

**Retail Solutions from IBM.**

*On demand. Now.*

## Dynamically serving customers

Today's newly empowered consumer is creating a seismic shift in the retail industry. Retailers are changing their focus from *what is on the shelf*, to a more customer-centric strategy that focuses on *who is in the store*. This new paradigm requires that retailers transform the way they do business and differentiate themselves in new and innovative ways. They must become fanatically focused on the customer. They must create an absolutely frictionless supply chain. And they must move to an on demand business model that enables them to react more quickly to consumer demands.

Retailers that embrace this consumer-centric vision must adopt new business methods to better meet customer expectations for more personalized service delivery. They must revolutionize the store itself to deliver a unique, customized experience to each consumer.

To do so, they need to better leverage the data that they collect about their customers. Transforming their supply chains enables them to put the right products in the right place so that consumers get those products when, where and how they want, with just the right level of customer service. Retailers must empower their corporate office and store employee teams by giving them the tools they need to do their jobs more effectively. And they must optimize their existing infrastructures to deploy innovation quickly, cost-effectively and securely. To meet these challenges, retailers need a partner with the solutions, the experience and the people that can help them get the job done.

From the barcode to e-commerce, from e-business to self checkout, IBM, the undisputed technology leader in retail, has been part of the major innovations in the retail industry. Today, IBM is poised to set the retail agenda for the future by helping retailers make the journey to On Demand Business—an enterprise whose business processes are integrated end to end across the company and with key partners, suppliers and clients, and that can respond rapidly to any client demand, market opportunity or external threat. Deep industry expertise, together with world-class consulting capabilities, makes IBM the ideal partner to help retailers set priorities, deploy the appropriate solution and realize short-term return on investment (ROI)—while building a model for the future.

*“Think of your company not as a group of products or services or functions or territories, but as a portfolio of customers.”*

*–Larry Selden and Geoffrey Colvin, “Angel Customers and Demon Customers”<sup>1</sup>*



## Retail reality: a world of extremes



### **Driving forces**

Recent market research sheds light on a variety of common challenges shaping the retail industry.<sup>2</sup> These include:

#### ***Customer value drivers fragment—***

Consumers are fragmenting into micro-segments as a result of pronounced shifts in demographics, attitudes and behavior patterns.

#### ***Gatekeepers become more guarded—***

Strapped for time and empowered by new technology, customers are seeking greater control over their interactions with businesses.

***Information exposes all—***Consumers are becoming incredibly empowered during their purchasing decisions through the ability to access information how, where and when they want it.

#### ***Mega-retailers break the boundaries—***

Global mega-retailers are rapidly expanding across industry boundaries, forcing all other market participants to establish highly differentiated value propositions.

***Partnering becomes pervasive—***Leading retailers are achieving unprecedented levels of agility and responsiveness by creating flexible value networks based on strong integration and collaboration with their partners.

Faced with these driving forces, retailers are becoming more focused on transforming the consumer shopping experience, streamlining operations to take costs out and empowering employees to provide higher levels of service with enhanced access to information.

Specifically, in today's retail industry, retailers must:

**Revolutionize the store** by configuring the retail environment to better meet shoppers' needs; by transforming the customer experience, moving from simply selling products to satisfying customers; and by creating differentiation in order to stand apart from the competition.

**Focus the supply chain** by sharing accurate demand and inventory data throughout the enterprise; by putting the information in the right place at the right time; and by providing employees with flexible and integrated supply chain tools to sense changes in consumer demand and respond in real time.

## Retail On Demand Business in action

**Empower teams** by providing associates with self-service access to just the right tools they need to do their jobs, and by enabling teams to take the correct action once they are armed with the right information. Store associates will then be able to react quickly and competently to customer needs and changing business conditions.

**Operate on demand** by leveraging an infrastructure that ensures that innovation can be rapidly deployed and information can be managed with the highest level of security.

