

KPMG

CREATING THE IDEAL
SHOPPING EXPERIENCE

WHAT CONSUMERS WANT IN THE PHYSICAL AND VIRTUAL STORE

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uccessful retailers know that the customer is the ultimate judge of the quality of a shopping experience. Everyday, shoppers decide which merchant is doing the best job serving their needs. Consumers enjoy more choice than ever before—in stores, brands, and channels—and have access to an ever-increasing amount of information upon which to base their buying decisions. Capturing the purchasing power of these sophisticated consumers is a difficult and constant challenge for retailers.

The Indiana University Center for Education and Research in Retailing (IU Center) and KPMG's Retail Industry practice share the belief that successful retailers in the future will be those that are focused on their customers and are able to deliver the best shopping experience in both traditional and nonstore environments. The value proposition is complex—encompassing price, quality, information, selection, convenience, service, and entertainment—and

providing the right balance is not an easy task. Technology can be a very useful tool in helping to create the right value proposition, but understanding how consumers react to technology, and when technology should be used in the shopping process, is critical to success. The IU Center and KPMG are pleased to present *Creating the Ideal Shopping Experience*, a research study that measures consumers' acceptance of technology and, more importantly, offers insights on how consumers want to shop.

The IU Center is dedicated to educating future retail leaders and executing leading-edge research for the benefit of the retail industry. KPMG, a key partner of the IU Center, delivers understandable business advice through a wide range of assurance, tax, and consulting services. We would like to acknowledge IU's Professor Raymond Burke as the primary researcher in this project and to thank him for his research contributions, including the design and analysis of the study.

We hope you find this study interesting and thought-provoking. Ultimately, we hope you're able to use the findings to help you create the *ideal shopping experience*, so that you can capture the loyalty and buying power of your customers—both today and in the future.

# Theresa Williams

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uring the past year, a number of high-flying online shopping companies hit hard times. Some, like Toysmart.com and Living.com, have gone bankrupt. Others, like Peapod and CD-NOW, ran out of capital and were acquired. Even Amazon.com, the premier online shopping company, has stumbled in recent months with sales of books and music down 4 percent over the first two quarters. These events bring to mind earlier failures of online shopping initiatives, including interactive television in the 1990s and videotex in the 1980s.

Companies also have struggled to find the best applications of technology in conventional retail stores. While UPC scanning and automated teller machines (ATMs) achieved widespread acceptance, other technologies have not met retailers' expectations. Interactive kiosks, for example, have fluctuated in popularity over the years, getting a boost every time a new technology is incorporated (such as videodisk players, touch screens, bar code readers, and Web access). But there are disappointments, such as Kmart's Solutions™ in-store kiosk, Ernst Home Center's special order kiosk, and the MicroMall catalog shopping kiosk. In 1993, Ted Turner's Checkout Channel, a network of five-inch color monitors positioned by the checkout counters in 840 grocery stores, was discontinued. That same year, VideOcart went bankrupt after installing LCD screens and computers on the handlebars of shopping carts in 220 stores.

Before retailers invest more time and money in developing, deploying, and promoting retail technologies, these questions should be asked:

- What role do *consumers* want technology to play in the shopping process?
- Are people overwhelmed by the technical innovations and want simpler rather than more sophisticated shopping experiences?
- Have companies already tapped out the most promising applications of technology?

From the customer's perspective, there are costs as well as benefits associated with new technologies. They often are confusing, take time to learn, are prone to failure, and can raise the prices of goods and services. From the retailer's perspective, technology is expensive to adopt and maintain and can become obsolete quickly. Clearly, it is necessary to understand which technologies and applications create value for specific consumer segments and product categories in order to optimize the shopping experience.

To address these issues, the Indiana University Center for Education and Research in Retailing and KPMG conducted a national survey of consumers' perceptions of the desired role of technology in the shopping experience. The goals of the research were to:

- Determine what would be the *ideal shopping experience* from the customer's perspective.
- Identify how media work together to move consumers through the purchase process.
- Help retailers optimize the online and in-store shopping experience by identifying the most important features of the customer interface for specific product categories and consumer segments.

The IU-KPMG study was conducted using an online panel of consumers because Internet users are familiar with interactive technologies and can provide early indications of consumer interest in new retail applications. It is important to note that this group tends to be younger, have higher income, and be better educated than the general population. Therefore, the findings may be a better reflection of the opinions of the next generation of consumers rather than today's average shopper.

The study covers a broad range of features associated with the shopping process common in retailing today, such as providing printed circulars and sales assistants, to innovations just emerging from the research labs. The study asked shoppers to evaluate 128 different aspects of the shopping experience with 58 online and 70 in-store attributes. Shoppers rated their preference for many kinds of product information, including product specifications, photographs, video clips, expert ratings, consumer discussion forums, and brand and price comparisons. They evaluated a variety of options for advertising, promotions, pricing, personalization, customization, and e-mail messaging. People assessed several different online and in-store technologies, including agent technology, multimedia, 3-D simulations, kiosks, handheld computers, and electronic signs. The study explores the role of people in the shopping process, including guest greeters, sales assistants, cashiers, and customer service representatives. Additionally, the IU-KPMG study sought shoppers' preferences for various checkout, payment, fulfillment, and return options.

Given the growing importance of multi-channel retailing, respondents were asked how they would like to use a combination of media—including the Internet, television, catalogs, wireless devices, public kiosks, and the physical retail store—at each stage in the purchase process. Then they evaluated a number of concepts integrating the online and in-store shopping experience, such as having online access to prices, promotions, and inventory of a local retail

# Product Categories

# **Durable goods**

- Major appliances
- ▶ Small appliances and consumer electronics
- ▶ Furniture and lighting
- Hardware, paint and wallpaper

# Soft goods

- Weekend apparel
- Weekday apparel

# Nondurable goods

- Groceries, health and beauty care products
- ▶ School and office supplies

## **Entertainment products**

- Toys and games
- Music, movies, and books

store; purchasing products online and picking them up at a store; and shopping in-store and having the merchandise delivered to their homes.

Of course, it would be difficult to construct a *single* ideal shopping experience because consumers shop differently for different types of products. Therefore, separate groups of consumers with recent shopping experience in ten different product categories independently evaluated the shopping features. The categories included durable goods (major appliances; small appliances and consumer electronics; furniture

and lighting; hardware, paint and wallpaper), nondurable goods (groceries, and health and beauty care products; school and office supplies), soft goods (weekend apparel; weekday apparel), and entertainment products (toys and games; music, movies, and books).

The following report summarizes the key findings from this research and highlights the major implications for retail practice in the 21st century.

# Raymond R. Burke

E.W. Kelley Professor of Business Administration Director, Customer Interface Lab Indiana University iven the incredible number of options available

to retailers when designing an online or in-store shopping experience, *Where should one start? What is the founda-tion of an ideal shopping experience?* We started by asking the consumer.

In our study, respondents were asked to assume that they were shopping for one of ten different product types and to design the shopping experience any way they wanted, with the specific features they desired most.

People classified each of the online and in-store features into one of five categories:

- must have— critical feature that the consumer could not do without
- should have important but would sacrifice under some circumstances
- nice to have —desirable but not necessary
- indifferent —didn't care about one way or the other
- prefer not to have—undesirable feature that would not be included in an ideal shopping experience.

