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Service-Logic Innovations:  
How to Innovate Customers, Not Products

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# Service-Logic Innovations: HOW TO INNOVATE CUSTOMERS, NOT PRODUCTS

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**F**rom the perspective of traditional product innovation theory, it remains difficult to understand how Google, just seven years after its founding, has achieved a valuation of billions of dollars and enjoys a market capitalization that surpasses a long list of business giants, including Coca-Cola Co., Honda Motor Company, and British Airways. Similarly, traditional marketing and strategy literature, with its focus on the transaction between the producer and a consumer, is ill-suited to explain the emerging pattern of Wikinomics<sup>1</sup> or Open Business Models,<sup>2</sup> for which the line between producer and consumer is not only blurring, but vanishing. New types of innovations are changing the competitive landscape through new technology, such as high-speed Internet, powerful and cheap memory capacities, and mobile devices. For these new forms of innovation, traditional approaches lack explanatory power. Consider, for example, how a DVD movie rental company like Netflix could upstage the long-standing market leader Blockbuster, despite the latter's access to more advanced technologies, including TV-on-demand and Internet-TV. Using traditional innovation theory, it also is difficult to understand how the Swedish furniture retailer IKEA can consistently earn high profit margins by selling contemporary furniture at low prices or how free, quick-read newspapers such as *20 Minuten* and *Metro* have disrupted the media industry in several European countries.

Quite simply, firms that focus on the distinction between products and services are shortchanging their own ability to innovate. We argue that service-logic innovation is a customer-oriented term and, as such, demands no artificial

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product-service dichotomies. Instead, managers benefit from viewing innovation from an entirely new service-logic perspective.<sup>3</sup>

### **Why Is a New Approach to Innovation Mandatory?**

All innovation, whether a service process or a tangible product, should be viewed as a service-logic innovation. This challenge to traditional, attribute-based views of innovation stems from the understanding that any innovation (or change) in product or process requires changes in customer thinking, participation, and capabilities to create and realize value. Altering value *as it is defined and used by the customer*, not value in production and exchange, defines innovation.

In the case of a rendered service, the provider applies its knowledge directly to the customer need; with tangible products, firms embed knowledge in goods that the customer later combines with his or her skill to realize value. For example, glucose monitoring systems enable diabetes patients to self-diagnose their blood sugar levels several times a day, a task that previously could be performed only by doctors. Knowing his or her glucose level immediately and with great accuracy, the patient can apply the most effective dose of insulin, which lowers the risk of both hyper- and hypoglycemia.

The service-logic perspective is based on the recognition that innovative new products enable customers to find new ways to service their personal needs, or as Clayton Christensen has argued, “when people find themselves needing to get a job done, they essentially hire products to do that job for them.”<sup>4</sup> After all, customers do not seek products; they seek satisfaction. Products thus represent vehicles for service, because they enable customers to productively pursue their individualized satisfaction. Thus, we consider the designations of “products” and “services” limiting and instead refer to both, individually and collectively, as offerings.

In this way, we subsume any discussion of product- and attribute-level innovation under a more general discussion of what, at its core, innovation really is: finding new ways of co-solving customer problems, whether they are fully recognized or completely latent to the customer. Whether customers have recognized or unrecognized needs, the disruption to their behavior and to the way they recognize and realize value actually presents the opportunity to manage discontinuous innovation better. More and more, offerings cannot be represented accurately by points on either end of a tangibility continuum. Rather, offerings are complex mixes of concrete objects, rendered services, and customer participation.

