Driven by increasingly intense competition in an ever-more global marketplace, retailers must seek new ways of capturing the hearts and minds of consumers. The traditional levers of price, selection and location—although still important—are no longer sufficient as bases for competitive differentiation. More and more, retailers are focused on improving the end-to-end shopping experience, boosting sales and winning customer loyalty by coming up with innovative ways of satisfying customer needs.

How will leading retailers evolve their store environments to enhance the customer experience? What new practices and technologies hold the most promise? IBM, in association with the National Retail Federation (NRF), surveyed leading retailers in North America and Europe to discover what steps retail executives are taking to build their “stores of the future.”

By Julian Chu and Gina Paglucia Morrison
In today’s challenging economy, retailers are focused on improving the customer shopping experience in order to deliver greater consumer and business value. In this environment:

- Increasingly discerning customers are demanding more services and information
- Heightened competition in mature, saturated markets is making it more difficult for retailers to sustain differentiated brands and value propositions
- Rapid evolution and adoption of new technologies present both opportunities and risks for companies seeking to innovate.

In response to these challenges, IBM believes that retailers, over time, will exploit an increasingly diverse range of technologies—both within and outside the store—to improve and differentiate the shopping experience for their customers. In order to better understand what initiatives retailers are likely to pursue, and identify the key challenges they will face in evolving the in-store experience, the IBM Institute for Business Value, in association with the National Retail Federation, surveyed leading retailers in the U.S. and Europe.

Four main themes emerged from the survey results:

- Retailers are actively investing in employee empowerment and improved marketing effectiveness, while placing less priority on direct customer-facing capabilities. In order to drive higher productivity, retailers are providing their employees with online access to a wide variety of useful data, as well as advanced applications and tools. Their marketing-related efforts have focused on building the back-end infrastructure necessary to collect customer data and develop insights from that information. Over 70 percent of the respondents stated they are “currently implementing” customer segmentation and data warehouse capabilities. Going forward, retailers will then need to pay attention to devising ways of exploiting these assets to improve marketing execution and customer satisfaction.
• **Significant opportunities remain unexploited, as a result of both business and technical challenges.** Retailers identified a number of high-value initiatives that are not yet widely adopted. For instance, 55 percent of respondents said that giving store employees access to customer purchase records would be “extremely effective” in improving the returns process and optimizing sales—but only one-fifth are making this happen today. Technical and business challenges remain key obstacles to retailers’ future store strategies. More than 40 percent of respondents stated that outdated point-of-sale (POS) systems, competing organizational priorities and budget constraints were all “very significant” challenges to improving the customer shopping experience. These fundamental issues will need to be addressed before retailers can truly innovate.

• **A small group of innovators is taking the lead.** A small but consistent subset of retail competitors appears to be most active in testing a variety of cutting-edge techniques, such as delivering promotions to personal mobile devices and deploying digital media displays in their stores. These innovative strategies are often focused on providing the customer with new access points and services. By testing the limits of what’s possible in the store environment, this group of early adopters may be able to distance itself from competitors and create true differentiation.

• **Retailers are not taking full advantage of the multichannel opportunity.** Many retailers are still playing “catch up” and have significant gaps in their multichannel shopping capabilities. This result is surprising given that 40 percent of the respondents were from department and specialty stores (segments where online shopping is highly penetrated), and that nearly all stated that cross-channel shopping was “moderately” or “extremely prevalent” in their customer base.

Furthermore, when asked about the importance of different steps of the shopping process to enhancing the overall customer experience, most retailers said that the first step—obtaining information pre-store—was the least important. Retailers appear to be underestimating the growing population of consumers who research competing offerings on the Internet. Consequently, they may be missing an opportunity to create and strengthen relationships with customers before those customers even walk in the store. In order to truly improve the future shopping experience, retail executives need to ensure that their strategic perspective is not limited to their stores’ four walls.
Survey methodology

IBM conducted this survey in association with the National Retail Federation, distributing the survey instrument in October-November 2002 to retailers with annual sales of at least US$100 million. Target respondents were senior business executives with titles such as CEO, President, Chairman, VP Sales, VP Marketing and VP Store Operations. We received a total of 62 completed questionnaires.

The respondents included retailers in nearly every industry segment (for example, grocery, drug, discount, specialty, department, convenience); however, 40 percent were from department and specialty apparel/accessory/sporting goods stores. The sample comprised many of the largest players in the industry: 84 percent of the respondents represent companies with annual revenues greater than US$500 million, and 65 percent had sales over US$1 billion (see Figure 1).

