichannel interactions, the cumulative investment of all the individual interactions could be more costly and disruptive than laying the right foundations at the beginning of the process. Retailers that plan to invest for every eventuality have to implement a raft of new technology and a swathe of process modifications to adapt to cross-channel imperatives. In order to reduce risk and disruption, they need to develop an investment road map that shows the business benefits and technology investment for each cross-channel interaction that they plan to support. They should sequence the introduction of cross-channel interactions based on a risk/reward ratio derived from each prospective interaction’s impact on:

- **Direct, financially quantifiable benefits.** Retailers should calculate each prospective cross-channel interaction’s impact on revenue and margin based on inferences from observations about their impact on traffic, conversion rates, and average order value. They should estimate the expected brand benefits of prospective cross-channel interactions using inferences based on survey data about expected changes in brand rankings and Net Promoter scores.

Figure 4 Simple Investments Support For Selected Cross-Channel Interactions

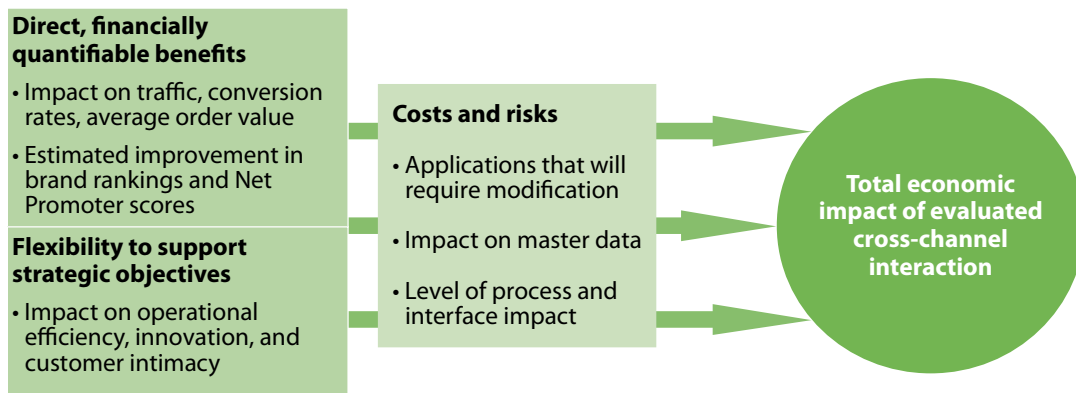
	Common cross-channel interactions	Typical supporting IT investments
Selling	Reserve or buy online and pick up in store.	<ul style="list-style-type: none"> • Trickle-feed POS data from stores to a central merchandising application that shows the latest inventory by store. • “Logically reserve” or physically segregate inventory.
	Provide consistent, clear, and transparent pricing.	<ul style="list-style-type: none"> • Use BPM or workflow technology to ensure that managers can view prices across all channels. • Use pricing ladder applications such as Profit Metrics to maintain relationships automatically across all channels.
	Take orders online, then manage and track them to in-store fulfillment.	<ul style="list-style-type: none"> • High-value-to-weight merchandisers, such as books or media retailers, should use order management solutions such as Sterling Commerce Order Management. • Low-value-to-weight merchandise grocers should distribute online orders to stores for in-store pickup or local delivery.
	Let customers redeem 2-D barcodes sent to their mobile phones.	Operators KPN and Telefonica, handset provider Nokia, and 2-D barcode vendors Gavitec and Neo Media Technologies are partnering in the Mobile Codes Consortium (MC2) to reach a standard. Mass adoption is a long way off.
Service	Offer customers a service choice when browsing online.	This requires a primary investment in Web site presentation and a secondary investment in integrated telephony such as Cisco IPCC or Genesys Suite 6.
	Provide service channels with full and real-time visibility into orders and customer information.	This requires an investment to integrate the order and customer data in each channel. Depending on the number of channels and the volatility of supporting applications, order and customer hubs may be a more attractive option.
	Give call center agents visibility into relevant cross-sells, up-sells, and promotions.	If promotions depend only on the item, then scripts at the call center can drive such offers using product information management data alone. But to be more effective, such promotions need to access consumer behavior, too.
	Offer an integrated inventory at the store level to allow orders from other stores or the Web.	<ul style="list-style-type: none"> • Use simple solutions such as a Web browser at the POS for store-associate use or at a kiosk for consumer use. • This requires an investment to ensure adequate network bandwidth in the store. Also, it will require ensuring that the ordering systems can capture sufficient customer data to hand the order to a third-party fulfillment service.
	Optimize service options for customer satisfaction and low cost based on the value of the customer Web.	This requires a means of accurately and securely calculating the lifetime value of a customer to allow quick access at any point when or where the customer might require service.