For instance, when customers purchase new software for their computer, they may get a tangible product (CDs) to take home and install on their computer. However, what they are truly buying is the ability to perform a new task or an existing task a new way. The installation CDs are replete with knowledge, encrypted with the capabilities of various service providers, which then require that the customer demonstrate the proficiency and willingness to liberate this stored knowledge. Value is realized, not released, because value is not for

*exchange* but rather in *use*. The value-creating process is truly the co-creation of value among providers and customers. Offerings in the form of services and products are thus best viewed as “frozen activities,” or tangible representations of relationships within a value-creating system.<sup>5</sup>

Managers may perceive new opportunities with customers in two ways: They may be convinced that their proposed solution to an already recognized need is superior to existing options, or they may discover a way for customers to fulfill an unrecognized need. Recognizing substitutes for peoples’ needs and problems is one view; looking for unoccupied market space in which latent needs remain unfulfilled is another. This distinction delineates the differences between “sustaining improvements,” which attempt to displace existing offerings, and improvements that are “disruptive to the market,” or invent an upward path.<sup>6</sup> Managers can think along these lines to gain insights into how customers make trade-offs across substitutes or alternatively transform latent needs into an appreciated value proposition.<sup>7</sup>

Our perspective relies on a more robust inclusion of the customer viewpoint to classify, understand, and capitalize on innovation as part of an overall firm strategy. Managers require a far more detailed customer-side perspective of innovation. Our perspective and framework provide managers with a clear understanding of the possibilities for, and the impact of, innovating the *customer’s* role to create value—altering how they integrate value and reconfiguring their value networks. The complexities of developing and managing products and services, partnering and supply chain issues, and competing effectively in markets are all part and parcel of the same global issue: What is so compelling about *our* firm’s mix of offerings that makes customers want to get on board? How can we anticipate and assess alterations in customer roles, such that we can innovate our offerings? And finally, how can innovating customer roles alter the ways our firm needs to configure its value network?

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## A Service-Logic-Based View of Innovation

In our view, there is no distinct separation between production and consumption; they are instead best viewed as inexorably linked along a continuum of value creation. The production a firm and its network partners initially perform to create value—namely, preparing processes and resources to assist customers in pursuing their satisfaction—demands recognition. However, this value then needs to be supported and enhanced by the value co-creating activities of the customer. Customers alter their roles, improve their capabilities, and contribute their own resources to the process of creating value. Therefore, improv-

ing the integration of a customer's knowledge resources into value creation requires that the firm increase its own capabilities, those of its suppliers, and, most important, those of its customers. Normann and Ramirez capture this notion quite clearly: "The goal of business is not so much to make or do something of value for customers as it is to mobilize customers to take advantage of proffered density and create value for themselves."<sup>8</sup> The Apple Macintosh computer, bundled with desktop publishing software, illustrates this point in that it allows customers to produce high-quality publications independently without the assistance of an advertising or design agency.

This example offers further evidence of the assertions that a firm can only create a value proposition; the customer must be involved for value co-creation to occur. In other words, value is not defined by a firm alone. Deployed in various ways, with various levels of customer co-design and co-production, a service-logic innovation likely will be valued differentially by different customers,<sup>9</sup> some of whom may even initially view an innovation as inferior to existing offerings. Understanding the reactions to service-logic innovations thus requires an understanding of how customers co-create value by using a firm's offering.

Moreover, to meet the needs of increasingly empowered and knowledgeable customers, firms are beginning to realize that they cannot do it alone. Instead, they are tapping into complementary enterprises that surround the process of value creation. No single firm is capable of employing all the smart people that can help them fulfill their organizational goals. Chesbrough has termed this point, "the end of knowledge monopolies," such that firms now must "exploit this diffusion of knowledge, rather than ignore it."<sup>10</sup> Some misguided innovators still try to carry out all activities completely within their firm, only to realize that they are at significant strategic disadvantage relative to their competition.

Recognition of these trends warrants a reevaluation of the *exchange* paradigm, the view that two parties are on opposite sides of a value equation. Rather, managers should begin to adopt an *interaction* perspective, whereby producers and buyers converge in the creation of value. Open innovation systems exemplify the network collaboration necessary for firms to capitalize successfully on a breakthrough.<sup>11</sup> Youtube.com, for example, creates value constellations of customers and is constantly transforming the way information gets shared.