The surveys were delivered by mail or in-person, and the data was collected by a third-party market research firm (Hudson Group, New York) retained by IBM. The IBM Institute for Business Value completed the analysis presented in this report.

For many of the questions in the survey, we asked retailers to first “rate the effectiveness or importance” of an initiative, and secondly, tell us the “status of their plans” for the same initiatives. Our objective was to compare perceived value against retailers’ implementation plans. Where there was a striking difference in the results, we have noted the gap in this report.

Figure 1. Key demographics of survey respondents.

The challenging retail marketscape
In a study of the retail industry completed earlier in 2002, we identified three fundamental forces affecting industry competitors: empowered consumers, competitive Darwinism and technology tipping points. Survey respondents confirmed the significance of these issues to retail strategy development. Consumers are more knowledgeable and therefore more powerful; competition is fierce and the quest for differentiation is vital to survival; and the growing availability and adoption of technology is making possible new ways to serve customers and compete.

Consumers are empowered
We asked retailers to evaluate their customers on a variety of notable characteristics (see Figure 2). Nearly all respondents reported that their customers are value-oriented, multi-channel shoppers, and well-informed about competing providers. At the same time, many considered their customers to be loyal. Traits that were considered less prevalent among their customers included “viewing shopping as a leisure activity,” “seeking entertainment,” and “viewing shopping as a chore.”

<table>
<thead>
<tr>
<th>How prevalent are the following traits and trends in your customer base? (percent of respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value-oriented</td>
</tr>
<tr>
<td>Shop across channels</td>
</tr>
<tr>
<td>Loyal</td>
</tr>
<tr>
<td>Informed about competing retailers</td>
</tr>
<tr>
<td>Price-sensitive</td>
</tr>
<tr>
<td>Demand additional product information</td>
</tr>
<tr>
<td>Willing to perform self-service functions</td>
</tr>
<tr>
<td>Place a premium on service</td>
</tr>
<tr>
<td>Comfortable with technology</td>
</tr>
<tr>
<td>View shopping as a leisure activity</td>
</tr>
<tr>
<td>Seek entertainment</td>
</tr>
<tr>
<td>View shopping as a chore</td>
</tr>
</tbody>
</table>

6-7 Extremely prevalent  3-5 Moderately prevalent  1-2 Not at all prevalent  No answer

Figure 2. Traits and trends observed among retail customers.

Note: Numbers may not add to 100 percent due to rounding. Respondents were asked to rate each item on a scale of 1 to 7.

Differentiation is key

To better understand how retailers are positioning themselves, we asked them to describe their plans on a set of initiatives that would enhance their customer value propositions. We found that retailers are pursuing a variety of strategies to achieve greater differentiation. Among the top initiatives, 57 percent of respondents were offering exclusive merchandise, 52 percent were implementing store layout or design changes, 47 percent were offering lifestyle bundles and services, and 40 percent were changing their real estate format and strategy.

Examples of these strategies can be seen all across the marketplace today. Private-label goods—both generic store brands and exclusive premium brands—are increasingly common as retailers seek to create uniqueness in their product mix. Store designs are evolving to add more convenience and services—for example, department stores experimenting with centralized checkout stations and supermarkets creating stores-within-a-store. Specialty grocers are creating lifestyle bundles by offering meal solutions rather than just selling ingredients. Soft-lines retailers are continuously introducing new formats and brands to attract customers. And Wal-Mart is exploring a smaller-format strategy with its Neighborhood Market.

Furthermore, many retailers are expanding their assortments through the addition of new product lines. For instance, mass-merchants are adding gas pumps and expanding into groceries, and alliances are being formed to collocate food service companies, financial service providers and specialty retailers into traditional large-format stores. One consequence of these strategies, however, is a blurring of the lines between industry segments that makes it all the more difficult to differentiate oneself from the competition.
Technology building blocks are reaching critical mass

Retailers indicated that technology adoption is accelerating for both themselves and their customers, setting the stage for significant change in the near future. For example, around half of the respondents expect that wireless network infrastructure, and employee personal digital assistants (PDAs) or other mobile devices, will be widely enabled in their stores within 24 months. Approximately one-third believe that pallet-level radio frequency identification (RFID) tags will be widely enabled in that same time. On the other hand, 18 percent of the retailers stated that electronic shelf tags would never become widely adopted in their stores.