### ***Transforming consumers into lifetime customers—customer-facing capabilities***

*Julia makes a trip to ValueTrend after dinner to pick up school supplies for her son and daughter. Inside the store, she snaps an IBM Personal Shopping Assistant to her cart and scans her loyalty card into the system. The product-locator feature first directs Julia to the ink-jet printer section, which Julia anticipates will be the most expensive item on her list. The system notifies her of a targeted on-sale offer on one of the models. Unable to decide, given the large assortment of ink-jet printers, she enters her daughter's age and school grade into the system and is provided a view and printout of age-appropriate models to help her make her decision.*

*Noticing the time, she uses the system's route optimizer to learn the fastest path to the remaining items on her list. Picking up a lunchbox for her son, she is notified by the IBM Everywhere Interaction System that book bags featuring the same design are on sale for 20 percent off. Julia picks up both items. Her son Tommy will be happy, and Julia has saved money in the process. Arriving at the checkout, she is approached by a ValueTrend associate who is using a handheld device that enables Julia to check out without the inconvenience of waiting in line. Julia is home in plenty of time to check the kids' homework and put them to bed.*



Cost-effectively satisfying  
**business needs**

Becoming an On Demand Business can help retailers to motivate and satisfy customers with personalized care, incentives and services—across multiple touch points and around the clock—while driving back-end efficiencies. Retailers can grant customers, employees, suppliers and partners unprecedented access to their integrated business systems on an as-needed basis.

On the store floor, this translates to dynamic information displays and portals, wireless access, self checkout devices, radio frequency identification (RFID) tags, targeted loyalty programs and convenient payment options. By implementing these innovative capabilities, retailers are better able to reduce labor costs, encourage customer loyalty

and differentiate themselves from competitors. They can even take advantage of variable cost structures to help keep expenses in line with revenues—enhancing profitability in an increasingly demanding market environment.

Today, retailers face obstacles ranging from high labor-cost-to-sales ratios and poor inventory visibility, to fragmented systems with limited scalability and upgradability.<sup>3</sup> With IBM On Demand Business solutions, retailers can help mitigate these problems with a broad array of solutions that map directly to their business needs. More specifically, these offerings can help retailers empower employees by providing them with access to information and strategic tools, streamline store operations to take costs out and reinvent the consumer shopping experience in the following ways:

#### **Revolutionize the store**

- *Install innovative technologies to transform the customer experience, such as Web-enabled POS systems, self checkout, wireless kiosks, personal shopping devices, touchscreen displays and more.*
- *Implement electronic marketing campaigns.*
- *Enrich the shopping environment with dynamic displays.*
- *Deploy self-service kiosks for customer and employee information, education, selling and HR.*
- *Leverage personalized loyalty rewards and promotions.*



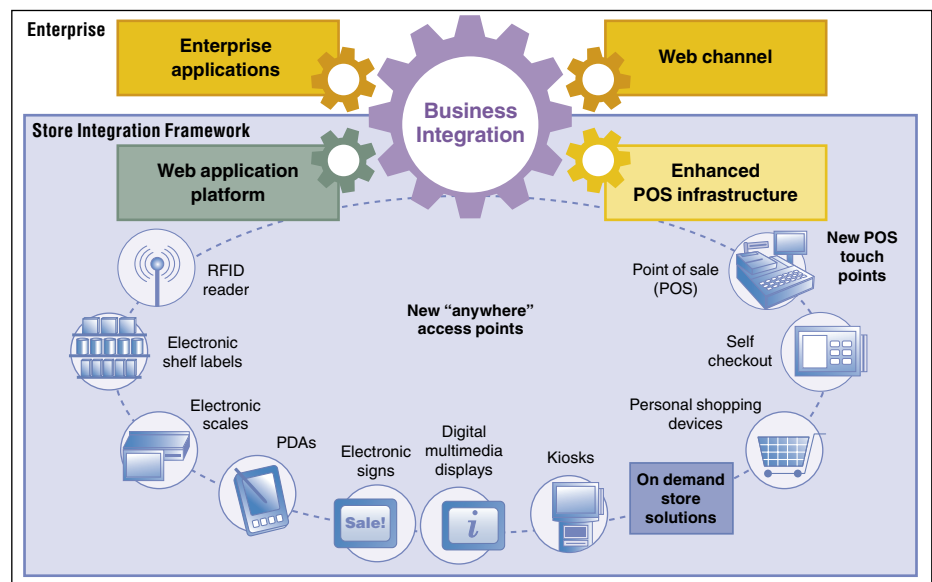
### Focus the supply chain

- Leverage innovative solutions such as RFID and enterprise data management to provide a real-time, consistent and accurate view into consumer purchase behavior and critical supply chain data.
- Develop flexible and responsive supply chain processes to quickly sense changes in consumer demand and react efficiently and effectively.
- Build a frictionless supply chain that extends across the enterprise, enabling collaborative planning and seamless execution between departmental silos and with key supplier trading partners.