These tasks—understanding the service that a customer requires from an offering, improving the integration of value with the customer, reconfiguring value constellations to exceed customer expectations, and continuously inventing new value propositions—form the core of the service-logic innovation. In turn, innovations fuel the engine of organizational strategy and offer opportunities for competitive advantage.

## Service-Logic Innovation in Practice

To learn more about how firms are using novel service-logic innovation practices, we conducted research to address a fundamental, overarching ques-

tion: What are the common denominators of service-logic innovations? We collected 26 case studies (e.g., Netflix DVD rentals, blogging, IKEA, desktop publishing), all of which provide exemplars of how innovations can change the way customers co-create value (value-in-use criterion) and significantly affect market size, prices, revenues, or market shares (value-in-exchange criterion). Our research orientation remains exploratory, rather than confirmatory, and our unit of analysis was actual service-logic innovations rather than innovating firms,<sup>12</sup> because the catalyst for this type of case study design is “the need to create a framework.”<sup>13</sup>

Instead of trying to position service-logic innovations into mutually exclusive cells, our research enables us to search for emerging patterns. This approach overcomes the limitations of other methods related to evaluating innovation, in which “innovation is hampered by pattern frameworks that describe business models or services in ‘one and one only’ place they fall in a classification scheme.”<sup>14</sup> The patterns we derive are sufficiently general, adaptable, and worthy of imitation that they can be reused.<sup>15</sup>

After reviewing the selected cases, we developed a service-logic framework to evaluate these innovations. By moving back and forth between the cases and the framework, we found two predominant, interesting patterns.

First, each service-logic innovation changes at least one of customers’ roles as users, payers, and buyers.<sup>16</sup> This typology applies to both individual and organizational customers, and depending on the context, the same person might perform all three roles (e.g., buying a bagel in a restaurant and eating it for breakfast) or perform unique roles (e.g., a mother buys a shirt for her son with the money his grandmother gave him for his birthday). In business markets, a manager might buy a computer for his or her own use and pay for it from his or her own budget. Alternatively, in the case of a major decision to acquire a fleet of computers, a buying center might be composed of separate users, buyers, and payers.

Second, service-logic innovations are triggered by embedding know-how into objects, changing the integrators of resources, and reconfiguring the value constellation, or combining any of these forces. Because our research is exploratory, we do not argue that other patterns do not exist; rather, we assert that our framework is generalizable with respect to how firms share knowledge, skills, and other resources with customers.<sup>17</sup> More specifically, our research shows the following:

- Embedding know-how and skills into products and applications can significantly change customers’ value co-creation, especially when these customers need fewer skills to get the job done. This type of embedding results in *smart offerings* from firms.
- Service-logic innovation can be caused by a change in *value integration*, specifically, by changing the firm’s and the customer’s integrating roles. Co-creation integrates many different resources. Value integration can include everything from customers who are completely self-sufficient

**FIGURE 1.** Framework for Classifying Service-Logic Innovations

SERVICE-LOGIC INNOVATIONS		Change of Customer Role		
		User	Payer	Buyer
Change in Firm's Value Creation	<b>Smart Offerings</b>	Cell 1	Cell 2	Cell 3
	<b>Value Integration</b>	Cell 4	Cell 5	Cell 6
	<b>Value Constellation</b>	Cell 7	Cell 8	Cell 9

(integrate all resources) to customers who outsource everything possible (let firms integrate resources for them).

- Service-logic innovation often includes reconfiguring the *value constellation*. We use the term value constellation to describe the interplay among multiple actors and resources to co-create value. In this regard, it goes beyond the traditional, linear concept of a value chain.<sup>18</sup> Innovations triggered by changes in a value constellation extend past a new product exchanged between one firm and its customers.

Based on these two patterns of change, the framework depicted in Figure 1 can be used to position any service-logic innovation into one or more of the nine cells, which are determined by changes in the customer's role and the firm's value creation.