As consumers become more comfortable using new devices and payment mechanisms over time, retailers expect them to be eager adopters of new technologies (see Figure 3). Thirty-one percent of the respondents believe that consumers will be widely using PDAs or other mobile devices in their stores within the next one-to-two years. This figure increases to 60 percent in the three-to-five year timeframe. Similarly, smart cards and key fobs (such as Mobil’s Speedpass) are projected to gain widespread consumer acceptance over time. In contrast, 24 percent of respondents asserted that “self-checkout terminals” will never be widely used by their customers.

When do you expect the following technologies to be widely used in your stores by consumers? (percent of respondents)

<table>
<thead>
<tr>
<th>Technology</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kiosks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDAs or other mobile devices</td>
<td>13%</td>
<td>18%</td>
<td>29%</td>
<td>11%</td>
<td>3%</td>
<td>26%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-checkout terminals</td>
<td>11%</td>
<td>13%</td>
<td>23%</td>
<td>8%</td>
<td>24%</td>
<td>21%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smart cards</td>
<td>7%</td>
<td>47%</td>
<td>32%</td>
<td>3%</td>
<td>18%</td>
<td>19%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Key fob</td>
<td>3%</td>
<td>3%</td>
<td>23%</td>
<td>32%</td>
<td>3%</td>
<td>18%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biometric devices</td>
<td>3%</td>
<td>10%</td>
<td>16%</td>
<td>16%</td>
<td>21%</td>
<td>34%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

■ Used widely today ■ In 1-2 years ■ In 3-5 years ■ In 6+ years ■ Never ■ Not sure ■ No answer

Figure 3. Customer adoption of in-store technologies.

Note: Numbers may not add to 100 percent due to rounding.

Importance of the checkout process

The shopping experience for consumers happens before, during, and after they visit a store and buy something. It is from the sum of multiple points of interaction that consumers form their opinions and attitudes about retailers. In order to understand retailers’ perspectives on different aspects of the shopping process, we asked them to rate the effectiveness of different store initiatives across the shopping process.

Retailers saw significant value in improving store capabilities across most steps of the shopping process. The top initiatives rated as “extremely effective” in optimizing sales covered such widespread areas as: planogram and display execution, chain-wide inventory look-up for employees, faster merchandise scanning and improved training of store associates.

However, they clearly emphasized certain steps of the shopping process over others. Over three-quarters rated “checking out” as most important to enhancing the shopping process (see Figure 4). The two initiatives in this step that were most often rated as extremely effective in optimizing sales were “faster check or credit card authorization” and “faster merchandise scanning process.”

Figure 4. Relative importance of shopping process steps in enhancing the customer experience.

Note: Numbers may not add to 100 percent due to rounding. Respondents were asked to rate each item on a scale of 1 to 7.

In contrast, “obtaining information (pre-store)” was rated as having the least importance to enhancing the shopping process. None of the initiatives for this step were among the top ten most effective in optimizing sales. Yet, given that most retailers surveyed consider their customers to be multichannel shoppers, and the growing tendency among consumers to do research on the Web before making a purchase, retailers may be missing out on an opportunity to attract and serve lucrative multichannel customers.

Core capabilities for the store of the future
IBM has identified several “core capabilities” that will enable 21st century retailers to address the increasing demands of the marketplace successfully (see Figure 5). These capabilities range from customer-facing marketing and service functions to key behind-the-scenes processes and infrastructure. Investing in these areas will allow stores to leverage information technology to improve employee effectiveness, increase sales and better satisfy customers. Different retailers will emphasize certain capabilities over others depending on their brands’ positioning and the specific value propositions that they are trying to create for their customers.

Figure 5. Core capabilities in the store of the future.
Source: IBM Corporation.
Satisfying customers through efficiency and convenience

In order to satisfy customers, many retailers need to become more flexible and responsive to consumers’ diverse needs. Providing more self-service options to access information and to complete transactions, and offering more cross-channel services (for example, fulfillment and returns) are key initiatives driving this capability.

Our surveyed retailers are taking a variety of steps to expand customer service options and channels, although most of the customer-facing initiatives have not yet been widely adopted (see Figure 6). The predominant theme is about convenience and efficiency. The two top initiatives, “providing detailed information about products and features” and “providing in-store returns for cross-channel purchases,” are currently being implemented by 40 percent or more of the retailers surveyed.