People were told to assume that these features were being provided by the retailer at no additional cost to them.

Consumers have clear and consistent opinions about which features **must be provided**. While there is some interest in technology, people are much more focused on the fundamental elements of the shopping process. They want to purchase quality products at a good price from an attractive selection of alternatives. They want a fast and convenient shopping experience with excellent service and sufficient product information. The specific features customers desire most are described in the following sections. Online shopping, in-store shopping, and multi-channel integration are discussed in turn.

#### Online shopping features that consumers must have **Product information** (%) 92.9 Online product prices Product prices and promotions at the closest retail store 64.3 Product specifications, usage instructions, and warranty information 57.3 50.4 Online list of product promotions Payment, fulfillment, and customer service 78.6 Toll-free telephone access to customer service Products shipped to home or office 77.6 E-mail order confirmation 72.6 69.3 Secure, Web credit-card payment E-mail shipping confirmation 66.5 58.0 E-mail access to customer service Online shipment tracking 55.7 Returns shipped back to retailer 52.4

# **Shopping online**

When shopping on the Internet, almost all consumers insist on knowing the prices of products sold online and most want to know the prices at the closest retail store. In addition, online shoppers like access to product specifications and instructions, warranty information, and a list of the products currently on sale.

Consumers want to be able to pay for products by entering their credit-card number on a secure Web page, receive an e-mail message confirming that the order was received and

shipped, and then track their shipment using the Web. Most shoppers would like products shipped to their homes or offices, and assume that there is a process to ship back unsatisfactory or defective products to the retailer. If they need help, shoppers want to be able to call a customer service representative on a toll-free telephone number or communicate via e-mail. The table on the previous page lists the percentage of consumers who reported that they must have each of these features.

While each of the features mentioned in the table is important for all ten product categories, there are significant variations in some ratings. For example, more than twice as many respondents said they must have detailed product specifications, usage instructions, and warranty information for major appliances (78%) than for music, movies and books (37%). On the flip side, people are more willing to ship back unsatisfactory music, movies, and books (62%) than major appliances (43%), furniture and lighting (47%), or hardware, paint and wallpaper (47%).

There are several features that most consumers feel **should be** provided by online retailers but that are **not absolutely necessary.** These include information on what products are in stock, detailed product photographs, product price and feature comparisons, a list of new items carried by the Web site, and expert ratings of product quality. Several features concerning the integration of the online and in-store shopping experience fall into this category, including being able to check on a local store's inventory, printing store coupons, getting travel direc-

tions to the closest retail store, and being able to put a 24-hour courtesy hold on an item that the store has in stock.

Consumers also feel that retailers should provide several features to improve the convenience of shopping. These include saving shipping and billing information for one-click ordering, saving a list of prior purchases for proof-of-purchase and warranty repairs, e-mail notification of sale items, and being able to pick up and return online purchases at a local retail store. Many consumers want the option of placing an online order by calling a toll-free number, being billed by the retailer on delivery, and having a retailer's agent pick up defective or unsatisfactory products.

## In-store shopping

When shopping in the physical retail store, consumers feel that it's essential for the store to provide knowledgeable, helpful sale assistants. If there is a question or problem, shoppers want to be able to speak to a customer service representative, either in person or on the telephone. When checking out, shoppers want cashiers to be avail-

Online shopping features that consume should have	rs
Product information	(%)
Online product inventory (what's in stock)	83.3
List of new items carried by Web site	76.5
Comparison of product prices across online stores	66.9
Detailed product photographs	65.9
Comparison of product features across brands	60.5
Expert ratings of product quality	57.3
Shopping aids	
Web site saves list of purchases for proof-of-purchase and warranty repairs	67.9
Web site saves shipping and billing information for one-click ordering	57.4
E-mail notification of sale items	54.1
Clicks-and-mortar integration	
Online information on local store's inventory	76.1
Product returns to local retail store	73.4
Ability to print coupons for local retail store	68.1
Travel directions to local store	60.1
Product pickup at local retail store	56.3
Ability to place 24-hour courtesy hold on product in local store	52.9
Payment, fulfillment, and returns	
Retailer's agent picks up product returns	67.4
Order online by calling toll-free number with credit-card number	63.0
Pay retailer when merchandise is delivered	56.6

able who can scan and bag products, accept payment, and provide a printed receipt. They want the store to accept

<sup>&</sup>lt;sup>1</sup> In the following discussion, any reference to the percentage of customers who felt that they *should have* a particular feature also includes those customers who indicated that they *must have* the feature.

#### In-store shopping features that consumers must have Sales assistance and customer service (%) 52.6 Knowledgeable sales assistants In-person or telephone customer service 51.6 Checkout, payment, and fulfillment Cash payment option 89.8 Printed receipt 88.0 Credit-card payment option 84.6 Product available at the store to take home 80.0 Check payment option 76.9 Debit-card payment option 69.7 Cashier checkout and bagging 54.9

In-store shopping features that consumers should have			
Product information	(%)		
Printed store circulars listing promotional items	81.8		
Sales associates with computer access to detailed product information	73.1		
Large store signs listing promotional items	72.7		
Printed store circulars listing new items	65.2		
Map of the store	61.3		
Large store signs listing new items	57.4		
Pricing policy			
Individual item pricing	75.8		
Everyday low prices	68.5		
Regular sales	57.9		
Seasonal sales	52.8		
In-store technology			
Handheld scanners displaying prices of selected products	62.7		
Kiosks providing electronic coupon redemption	61.0		
Electronic signs displaying daily and hourly promotions	56.6		
Kiosks for shoppers to order items that are out of stock	55.1		
Electronic shelf labels that are always accurate and current	54.7		
Handheld scanners that can check colors/styles/sizes and place orders	51.8		
Fulfillment			
Order out-of-stock items and have them shipped to home or office	55.9		
Order out-of-stock items for later pickup at retail store	55.5		

all forms of payment (cash, credit card, check and debit card), and to have products in-stock and available to take home.

Once again, the importance of some aspects of the shopping experience varies by product category. Consumers are most interested in having knowledgeable sales help when shopping for infrequently purchased durable goods, such as major appliances, small appliances, consumer electronics, furniture, lighting, and hardware. Sales assistance is less important (but still valuable) when shopping for groceries, health and beauty care products, apparel, music, movies, and books, and toys and games.

There are several additional features that most consumers feel retailers should provide but which are not mandatory. These include: printed circulars and signs listing new and promotional items, a map of the store, sales associates with computer access so they can look up detailed product information, everyday low prices, regular and seasonal sales, and individual item pricing. Consumers like having the option to order out-of-stock items and have them shipped to their home or office or pick them up from the store at a later date.