### Changing Customer Roles

As illustrated in Figure 1, service-logic innovation can change any of the roles of customers as *users*, *buyers*, and *payers*. In traditional economic theory, the customer mainly represents the payer who uses money in a market exchange. In traditional marketing research, the customer becomes the buyer who makes choices. Both concepts correspond to the concept of value-in-exchange, which is based on the paradigm that value is produced independently of the end user and can be defined prior to consumption. This traditional approach negates the new, empowered view of the customer as co-creator of value.

One example of a service-logic innovation that has changed customers' user role and a university's value integration comes from the University of Phoenix. It has altered the learning experiences of thousands of students,<sup>19</sup> even though it has not invented any new subjects or degrees (no "product" innovations). Rather, the University of Phoenix has changed users' roles dramatically because students can earn a degree at a pace they (rather than the university) define from anywhere in the world that offers online access. As Christensen and colleagues point out, the University of Phoenix differs from traditional universi-

ties because it offers less integrated value creation (cell 4 in Figure 1).<sup>20</sup> Our preceding discussion of a glucose monitoring system, in contrast, illustrates a change in the firm's value creation, because it brings a smart offering to the market that changes customers' user role (cell 1 in Figure 1).

Service-logic innovations also might alter customers' buying and paying processes. With Netflix, customers rent DVDs via the Internet and then receive them through the mail at their homes. In contrast, the traditional business model of Blockbuster and other rental stores required customers to drive to a store to select, obtain, and return videos or DVDs. Furthermore, Netflix has transcended the traditional model's rental time constraints, demonstrating a more complete understanding of customer use needs. In this way, though customers still rent and watch the films at home, the process they use to buy and pay for the service differs radically. Because Netflix substitutes postal mail for brick-and-mortar stores, it has created a different value constellation (cells 8 and 9 in Figure 1).

## **New Ways to Create Value with Customers**

Our case research also suggests three different patterns of service-logic innovations: creating smarter offerings, changing the integration of value, and reconfiguring the value constellation (see Figure 1).

### ***Creating Smart Offerings***

Changing customer co-creation requires "smart offerings,"<sup>21</sup> or, more generally, services and products that contain more frozen knowledge. Transferring knowledge and skills into objects is especially important because it allows for economies of scale that cannot be achieved easily through direct applications or education and training. For example, the Industrial Revolution caused design and production knowledge to become "imprinted" on raw materials, which then were transformed into carriers of frozen knowledge. Running shoes are designed to restrict unhealthy movements, microwaves offer programs for optimal cooking, and postage machines calculate the costs of mailing a package on the basis of its weight and destination. After knowledge has been frozen into a tangible product, it can be multiplied more easily, which allows for economies of scale or, in other contexts, economies of scope.<sup>22</sup>

Consequently, new smart offerings are not necessarily service innovations, according to a traditional definition of services (i.e., intangible, cannot be stored). However, they are service-logic innovations, because they enable customers to co-create value very differently. Customers' value co-creation activities complement firms' co-creation activities, allowing the frozen knowledge to influence the resources that the customer will require.<sup>23</sup>

A brief review of the automobile industry reveals several relevant innovations. Although the basic principles of cars have not changed much in the last century, the service-logic innovations are significant. Automatic gears, cruise control, and global positioning systems are all examples of smart offerings that



de-skill the task of driving a car (cell 1 in Figure 1). Another example involves the data-mining software applications that help managers make better decisions on the basis of factual information about customers, combined with model-based algorithms that turn the data into information and then into knowledge.

### ***Changing the Integration of Value***

The second type of service-logic innovation we uncovered relates to changes in value integration, specifically, in the firm's and the customer's integrating roles. Markets exist because of the specialization and division of labor, so the integration of knowledge resources must be part of any customer value co-creation. In other words, the question is not whether to integrate but who integrates what.<sup>24</sup> Value-creating activities naturally integrate knowledge resources according to the "conservation of integration," which holds that any given value-creation activity requires a certain amount of integration so that the customer, as a co-creator of value, can integrate more or fewer resources as necessary.<sup>25</sup> The conservation of integration rule probably can be better understood in business markets than in consumer markets. In simplified terms, a company that integrates more resources is considered a solution provider, whereas one that engages in little integration is often a specialist.