### Empower employees

- Offer real-time, user-focused operational and store performance management tools.
- Deploy an enterprise employee portal to stimulate an action-oriented culture.
- Implement wireless access to key applications, enabling better customer service.
- Provide key performance indicators through executive dashboards, scorecards, graphs, charts and alerts, by role and on the device of choice.

### On Demand Operating Environment for Retail



Retail on demand delivers a unified customer experience by orchestrating touch points throughout the shopping cycle.

### Operate an On Demand Business

- Create a consistent, reliable infrastructure that extends from back office to front of store.
- Establish customer segmentation solutions.
- Impact customers during the shopping experience with real-time customer segmentation and scoring solutions.
- Deploy network-based technologies that increase speed, reduce security exposure and minimize risk.
- Deploy and integrate new business applications quickly across all stores.
- Help control IT costs by maximizing the value of existing IT infrastructure and POS investments.



## Experience on demand retailing now

These initiatives can help retail organizations become more responsive and more focused—key attributes of successful on demand retailing. To customers, these advantages mean shorter lines, increased convenience, precisely targeted promotions and more personalized service.

IBM On Demand Business consultants are helping retailers of all sizes and formats, around the world, transition to this new model by creating customized roadmaps geared toward an On Demand Business environment. IBM also offers an open, total systems view of the infrastructure, emphasizing autonomous, self-managing technologies. And we provide the opportunity for organizations to virtualize their computing environments, focus on core competencies and leverage usage-based cost structures to optimize expenses.

IBM understands that every organization has unique strategies and needs. No matter what your focus—from POS, kiosk and self checkout solutions to electronic marketing and dynamic inventory—IBM can help you address your complex business challenges and develop a solution designed to help enhance your organization's business results.

### **The IBM portfolio of retail solutions**

Becoming an On Demand Business is an imperative for retailers today. IBM can help you take full advantage of proven hardware, software and services designed to help you get there quickly, and with reduced risk. IBM offers a focused portfolio designed to address the entire retail life cycle, including IT management, logistics and distribution, marketing and merchandising, store operations and customer care.

Specific solutions available today include the following offerings:

### ***Store solutions***

IBM on demand store solutions enable retailers to help increase same-store sales while reducing the cost of goods sold. By allowing customers to shop virtually whenever, wherever and however they choose, stores can make positive impressions on those customers, driving loyalty and preference. IBM can help you empower your store associates with the skills, information and technology tools they need to do their jobs effectively.



## Retail On Demand Business in action



As retailers revolutionize their stores to stand out in a crowded marketplace, they need a partner with deep industry expertise, best-of-breed technology solutions and a comprehensive set of consulting services. IBM offers solutions that enable retailers to improve the customer experience, streamline operations and improve in-store execution by leveraging multiple, industry-leading technologies and services: IBM point-of-sale solutions, IBM Software Group, IBM TotalStorage® services, IBM @server® technology, IBM Global Services and selected partners such as Symbol Technologies and Cisco Systems. IBM Total Store Solutions focus on the life cycle of store technology, from requirements definition and selection through installation, implementation support, management

### ***Transforming enterprise knowledge into store profit***

*Using ValueTrend's Trading Partner Portal, Chris, the category manager for school supplies, has seen that a particular item is performing below expectations. The system recommends a markdown, and Chris confirms it in the system. The portal then suggests a newly launched lunchbox line as a replacement. Chris agrees and sends a request to the supply chain manager and supplier partner who review it for accuracy. The supplier uses the portal to notify Chris of a promotional fund for the new item. Chris approves it, assigns the product to his large stores and Web catalog, and sends it to the appropriate departments with the launch date and price information.*

*The system then recommends a new pricing strategy to increase average gross margin on the product. In the portal, Chris performs a market-basket analysis and determines that snacks and pencils are likely to be purchased with the lunchboxes and creates a promotion that is sent on to the supplier—who approves it and returns it to Chris. In the portal, the supply chain manager then develops a demand plan in collaboration with the supplier, which is used to create the initial order. Leveraging RFID, ValueTrend and the supplier partner are then able to use the portal to maintain visibility and control of the product from shipment and distribution to the store shelf.*



and maintenance services. In-store solutions such as self checkout, wireless/networking, digital security, kiosks and handheld shopping assistants can improve efficiencies and increase customer satisfaction.

