E-Service and the Consumer

Roland T. Rust and Katherine N. Lemon

ABSTRACT: Many Internet applications do not fully utilize the unique nature of the Web, which in its purest form involves interactive, personalized information service. The true nature of the Web, here termed e-service, will be the key to marketing most effectively to the consumer, for it is the logical continuation of a 100-year trend toward information service in the economy. This paper examines the aspects of e-service that are critical in effectively interacting with consumers in interactive, networked information environments like the Internet. It discusses three central changes brought about by the advent of the Internet (true interactivity with the consumer, customer-specific, situational personalization, and the opportunity for real-time adjustments to a firm’s offering to customers), as well as changes in consumer expectations regarding firm service strategies that flow from these developments. Based upon these changes in technology and consumer expectations, important elements of the e-service experience are defined. The paper concludes by showing how e-service strategies will play a significant role in growing the overall value of the firm. In each of these areas, a set of research questions is proposed that will lead to a stronger understanding of e-service and consumer behavior.

KEY WORDS AND PHRASES: E-service, personalization, self-service.

As consumer behavior continues to expand in cyberspace, it is important to understand the role of service in this new arena, here termed “e-service.” Research advances over the past several years have provided a solid understanding of how services influence consumer behavior in traditional settings such as retailing, financial services, telecommunications, and post-purchase sales support. Little research, however, has examined the consumer’s response to e-service, and how the exploding world of e-service on the Internet is affecting consumer behavior.

An understanding of the role of e-service is critically important. A recent study by Datamonitor, Inc. suggests that as much as $6.1 billion in potential Web sales were lost in 1999 due to inadequate e-service [8]. More important, as mainstream consumers begin to explore the world available to them on the Web, they will be less willing to put up with poor service. Widespread consumer experiences of inadequate e-service may, in fact, stall the growth of this emerging economy [4].

The Service Revolution

To fully appreciate the importance of understanding e-service and the consumer, it is first necessary to understand the economic changes that have led to the rise of the service aspect in the economy. Advancing technology has resulted in a shift, in advanced economies, from goods to service. This is a 100-year trend. Consider any key growth indicator—new jobs created, new businesses created, growth in Gross Domestic Product. In every case, service has been the major source of growth [12, 32]. In addition to the growth of service companies, service is becoming more important to goods producers.
[29]. In fact, for many goods producers, service is becoming a key revenue and profit driver, over and above their traditional “tangible” product mix [40].

The service revolution has increasingly been an information revolution, because information service is the highest growth area in service. Information service is that aspect of service in which information is the primary value exchanged between two parties (e.g., buyer and seller). The Internet is built upon this concept of information service. By its very nature, the Internet is a network that permits the interchange of information (at its very core, in zeroes and ones). The purest commercial utilization of the special characteristics of this environment is interactive information service, with consumer wants and needs going in one direction, and highly customized information going in the other direction. This interactive information service is the critical backbone of the new e-economy, and is critical to understanding the role of e-service in this new domain.

This is not to say that traditional aspects of consumer service are not important on the Internet. Rather, what is already known about consumer behavior and service will provide a solid foundation for developing service strategies on the Web. Key elements like site effectiveness, trust, response quality and response timing, fulfillment, and availability will be key elements in defining a basic approach to serving customers on the Web and developing e-service quality [37]. However, this article focuses on aspects of the Internet that are markedly different from the traditional service domain.

E-Service: Beyond E-Retail and Fulfillment

To date, e-tailers (Amazon, CDNow, Pets.com, Boo.com) have been the highest-profile pioneers in Web-space. These businesses, as goods marketers, do not take advantage of the true strengths and breakthrough innovations offered by the Internet. Such businesses are really nothing more than catalog sellers in electronic clothing. Unfortunately, because goods sellers dominate the Web, people (wrongly) think of e-service as no more than access to goods and order fulfillment. Although these elements are important for e-tailers, they do not represent the true nature of e-service, but the current state of e-distribution. Now that more than 400,000 companies have Web sites, experts are recommending that 70–75 percent of Web budgets should be allocated to developing e-service [2, 34, 38]. Why? E-service is more than order fulfillment, more than responsiveness to inquiries, e-mail, and status requests. The true nature of e-service is providing consumers with a superior experience with respect to the interactive flow of information. As will be discussed below, it is e-service (in general) and e-service providers (in particular) that represent the future of e-commerce.