There is significant interest in several in-store technology applications. More than 50 percent of shoppers feel that retailers *must* or *should* provide electronic shelf labels that are always accurate and current. They would like electronic signs displaying daily and hourly promotions and kiosks for retrieving electronic coupons and ordering out-of-stock merchandise. Also, shoppers would like handheld scanners that display prices, report product availability in other colors, styles, sizes or varieties, and provide an option to order out-of-stock items. These results mirror the findings of the first IU-KPMG study, conducted in the

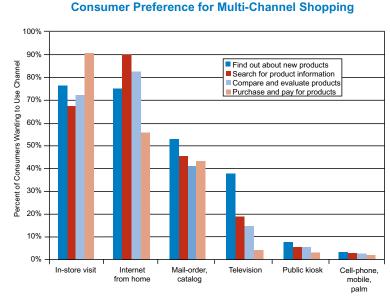
summer of 1999. In this research, 82 percent of shoppers felt they would benefit from retailers' adoption of electronic shelf tags, 81 percent wanted handheld price scanning, 77 percent liked product information/ordering kiosks, and 74 percent valued electronic-coupon kiosks.

# **Multi-channel shopping**

Many retailers have expanded from selling their goods and services through a single channel, such as bricks-and-mortar stores or the Internet, to a number of different channels, including catalogs, television shopping channels, public kiosks, and even cell-phones and handheld computers. Some of the pioneers in multi-channel retailing have reported that those customers who use multiple channels spend significantly more than single-channel shoppers. *But what are the best ways to use these media to attract and retain customers?* 

Shoppers were asked to tell us which channels they would prefer to use when shopping for ten different product cat-

egories. They could select any combination of channels for each of the four steps in the purchase process: (1) finding out about new products, (2) searching for information on specific products, (3) comparing and evaluating alternatives, and (4) purchasing and paying for products. They also were asked how they would like to receive products and return unsatisfactory items: by having them shipped through the mail and/or visiting a retail store.



The study ascertained that a majority of consumers want to

use multiple channels when shopping. More than three-fourths (82%) prefer to use more than one channel to learn about new products, 77 percent to search for product information, 74 percent to compare and evaluate alternatives, and 63 percent to purchase and pay for products. More than half (59%) of consumers would like the option of receiving merchandise through the mail or a store visit, and 39 percent would like to be able to return products through both channels. Consumers are less interested in using multiple channels when shopping for frequently purchased goods, such as groceries and health and beauty care products.

The survey reveals that the various media can play different roles in moving shoppers through the purchase process. On the one hand, consumers prefer to visit a retail store to learn about new products (76%), purchase and pay for merchandise (91%), receive products (91%) and return unsatisfactory items (89%). On the other hand, they are most enthusiastic about using the Internet to search for product information (90%) and compare and evaluate alternatives (83%).

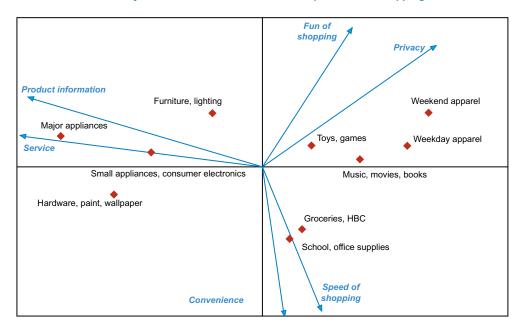
Consumers prefer to use media that can accurately portray the characteristics of the specific products they are buying. For example, consumers like to use the Internet to find out about and search for information on products like music, movies, books, and consumer electronics, presumably because of the detailed information that is available online. Catalogs are more popular for weekend apparel and furniture and lighting, where visual quality is important. Television is a preferred medium for learning about products that have a sensory or entertainment element, like toys, games, music, and videos. In-store visits are more appealing for expensive and infrequently purchased items such as appliances, furniture, hardware, paint and wallpaper, as well as weekday apparel and groceries.

# OPTIMIZING THE EXPERIENCE: PRODUCT CATEGORIES

onsumers are in general agreement that three aspects of the shopping experience—product quality, value provided, and product selection—are critically important no matter what type of product is being purchased. These attributes are rated as being very important by 74 percent, 69 percent, and 66 percent of respondents, respectively. For most other shopping dimensions, there are distinct differences between product categories in consumer importance ratings. To explore these differences, the results of the study are examined using discriminant analysis.<sup>2</sup>

As shown in the figure, the ten product categories fall into three different groups. The first group, shown on the left side of the diagram, are the infrequently purchased, durable goods: major appliances, small appliances, consumer electronics, furniture, lighting, hardware, paint, and wallpaper. When buying these items, consumers want retailers to provide *detailed product information* and *excellent service*. A second group of products, shown in the lower-right-hand quadrant of the diagram, are the frequently purchased, nondurable goods: groceries, health and beauty care items, and school and office supplies. These shoppers emphasize the importance of having a *fast* and *convenient* shopping experience. The third set of products cluster in the upper-right-hand quadrant, and consist of entertainment products—music, movies, books, toys and games—and weekend and weekday apparel. When shopping for these products, consumers want to have a fun and entertaining shopping experience. Shoppers also feel it's important to maintain their privacy when buying these personal and lifestyle-oriented products.

# Discriminant Analysis: Product Differences in the Importance of Shopping Attributes



<sup>&</sup>lt;sup>2</sup> This procedure generates a set of statistical functions that provide the best discrimination between the ten product categories based on linear combinations of the attribute importance ratings. Each of the arrows in the diagram represents a shopping attribute, where the attribute's importance for a particular product category is reflected by the distance of the category along the attribute dimension.

As noted earlier, the evaluations of many individual shopping features depend on the specific type of product being purchased. These interactions are explored in more detail in the following sections.

#### **Product information**

Some of the most dramatic differences between product categories concern product information. Across a range of online and in-store shopping features, consumers express a greater interest in having access to detailed product information for durable goods—such as major appliances, small appliances and consumer electronics—than for frequently purchased products like groceries, school and office supplies, apparel and music. When shopping on the Internet, respondents emphasize the importance of having product specifications, a comparison of store prices and brand features, and expert ratings of product quality. When shopping in the retail store, they want knowledgeable sales assistants who can look up product information on a computer, and kiosks that can provide access to manufacturers' Web sites and expert ratings of product quality. The figure on the next page shows how consumers rate various kinds of information for the four broad product types.

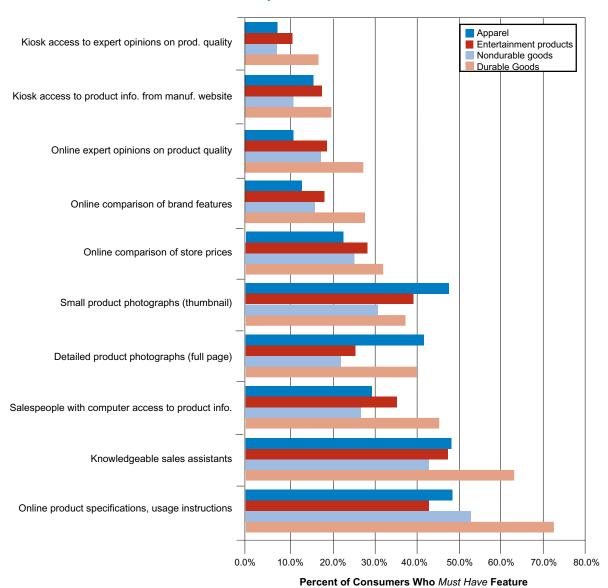
While facts and figures are important for appliances and consumer electronics, the visual appearance of products is critical when shopping for products with a strong aesthetic component, such as furniture, lighting, and apparel. For example, 50 percent of furniture shoppers indicated that Web sites must provide full-page product photographs, and 36 percent said that sites should allow shoppers to view 3-D product images that can be rotated 360 degrees. Consumers want the option to view thumbnail photographs of all product types because this makes it easy to search quickly through a large number of items. They especially like thumbnails for apparel, toys, and games.