Over the near and medium term (within 5 years), cross-channel integration is likely to become more widely established, with more than 50 percent planning to implement initiatives such as “in-store access to e-commerce,” “purchase online and pick up in store” and “shopping list creation.” In addition, kiosk-based services are expected to be deployed by over half the respondents within three-to-five years.

Figure 6. Retailer plans for new customer services.

Note: Numbers may not add to 100 percent due to rounding.

Building the infrastructure to motivate shoppers

Converting latent desire to real demand is the key objective of a retailer’s marketing efforts. Taking customers from “I want/I am considering,” to “I will buy” is best done by understanding customer purchase habits and developing the ability to create targeted and relevant messages. The critical foundation is a robust infrastructure to gather customer data, build customer insights and execute on that knowledge. The retailers that we surveyed are actively building that infrastructure. Over 70 percent currently have customer segmentation capabilities and customer data warehouses, and just over 55 percent have built persistent network connectivity and data mining tools.

Despite having these tools in place, however, respondents do not necessarily turn customer insights into new marketing tactics at the store level (see Figure 7). The most common initiative currently used by retailers was “targeted promotional e-mails,” a basic capability possessed by 53 percent of the respondents. Much less common are such initiatives as “electronic shelf tags,” “digital media displays” and “promotions to personal mobile devices.” Many retailers said that they had no plans to use these technology-based tools. It appears that retailers today are more focused on the “back end” of marketing effectiveness and have yet to determine how best to leverage such capabilities.

Figure 7. Retailer plans to improve marketing effectiveness.

Note: Numbers may not add to 100 percent due to rounding.

Empowering employees and creating expert managers

In contrast to many customer-facing initiatives, retailers feel strongly about and are widely adopting initiatives to drive employee productivity and, indirectly, customer satisfaction. Survey respondents see value in “e-enabling” both store associates and managers - in fact, nearly 70 percent chose “store manager” as the job function that would benefit most from effective use of IT. The majority of retailers agreed that enhancing training and development, improving store-level transaction processing systems and providing employees with access to real-time data would be “extremely impactful” to increasing employee productivity.

Providing employees with direct, online access to various types of information (for example, pricing, promotions, HR and customer purchase histories) is in most retailers’ plans for the next 24 months (see Figure 8). In addition, many retailers are currently using technologies such as portals (63 percent) and online training (42 percent). Notably, 67 percent of retailers said they would be providing handheld devices to their employees in the next one-to-two years.

**Direct online access to information for store employees** (status of plans; percent of respondents)

<table>
<thead>
<tr>
<th>Information Type</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product pricing</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>60%</td>
</tr>
<tr>
<td>Details of promotions and special offers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>48%</td>
<td></td>
<td>39%</td>
<td></td>
<td>39%</td>
<td>7%</td>
</tr>
<tr>
<td>Customer purchase history</td>
<td></td>
<td></td>
<td></td>
<td>39%</td>
<td></td>
<td></td>
<td>27%</td>
<td></td>
<td>27%</td>
<td>10%</td>
</tr>
<tr>
<td>HR information and training</td>
<td></td>
<td></td>
<td></td>
<td>37%</td>
<td></td>
<td></td>
<td>42%</td>
<td></td>
<td>42%</td>
<td>5%</td>
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<tr>
<td>Planograms and store displays</td>
<td></td>
<td></td>
<td></td>
<td>37%</td>
<td></td>
<td></td>
<td>24%</td>
<td></td>
<td>24%</td>
<td>2%</td>
</tr>
<tr>
<td>Product information</td>
<td></td>
<td></td>
<td></td>
<td>36%</td>
<td></td>
<td></td>
<td>34%</td>
<td></td>
<td>34%</td>
<td>2%</td>
</tr>
<tr>
<td>Cross-sell/up-sell offers</td>
<td></td>
<td></td>
<td></td>
<td>16%</td>
<td></td>
<td></td>
<td>39%</td>
<td></td>
<td>39%</td>
<td>2%</td>
</tr>
<tr>
<td>Customer personal information</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>10%</td>
</tr>
</tbody>
</table>

- **Currently use**
- **Plan to use next 1-2 years**
- **Plan to use next 3-5 years**
- **No plans to use**
- **No answer**

Figure 8. Retailer plans to outfit employees with added information.