Internet Myths

For the first several years of e-business, the excitement of a new advertising medium, a new distribution channel, or a new information source has led
many firms to overlook the true marketing-innovation opportunities the Internet provides. To understand the importance of e-service in this unprecedented interactive, networked environment, it is first useful to examine what the Internet is not. Here are some of the more common Internet myths.

“The Internet Is Just a New Advertising Medium”

Traditional advertising is a unidirectional information flow—delivering a message to a set of potential customers and then waiting for sales. Much of Internet advertising (e.g., banner ads, pop-up windows) relies on this traditional approach to attracting new customers to Web sites. Thinking about the Internet simply as an advertising medium, however, ignores three crucial aspects of the Web world: (a) two-way (instantaneous) communication, (b) personalization based on two-way communication, and (c) real-time adjustments to the firm’s communications with customers and even to its offerings.

“The Internet Is Just a Big Direct-Mail Catalog”

Traditional direct-mail marketing uses market segmentation (or even segments of one based upon customer purchase histories) to focus one-way appeals to customers and, like traditional advertising, then waits for the sales response. Although the Web has made it much more convenient for many consumers to engage in direct-to-firm ordering, thinking about the Internet in this way overlooks certain critical elements. Although two-way communication is possible through direct mail marketing, the two-way feedback loop is too slow to characterize the Web (entire e-businesses begin, grow, and die in the amount of time it may take for a direct-mail marketer to determine the complete response to a promotion). Moreover, although personalization is possible through targeted mailing based upon profiling, it is limited, expensive, and often out of date. Finally, direct mail marketing does not allow for real-time adjustments to communications, offerings, or context. On the Internet, the time lag between communications from the firm and communications from the customer is compressed, real-time dialog is possible, and the firm’s responses to the consumer can be adjusted much more quickly.

“On the Internet, Everything Becomes a Commodity”

Will the Internet become a commodity marketplace? A commodity marketplace implies perfect competition, with no differentiation among products. Only a pure goods marketplace is a true commodity marketplace, because service provides the opportunity for differentiation. The e-service potential of the Web will decrease the extent of commoditization (even for branded items). Even a book sold over the Web may demand a higher price at one retailer than at another because of the potential to differentiate on e-service through communication, personalization, and trust. Two-way communication (and learning over time) enables e-businesses to personalize offerings to an extent not before scalable, resulting in greater differences between competitors. This personalization may produce a new form of monopoly. In effect, e-businesses
providing customized and personalized e-services may develop monopolies on specific customers. This may lead to increased prices (a monopolistic price effect) for two reasons. First, captive customers may be willing to pay higher prices to receive the customized benefits. Second, firms will need to increase prices to cover the costs of the customization and personalization. These increased costs may actually outweigh the cost reductions that result from the distribution channel efficiencies the Web provides.

"The Internet Is Just a New Sales Channel"

Periodically, significant innovations occur in the distribution process, as improvements are made in the way goods are moved from individuals or organizations that want to sell the goods to individuals or organizations willing to pay for them. But it is not the new sales channel that makes the Internet a revolution. Thinking about the Internet as a new channel from seller to buyer focuses on an outmoded “push the product to the consumer” seller’s view of the marketplace. What is new is that the Internet is a new access or “buy” channel, providing consumers with new avenues for initiating contact with the firm.

Moreover, the interactive, instant-feedback nature of the Internet provides firms with exciting product-development opportunities. In addition to being able to customize its response to the customer (in terms of communication or product offering), the firm can collaborate with the customer to develop new products and services. It is now possible, for example, for apparel retailers to communicate with customers before they make buying decisions for the fashion season—pretesting fashions with consumers in real time, or for car manufacturers to involve consumers directly in the product-development process—getting quick feedback on potential design changes.