Noninteractive media are especially popular for frequently purchased products, such as groceries, health and beauty care products, school and office supplies, and weekend apparel. For example, 75 percent of grocery shoppers feel that retailers should display large signs with a list of promotions, 81 percent for school and office supplies, and 78 percent for weekend apparel. When shopping for school and office supplies, 88 percent of shoppers like to receive printed circulars listing items on promotion.

# **Shopping aids**

There are several online and in-store shopping aids that are rated as being particularly desirable for one or more product types. Internet shoppers feel they must have the ability to check inventories for products frequently purchased online such as weekday apparel (52%), weekend apparel (46%), music, movies, and books (52%) and toys and games (45%). For these same product categories, approximately one-fourth of the respondents want the option to place one-click orders. People have a greater interest in custom-designing their own ideal product when purchasing lifestyle-oriented items, such as furniture, lighting, music, and apparel.

# **Product Differences in the Importance of Online and In-store Information**



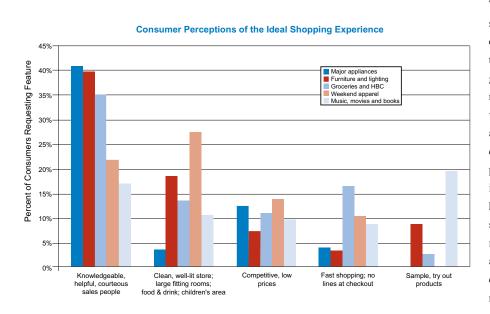
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#### **Fulfillment**

Different products have different physical characteristics and handling requirements that affect how consumers would like to receive and return merchandise. For example, approximately three-fourths of consumers are enthusiastic about having their online purchases of major appliances and furniture delivered because these items are large and heavy and would be difficult for shoppers to transport themselves. However, they are less enthusiastic about having to ship these items back to the retailer if there is a problem. Instead, many consumers feel that retailers should arrange to pick up the defective merchandise. People also express some interest in using a drive-through warehouse to pick up and return durable goods, perhaps because they are familiar with home improvement centers that use a warehouse format.

# Other Elements of the shopping experience

After people rated 128 different features of the online and in-store shopping experience, they were asked to tell us in their own words what else they would want. More than half of the respondents made suggestions. The most frequent comments are summarized in the following figure for five representative product categories.



The dominant suggestion for eight out of the ten product categories is for retailers to provide knowledgeable, helpful, courteous salespeople. The importance of having good salespeople is mentioned by about forty percent of the respondents shopping for

major appliances and furniture and lighting and more than one-third of the respondents shopping for groceries, and health and beauty care products. Many shoppers qualify their comments by saying that they only want sales assistance when it is needed and that they would prefer not to have pushy salespeople.

Shoppers for weekend apparel want an attractive store, with large fitting rooms, and other amenities and suggest that stores include areas serving food and drink and provide places for children to play. The sensory aspects of the shopping experience also are important for entertainment and lifestyle products. Shoppers want to be able to sample or try out products when shopping for music, movies and books, toys and games, and furniture and lighting.

Consumers made several suggestions that are specific to just one or two product categories. For example, when buying groceries and health and beauty care products, shoppers want a fast shopping experience with no checkout lines. When buying appliances, they want timely, reliable delivery. Some people asked to see product demonstrations when shopping for small appliances and consumer electronics.

# OPTIMIZING THE EXPERIENCE: CONSUMER SEGMENTS

he four demographic variables—age, gender, educa-

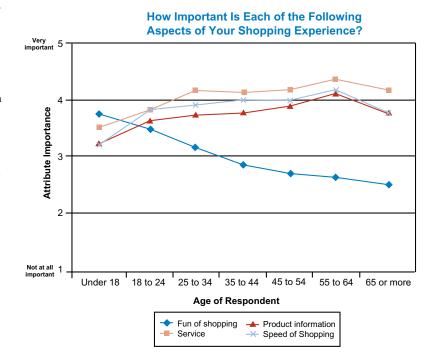
tion, and income—affect shoppers' preferences for online and in-store shopping features. The following sections discuss how these attributes influence the way shoppers would like to shop.

### Age

There are clear, generational differences in what consumers value most in the shopping experience. People under the age of 25 are most interested in having *fun* while shopping. They respond more favorably than older shoppers to features that make shopping entertaining, including online and in-store product auctions, videogames on handheld shopping devices, and cell-

phones to call friends and relatives. They also are more positive about features that increase the chances of finding a bargain. They favor variable pricing policies, such as having sales on a broad selection of products, cutting prices at the end of the season, and changing prices on a daily basis depending on the retailer's product inventory and competitive conditions.

Older shoppers are more pragmatic; placing greater emphasis on having detailed product information, quality service, and a fast and secure shopping environment. When shopping online, they have a



greater interest in product specifications, usage instructions, warranty information, product histories, countries of origins, and retailer and manufacturer advertisements. In the conventional store, older shoppers are more accepting of guest greeters and more enthusiastic about having retailers post large signs with product information. However, their enthusiasm for product information does not translate into a higher interest in interactive technologies.

Younger adults (especially those under 25) are significantly more interested in using newer technologies—cell-phones, mobile and palm computers and interactive kiosks—to find out about new products, search for product information, and compare and evaluate alternatives. They are more enthusiastic than older shoppers about almost

every application of interactive kiosks and handheld shopping devices, including applications that:

- Provide access to product information, product locations, customer evaluations, and expert ratings.
- Personalize the shopping experience.
- **Expand** the selection of available products.
- Entertain by using auctions and videogames.
- Provide price and promotional information and electronic coupons.

Younger adults also are more positive about (or tolerant of) one-to-one marketing practices than older consumers. When shopping online, younger people are more interested in receiving personalized product offers and discounts, custom-designing products, and seeing the profiles of other shoppers who have previously purchased items. When shopping in physical stores, they are more receptive to frequent-shopper discounts, and having a salesperson make product suggestions based on their computerized purchase history (in addition to the personalization applications for kiosks and handheld shopping devices noted earlier).

Surprisingly, younger consumers do not differ significantly from older shoppers in their interest in shopping online or in conventional retail stores. This runs counter to the general intuition that young shoppers are migrating fastest *from bricks to clicks*. It is important to note, however, that this research was conducted over the Internet, so the study may have missed the views of those consumers who have been slow to adopt online shopping.

With the current media focus on the Internet, it's easy to forget the importance of television for the younger generation of consumers. People under the age of 35 are more interested in using television to find out about new products, search for product information, and compare and evaluate products than older shoppers. They also place a greater emphasis on seeing pictures of products when shopping online, which suggests that younger people may be more attuned to visual information.

