



In the ultra-competitive retail industry, customer satisfaction rarely guarantees loyalty. **New sales formats,** increased diversity of products, the availability of new distribution channels, industry alliances and many other factors are forcing retailers across all segments to find new ways to differentiate themselves and strengthen marketshare.

As a result, many retailers are trying to identify, develop and retain their most profitable customers, using the principles of e-business – in particular customer relationship management (CRM). CRM is simply a disciplined method for using customer information to:

- Refine insights into customer wants and needs
- Develop targeted value propositions based on the implications of these wants and needs
- Focus marketing and other company resources on those customers that provide the most value to the retail enterprise.

The IBM approach to e-business CRM builds on these three basic tenets with a total solution offering designed for multichannel, customer-focused retailers.

IBM e-business solutions for Retail CRM: A multichannel, customer-focused approach to building loyalty

The IBM e-business Retail CRM Solution enables retailers to drive sales and profits by building customer loyalty, improving visit frequency and increasing spend per visit – all across multiple channels.

The IBM e-business solution for Retail CRM includes the hardware, software, applications, architectural blueprints and consulting services to build the infrastructure required for operation of a frequent shopper/customer loyalty program, campaign management, business intelligence – including data collection, analysis, mining and reporting – and customer contact across multiple retail channels.

IBM created this e-business Retail CRM Solution according to four guiding principles:

- 1. The solution must allow a single, consolidated view of the customer, with the ability to access and update customer information easily
- 2. The single view of the customer must integrate information from every 'touch point', including the physical store, catalog, Web site, telephone, fax, e-mail or physical mail, as well as customer- and retailer-initiated interactions
- 3. No one IT application, package or suite of applications will meet all the requirements, and today's best-of-breed solutions may be tomorrow's outmoded tools. Solution components will change over time. So, the architecture must not rely on the unique capabilities of a specific application
- 4. The business processes and analysis needs related to CRM are just as fluid as the solution components. The architecture must be flexible enough to accommodate retailers' changing needs.

The heart of the solution is a customer data warehouse. It accommodates the full range of customer transactions and interactions from any number of touch points in the multichannel retail world. Yet it is flexible enough to integrate several analysis tools. It can scale to handle the large volumes of data generated by customer interactions at every touch point. And it acts as both a data repository and the mechanism by which a range of tools and applications work together seamlessly.

The IBM solution conducts a continuous and dynamic flow of customer information into the data warehouse, where it is combined with other business intelligence data, then analyzed using a number of tools. The analysis results drive decisions about marketing, merchandising, customer service and store planning, which in turn affect incoming customer data.

Best-of-breed tools are used consistently and wherever possible. For example, the same query tool can be used for customer analysis, precampaign analysis and campaign response analysis. But no matter how powerful the technology or methodology, IBM recognizes that industry-specific content is a must-have. Which is why the solution includes a retail-specific customer data model and analytic reports.

Retailers have already implemented many of these solution components in piecemeal fashion. However, the true benefits of Retail CRM are best realized with an integrated approach.

Developing an e-business solution for Retail CRM in the real world

Leverage: knowledge and information

- Transaction history
- Product and service preference

Transform: core business processes

- Focus on the customer
 - Add 'customer pull' to 'customer push'
- Add cutomer dialogue and 1:1 marketing to mass marketing
- Move from single-channel to multichannel retailing

Although it is clear that Retail CRM offers significant benefits for retailers, developing the actual solutions requires careful planning and consideration. That is why IBM implements the e-business Retail CRM Solution using a proven, four-step e-business roadmap (see Figure 1):

• TRANSFORM core business processes



• LEVERAGE knowledge and information.

• RUN a scalable, available, safe environment

Retail CRM

Run: a scalable, available, safe environment

- 24x7 retailing
- Business intelligence across multiple channels
- Enterprisewide e-business activities
- Secure environment

Build: new applications

- Loyalty card program
- Campaign management
 - Full-service Web site
 - Enterprise data store







Retail CRM case study: Safeway

Safeway – one of the U.K.'s 'big five' supermarket chains – launched its Easi-Order scheme in February 1999 at its Basingstoke store, located southwest of London. The company equipped 200 of its most loyal customers with PalmPilots, each of which includes a Symbol Technology scanner.

Shoppers can now use the PalmPilot to order specific products or select items from a personalized shopping list, which includes all the items the user has previously purchased with a Safeway loyalty card. The PalmPilot downloads the personalized list automatically when connected to the telephone. Once the shopper makes his or her selections, the PalmPilot transmits the final shopping list to the store, where it is assembled and prepared for customer pickup at a prearranged time.

Simulation exercises performed by Bain & Co. across multiple industries have shown that Retail CRM will be – by far – the greatest source of competitive advantage in the future. The simulations showed that a 5% increase in customer retention can result in profit increases of up to 125%.