"The Internet Is Just a Big Encyclopedia"

Many people think that what is new on the Internet is more information. However, it is not the information that is new. The information has always been there—encyclopedias, journals, newspapers, research articles are not new. What is revolutionary is the ubiquitous access to information, the new flows of information, and the new markets for information that the Internet makes possible.

The Full Potential of E-Service

Much of what has been written to date about e-service focuses on traditional customer service—call center response, weekly e-mail discount reminders, speed of response, order-status updates, site effectiveness, and so forth [36, 38]. Although it is critical to get the traditional aspects of customer service right to be a successful e-player, the real action in the e-service opportunity lies elsewhere. Several service opportunities made possible by the advances of the Internet have already been mentioned: two-way, interactive communication, personalization, real-time adjustments to a firm’s offerings, new forms of consumer
access. To fully appreciate the importance of these e-service opportunities, one must understand their impact on consumer behavior and consumer expectations of the firm.

The New Consumer Values

The historic development in the service economy and the ongoing emergence of the e-economy have been accompanied by shifts in consumer expectations in three specific areas: the importance of the buying experience, the importance of control, and the role of personalization.

The Buying Experience

Pine and Gilmore suggest that providing a unique buying experience is the key to winning the hearts and minds of consumers in the new millennium [27]. Their work indicates that consumers value the experience of a good or service more than its actual tangible value—in fact, the experience becomes a key element of the overall “product” being purchased and consumed. Other researchers have begun to examine the consumer’s experience via the Web with the flow construct, suggesting that it is possible to measure the extent and intensity of the consumer’s experience on the Web [24]. The importance of experience to the consumer underscores the importance of getting e-service right.

Customer Control

New advances in technology have made it possible for customers to take greater control of the purchase and consumption experience than ever before. The customer has always had the power to choose to purchase or not. Now, however, not only do customers choose whether or not to purchase the product, they choose the channel through which to acquire the product, the channel through which the product will be delivered, the extent of personalization of the product, and the extent to which they would like to be involved in or responsible for the development or delivery of the product. This shift toward greater consumer control leads to higher consumer expectations of ease and convenience throughout the entire purchase, consumption, and post-purchase sales-support process [35]. These expectations continue to escalate. Consumers may have forgiven unresponsiveness to e-mail queries a few years ago, but now it is as critical as responding to an incoming phone call [28]. In short, given the consumer’s new access to being in control, consumer expectations of perceived control (e.g., [6, 15]) have escalated.

Personalization

Finally, the new technologies that together represent the e-experience for consumers have created exciting opportunities for the personalization of com-
communications, product offerings, delivery options, and post-purchase support. Customers’ expectations of personalization will escalate with the continued enhancement of technological capabilities. However, it is not sufficient just to utilize past purchase patterns to develop customized interfaces for customers. Solutions such as collaborative filtering will not be sufficient, because they are not personalized enough. Customers expect to be truly “known” by the firm. Consider the underlying assumptions in collaborative filtering. Collaborative filtering assumes that the customer’s needs are static and can be matched with an exemplar customer with similar static needs. Why will this not be sufficient? If a customer has different needs in different situations (which marketers have demonstrated for many years, e.g., [3]), then the assumptions of collaborative filtering will not hold. The approach will be ineffective and may even lead to confused, disgruntled consumers. Consider the consumer who purchases a size 4 blouse (for her daughter) and a size 12 skirt for herself. This individual should not be “averaged” to predict future purchases of size 8. In contrast, consider the “Your Personal Model” feature at www.landsend.com. Simply by providing a few inputs, such as weight, height, body measurements, and coloring (anonymously if desired), individuals see “models” of themselves and can ask for style advice, virtually try on outfits, and even get one-on-one personal attention from a “Web rep” [11]. This technology makes it possible for the consumer mentioned above to create two different models—one for herself and one for her daughter. Situational personalization—the ability to identify and respond to different sets of needs and preferences of the same individual—will be essential to successful personalization strategies.