45392

Source: Forrester Research, Inc.

- **Flexibility to support strategic objectives.** Retailers have different cross-channel strategic objectives. Some, such as UK variety store Woolworths, seek further operational efficiencies, using the online channel to drive range extension and exploit “long tail” microsegments without investing in further store infrastructure, inventory, or catalog printing and distribution. Some, such as Nau, use cross-channel interactions to promote innovation, reassuring consumers that they can touch and feel new fabrics in Web-front stores before ordering for home delivery. Those retailers that, like Kroger, have focused on transactional and supply chain efficiency use cross-channel interactions to develop customer intimacy. Cross-channel interactions that support a retailer’s chosen leadership discipline — operational efficiency, innovation, or customer intimacy — have the highest potential business impact.
- **Cost and risk to the existing application footprint.** Retailers should list each application in their portfolio that a prospective cross-channel interaction will affect. Retailers then need to list the impact of each prospective interaction on master data, identifying the number of sources of master data to be reconciled. They also need to determine the level of process and interface impact for each prospective interaction (see Figure 5).

Figure 5 Prioritize Cross-Channel Interactions Using A Reward/Risk Ratio



45392

Source: Forrester Research, Inc.

Invest In IT Infrastructure To Support Cross-Channel Interactions

Taking into account their cross-channel objectives and the limitations and opportunities of their current portfolios, retailers can see that some common infrastructure investments would support multiple cross-channel interactions and that some investments are essential to cope with continued channel development and innovation. The importance of each infrastructure element varies depending on the characteristics of the retailer. Retailing continues to defy all attempts to tame it into regular subverticals, but it does help to distinguish three groupings and their associated multichannel IT road maps:

- **Food and drug retailers should prioritize ESBs.** Grocers, drug stores, and convenience stores are at the cutting edge in terms of interaction channels. They feel the most pressure, at least in North America, to support consumer packaged goods' (CPGs') direct-to-consumer messaging and to integrate with consumers' own personal shopping devices. In order to cope with interface changes to support prospective multichannel interactions, these retailers can benefit from implementing a service bus. It's a much more attractive than the alternative: undertaking brittle point-to-point integrations among applications and constantly revising integrations as the portfolio morphs to support new channels and new business requirements.
- **Fashion and luxury goods retailers should adopt BPM tools.** High-touch, and especially services, retailers expect greater process impact from prospective cross-channel interactions. So they can expect greater shared benefits, over time, from investing in a business process management (BPM) engine that will enable the business to adapt processes without replacing applications.
- **Hardlines, consumer durables, and electronics retailers should tap MDM.** Master data management (MDM) is key for these retailers because in their case, the more sources of master data that they anticipate integrating to support cross-channel interactions, the more attractive will be investments in product information management, content management, customer hubs, and order hubs.

Synchronize The IT Road Map And Business Case Development

Infrastructure investments such as ESB, BPM, or MDM projects are notoriously hard to justify because the benefits are shared over time by multiple line-of-business initiatives. Several retailers have overcome this challenge by:

- **Taking a long view.** Listing all the prospective cross-channel initiatives expected over the medium term enables an organization to better judge the strategic impact of investments in infrastructure. These initiatives are often projects that can be justified collectively but that no single cross-channel interaction could justify. The medium term might be the expected useful life of a middleware implementation or five to seven years.
- **Appreciating the full scope of the opportunity.** One of our retail interviewees explained that it measured both hard and soft benefits. It started by measuring the number of Web site visitors it could drive to stores at 17%. Based on the average order value of store visits versus online orders, it calculated that it could pay for its point-to-point ATG-to-SAP integration if it could drive the store-visit conversion ratio to 17.2%. It drove the store visit conversions to 24%. At the same time, it implemented an online survey that secures 1,500 responses per week and used this to measure the soft impact of its cross-channel interaction support on brand perception (comparing this to competitors' customers' brand perception) and on Net Promoter scores.