Retail CRM case study: Boots the Chemists

Boots the Chemists, a U.K. pharmacy, beauty and gift chain, launched its Advantage loyalty program in 1997 with smart cards for shoppers and an attractive menu of rewards. More than 10 million cards were issued in the first year alone, and Boots attributed a 4% sales increase to the program. To get even more business value out of the information the company was collecting, Boots turned to IBM to establish a customer database.

IBM built a customer analysis system and campaign management application for BTC. The solution runs on an IBM RS/6000 SP and the DB2 Universal Database system, on the AIX operating system. After 18 months of operation, more than 1.2 terabytes of customer and transaction data has been accumulated.

"We were always confident that the loyalty data would have a real impact on the business," said customer insight strategy manager Helen James. "And that has happened – the information really is changing the way we do things. From our traditional POS data we knew what was being sold, where and when. Now we can determine what different groups of customers are buying and monitor their behavior over time."



TRANSFORM core business processes

For many retailers, this is the most challenging phase. It requires retailers to rethink the business processes they have depended on for decades to grow sales and increase profitability. However, when you consider how drastically consumer attitudes are changing, this step is absolutely critical. The transformation involves four business processes:

- Focus on the customer
- Add "customer pull" to "product push"
- Add customer dialogue and 1:1 marketing to mass marketing
- Move from single-channel to multichannel retailing.

Traditionally, retailers used a product view to understand customer wants and needs. Inventory was closely monitored. Retailers took note of which products sold the most, what price they were sold for, and what time of year they were sold – then reordered and restocked accordingly.

Shifting to a customer view, however, takes customer knowledge to a much deeper level. It means finding out up front what customers want most, how they want it, when and where they want to buy it and how they want to pay for it. With this information, retailers can do more than meet basic expectations – they can exceed customers' highest expectations. This drives satisfaction up, builds loyalty and can increase customer spend when customers become aware of attractive products they did not know were available.

One-to-one marketing helps retailers recognize top-tier customers – those who visit most frequently and spend the most money – as individuals. This enables direct, personalized communication, which makes it clear that your retail enterprise is committed to providing the right products and services at the right time, on the customer's terms.

To support the promise of one-to-one delivery, many retailers are moving from a single sales channel to multichannel retailing. In this scenario, the bricks-and-mortar store becomes one of many sales channels. Other channels include the Web, kiosks, catalogs and call centers. One-to-one communications also affects customer service processes. For example, customers that buy in person may want customer service onsite, while those that buy from a catalog want equally satisfying service available to them over the phone, or through a Web site.

Solutions, services and people to help you TRANSFORM

IBM offers several tools to help retailers complete their transformation to Retail CRM. The most important is CRM Foundation. With CRM Foundation, retailers gain the environment in which they can channel customer data from multiple touch points. And they change the way retail decisions are made.

CRM Foundation includes a retail-specific customer file that supports customer and behavior analysis; a starter set of metrics and templates, plus reports that help you examine customer dynamics (defection, development and segment migration), campaign and promotion effectiveness, customer behavior, product purchasing quantity and frequency, and customer and purchase profiles.

IBM business consultants know retail – and CRM. They start with the business problems you need to solve, examine your current strategies, and create a solution that aligns with your broader strategic objectives.



BUILD new applications

The second step toward a successful launch of Retail CRM is very straightforward: implement e-business applications that enable you to gather information about customers, combine it with other business intelligence and share it throughout the enterprise. These applications may include:

- Loyalty Card Program. Customers provide detailed information about themselves in exchange for a unique customer number.
 This number is recognized throughout the retail enterprise to track the customer's purchases and buying behaviors, as well as reward the customer for loyalty.
- Campaign Management. To determine which tactics work best with your most loyal customers, retailers need to measure and monitor a long list of daily activities related to marketing campaigns, including: planning, setup and control; definition of objectives; campaign cost and budget analysis; name selection and campaign execution; scheduling; content determination; and vendor/supplier relations.
- Full-service Web site. A dynamic Internet presence allows customers to browse products, make secure purchases and receive services online. Each interaction gives retailers another opportunity to capture customer data.
- Enterprise Data Store. This enterprisewide information repository allows retailers to integrate data streams from POS, kiosks, call centers, Web sites and loyalty card programs. Integrating information helps establish a single view of the customer. In other words, information about specific customers exists in one location that can be updated and maintained centrally.