For example, a company might choose to have all its mail-related activities performed by Pitney Bowes, an integrated provider of mail services. Alternatively, the company could integrate more resources itself by using the United States Postal Service and other specialist providers. Pitney Bowes's mail-handling services change the role of the user within a company, but they also change the buyer role (deciding which parcel service to use gets delegated to Pitney Bowes) and the payer role (the fee is calculated by a service agreement rather than individual parcel postage). This service-logic innovation therefore fits into cells 4, 5, and 6 in Figure 1.

Another value integration example comes from the Swedish furniture giant IKEA. The retailer enables customers to pay less for furniture but also encourages them to transport and then assemble the furniture themselves. Compared with a traditional furniture store, IKEA's business model is simultaneously more and less integrative. It is more integrative in providing customers with a data-rich catalog describing all the furniture, which clearly changes the buyer role that the customer must undertake. However, IKEA also is less integrative because it does not provide extensive personal consulting, transportation, or assembly services automatically, which changes customers' roles as users (cells 4 and 6 in Figure 1).

### ***Reconfiguring Value Constellations***

The third type of service-logic innovations uncovered during our research features the reconfiguration of a "value constellation," or a value-creating system comprised of suppliers, partners, allies, and customers. A value constellation describes the interplay among market participants (or actors) and resources to co-create value.<sup>26</sup> Compared with a more traditional view, this perspective high-

lights two key differences. First, market exchange is not restricted to two parties but rather is open to many actors. Second, the idea of a linear value chain gets extended to more complex value constellations, previously referred to as “value stars.”<sup>27</sup> The increasing relevance of value constellations versus firm-bounded value chains stems partially from the end of knowledge monopolies.<sup>28</sup>

Our research shows that innovative value constellations fall into one of two categories. The more obvious ones are the many Internet-related applications. Less obvious are those that bring together economic actors by some means other than the Internet.

Google offers the most popular case of the Internet applications. By its very nature, a search engine links skills, know-how, information, and data. A search engine user co-creates value by entering search strings, and the quality of the search results depends largely on the user’s ability to define his or her interest with appropriate keywords. Furthermore, Google’s revenue model relies on context-specific links to paying companies. Another company (now owned by Google) also illustrates Internet-based value constellation: Youtube.com.<sup>29</sup> By involving customers in new user and payer roles, as well as a different value constellation, the site has created a service-logic innovation through which users evolve from simply sharing home videos to actually producing and disseminating short films, which means they can market their movies virally. Youtube also has shifted the paying process; people previously paid to convert and host video, whereas now the service is free and funded by advertising/subscription. The value constellation thus has shifted radically as a result of Internet-related applications that enable users to seek, share, and explore videos—tasks that once were perceived as arduous and usually limited only to family and friends (cells 7 and 8 in Figure 1).

Yet the bringing together of economic actors in innovative value constellations actually existed prior to the Internet age, such as the example of Mobility Car-Sharing. Originating in Europe and now growing in popularity in the United States, car sharing enables a number of people to share vehicle access. The success of this model demands significant innovation in the form of an altered relationship between the car user and the car. Mobility’s success relies on the idea that cars are not considered substitutes for public transportation but rather complements. Users take trains to travel long distances, and then at the train station, they get in a reserved Mobility car to drive on to their final destination. Thus, the value constellation changes the user role. Furthermore, combined tickets for railroad passes and Mobility membership alter the payer role. With car sharing, a user pays a membership fee, gets a smartcard to access the car, books its use online, and pays an hourly/per kilometer rate to use the vehicles. This method alters the way people pay for auto-mobility because they are charged on a per usage basis rather than paying to “own it.” Consequently, this arrangement also alters the buyer role, because the customer does not decide on a single car to purchase. Although an innovative value constellation drives the Mobility concept, built-in smart tools throughout the process are also critical. For example, GPS systems, electronic keys, remote reporting of distance driven, and other

innovations enable the coordination of a growing fleet of cars. This innovation thereby reflects changes in cells 1, 2, 3, 7, 8, and 9 in Figure 1.