	Shopping online	Shopping in-store
Checkout and payment	<ul> <li>Fax or call in credit-card number using a toll-free number.</li> <li>Swipe credit card through PC's keyboard reader.</li> <li>Pay retailer on delivery.</li> </ul>	<ul> <li>Use self-checkout system to scan, bag, and pay for merchandise.</li> <li>Scan products with handheld device while shopping, and pay cashier or ATM machine at</li> </ul>
Fulfillment	Pickup product at local retail store, affiliated convenience or drug store, or drive-thru depot.	<ul> <li>checkout.</li> <li>Product shipped to home or office, or available for pickup at retail store, in two to three days.</li> </ul>
Customer service	<ul> <li>Customer service through two- way text chat window, two-way voice (using PC), or one-way videoconferencing.</li> </ul>	Customer feedback through print- ed evaluation cards, kiosk ques- tionnaire, or Web questionnaire.

When shopping online and in conventional stores, older shoppers favor the more familiar methods of checkout, payment, product fulfillment, and customer service. For example, when shopping online, they prefer to enter a creditcard number on a secure Web page, have the merchandise shipped to their home or office, and

interact with customer service people via the telephone. In the physical store, they like having a cashier scan and bag products, accept payment, and provide a printed receipt. They want the merchandise to be available immediately to take home and resolve any problems by speaking to an onsite customer service representative.

Younger consumers are more willing to try new and alternative methods of checkout, payment, product fulfillment, and customer service. For example, they are significantly more positive about each of the shopping options depicted in the table.

When shoppers are asked what else they would include in their ideal shopping experience, younger shoppers (under 35) are more likely to suggest eliminating overaggressive or pushy salespeople and, in fact, want retailers to make it easier for them to find items themselves. In contrast, older consumers are more interested in the facilities and suggest that retailers offer to sell refreshments and provide play areas for children.

#### Gender

Men and women have distinctly different views of what would constitute an ideal shopping experience. Men express a greater interest in using various types of technology in the shopping process. They are more positive about using the Internet, cell phones, mobile and palm computers, and interactive kiosks than women. In contrast, female shoppers express a greater interest in using catalogs at each stage in the shopping process: to learn about new items, search for product information, compare brands, and make purchases.

In online and in-store shopping environments, women are consistently more focused on price, promotions, and coupons than men. A greater percentage of women say that they *must have* online product prices, a list of sale items, personalized product discounts, and the ability to view prices and print out coupons for the local retail store. They also are more interested in receiving e-mail notification of sales. When shopping in conventional stores, women want printed circulars and store signs listing promotions. They also express a greater interest in using kiosks that offer electronic coupons that are automatically deducted at the register. When asked about their ideal pricing policy, female shoppers are more enthusiastic about variable pricing strategies, including high-low pricing, end-of-season markdowns, and even daily and hourly promotions displayed on electronic signs.

In contrast, men express somewhat greater interest in product information, perhaps because they shop less frequently. When shopping online, they are more interested in information on product histories and countries of origin, complementary products, comparisons of brand features, and unedited consumer evaluations. They are more tolerant of online advertising, and more interested in viewing a map of the local retail store with product locations. When visiting the physical store, they show a greater interest in using handheld shopping devices to scan an item's UPC code and display unedited consumer evaluations, and to e-mail product information from the store to their home PCs for later review.

Women are more interested than men in a variety of features that increase shopping convenience. When shopping online, they are more receptive to using an electronic shopping list or having the Web site save a list of past purchases to simplify reordering. Women like being able to speak to a real person (customer service representative) when placing an order or requesting assistance. Compared to men, they have a greater interest in being able to check if a local store has an item in stock and then placing a 24-hour courtesy hold on the item. Women are more insistent that online stores notify them through e-mail when orders are received and shipped and are more interested in alternative means of returning products such as having a retailer's agent pick up the product or returning it to an affiliated convenience store or drugstore.

When shopping in a conventional store, women are more interested than men in all forms of assistance by salespersons. They are more receptive to using kiosks and handheld devices that allow them to order items that are out-of-stock. They want a cashier to be available to scan and bag merchandise, accept all forms of payment, and provide a printed receipt. If an item is out of out-of-stock, women are more interested than men in having the item shipped to the home or office or returning to the store in a few days to pick up the merchandise.

Compared to female shoppers, men are more tolerant of technology that could increase the time and effort required to shop. When shopping online, men are more interested than women in Web sites that allow them to custom-design products. They are more willing to access customer service using a PC's two-way voice or one-way videoconferencing capabilities. In the physical store, they have fewer concerns than women about removing item pricing and are more comfortable with having receipts e-mailed to them or made available on a private Web site. They also are more interested in online and in-store product auctions (the latter using handheld shopping devices).

#### **Education**

Education plays an important role in determining consumers' perceptions of the ideal shopping experience. Higher education consumers are more comfortable using nonstore channels (e.g., the Internet and catalogs) to find out about new products, search for product information, purchase products, and have the merchandise delivered. When shopping in conventional stores, they are more likely to use credit cards (while lower education shoppers are more interested in debit cards) and are more willing to have out-of-stock items delivered or available for pickup at a later date from the retail store.

Lower education consumers are significantly more accepting of most forms of intrusive communications. When shopping online, they are more tolerant of retailers' and manufacturers' product advertisements displayed on a Web site and are more willing to receive e-mail notices alerting them to when new items and sales items are being offered. These consumers also are more positive about receiving unsolicited communications within the physical store. They like the idea of being greeted by a customer service representative when entering the store and are more interested in receiving printed store circulars and seeing large signs featuring new and promotional items. They also are more willing than higher education shoppers to be exposed to product advertisements in the store, on conventional (e.g., printed signs) and electronic (e.g., handheld shopping devices) media.

Lower education shoppers are significantly more positive about in-store technologies that provide personalized product suggestions and promotions. They are more willing to have a salesperson look up their past purchases on a computer terminal and make recommendations or use a handheld device to scan a product's UPC code and display a list of complementary items, a rating of how well the product fits their personal profile, or personalized product promotions. Higher and lower education consumers do not differ in their interest in using convenience-oriented personalization features, such as saving shopping lists and billing information to facilitate replenishment purchases.

Higher education consumers resist some attempts to increase the complexity of the shopping experience. For example, they would prefer not to have prices change daily based on store inventory and competitive conditions. They also are less interested in using a kiosk to custom design their own ideal product.

# Income

In general, education level was a better predictor than income of respondents' preferences for specific shopping features. However, income did play a significant role in a few relationships. Higher income consumers (\$60k+) have a greater interest in seeing detailed photographs of products when shopping online and checking product inventories in local stores. They also are somewhat more interested than lower income shoppers in using credit cards as a method of payment. When shoppers are asked what else they would include in their ideal shopping experience, higher income consumers are 28 percent more likely than lower income consumers to suggest increased levels of customer service.

gy. They are enthusiastic about the power of personal computers but struggle with the complexity of new technologies and the continual threat of obsolescence. People marvel at how the Internet can provide extensive product information and vast product assortments but feel overwhelmed by the clutter. Shoppers like to receive personalized and relevant marketing messages but fear that they'll lose their privacy as businesses build vast, centralized data warehouses.

The IU-KPMG study revealed that consumers are generally positive or at least neutral about most of the aspects of the shopping experience that were tested. However, there is a significant percentage of shoppers who are negative about several aspects of the shopping experience, including intrusive communications, personalization, variable pricing policies, technology-intensive shopping aids, and alternative methods of checkout and payment. The following table lists those shopping features that at least 10 percent of consumers would *prefer not to have*.