Note: Numbers may not add to 100 percent due to rounding.

Streamlining key retail processes

Although our survey was designed to focus on changes affecting the customer shopping experience, we also gained insight on how retailers leverage technology to improve aspects of store operations. Respondents are improving critical areas such as merchandising, checkout and inventory management (see Figure 9). At least half have ongoing initiatives in the areas of “planogram and display execution,” “faster check/credit card authorization” and “chain-wide inventory look-up for employees.”

Nearly 50 percent of retailers stated that they had plans to employ RFID-enabled checkout in the next three-to-five years. This form of checkout assumes that retailers and manufacturers have adopted RFID item-level tagging. If the price of these tags reaches low-enough thresholds, retailers will be able to realize significant operational improvements in such areas as replenishment, POS scanning accuracy, backroom stock visibility and inventory counting.

Figure 9. Retailer plans to enhance key store processes and functions.

Note: Numbers may not add to 100 percent due to rounding.

Innovative leaders stepping out ahead

To develop an overall picture of the future retail industry landscape, we filtered the future store initiatives examined in our survey by choosing only those that represented more than 50 percent of respondents for each of the three timeframes: today, the next one-to-two years and the next three-to-five years. This provided a view of what “mainstream” retailers are doing or plan to do. We found the following trends:

• Retailers are currently focused on getting the fundamentals right.
• In the next 24 months, they will concentrate on data integration and information access.
• For the three-to-five year timeframe, few new innovations are projected to surpass the 50 percent adoption level, indicating a low degree of industry consensus on the value of many emerging technologies.

Some of the more cutting-edge technologies ranked consistently low in the number of retailers currently using or planning to use them, and they often had high numbers for retailers expressing “no plans to use.” The common theme among the initiatives was that they provide customers with new services and access points and are not among those expected to be implemented in the “mainstream” store of the future described before.

We looked more closely at the 20 percent of respondents who were using these technologies and found that it was consistently the same set of retailers, undertaking multiple initiatives such as:

• Electronic shelf tags
• Digital displays
• In-store hotline or hot button to request assistance
• Virtual or remote customer service desks
• Promotions delivered to personal mobile devices.

Also of note were the demographics of these retailers: They represented nearly all retail segments, had revenues greater than US$1 billion, and included companies in both North America and Europe. It appears that a small percentage of leading retailers are setting the pace for the industry in terms of store technology innovation. These competitors are well-positioned to be “first to learn” and succeed with differentiated in-store experiences.
Untapped areas of opportunity

We compared how retailers rated the value or effectiveness of specific initiatives and what they planned for the same initiatives. Overall, we found a high degree of correlation between “value” and “plan,” but for several areas, there were large gaps—meaning many more retailers rated the initiative as highly valuable than were currently pursuing it (see Figure 10). The greatest gaps were in areas such as alerting store managers or associates to the presence of high-value customers, and providing access to customer purchase records to improve the returns process. These results point to areas of opportunity for retailers to satisfy customers better and increase sales.

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Value Ratings</th>
<th>Stated Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager or sales associate alerted to presence of high-value customer</td>
<td>45%</td>
<td>10%</td>
</tr>
<tr>
<td>Access to customer purchase records to improve returns process</td>
<td>55%</td>
<td>21%</td>
</tr>
<tr>
<td>Faster merchandise scanning process</td>
<td>71%</td>
<td>37%</td>
</tr>
<tr>
<td>Easy access to product information for employees</td>
<td>57%</td>
<td>34%</td>
</tr>
<tr>
<td>Electronic shelf tags for product/price information</td>
<td>37%</td>
<td>15%</td>
</tr>
<tr>
<td>Easy access to customer information for employees</td>
<td>37%</td>
<td>16%</td>
</tr>
<tr>
<td>Virtual/remote customer service desk</td>
<td>24%</td>
<td>5%</td>
</tr>
<tr>
<td>In-store returns for cross-channel purchases</td>
<td>57%</td>
<td>40%</td>
</tr>
<tr>
<td>Purchase online and pick up in store option</td>
<td>37%</td>
<td>21%</td>
</tr>
<tr>
<td>RFID-enabled checkout</td>
<td>27%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Note: Numbers may not add to 100 percent due to rounding.

Facing up to key business and technical obstacles

To better understand these gaps and the survey results as a whole, it is helpful to look at the key business and technical challenges that retailers face in their drive to improve the customer shopping experience (see Figure 11). The top three, in order of importance and each chosen by more than 40 percent of respondents, were outdated POS system, competing organizational priorities and budget constraints.