These three aspects of consumer expectations (the experience factor, increased customer control, and situation-specific personalization) suggest a unique role for e-service, for only the service aspect of e-business can successfully address these emergent customer expectations. Recent evidence suggests that it pays to respond to these expectations. To cite but one example: Merita NordBanken, Finland’s largest bank, has made its customer accounts e-accessible via ATMs, telephone, GSM mobile, PC, Internet TV, and WAP phones. Customers can conduct all transactions electronically, without any paperwork. Merita has 600,000 Finnish e-banking customers, 500,000 of whom use the service monthly. They are gaining approximately 5,000 new users per month, and the current monthly logon is about 2 million (4 logons per active customer). A recent study suggests that the e-service strategy will save the bank money: A transaction over a cell phone costs approximately 8 cents, while the same transaction via the traditional call-center runs about 60 cents [10].

**Research Questions**

There is much still to be learned about the consumer in e-space. Future research in this area should focus on the following questions:

- To what extent do customers prefer to be in control throughout the decision, purchase, consumption, post-purchase support, and disposition processes? What mechanisms influence customer perceptions of control for each aspect of consumer behavior?
• To what extent do consumer expectations of personalization escalate with experiences of personalization?

• Can an individual customer’s behavior be segmented? Do consumers construct multiple personalities, characters, or schemas as they interact on the Web? How can firms market to the different consumers within the consumer?

• Are the benefits of situation-specific personalization worth the costs? To what extent do consumers value such investments in shopping efficiency?

• Customer important weights and ideal points: rediscovering marketing models and psychometrics. The many advances in marketing models and psychometrics have provided great insight into how customers choose. Perceptual space models and choice models have been studied for years, and the main insights of this extensive stream of research should be utilized. Applying the tools and knowledge of psychometrics to the problem of understanding e-consumer behavior will be critical to understanding how best to meet changing consumer expectations.

**Designing E-Service**

The changes in consumer behavior and expectations require firms to respond via specific e-service strategies in three areas: two-way communication, customer collaboration, and real-time adjustments of the firm’s offerings. These elements will now be treated in more depth, discussing the challenges involved in developing effective e-service strategies for each of them.

**E-Dialog: From One-Way to Two-Way**

The Internet is inherently a bidirectional medium. To take full advantage, marketers must understand the new opportunities available in this real-time two-way conduit. What are the possibilities? At a minimum, marketers should use this two-way capability to elicit information from the consumer and then use it to personalize the product offering. But the possibilities for dialog go much further.

*From One-to-Many to One-to-One*

Since decreasing communications and processing costs result in smaller segment sizes [36], the traditional role of mass media (and mass messages) should be replaced by targeted invitations for dialog. The initial message should be an opportunity rather than an offering, because the offering (or response) itself should be crafted from the two-way interaction with the customer. Hewlett-Packard (HP), for example, has developed tracking software to better under-
stand corporate customers who call or e-mail with service concerns. When the customer contacts HP a second or third time, the contact can be immediately routed to the appropriate service specialist who can address their specific concern. HP estimates that the program has generated (thus far) an additional $180 million in incremental business [34].

*From Firm-to-Customer to Customer-to-Firm*

Traditional marketing communications strategies assume, as a starting point, that the firm initiates contact with the potential customer. In the e-world, this assumption is no longer valid. In many instances, the customer will initiate the dialog. It will be imperative to have systems in place to take advantage of customer-initiated contacts with the firm, as these prospects may be more valuable than those who merely respond to the firm’s initial contact. Consider the innovative ways that traditional service firms such as Geico (direct-to-consumer insurance) and Fidelity Investments (mutual funds) are capitalizing on customer-initiated dialog. Both firms are utilizing “click-to-talk” applications on their Web sites that allow customers to click a button that prompts service representatives to call them back immediately. Geico has found that the technology provides customers with the customized two-way interaction that is critical for complicated products like insurance. Fidelity is utilizing the feature only with its very high-end customers, providing it as a critical competitive advantage to retain these valuable customers [38]. The key here is *customer accessibility*—letting the customer choose a preferred communication channel to the firm and developing dialog through the customer’s preferred channel [13].