## Intrusive communications

Advertising is an important part of consumer marketing. It informs and entertains consumers, promotes products, and subsidizes many of the traditional and interactive media channels. Therefore, it is not surprising that most consumers are positive or at least neutral when asked about their preference for online and in-store advertising. However, almost a third of shoppers say that they would prefer not to be exposed to one or more forms of advertising tested. Consumers also have mixed emotions about other types of intrusive communications. Most shoppers like being greeted by a store representative when entering a retail store and receiving e-mail notices alerting them when new items become available. Yet, a segment of consumers say that they would prefer not to have such interactions with the retailer.

#### Shopping features that some consumers would prefer not to have Communications (%) Online advertisements for products sold by a Web site 16.7 Store representative who welcomes guests and can answer questions 14.1 E-mail notification of new items 13.2 Handheld device displaying ads for products near your location 12.7 10.4 Manufacturers' online product advertisements Personalization Handheld scanner that evaluates product fit with shopper's preferences 21.1 Salesperson who can look up past purchases, make recommendations 16.0 Online profiles of shoppers who previously bought specific products 13.5 Web site that saves shipping and billing information for one-click ordering 12.5 Handheld device that displays personalized offers based on past purchases 12.3 **Pricing** In-store prices that change daily based on stock levels/competition 36.2 Shelf pricing but no item pricing 26.6 In-store auction where you bid for products using handheld device 22.8 Store that sells products at discount to its most frequent shoppers 12.4 **Shopping aids** Store-supplied handheld games for children 25.0 Store-supplied cell-phones to call friends/relatives for opinions 19.1 Store-supplied cell-phones to call sales assistants 12.4 Online customer service through one-way videoconferencing 11.1 **Checkout and payment** In-store purchase receipt available on private Web site 36.4 In-store purchase receipt e-mailed to you 29.4 28.5 Pay for online purchases by faxing credit-card number to retailer Scan products with handheld device while shopping, pay ATM 22.3 Self-scan and bag products at checkout, pay ATM 22.0 Pay for online purchases by swiping credit-card through keyboard reader 19.1

onsumers have mixed feelings about technolo-

Shoppers have different opinions about product information and product advertising, the former being seen as more objective, relevant, and desirable than the latter. When shopping online, 88 percent of respondents feel that a Web site *must* or *should have* detailed product information, while only 20 percent have a similar desire to see product advertising. In the physical store, 46 percent of consumers strongly favor store signs with product information and almost the same amount (40%) are positive about in-store advertisements. Consumers place greater emphasis on having detailed, objective product information when shopping online because they have no physical interaction with the product.

Shoppers are more receptive to the idea of receiving e-mail notification of sale items than new items, with 54 percent saying that retailers *must* or *should* provide this feature. Consumers are consistently more positive about shopping features that provide a tangible benefit, such as a price discount.

While the results of this research generally are positive for advertisers, one should not assume that consumers will tolerate further increases in the volume of advertising. The proliferation of advertising and other unsolicited communications on the Internet, in retail stores, and on handheld and wireless devices will continue to reduce advertising effectiveness, and may cause the large group of indifferent consumers (38 percent for online ads, 24 percent for instore, and 32 percent for mobile) to turn decidedly negative.

## Personalization and privacy

In recent years, retailers have sought to strengthen their relationships with customers through one-to-one marketing programs. These programs collect individual-level data on the unique needs, preferences, and shopping habits of consumers and attempt to personalize retailing activities to better satisfy shoppers' requirements. In this study, seven online and nine in-store personalization features were evaluated.

Most consumers are positive or indifferent about the various personalization features tested. The five most popular personalization options involve the Internet. Consumers are receptive to having a Web site keep track of their past purchases to provide proof-of-purchase for returns and warranty repairs (68%), display personalized promotions (50%), and simplify reordering (46%). People also like having a Web site that saves shipping and billing information for one-click ordering (58%) and allows customers to construct a personal shopping list (46%). Each of these features provides a significant consumer benefit and helps to overcome some of the inherent bandwidth and customer-interface limitations of the Internet.

However, a segment of shoppers have reservations about letting businesses collect and use individual-level customer data to tailor their marketing programs. People have the strongest negative reactions to personalization options that make product recommendations based on a customer's preference profile. For example, 21 percent of shoppers dislike having a handheld scanner tell them which products match their personal profile, 16 percent oppose having a salesperson make recommendations based on their past purchases, and 14 percent object to having shoppers' profiles available online. Some shoppers also have reservations about one-click ordering, perhaps due to concerns about the security of their credit-card information.

When evaluating these features, consumers differentiate between personalization by the manufacturer or retailer and personalization by the consumer (also known as customization). Customization features include options to build personal shopping lists and custom-design products (online and in-store), and add items to a gift registry. Looking across the 16 features tested, almost 50 percent of consumers objected to at least one of the personalization features,

while less than 20 percent disliked one or more of the customization features. These results are consistent with earlier research indicating that consumers prefer one-to-one marketing options that give them control over the acquisition, dissemination, and use of their personal information.

## Variable pricing

Across all product categories, 36 percent of shoppers dislike the idea of having product prices change on a daily basis depending on product inventory and competition compared to 25 percent with a more positive view. A smaller group of shoppers dislike in-store auctions and loyalty programs that discount products for frequent shoppers. Not surprisingly, people who shop and purchase products more frequently are more positive about stores running regular sales, providing frequent shopper discounts, and changing prices on a regular basis, while infrequent shoppers tend to favor everyday low prices.

Some shoppers also dislike having price labeling on shelf fixtures as a substitute for individual item pricing. This is of greatest concern to apparel shoppers, with more than 30 percent opposing this practice. Again, this confirms earlier research that consumers want to be able to find prices quickly and easily while shopping.

# **Technology-intensive shopping aids**

Some high-tech shopping features are seen by shoppers as being more trouble than they are worth. For example, while it is technically possible to provide online customer service through one-way videoconferencing, 55 percent of shoppers are indifferent or dislike this feature.

People also are not that interested in carrying and using a networked, palm computer or Web-enabled cell phone during their shopping trip. For example, while many shoppers feel retailers should provide store maps on large signs (61%) or kiosks (49%), only 18 percent of shoppers are enthusiastic about viewing a store map on a handheld device. The highest rated applications of mobile devices are those that display coupons for products as shoppers pass nearby and notify shoppers when they are next in line at the cash register. Shoppers are more enthusiastic about using a specialized handheld device that can scan a product's UPC label and display item pricing (63%), check if other colors, styles and sizes of a product are available (52%), keep a running total of purchases (49%), and allow self checkout (46%).

Of course, many online and in-store technologies can provide value for certain niche segments and applications. For example, 24 percent of households with two or more young children favor having the store provide handheld videogames for children compared to 14 percent for the total sample. This option was particularly attractive for adults who are shopping for apparel (presumably because kids dislike buying clothes and would enjoy an electronic babysitter).