IBM is also focused on the future of retail. We're providing retailers innovative new solutions, technologies and offerings that enable them to transform the customer shopping experience and become an On Demand Business. The newly transformed store will be powered by emerging technologies such as personal shopping assistants, RFID, dynamic merchandise displays, digital signage and electronic shelf labels. To help retailers become an On Demand Business, IBM has built IBM Store

Integration Framework, a comprehensive technology foundation upon which to build store operations. The framework is a store-level architecture, built on proven IBM WebSphere® technology, and is designed to provide a complete and reliable infrastructure to support today's demanding store environment.

#### ***Consumer Driven Supply Chain***

Challenges stemming from increased competition and more demanding consumers mean that retailers can no longer operate linear, one-size-fits-all supply chains. IBM delivers a flexible framework of supply chain solutions that are designed to deliver rapid ROI and provide a roadmap for long-term competitive advantage. Drawing on IBM's


strengths in core supply chain solutions, as well as our leadership in cutting-edge initiatives such as global data synchronization and RFID, IBM brings together a comprehensive combination of technologies and implementation services that enable retailers to respond in real time to the changes in consumer demand.

#### ***Merchandising***

Market conditions change rapidly. Items sell faster and in greater volumes than expected. Items sell more slowly and in fewer numbers than expected. Buyers are continually faced with critical questions at the start of the retail value chain. What should I buy? Where should I put it? How should I buy it? How should I price it? How should I promote it? How

Dynamically serving  
**customers**





*“Significant progress can still be made in execution of end-to-end business processes, from ordering through to inventory management, distribution of product, pricing, close out and returns...Continuous improvement and optimization of operations is key.”*

*—Retail respondent, IBM 2004 CEO Survey<sup>4</sup>*

should I respond? IBM merchandising solutions can help retailers more effectively answer these questions. By partnering with leading retail supply chain providers, IBM is able to help retailers optimize their merchandising efforts. In May 2004, IBM launched a strategic alliance with SAP, a leading provider of enterprise solutions for retail, and merchandising in particular. IBM and SAP solutions focus on putting the customer at the center of the value chain. Additionally, IBM has also partnered with Evant, DemandTec and ProfitLogic to provide industry-leading, best-of-breed solutions in demand planning, replenishment and merchandise optimization.

#### *IBM On Demand Workplace for retail*

Access to information on a real-time basis is critical to being an on demand retail business. The IBM On Demand Workplace™ environment helps give retail executives and store associates a personalized dashboard from which they can quickly and effortlessly acquire the secure, relevant information they need. Personnel in every part of the retail organization can increase their productivity by leveraging a wide range of Web-enabled devices—from desktop PCs and conventional and wireless phones, to specialized handheld devices, point-of-sale screens and self-service kiosks. IBM On Demand Workplace solutions enable retail employees to retrieve reliable, real-time information and collaborate effectively with their associates.

Store managers can access critical operational information such as pricing data, inventory levels, staffing and promotions. Merchandisers can react quickly to sales information and can collaborate with associates throughout the enterprise for more efficient planning and procurement. Sales associates can enrich their customer service skills through contextual online learning. And rotated and relocated store staff can stay current on scheduling, benefits and salary data.

The IBM On Demand Workplace environment for retail can help every employee become a knowledge worker and enable them to add value to the enterprise.