*Customer-to-Customer Dialog*

Finally, the Internet increases the likelihood of customer word-of-mouth communication. On-line communities and the ubiquity of e-mail create numerous possibilities (and potential headaches) for marketers [19]. Firms must understand the role of electronic communities and word-of-mouth communications in their marketing strategies. They must find ways to encourage not only dialog, but “multi-log” with their customers—actively managing the overall network of communications made possible on the Net.

**E-Self-Service: New Forms of Customer Collaboration and Control**

Given the consumer’s need for increased control in service transactions, e-technologies enable the consumer to take care of a new set of functions that previously could only be handled by the firm [20]. This focus on e-self-service provides opportunities for the firm to increase the stickiness of the relationship while reducing the internal costs of serving the customer [23]. Recognizing the importance of shifting the locus of control from the firm to the customer, FleetBoston Financial has created a set of services that enables the customer to
get answers to questions quickly, consistently, and without having to rely on human response. These solutions have created an unexpected advantage: The firm’s employees also have access to the on-line help function, and as a result are now able to provide higher-quality information to customers who call in via traditional means [25]. Specialized Bicycle has created Web self-service access that it credits as a key element in its brand-building and relationship-building strategies [17]. The system allows Specialized to continuously update and refine the content of its Web site and frequently asked questions (FAQs), putting the issues most frequently searched for up front. This simple approach has decreased overall call volume and improved visitors’ perceptions of the site and Specialized. Simple though they may be, all of the preceding examples are solutions that create opportunities for increased customer control.

**Real-Time Marketing**

New technologies make real-time marketing possible. The decreasing cost of computer storage, increased concerns about privacy, the potential for more speedy personalization, and the shift from centralized data warehouses to a distributed data approach in which consumers carry their data around with them (think cookies or smart cards) will result in customer information increasingly being stored at the customer’s location. Real-time marketing means that the potential capability of the service offering is present in many forms (perhaps an infinite number) at the customer’s location, and that the product offering changes in real time, based on the choices and actions of the customer [26]. Consider the following examples. eNutrition already provides at least 30 different ways for customers to buy its products on-line. By analyzing the customer’s behavior (where and when on the site the customer purchases, other products looked at, etc.), customized access approaches can be developed for that customer [18]. The software solutions described above for Lands’ End’s “Your Personal Model” allow Lands’ End reps to actually take control of the customer’s browser (with permission, of course) and make specific, customized-product suggestions. In addition, new technologies not only route the customer’s record to the appropriate representative when an incoming call is received from the customer, but also suggest appropriate responses to the representative, based upon the customers purchase or service history [10].

**Research Questions**

Many of the concepts presented here represent relatively uncharted territory for both marketing researchers and marketing practitioners. Future research in this area should focus on the following questions:

- How does the potential of engaging in active dialog over time, and in real time affect the customer-firm relationship? What forms of dialog are most effective for building sustainable, profitable relationships? How does a firm’s e-mail or Web response influence customer perceptions of the firm?
• How does marketing change when consumers initiate the relationship? Are these customers more likely to be retained by the firm? Do they purchase more quickly? Buy more?

• How does marketing change when consumers sell to other consumers? How does the (unmanaged) dialog among a firm’s customers influence customer relationships with the firm? How can the firm best manage these word-of-mouth communications?

• How does consumer self-service affect overall perceptions of the firm, customer satisfaction, perceived service quality, customer retention, and customer equity? Does consumer self-service truly reduce a firm’s cost-to-serve? Increase profitability? How do customers want to use self-service?

• Is integrating all information on the customer so that the firm can present a “single face” to him or her really worth the effort? What benefits accrue from effective data integration? How does effective data integration influence customer satisfaction, perceived quality, customer cost-to-serve, customer retention, customer lifetime value, and overall profitability?

• What is the value of real-time marketing? To what extent do consumers expect or value personalization and customization? What are the consumer ideal points on these dimensions? What attributes are needed by effective Web-reps?