## **Checkout and payment**

We conclude this section with a discussion of alternative methods of checkout and payment. Many of these new approaches are appealing to a particular segment of consumers or when shopping for a specific type of product. However, in almost every case, consumers favor the status quo. For example, overwhelming, Internet shoppers prefer to enter a credit-card number on a secure Web page rather than swipe their card through a keyboard reader or fax the number to the retailer. People shopping in conventional retail stores prefer to have a cashier scan and bag their merchandise and accept payment rather than interact with an ATM. Almost all shoppers want to get a paper receipt instead of a digital receipt sent as an e-mail attachment or available on a private Web site.

onsumers spoke with a clear voice about what

they want and do not want in their ideal shopping experience. The five key lessons are summarized below.

# 1. Technology Is a Means, Not an End

It's easy to become enamored with new technologies. Vendors introduce a continuous stream of innovations, trade shows dazzle us with flashy demos, the media trumpets the virtues of new technologies, and the stock market rewards early adopters. During the last two years, retailers rushed to develop Web sites, fearing that they would be left behind by the digital revolution. Now they are embracing mobile e-commerce and in-store technologies. Forrester Research reports that over 80 percent of retailers plan to roll out in-store kiosks by 2002.

But consumers tell us that they are not interested in technology for its own sake. People want the basics in their ideal shopping experience. When shopping online, they look for accurate product and pricing information, convenient and secure ordering, order tracking, reliable delivery, and accessible customer service. In retail stores, shoppers want knowledgeable and courteous sales help, clean and attractive facilities, competitive prices, fast checkout, and convenient payment options. People rarely mentioned technology when they were asked to describe their shopping nirvana.

However, technology *can* play a role in enhancing the shopping experience. We found, for example, that a large percentage of consumers are enthusiastic about having at least one application of each of the in-store technologies tested. Looking across applications, 84 percent of shoppers felt that retailers *must* or *should* provide interactive kiosks, 89 percent requested electronic signs, and 73 percent asked for handheld shopping applications. However, there are substantial differences in the ratings of each different application of the technology. For example, 63 percent of shoppers wanted retailers to provide a handheld device that could perform price checks, but only 12 percent would use the same device to participate in an in-store auction or call a friend or relative for advice.

This response suggests that it is not the technology per se, but how it is used to create value for customers, that will determine its success. Several of the technology applications tested are perceived as less convenient than conventional shopping aids. For example, most shoppers prefer to see what's on sale by looking at a printed circular or conventional signage rather than using a kiosk or a handheld device. Technology applications are rated highest when they make shopping more convenient. Nearly two-thirds of the respondents like being able to clip and redeem coupons electronically from a kiosk rather than having to cut them out of a newspaper and carry them to the check-out counter. The same percentage want to self-scan products to verify prices rather than having to find a sales assistant to run a price check.

What about all of the other, high-tech features that were tested? Many of these have been hyped as the latest revolution in electronic shopping—software agents, discussion forums, online auctions, multimedia, 3-D shopping, text chat, and voice chat, among others. From the customer's perspective, they fall in the netherworld of indifference. Most consumers didn't care if they are provided or feel they are nice to have but not essential. In some cases, shoppers are happy with an existing alternative. In others, the technology is seen as not sufficiently developed. Many of these innovations will require significant refinement and consumer education to deliver their benefits.

# 2. We Want to Shop Differently for Different Types of Products

We've seen retailers in the physical world become successful selling a variety of different products from one, convenient location. Mass retailers, warehouse clubs, power centers and shopping malls have all achieved some degree of success by providing one-stop shopping. Retailers create *destinations*; leveraging existing customer traffic to sell more products. Why not use the same strategy on the Internet, selling a variety of products from a single Web site? Following this reasoning, Amazon.com has expanded from selling books and music to a wide range of consumer products.

The IU-KPMG study suggests that using the same shopping interface to sell a diverse set of products is likely to result in a poor shopping experience. Shoppers value different features when shopping for different kinds of products. For products purchased infrequently, like appliances and electronics, consumers want detailed product information and expert evaluations. For products purchased frequently, like groceries and school and office supplies, consumers want a fast and convenient shopping trip with instant fulfillment. Additionally, for apparel and entertainment

products like toys, books, and music, shoppers would like a pleasant and entertaining shopping experience with an extensive product selection. In the latter case, there is more interest in seeking variety and learning about new items. Objective information has limited value because product evaluation is a more subjective experience.

The benefits of one-stop shopping are reduced on the Internet because online search costs are much lower than in the physical world. At the same time, the risks of using a *one size fits all* shopping interface are much greater. The electronic interaction is a degraded experience compared to conventional shopping, so it's critical to understand what cues consumers use to make decisions and create an appropriate customer interface.

## 3. Don't Treat Us Alike

During the last year, e-commerce companies went on a spending spree to acquire customers, with sales and marketing expenses often equaling or exceeding revenues. They ran extravagant ad campaigns, gave shoppers substantial price discounts, and offered free ship-



ping; all in the hopes of cementing relationships with as many customers as possible. These high acquisition costs were supposed to be offset by the repeat business of loyal shoppers.

Unfortunately, customer loyalty can't be taken for granted. Different shoppers have different needs and wants and they will go where they are best served. We found, for example, that women want features that make shopping more convenient and provide better value while men are more enamored with new technical innovations. Younger consumers place more emphasis on the visual experience and the fun of shopping while older consumers want more

detailed product information, faster shopping, and better service. By going after the mass market, these companies guarantee that many shoppers will not be satisfied with the experience. Rather than staying for the long haul, shoppers switch to the first competitor who offers a better deal.

How can retailers satisfy a diverse group of shoppers? By giving them a choice. Coca Cola learned this lesson when it replaced Classic Coke with what it thought was a better tasting new Coke. The consumer outcry forced the company to reintroduce the original. In the future, the trend will be for companies to give shoppers more control over the experience, allowing them to tailor it to their unique style of shopping.

# 4. Help Us Make the Best Use of Each Channel

The initial success of several online shopping ventures led many consultants to predict that conventional retail stores would be driven out of business. The research reveals that the Internet is not a substitute for the physical store but instead is a valuable complement. Consumers want to use a variety of media in the process of purchasing goods and services. They might see something new on television or in a catalog, then search the Internet for product information, and finally visit a store to make a purchase. Retailers should explore how best to use technology to move consumers through each of the stages in the purchase process.



Consumers are enthusiastic about several shopping features that make it easier to shop across multiple channels. They like being able to use the Internet to check prices, promotions, and inventory in the closest retail store. They appreciate having the option to buy online and pick up the product at the closest store, shop in the store and have the merchandise delivered to home, and return merchandise to the store or through the mail. Retailers need to integrate channels so that consumers can move transparently between the various media.

This is not to say that the experience should be identical in each medium. For example, several features that are popular online are not as desirable when delivered in the store through a kiosk or handheld device. Consumers are in a different frame of mind and have different informational needs when shopping online and in the physical store. This suggests that retailers should exercise caution when attempting to *Web enable* their stores. Rather than simply providing Web access in the store, they should optimize the interface for the in-store shopping environment.

# 5. Personalization Does Not Guarantee Our Loyalty

Many conventional and online retailers have invested in customer-relationship management, personalization, and one-to-one marketing programs in the hopes of building customer loyalty and increasing customer retention. Retailers believe that by tailoring their marketing activities to the unique needs and wants of individual shoppers, they can do a better job of serving their customers.