### ***Revolutionizing retail with RFID***

*Retailers can leverage RFID product and inventory tagging to track product movement across the store floor—from the back room to the distribution center and through the final transaction. Thus, they can gather vast amounts of information about in-store shopper activities and transaction patterns and improve inventory management. Consider the actions of Julia. Perusing the store, she notices its impressive assortment and well-stocked display of supplies for back-to-school—enabled by ValueTrend's RFID-based electronic shelf label system. The system continuously checks the shelf stock status and monitors planogram compliance. While browsing, Julia finds a digital camera she wants to buy. In a moment, Julia completes her purchase via a sales associate's hand-held POS device, and the store inventory is automatically updated.*



## Retail On Demand Business in action

### **Leveraging technology to empower employees**

*Store employees need to know their objectives, and how to take action to improve store performance. Sharing best practices helps. Having vital and timely information is critical. Many processes have to work in concert to gain the most benefit. Effective hiring, forecasting, scheduling, payroll, HR practices, training and inventory management all must be harmonious. An environment where all of these critical elements are brought together is essential.*

*The ValueTrend store manager reviews his store's performance on his PC. He drills down on his margins to determine why the margins at his store are low as compared with peer stores. He sees suggestions on best practices that he can implement and tips on how to improve his profitability. In order to better understand the issues, he sets up a meeting with his mentor, the manager of the most profitable store in the city. He places his report in their shared workspace for them both to review at their meeting. While going over his task list, he sees that a new hire is starting the next day. The system allows him to quickly review the new hire's qualifications and assignment. He scans the hiring information for completeness and grants approvals for system access and handheld device assignment. He then creates a workflow for his department manager to assign the new hire a mentor and populate the hiring forms. Reviewing his task management system for the following day, he notices that he may be understaffed. By sending an IBM Lotus® Sametime® message to the manager of a nearby store, he is able to confirm the availability of a replacement employee. As he picks up his handheld and proceeds to complete his daily store walk-through, he receives an alert that the fraud detection system has picked up the fact that an employee at register three is not scanning all items. He tags the transactions for review and sends an alert to the front-end manager with all the details.*

### **IBM Retail Enterprise Data Warehouse – Advanced Analytics**

Rather than focusing solely on the next customer transaction, the advanced analytics solution is designed to enable retailers to aggregate data from thousands of transactions and acquire knowledge that can lead to more effective and more profitable cross-channel selling. IBM Retail Enterprise Data Warehouse – Advanced Analytics is a business intelligence solution that offers an advanced data information framework that enables data insight and knowledge management; provides the ability to analyze performance; and delivers actionable information for customer management, product and services management, merchandising and store operations.



IBM Retail Enterprise Data Warehouse enhances business performance management by enabling real-time monitoring and exception management for alerts notification in response to business conditions. It provides merchandisers with access to information for improved category management, localized assortment planning and vendor analysis and performance. For marketing managers, it supplies real-time information on promotion and marketing programs to more accurately target customer promotions. And IBM Retail Enterprise Data Warehouse helps streamline store operations by delivering real-time information on inventory levels, product performance and labor activity.

**Innovative technology. Deep experience.**

These five retail enterprise solutions are complemented by a robust set of IBM hardware, software and services offerings. From IBM @server and IBM TotalStorage technologies to IBM DB2® content solutions and IBM WebSphere infrastructure software, IBM delivers proven, industry-leading technology solutions that can help transform your retail enterprise—delivered by IBM Integrated Technology Services, helping retailers manage the technology life cycle.

Deep in experience and industry savvy, IBM Business Consulting Services can help companies build great customer relationships. Our industry experts can enable you to integrate sales strategies across channels, improve distribution and customer service and help you harness technology to be more agile and responsive to changes in the marketplace.

**Delivering on demand retailing today**

Consumers are ready to shop in the store of the future today—whenever they want, wherever they choose to be. Therefore, retailers must be ready to respond to customers dynamically and in real time. IBM is uniquely prepared to help transition your organization to an on demand retail environment—one designed to cost-effectively leverage and protect your existing technologies while accommodating new solutions from best-of-breed vendors—at the right pace for your company. On Demand Business for the retail industry is not just the future—it's the present. Experience On Demand Business. Now.

**For more information**

To find out more, contact your IBM sales representative or visit:

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<sup>1</sup> Selden, Larry and Geoffrey Colvin. "Angel Customers and Demon Customers." Page 7. NY: Penguin Group. 2003.

<sup>2,3,4</sup> "Your Turn: the Global CEO study 2004." IBM Business Consulting Services. February 2004. [http://www.ibm.com/services/us/bcs/html/2004\\_global\\_ceo\\_study\\_gen.html](http://www.ibm.com/services/us/bcs/html/2004_global_ceo_study_gen.html).