![Figure 11. Obstacles to improving the consumer shopping experience.](image-url)

**Significance of business challenges (percent of respondents)**

<table>
<thead>
<tr>
<th>Challenge</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
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<tr>
<td>Competing organizational priorities</td>
<td>42%</td>
<td></td>
<td></td>
<td></td>
<td>40%</td>
<td></td>
<td></td>
<td></td>
<td>16%</td>
<td>2%</td>
</tr>
<tr>
<td>Budget constraints</td>
<td>40%</td>
<td></td>
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<td></td>
<td>48%</td>
<td></td>
<td></td>
<td></td>
<td>8%</td>
<td>3%</td>
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<tr>
<td>Uncertain/insufficient ROI</td>
<td>36%</td>
<td></td>
<td></td>
<td></td>
<td>47%</td>
<td></td>
<td></td>
<td></td>
<td>11%</td>
<td>6%</td>
</tr>
<tr>
<td>Lack of skills among store associates</td>
<td>30%</td>
<td></td>
<td></td>
<td></td>
<td>63%</td>
<td></td>
<td></td>
<td></td>
<td>5%</td>
<td>2%</td>
</tr>
<tr>
<td>Insufficient IT skills and resources</td>
<td>21%</td>
<td></td>
<td></td>
<td></td>
<td>65%</td>
<td></td>
<td></td>
<td></td>
<td>11%</td>
<td>3%</td>
</tr>
</tbody>
</table>

- 6-7 Extremely important  - 3-5 Moderately important  - 1-2 Not at all important  - No answer

**Significance of technical challenges (percent of respondents)**

<table>
<thead>
<tr>
<th>Challenge</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
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<tbody>
<tr>
<td>Outdated POS system</td>
<td>44%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>34%</td>
<td></td>
<td></td>
<td>18%</td>
<td>5%</td>
</tr>
<tr>
<td>Insufficient networking bandwidth to the store</td>
<td>26%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>45%</td>
<td></td>
<td></td>
<td>19%</td>
<td>10%</td>
</tr>
<tr>
<td>Lack of integration of store systems</td>
<td>24%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>47%</td>
<td></td>
<td></td>
<td>18%</td>
<td>10%</td>
</tr>
<tr>
<td>Inability to manage information security risks</td>
<td>8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>52%</td>
<td></td>
<td></td>
<td>34%</td>
<td>6%</td>
</tr>
</tbody>
</table>

- 6-7 Extremely important  - 3-5 Moderately important  - 1-2 Not at all important  - No answer

Note: Numbers may not add to 100 percent due to rounding. Respondents were asked to rate each item on a scale of 1 to 7.

Lack of funding and allocation of scarce resources are prominent issues for most retailers in today’s weak economic environment. Retailers are still trying to recover from the shocks of the terrorist attacks of September 11th, economic recession and the onslaught of mass-discounters into other retail segments. Executives are focusing on areas where return on investment (ROI) is easily calculated and the payback is quick. In this context, it is not surprising that productivity-focused initiatives rank high on the list of priorities, while new customer-facing technologies remain unfulfilled items on retailers’ “wish lists.”

Meanwhile, many retailers are taking steps to address key store technology-infrastructure problems, such as poor store network connectivity and lack of systems integration. Only after a solid foundation is laid can retailers truly exploit emerging capabilities to transform the customer shopping experience.

**Conclusion**

Our survey findings reflect dedicated efforts by retailers to improve customer service and store operations even in the face of economic uncertainty. Retailers are moving ahead on employee-enablement initiatives and, to a lesser degree, customer-facing programs. At the same time, a small group of pioneering retailers is seeking to use emerging in-store technologies to enhance the customer shopping experience in innovative ways.

The fundamental strategic question is how to allocate scarce resources over time to address current priorities, while building a strong foundation for those capabilities that will be required to succeed in the future. Retailers should consider whether the risk is greater in simply keeping up with the mainstream or in actively transforming their store environment in search of differentiation. Ultimately, success will come to companies that best align the use of technology to their core brand and value propositions, delighting their customers and achieving greater business value.

To learn more about the IBM/NRF “Store of the Future” survey or discuss its implications for your retail business, contact us at insights@us.ibm.com. To browse through other resources for business executives, visit our Web site at:

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