- **Abolishing channel-specific metrics.** Each of the interviewees agreed that the common practices of measuring sales by channel and linking executive compensation to channel-specific revenues have resulted in channel-specific applications and organizations that are poorly adapted to the cross-channel interactions that consumers demand. Retailers have to implement apps that compile metrics and measure goal achievement in a way that supports cross-channel interactions.
- **Learning by doing.** Some interviewees were highly critical of developing detailed business cases before undertaking small projects to test technologies. They had undertaken limited “sand box” investments to provide an empirical basis for decisions about investing in technologies to support cross-channel interactions.

Select Cross-Channel Interactions With The Highest Business Returns And Lowest IT Risks

Some retailers quail at the prospect of planning the interactions that they expect to support in the next three to five years and then committing to heavy medium-term supporting investments. Retailers that just want to support selected cross-channel interactions on an opportunities basis should consider the following more-bite-sized initiatives:

- **Provide simple HTML visibility to data about orders and customers across channels.** In the short term, it's easier for retailers to train customer service associates to look up data about inventory availability, a consumer, or an order than it is to integrate their applications themselves.
- **Centralize data using technologies that are already on hand.** Most POS applications provide the ability to trickle-feed sales data to a retailer's headquarters. A simple step toward inventory transparency is to use near-real-time sales data and data about store replenishment to make inferences about on-hand availability by store, by SKU — such as lady's tweed suit — and sometimes by SKU attribute, such as size and color.

RECOMMENDATIONS

SEQUENCE CROSS-CHANNEL INTERACTIONS USING A RISK/REWARD RATIO

Retailers realize that many of their cross-channel interaction problems are rooted in bad data, and we learned of one retailer in Germany that chose to implement ERP before embarking on cross-channel consumer initiatives on the grounds that ERP disciplines would improve the consistency of its customers' experiences. But most of our interviewees, realizing that technology is the smallest part of the puzzle, told us that building a foundation for effective cross-channel interactions requires making changes to processes as well as apps portfolio strategy. Retail business process and applications professionals should:

- **Lay the foundation for cross-channel interactions.** Retailers should clean critical data about merchandise and customers and implement processes to keep it clean and current. Where there are multiple sources of master data, they must choose the superset source that will become the driver. They should manage data in a channel-agnostic format so that it can be published in multiple channel-specific formats. If they plan to expose data about merchandise to consumers, they need to work with specialists such as Pindar and IVIS Group to implement processes to ensure that the data is fit for that purpose. In the case of on-hand store inventory, this means mastering perpetual inventory. They should choose order management and fulfillment processes, such as those from Sterling Commerce, that are intrinsically channel-agnostic.
- **Sequence planned cross-channel interactions using a risk/reward ratio.** Retailers should analyze the impact of each prospective cross-channel interaction based on their ability to execute the interaction strategy and on their apps portfolio.
- **Synchronize investments with the sequenced introduction of cross-channel interactions.** Retailers should analyze the expected benefits of the cross-channel interactions that they expect to introduce over the expected life of a middleware project and develop the business case for investments to support planned cross-channel interactions.
- **Align the organization with its cross-channel strategy.** Retailers should design metrics and goals that encourage enthusiastic adoption of processes supporting cross-channel interactions. They should report granular measures of traffic and conversion stages.
- **Develop an intelligent design for apps portfolio evolution.** Retailers should strengthen their IT governance function to ensure that all portfolio maintenance and development expenditure converges on an adaptable platform to support cross-channel interactions. Business applications and process professionals carry the responsibility of ensuring that each store systems upgrade takes into account the need to accommodate cross-channel interactions such as in-store return of online purchases. Additionally, they should make sure that each eCommerce application suite upgrade takes into account the need to incorporate call center functionality to provide seamless transition from self-service to personal service.

SUPPLEMENTAL MATERIAL

Methodology

Forrester conducted structured interviews with 29 retailers, systems integrators, and technology vendors.