• How does our understanding of marketing change when consumers rather than the firm choose the “P’s” (i.e., product, price, promotion, and place)?

When the Customer Isn’t Human

Thus far the challenges of e-service have been examined in the traditional contexts where the customer is an individual human consumer. However, as the Internet continues to bombard the customer with information, the overall amount of data will eventually become too much for the customer to handle. In The Doors of Perception, Aldous Huxley argues that the brain is primarily a “reducing valve,” whose function is to reduce the amount of input information to a manageable amount. On the Internet, the search engine is the initial (and currently the most popular) reducing valve. Search engines make decisions for consumers that reduce the size of their choice—or search—problem.

Agents and Bots

Beyond search engines, many different kinds of agents and bots have been devised to save the consumer time and effort. To name but a few, there are shopping bots (that shorten the consumer’s search time), chatter bots (that
engage in dialog), gossip bots (that negotiate, share information, and make deals with other agents), and datasheet bots (that locate product datasheets from manufacturers) [40]. Bots can be found in almost any language. The role of many bots is to act as reducing valves, or intelligent decision aids, for the consumer. Essentially consumer behavior on the Web is becoming, in essence, a human-machine hybrid. To understand consumer behavior on the Web, one will have to understand not only how consumers choose, but also how consumers choose agents (or bots) to make decisions on their behalf, how consumers interact with their chosen agents, the situations under which consumers will “trust” agents to make decisions on their behalf, and how the agents themselves make decisions [1, 14, 21, 22].

In addition to understanding the decision processes involved between consumers and agents, it will also be important to understand how to market to agents. The role of agents and bots in consumer decisions is growing steadily. Currently these decision-aids are utilized to construct consideration sets (handling the “winnowing-down” process), but in the future they may handle the purchasing decisions as well. Therefore, it will be critical to understand the decision rules embedded in agents so as to develop e-service strategies consistent with the “needs” of agents and bots, and their “client” consumers. Therefore, in addition to understanding consumer behavior in the e-space, it will also be necessary to understand computer behavior [29]. Consider the Gossip bot mentioned above (www.tryllian.com). Each of the consumer’s agents (a consumer can have up to five) actually goes out and interacts with other agents to negotiate deals on the consumer’s behalf. Right now, the Gossip bot can only gather information. But soon, Tryllian promises, Gossip agents will also be able to make purchases on behalf of consumers. This means that marketers are going to have to understand the decision processes not only of consumers but of their designated agents.

**Research Questions**

Understanding consumer behavior in the Internet domain represents a significant challenge to researchers and practitioners. The challenge of understanding the computer behavior of the nonhuman decision-makers on the Web may be even more daunting but is no less important. Future research in this area should focus on such questions as:

- How do intelligent decision aids and consumer information “reducing mechanisms” influence consumer behavior?
- What is the process by which consumers choose agents? Under what conditions and for what specific tasks do consumers find agents helpful?
- Will consumers choose to employ multiple agents? What decision models will best characterize consumer choice of multiple agents?
- What factors drive agent consumption decisions? What are the most appropriate decision rules for developing effective agents?
• What are the appropriate models for consumer-to-agent interaction and for agent-to-agent interaction?

• Do traditional marketing approaches apply when marketing to computer agents rather than human consumers? Is there room for differentiation? What marketing approaches are most effective?

E-service and Customer Equity

Throughout this article it has been argued that e-service, and not just e-commerce, is the “killer app” on the Internet. This leads to the question: What is the value of a firm’s e-strategy? Recent research suggests that the foundation of a firm’s value arises from its discounted future profit streams [7, 9, 33]. From a marketing perspective, this may be thought of as the firm’s Customer Equity, or the total of the discounted lifetime values of the firm’s current and future customers [5, 31]. The three drivers of Customer Equity, as defined by Rust et al., are Value Equity (arising from the consumers objective perceptions of the firm’s offerings), Brand Equity (arising from the consumer’s subjective perceptions of the Brand, over and above value Equity), and Relationship Equity (the customer’s likelihood to stick with the brand, over and above the effects of value and brand) [30]. Each equity has a set of actionable subdrivers—drivers that build (or detract from) the firm’s overall Customer Equity.