Solutions, services and people to help you BUILD

IBM and its Business Partners offer a complete range of e-business solutions that help retailers capture customer information on an integrated, enterprisewide level:

- Electronic Marketing: This solution helps retailers create a card-based loyalty program that rewards customers for return visits and increased spending in exchange for valuable personal and financial information. What's more, it allows retailers to control electronic marketing from the POS, including enrollment and identification, electronic coupons, coupon processing and loyalty point totaling. Retailers can also use the Electronic Marketing Enterprise solution to make sure customers receive loyalty rewards no matter which store they visit.
- Campaign Management: IBM offers three options for marketing campaign management. For retailers who want to establish effective management tactics immediately, we can deliver proven software packages from IBM or IBM business partners. For those who need to evaluate their needs on the front end, we can help you conduct a workshop to define and prioritize your overarching requirements. For retailers who want to implement campaign management independently, we provide specifications and designs to help you quickly build your own campaign management tools.
- WebSphere Commerce Suite Pro, Start, and Service Provider editions: Establish effective, high-end e-commerce activity with this set of software. WebSphere Commerce Suite provides everything you need to conduct business over the Internet in a secure, scalable package. Complete e-commerce capabilities include catalog or storefront creation, payment processing and integration with other business systems.
- Call Center: IBM and its Business Partners offer a complete range of call center technologies, computer telephony and voice processing products for managing the customer relationship lifecycle.
- Systems Integration: The benefits of Retail CRM multiply quickly when you integrate systems across your enterprise.
 Our teams of technicians have the hands-on, practical experience to help you implement solutions and connect them to other business systems on a global scale.

RUN a scalable, available, safe environment

No CRM application will produce measurable financial impact if it is not built according to a sound information technology infrastructure. To run a scalable, available, safe environment, retailers need to make sure their CRM information technology infrastructure meets a number of criteria:

- 24x7 Retailing: To satisfy the customer, stores virtual or otherwise – need to be available whenever customers want. That means having the IT support necessary to run Retail CRM systems 24 hours a day, capturing information on a global scale across multiple channels
- Information Access: As we will see in the next phase, various decision-makers in the retail enterprise need to analyze the customer data that Retail CRM collects. This requires a business intelligence environment – one that decisionmakers can access anytime, from anywhere
- Security: Customer information must be kept absolutely secure. Customers that can't trust a retailer with their personal information will never become loyal to that retailer. In the same way, retailers must protect what they learn about their customers from the competition.

Not only can IBM establish a global Retail CRM solution, we supply the reliable software, middleware and hardware you need to offer 24x7 retailing. We provide security applications to safeguard valuable customer data. And we offer expert consultants who can make sure the entire infrastructure is built efficiently from the start and optimized for performance.

- Software: The proven DB2 Universal Database is scalable from NT to mainframe, accessible through the Internet, and supports Retail CRM with text, image, sound, video and more. It provides tools you need to establish a data warehouse quickly and cost-effectively.
- Middleware: MQSeries and MQSeries Integrator give retailers the ability to connect Retail CRM and other business applications across traditionally incompatible environments. Customer information may be exchanged with assurance across more than 25 different operating platforms.
- Hardware: IBM hardware, including the S/390, AS/400, RS/6000, NUMA-Q and Netfinity servers, gives retailers affordable options for supporting Retail CRM applications and high-volume Web serving. IBM storage systems offer the highest reliability for 24x7 computing, and IBM networking hardware provides the 'plumbing' for connecting people and information systems while handling larger and larger traffic streams. On the back end, Tivoli Enterprise helps manage computing resources from a central location.
- Security: Vault Registry is a highly secure, integrated registration and certification solution that allows retailers to establish the level of trust needed to conduct e-business with confidence on the Internet. The eNetwork Firewall controls external access to enterprise resources, selectively restricts access to the enterprise by knowing the source of asset requests, and facilitates secure communication with selected partners by setting up virtual private networks.

LEVERAGE knowledge and information

The fourth step lets retailers take all the information about customers and put it to work. This analysis provides the most measurable impact for retailers. It fuels better marketing, merchandising, customer service and store-planning decisions, and helps retailers deliver the right products at the right time, anywhere in the world.

Analyzing customers' transaction history can help determine their service, channel, contact and product preferences. Discovering customer preferences provides the information necessary to anticipate their needs, develop merchandise and service plans that exceed their expectations, and build loyalty among your most profitable customer segments.

Solutions, services and people to give you LEVERAGE

Once retailers start the flow of customer information into a data warehouse, analysis turns raw data into true customer knowledge, which is fuel for profitable decision-making. The IBM e-business Retail CRM Solution includes a wide range of analysis applications, from basic reporting to sophisticated data mining for segmentation (grouping customers by shared characteristics), scoring (understanding the likelihood of customers performing certain actions) and prediction (forecasting future customer actions):

- Intelligent Miner: Intelligent Miner helps recognize and validate important retail patterns and trends, so you can identify and extract high-value information from vast amounts of data
- Lotus Notes and Domino: These product families help distribute vital information gleaned from Retail CRM analysis to individuals, small groups or entire project teams around the globe
- Business Partner Solutions: The IBM Retail CRM architecture incorporates a number of Business Partner solutions for data analysis, statistical packages and mapping tools
- Business Intelligence Consulting: With business intelligence consultants from IBM, you can be sure you are leveraging the data that Retail CRM systems provide to build the largest possible competitive advantage.