ENDNOTES

- ¹ Two-thirds of Web buyers rank the retail store as their preferred shopping channel, far outpacing the 31% who first turn to the Web for their shopping needs. It follows that 54% of Web buyers make purchases at a retail store at least weekly, while just 16% buy over the Web on a weekly basis. See the December 19, 2007, “[Retail Channel Surfers Prefer To Buy Offline](#)” report.
- ² As consumers embrace the Web and incorporate it into their lives, and specifically into their shopping habits, the number of cross-channel shoppers — consumers who research products online and buy offline — has increased 8% compared with 2004. These shoppers are still a step ahead of the mainstream, with higher household income, education, and technology optimism. They wield tremendous power, influencing more than \$125 billion in offline sales in 2005. But they are still a price-conscious bunch that doesn’t hesitate to switch retailers as they switch channels. To keep these precious shoppers from slipping to the competition, retailers should concentrate on creating easy in-store pickup options and incentives to remain brand-loyal. See the April 19, 2006, “[Understanding US Cross-Channel Shoppers](#)” report.
- ³ In fact, slightly more than half of online consumers are cross-channel shoppers, having researched a product online and then purchased it offline in a traditional brick-and-mortar location. Today, cross-channel sales — store sales influenced by online research — total almost \$397 billion and are poised to grow to more than \$1 trillion by 2012. See the December 10, 2007, “[Web-Store Experiences: Department Stores](#)” report.
- ⁴ Window shopping now has an entirely new meaning: 54% of online consumers researched a product online and purchased it offline, and 37% researched offline and purchased online in 2005. Half of these consumers cited price comparison among retailers as the reason for researching online, more than any other factor. When it came time to buy, those who purchased offline cited immediacy, the ability to see an item in person, and shipping costs as the top deterrents to online purchasing. See the January 20, 2006, “[Trends 2006: Multichannel Retail](#)” report.
- ⁵ As shoppers crossed from the Web to stores, they spent more than \$125 billion in brick-and-mortar stores in 2005 — a 23% increase over 2004. What did they buy and where did they shop? Depending on the product price point and complexity, certain categories lend themselves to cross-channel behavior more than others. Cross-channel shoppers research high-ticket commodity items online but buy them offline, particularly more complex products like consumer electronics, major appliances, and computer hardware. Combined, these categories capture over \$44.5 billion of cross-channel shopping. Wal-Mart, Target, and The Home Depot capture the most cross-channel shoppers in the offline world. Winners of the online channel are — not surprisingly — Amazon.com, eBay, and Overstock.com, which capture the dollars of cross-channel shoppers when they buy online. See the April 19, 2006, “[Understanding US Cross-Channel Shoppers](#)” report.