Building Value Equity

The role of e-service in building Customer Equity will now be explored. Within Value Equity, e-service capabilities can influence the quality subdriver (through specific elements of quality, such as response time to e-mail inquiries, real-time chat, customization of products, etc.). In addition, e-service capabilities have a strong influence on the convenience subdriver of Value Equity. Finally, recent evidence suggests that the application of e-self-service strategies may provide significant cost reductions in the customer service area. For example, recent research regarding the difference in cost to the firm of a phone contact with a customer and a Web contact suggests significant savings (per call) ranging from tenfold to twentyfold [4, 34]. Verizon expects to cut the number of rudimentary calls from customers in half with its self-service e-strategies, realizing tremendous cost savings [38]. If these savings materialize, e-self-service strategies may influence the price subdriver of Value Equity as well.

Building Brand Equity

Within Brand Equity, e-service strategies will be important in influencing the customer’s overall attitude toward the brand, particularly the extent to which the consumer trusts the e-provider (e.g., through secure ordering channels). Second, e-service strategies and policies will be an important influence on the corporate ethics subdriver of Brand Equity, and in particular, the firm’s privacy policies and choices of advertising partners. Finally, successful e-service
strategies have the potential to create significant word-of-mouth for a firm’s Web site, as customers tell other customers their success stories of interacting with the firm in real time, with real-time responsiveness and situation-specific customization.

**Building Relationship Equity**

Within Relationship Equity, e-service strategies will be most critical. Firms can utilize e-service capabilities to develop learning relationships with customers, providing customized communication options for individual customers or customer segments, and thereby increasing their likelihood of continuing the relationship with the firm. Specialized Bicycle, noted above, has realized that learning about individual customers over time is critical. "No one ‘needs’ a $3,000 bike,” says Mike Regan, senior global e-marketing manager [17]. The key is developing a strong bond with the customer, based upon knowledge from the customer. Second, the firm can customize e-service strategies by the value of the customer (or potential value), providing distinctive reward programs and special-treatment options for each customer (consider the example of Fidelity Investments’ click-to-chat technology for high-value investors, discussed above). Finally, firms can build Relationship Equity by designing and managing on-line customer communities to strengthen their relationships with their customers.

**Strategic Choices**

Each of the strategies noted above can be utilized to engage the consumer in distinct forms of interaction and dialog with the firm. Objective value is created for the consumer through Value Equity, the customer’s subjective value of the firm’s offerings is enhanced through Brand Equity, and the customer’s bond with the firm is strengthened through Relationship Equity. The cumulative effect grows the firm’s overall Customer Equity.

Supporting the links between e-service and customer equity, there is growing evidence that e-service strategies have a significant impact on the bottom line. In addition to the examples already described (incremental sales for HP, cost effectiveness for Merita NordBanken, decreasing incoming calls by 50 percent at Verizon), FleetBoston Financial expects significant support-cost reductions from its investment in e-service. A key aspect of this savings will be in the creation of greater institutional knowledge that will decrease the training time for new support analysts at Fleet. In a recent survey, more than 17 percent of CFO’s reported reduced operating costs due to e-service as the most important benefit of their e-strategies [35]. The preceding discussion and these preliminary results suggest that e-service strategies will be fundamental as firms seek to utilize the Internet to enhance their value.

**Research Questions**

It is not enough to understand consumer behavior on the Web or the role of e-service in influencing consumer behavior. An understanding of how success-
ful e-service strategies can lead to enhanced firm value is crucial. Although there has been much useful study of the links between e-service and firm value, much more remains to be done. Future research should focus on the following questions:

- What is the role of e-service in building Brand Equity? Relationship Equity? Value Equity?
- What are the opportunities for business models built upon e-service? What new business models become possible and viable with the advent of expanded e-services?
- How can the value of e-service strategies be measured? What are the appropriate metrics for evaluating the success or failure of such strategies?