While personalization can create customer value and reinforce loyalty, most applications have been simplistic and retailer-centric. There are several reasons why personalization programs have failed to achieve their goals:

#### Convenience

One of the most popular methods of personalization is the frequent-shopper program, which rewards repeat customers with price discounts. Some programs require shoppers to carry a special loyalty card and present it at the point-of-purchase so that their purchases can be tracked across all forms of payment. Others require consumers to save their receipts and turn them in at a special service desk. For people who do participate, this reduces the convenience of shopping by adding extra steps to the process. For those people who don't, it raises issues of fairness by charging higher prices. It's not surprising that some of the most popular personalization options increase the convenience of shopping, such as saving a transaction log to simplify returns and warranty repairs.

#### Privacy

Most people don't have to pay their friends to reveal their names, addresses, and hobbies. Yet, this is what most retailers do when they sign shoppers up for their frequent shopper programs. They give people a discount in exchange for information. Why? Because shoppers often don't see any other tangible benefit for participating in these programs. Quite the contrary, consumers worry that the information will be distributed to other companies without their knowledge and permission, which may lead to junk mail, spam and telephone solicitation.

For personalization to be effective, retailers must build trust with the consumer. Shoppers want to know what information is being collected and how it will be used. They would like the option to view and edit personal information and to control its dissemination. Shoppers expect to see tangible benefits for providing personal data that are commensurate with the amount and type of data provided.

## **Prediction**

At the core of most personalization programs is an algorithm that attempts to predict which products, services, and messages a consumer will respond most favorably towards. Often, this prediction is based on a statistical model of the shopper's past purchases and demographic profile. While this approach can improve the chances that shoppers will respond to an offer, most consumers still receive a mountain of irrelevant and potentially irritating product recommendations and promotional messages. Prediction is poor because (1) the forecasts are based on an incomplete record of shoppers' category purchases; (2) the purchase history may include items purchased for someone other than the shopper; (3) consumers' needs change over time and across situations; and (4) purchase histories and demographic profiles may not reflect consumers' attitudes and lifestyles.

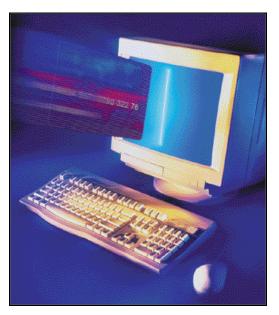
Retailers need to move away from the practice of just offering consumers more of what they bought last time (or giving them an incentive to switch to a competing product). Retailers need to understand better the full constellation of consumer needs and the role of variety seeking so they can filter out what consumers truly have no interest in, but retain a selection of items that will satisfy and potentially delight shoppers. They also need to expand the concept of personalization to include situational influences and the life stage of shoppers; both of which are important purchase drivers.

# REALIZING THE POTENTIAL OF TECHNOLOGY

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any companies fail and others stumble in their efforts to use technology to enhance the shopping experience. The IU-KPMG research reveals that this is not due to the wholesale rejection of these innovations by consumers. Instead, people see technology as playing an important role in the shopping process, but it must be optimized for their shopping style, the stages in the decision process, and the type of product being purchased.

With the incredible clutter in most retail environments (both online and in-store), merchants have just a few seconds to communicate the value of new technology. The innovation must provide an immediate, tangible benefit to the consumer. It must be easy to use, requiring a minimal amount of new learning and few changes in consumer behav-



ior. It must relate to the shopper's current need state. Features must be linked together into a simple, coherent, and compelling interface. The best customer interface doesn't have to change every few months, because it delivers its benefits conveniently, reliably, and at a low cost today.

Every retailer is in a unique situation with unique assets. One must resist the temptation to use off-the-shelf technology to create a generic customer impression and shopping experience. The technology should reinforce a retailer's brand heritage and leverage its distinctive strengths. For example, a retailer with both a catalog and store presence may carry a greater selection than what can be displayed physically in the store. This merchant may get the greatest benefit from technology by using just-in-time replenishment to keep fast-moving items in stock in the retail store, and then using attractive displays of product samples, test-fit items, and kiosk technology to make the extended selection available at the point-of-purchase. The kiosk technolo-

gy should be integrated into the store displays and merchandising to strengthen rather than compete with the store's brand identity.

There is no question that there will continue to be innovations in retail technology and that consumers'expectations will continue to change. Increased levels of consumer education, familiarity with technology, and generational issues are likely to increase technology adoption. At the same time, competitive pressures will turn several of the features that consumers rated as *nice to have* or *should have* in the IU-KPMG study into *must haves*. However, retailers must be cautious in adopting new technologies. Many innovations will not deliver sufficient value and consumer patronage to offset their costs. Companies need to focus on consumer innovation—developing creative solutions to consumers'problems—rather than technical innovation as we move forward into the 21st century.

# STUDY METHODOLOGY/PARTICIPANT DEMOGRAPHICS

ata were collected from NPD Group's online consumer panel during the May-June, 2000, time frame. The research was conducted in two phases. In the first phase, 10,000 consumers were contacted and asked if they had shopped for or purchased products (either online or instore) in each of ten broad categories during the last six months. The categories were (1) major appliances, (2) furniture and lighting, (3) hardware, paint, and wallpaper, (4) small appliances and consumer electronics, (5) school and office supplies, (6) toys and games, (7) music, movies, and books, (8) weekend apparel, (9) weekday apparel, and (10) groceries and health and beauty care products.

Based on their responses, 4,000 people were selected to participate in the second phase of the survey. Each respondent was screened to have shopped for, or purchased products, in one of the ten product categories during the last six months. Respondents were asked to design their *ideal shopping experience* for one of the ten categories, and to rate their interest in using various media at each stage in the shopping process. The survey also included questions



on consumer demographics, shopping habits, and satisfaction. The online survey was completed by 2,120 consumers, for an overall response rate of 53 percent. Over 200 surveys were completed for each of the ten categories, with the exception of furniture and lighting, with 196

completes. The demographics of the sample reflected the characteristics of the online, U.S. population on most dimensions. Sample percentages were within 5 percent of population statistics for age, 7 percent for gender, 2 percent for income, 6 percent for education, and 4 percent for market size. Women were intentionally over-sampled because of their significant role in retail spending.

Participant Demographics		
Age	(%)	
Under 25	13.6	
25 – 34	26.9	
35 – 44	27.0	
45 – 54	24.5	
55 and over	8.0	
Gender	(%)	
Male	39.1	
Female	60.9	
Income level	(%)	
Under \$25,000	10.0	
\$25,000 - \$34,999	14.2	
\$35,000 - \$44,999	12.5	
\$45,000 - \$59,999	21.0	
\$60,000 - \$74,999	14.9	
\$75,000 - \$99,999	14.5	
\$100,000 and over	12.9	
Education level attained	(%)	
Some or no high school	2.1	
High school diploma	7.9	
Some college	24.2	
College diploma	38.5	
Postgraduate	27.3	
Market size (MSA)	(%)	
2,500,000 and over	26.6	
1,000,000 – 2,499,999	26.3	
Under 1,000,000	29.6	
No MSA	17.5	
Size of household	(%)	
1 member	15.2	
2 members	31.9	
3 members	21.1	
4 members	18.6	
5 or more	13.2	