- ⁶ In reality, many Web buyers shop online for convenience. Sure, every shopper wants to snag the best deal, but Web retailers should focus less on price sensitivity and more on convenience and a seamless multichannel experience. See the December 19, 2007, "[Retail Channel Surfers Prefer To Buy Offline](#)" report.
- ⁷ Forrester's NACTAS Q4 2006 Retail Online Survey asked US online households about their general attitudes toward online holiday shopping. The results revealed that that 66% of US online households are more likely to shop at a retailer that offers free shipping, 49% find online shopping easy because gifts can be shipped directly to recipients, and 45% shop online to avoid crowds and lines. See the October 20, 2006, "[US eCommerce Outlook For Q4 2006](#)" report.
- ⁸ Survey respondents said that 43% of catalog customers have also purchased from their online store and that 35% of online customers have also purchased from their brick-and-mortar store. Online retailers reported that, in 2006, they dedicated on average 18% of their marketing spend to cross-channel sales, up from 13% in 2005. Typically, such tactics included direct mail initiatives, such as catalogs and email programs, intended to drive customers to local stores. However, more retailers are also leveraging direct print mail as a way to increase online sales. According to the study, 66% of retailers measure the success of a catalog by how it increases Web sales. Source: The State of Retailing Online 2007, a Shop.org survey conducted by Forrester Research (<http://www.shop.org/>).
- ⁹ Retailers with separate online and in-store loyalty programs — often created through expediency rather than strategy — not only miss opportunities to develop a more comprehensive understanding of their customers but also jeopardize customer service for valuable shoppers. Multiple loyalty programs introduce behind-the-scenes complexity and integration nightmares for retailers that try to pull data across these solutions into a single customer database, practically guaranteeing that cross-channel customer service issues are not even identified, let alone resolved. See the May 17, 2007, "[The Inevitable Convergence Of Retail Channels](#)" report.
- ¹⁰ Retailers like REI, Borders, and PETCO use their loyalty programs to gather information and gain deeper insights into their consumers' cross-channel behaviors. Borders captures about 50% of transactions through its loyalty program, and REI members account for almost 90% of the retailer's transactions. The customer loyalty program data provides these retailers with strong proof of their customers' behaviors, and its analysis drives many of their multichannel initiatives. Retailers should refocus their loyalty programs and use them to get consumers to use their identifiers for all interactions. See the December 18, 2006, "[Best Practices In Multichannel Retailing](#)" report.
- ¹¹ Consumers increasingly expect free shipping to be an industry standard, especially for items like apparel and footwear that see a higher-than-average exchange/return rate. See the November 15, 2007, "[Fashion And Online Shopping: It's A Match](#)" report.
- ¹² Half of consumers find returning items a hassle, and 27% prefer not to buy online altogether because of the prospect of dealing with returns. See the October 20, 2006, "[US eCommerce Outlook For Q4 2006](#)" report.
- ¹³ Conversely, many consumers want to be able to buy a product online but pick it up from (and possibly return it to) a store. See the March 4, 2008, "[Lessons For Online Retail From Europe's 2007 Christmas Season](#)" report.

- ¹⁴ As sellers continue to upgrade their commerce platforms off of outdated and homegrown solutions, many face the daunting task of replatforming and relaunching eCommerce sites. We've all heard the horror stories and seen the repercussions of poorly implemented solutions — delayed launches, unstable site performance, and millions of unbudgeted dollars. See the July 17, 2007, "[The Top Five Things eBusiness Executives Need To Know About Commerce Platform Implementations](#)" report.
- ¹⁵ These capabilities include supporting quoting, ordering, and returns and exchanges over the Web. Many respondents report a lack of capability in this area. Between one-quarter and one-third evaluated their capabilities to be poor/below average for the practices of having strong quoting capabilities, facilitating online ordering, and supporting returns and exchanges online. See the January 10, 2008, "[eCommerce Best Practices Adoption](#)" report.
- ¹⁶ Consumers are increasingly expecting their customer service experience to be seamless and want the option to be able to transition from self-service to live service in single session with no loss of context or information. From a service provider point of view, multichannel orchestration increases the ability to achieve "one-call resolution" of an incident, a major driver of customer satisfaction — or dissatisfaction if not achieved. See the January 10, 2008, "[eCommerce Best Practices Adoption](#)" report.
- ¹⁷ Merchandising groups are organized by category: "women's wear" and "men's wear" or "cameras and computers." But becoming consumer-centric changes that orientation radically. Instead of buying for cameras, a consumer-centric retailer needs to think about the different customer segments interested in cameras and make sure that it carries the products that enable each segment's "camera" experience. For example, soccer-mom Susan who doesn't really like technology but wants a digital camera to take pictures for making scrapbooks needs a lot more than the camera to enable the experience she's looking for. A retailer looking to help Susan needs a "Susan" buyer, not a camera buyer. See the May 15, 2007, "[Consumer Centricity Takes Merchandising Into New Territory](#)" report.
- ¹⁸ Overall, sites we have seen in the past have had mixed online merchandising strengths. As a category, apparel fell next behind auto, mainly because of strong customer service and multichannel integration: We found J. Crew's wedding and bridal section an excellent example of reinforcing the company's brand online while efficiently driving sales through detailed sizing and help information. This, however, was more the exception than the rule: Clumsy navigation and rudimentary site features, particularly among home sites, made many sites more cumbersome than necessary. See the April 7, 2006, "[How To Master Online Merchandising](#)" report.
- ¹⁹ The primary persona for a design is typically the mainstream persona that is hardest to satisfy. "Mainstream" because design projects often target multiple audiences, some of which fill very demanding — but small — niches. "Hardest to satisfy" because the main reason for picking a primary is to make sure that the design team supports the most challenging user scenarios. This helps them avoid the trap of locking themselves into a design approach that will only support easy use cases. Ideally, the primary should represent a superset of both primary and secondary personas so that by serving the primary's needs, designers serve all users. See the December 28, 2006, "[How To Choose — And Use — A Primary Persona](#)" report.