**Conclusion**

Getting e-service right (or wrong) will make (or break) a firm’s e-strategy. This article argues that a firm’s e-strategy needs to be centered on e-service: the interactive flow of information between customer and firm. Any other focus will not be sustainable.

The essential innovation available to markers as a result of the Internet is the *instantaneous, two-way communication link with customers*. Several opportunities arise from this innovation:

1. situation-specific, personalized communication
2. real-time adjustment of the firm’s offering based upon customer input
3. collaborative product development
4. new opportunities for access by the customer—new “buy” channels
5. an unprecedented opportunity to develop the firm’s key assets—its customers.

However, in most cases, these opportunities represent relatively uncharted territory in which there is little documented evidence of successful strategies or conclusive research findings. There is still much to learn about customers in e-service environments, and an ambitious research agenda has been outlined here. It includes key questions that must be answered in order to ensure successful e-service strategies, and key questions that must be addressed to fully understand and take advantage of the opportunities afforded by the new technologies. Significant research is needed in three areas: (1) the effects of the e-service revolution on consumer behavior, (2) the influence of agents on the marketing process, and (3) new strategic models and metrics.

The goal of this article has been to examine the emerging yet *critical role of e-service as an element of customer strategy*. An improved understanding of e-service and the consumer will be critical to the continued development of
the Internet as a powerful, credible business environment. As firms (and consumers) begin to harness the power of instantaneous, multiparty, multidirectional flows of information, the possibilities will be astounding. This is e-service: the future of e-business.

REFERENCES

13. Hashemian, R.V. Where did the service in e-service go? Call Center Solutions, 18 (February 2000), 56–58.

ROLAND T. RUST (rrust@rhsmith.umd.edu) holds the David Bruce Smith Chair in Marketing at the Robert H. Smith School of Business of the University of Maryland, where he directs the Center for E-Service. His research focuses on service marketing and advertising media. He has won best-article awards for articles in Marketing Science, Journal of Marketing, Journal of Advertising, and Journal of Retailing, and his six books include Driving Customer Equity, Service Marketing, and Advertising Media Models. Professor Rust is one of only two media researchers to be awarded the Outstanding Contribution to Advertising Research award by the American Academy of Advertising, and the only media researcher ever to be named a Fellow of the American Statistical Association. He has also received the American Marketing Association’s Gil Churchill Award for career contributions to marketing research, and the Henry Latané Distinguished Doctoral Alumnus Award from the University of North Carolina at Chapel Hill. He is the founder and chair of the AMA Frontiers in Services Conference, and founding editor of the Journal of Service Research. He also serves on the editorial review boards of the Journal of Marketing Research, Journal of Marketing, and Marketing Science. He has taught at Vanderbilt University and the University of Texas at Austin, holds a B.A. in mathematics from DePauw University, and an M.B.A. and Ph.D. in marketing from the University of North Carolina at Chapel Hill, and is a member of several corporate and nonprofit boards.

KATHERINE N. LEMON (lemonka@bc.edu) is an assistant professor of marketing at the Wallace E. Carroll School of Management, Boston College, and previously was the M.B.A. Class of 1962 Visiting Assistant Professor at the Harvard Business School, and on the marketing faculty of Duke University’s Fuqua School of Business. Her research focuses on dynamic customer-relationship management, customer equity, and wireless CRM. She has conducted research in a myriad global industries, including emerging e-businesses, financial services, retailing, telecommunications, interactive television, computing, high-technology electronics, and consumer products. She is a co-author of Driving Customer Equity: How Customer Lifetime Value Is Reshaping Corporate Strategy, currently being translated into several languages, and the forthcoming Wireless Rules: New Marketing Strategies for Customer Relationship Management Anytime, Anywhere. Her research has appeared in the Journal of Marketing Research, Marketing Science, and the Journal of Product Innovation Management, and she serves on the editorial board of the Journal of Service Research and Journal of Interactive Marketing. She consults with and teaches senior executives at leading companies worldwide.