The Retail CRM scenario

Mrs. Scott visits the "JK Toys" Web site to find a jungle gym for her son's birthday. While on the site, she clicks on a link inviting her to join the "JK Club," a frequent shopper program.

Mrs. Scott decides to enroll in the program and provides her name, address and children's birthdays. In return, she is notified she will receive a membership card by mail. In the meantime, she can use her new membership number for a special discount, plus an additional 10% discount on her first purchase. Finally, she is asked how she would prefer to receive club information – by mail, e-mail or phone – and she selects e-mail.

Still on the site, Mrs. Scott browses information on various jungle gyms and selects a specific one for more details. She is immediately offered the choice to purchase it now or find the JK Toys store nearest her home that stocks the product. She requests the details on the physical store.

When she visits the store the next week, Mrs. Scott decides the jungle gym she discovered on the site is the one she wants to buy for her son. She heads to the customer service desk and orders it, using her JK Club membership card. When the order is entered at the point of sale, she instantly receives her normal club and first-time buyer discounts. The POS system displays her name and address for delivery, which she confirms.

After paying, Mrs. Scott receives her order number so she can check its status online. She then requests a telephone call prior to delivery, so she can schedule the delivery during school hours and keep the jungle gym a secret.

Later, Mrs. Scott visits the JK Toys site and confirms her order is in the system, stock has been assigned and a delivery date scheduled. While on the site, she is prompted to fill out a quick questionnaire on preferred products. She fills it out.

The afternoon prior to delivery, the JK Toys call center phones Mrs. Scott to confirm the delivery time. The jungle gym is delivered the following day. On his birthday, Mrs. Scott's son receives a birthday card and a small gift item from JK Toys – a special promotion for club members.

The following month, JK Toys creates a campaign targeted at all customers who purchased large playground equipment or similar items. The campaign promotes equipment accessories. The choice of accessories is personalized, based on the customer's original purchase. Mrs. Scott is selected to receive an offer on the slide that attaches to her son's jungle gym.

A few days later, Mrs. Scott receives an e-mail – her preferred communication channel – from JK Toys offering her a 20% discount on the slide. She decides to order it and clicks on a link within the e-mail that takes her to the order entry page on the JK Toys site. The order information is already entered – she simply confirms the order. The slide is delivered a week later.

When JK Toys analyzes the campaign, the company finds that 35% of jungle gym buyers chose to purchase the slide. As a result, JK Toys creates a new promotion bundling the jungle gym and slide together at a special price.

IBM: Dedicated to Retail

IBM's Retail CRM Solution addresses the entire organization's needs, from the boardroom to the IT shop. We have the experience, the global resources and the proven technology to help you succeed.

For executives, IBM's e-business Retail CRM Solution provides:

- A single, enterprisewide view of your most profitable customers, including information drawn from all touch points
- Proven methods for satisfying targeted customer groups and increasing loyalty among your best customers
- The ability to understand customer behavior and measure the results of marketing, service and merchandising changes
- More effective promotions that integrate data from marketing, customer service and merchandising sources

- Faster response times in a dynamic, demanding market
- Fast implementation and a proven approach
- Longevity: Long after the solution is in place, IBM will be there to provide ongoing support and strategic guidance.

For the IT function of your retail organization, IBM's e-business Retail CRM Solution provides:

- Implementation that builds on your current investment in architecture and systems infrastructure
- An approach that is grounded in solid IT processes
- Scalable and open solutions
- Phased implementation that minimizes disruption to ongoing operations.

IBM's presence in retail spans nearly 90 years, beginning at the very inception of the corporation in 1911, when retailers used IBM scales, time clocks and punch-card tabulators to manage their business and service customers. Some 60 years later, IBM revolutionized retail forever with the announcement of the first electronic POS terminal in 1973, the same year that IBM introduced the Universal Product Code (UPC). Never again would retail be the same. As a worldwide leader in retail POS – with over 1.4 million POS systems shipped to over 100 countries across the globe – IBM remains at the forefront of providing technology solutions for retailers.

Today, we are also leading the way in retail e-business, with enterprisewide solutions for e-commerce and business intelligence. With a 30,000-patent portfolio that includes more than 60 retail-specific patents, and an extensive worldwide network of retail professionals and Business Partners, IBM is uniquely qualified to provide the solutions retailers demand to navigate today's complex global marketplace.



Find out more today.

For more details on IBM's solutions for CRM in retail, please visit www.ibm.com/solutions/retail

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