- ²⁰ An enterprise service bus (ESB) is application middleware designed to be the backbone of a modern service-oriented architecture (SOA). ESBs route requests between service consumers and service providers, both synchronously and asynchronously, and may be configured to perform a variety of actions, such as routing, translation, protocol conversion, or authentication in-between. See the December 12, 2006, "[The Case For An Enterprise Service Bus](#)" report.
- ²¹ IaaS not only addresses data integration and data management challenges; it also provides a more flexible architecture to support a broader range of use cases. See the January 23, 2008, "[The Forrester Wave: Information-As-A-Service, Q1 2008](#)" report.
- ²² Despite these customer data integration (CDI) initiatives, many enterprises still struggle to assemble accurate customer data. So while Forrester believes that CRM systems, business intelligence (BI), trusted data sources, and data warehouses represent pieces of the story, the continuous customer management (CCM) process represents a much bigger picture around how enterprises collect, distribute, and use data in an organization to create value. Customer hubs represent the intersection of technology solutions and a category of packaged application software that operationalizes the acquisition, distribution, and management of customer information for use in other systems. See the December 22, 2006, "[The Forrester Wave™: Customer Hubs, Q4 2006](#)" report.
- ²³ Order management cycle (OMC) functionality has traditionally represented the integration of enterprise resource planning (ERP), customer relationship management (CRM), and supply chain management (SCM) processes to achieve a macro process: opportunity-to-cash. Emphasis on a process-centric view, increasing importance of service orders, requirements for multiple party accesses, and the maturation of middleware platforms shape the future of OMC. See the April 21, 2006, "[The Forrester Wave™: Order Hubs, Q2 2006](#)" report.
- ²⁴ In a marriage of technology that will ultimately give eBusiness executives a single view of the order across-channels, Sterling Commerce acquired Comergent on January 8, 2007. Forrester examined the integration plans 100 days after acquisition. We believe that the Comergent platform strengthens Sterling's sell-side capabilities, offering multichannel order visibility from end to end, while Sterling brings Comergent customers stronger order-fulfillment-to-order-completion capabilities. See the May 9, 2007, "[Acquisition Of Comergent Moves Sterling Commerce A Step Closer To The Perfect Order](#)" report.
- ²⁵ Retailers that have a large store presence need to support their customers as they cross channels through the buying process. These firms have the biggest risk of losing these customers as they move from research to buy, so attention to multichannel research tools and services like reserve or buy online and pick up in store will have the biggest benefit. However, to ensure that customers receive the most consistent multichannel experience, store-based retailers need to incent the channels to work together and embrace multichannel cooperation companywide. See the December 18, 2006, "[Best Practices In Multichannel Retailing](#)" report.

FORRESTER®

Making Leaders Successful Every Day

Headquarters

Forrester Research, Inc.
400 Technology Square
Cambridge, MA 02139 USA
Tel: +1 617.613.6000
Fax: +1 617.613.5000
Email: forrester@forrester.com
Nasdaq symbol: FORR
www.forrester.com

Research and Sales Offices

Australia	Israel
Brazil	Japan
Canada	Korea
Denmark	The Netherlands
France	Switzerland
Germany	United Kingdom
Hong Kong	United States
India	

For a complete list of worldwide locations, visit www.forrester.com/about.

For information on hard-copy or electronic reprints, please contact the Client Resource Center at +1 866.367.7378, +1 617.617.5730, or resourcecenter@forrester.com. We offer quantity discounts and special pricing for academic and nonprofit institutions.

Forrester Research, Inc. (Nasdaq: FORR) is an independent technology and market research company that provides pragmatic and forward-thinking advice to global leaders in business and technology. For more than 24 years, Forrester has been making leaders successful every day through its proprietary research, consulting, events, and peer-to-peer executive programs. For more information, visit www.forrester.com.