## How to Innovate Customers

The research and accompanying framework we use to analyze current service-logic innovations can help managers explore future innovations. For innovative businesses, the basic question should be simple: How can we improve customers' value co-creation? Our intent is not to offer a holistic innovation management approach; instead, we suggest a different perspective on scanning and interpreting business environments. As Day and Shoemaker find, 80% of senior executives agree that their "peripheral vision" does not meet their needs, and 97% recognize that their companies lack any early warning system to prevent (potentially disruptive) surprises in the future.<sup>30</sup> In this sense, we are not offering a standard, linear recipe for creating innovations but rather a customer perspective as a starting point for exploration.

We can apply our approach using two different points of view. "Outside-in" service-logic innovation starts with changing customers' roles, which causes a change in the firm's value creation. In contrast, "inside-out" service-logic innovations start by changing the firm's value creation and then encourage a change in customers' roles.

### *How to Change Customer Roles: Outside-In Innovations*

Firms can encourage outside-in service-logic innovation by changing customers' roles as users, payers, and buyers. Following are strategies for stimulating this form of innovation.

#### *Change the Role of the User*

Firms can only make value propositions; the customer must interpret and co-create that value.<sup>31</sup> Therefore, an outside-in service-logic innovation proposes new ways for customers to solve their problems. Customer intelligence gathering must go beyond traditional surveys and focus groups to include more immersed and holistic perspectives that provide intimate observations of how customers co-create value.<sup>32</sup>

One promising avenue asks why potential customers are *not* co-creating value with the firm.<sup>33</sup> For example, PetSmart, a retailer of pet foods and supplies, found out that potential "pet parents" faced numerous difficulties if they had a pet and wanted to travel, and these restrictions had limited the increasingly mobile members of the population from becoming pet parents. As a solution, the retailer's PetsHotels offer mobility to pet parents, who no longer have to bother their neighbors, family members, or friends for pet sitting.

Managers can also study the skills lacking among non-customers. Learning about these challenges could prompt firms to offer appropriate training opportunities, integrated services, or smart offerings. For example, not all home-

owners can replace a broken sink or install a wireless network at home. Consequently, Lowe's not only sells do-it-yourself material, but also offers full service installation to go with it.

This user analysis becomes even more important in a cross-cultural context, when the same "global" offerings get used very differently. For example, when Disney opened a theme park near Paris, one of the many problems was customers' dissatisfaction with the waiting time in the food court. The wait was caused not primarily by a shortage of capacity (the number of visitors was much lower than anticipated in the first few years) but by the eating habits of most Europeans, who are used to eating a full lunch at noon rather than several snacks during the day.

### *Change the Role of the Payer*

Managers have two options for changing the role of the payer: change what customers pay for (i.e., the price metric); or change the payer altogether.

In the first case, the challenge is to find price metrics that allow prices to vary automatically with value delivered, which keeps all customers within the "Price $\approx$ Value" range.<sup>34</sup> General Electric (GE) used this approach to launch its GE90 aircraft engines, which promised greater fuel efficiency and power and therefore would be much more profitable to operate. The catch was a high degree of uncertainty about maintenance costs, which undermined GE's intention to capture a price premium. Rather than accepting a lower price, GE changed the price metric and offered "power by the hour," billing clients a fee per hour flown, which included scheduled and unscheduled maintenance.

Heating contracting serves as another good example. Traditionally, owners of office buildings would buy a heating system and maintain it over its lifetime. However, with service contracting innovation, the heating company does not sell the heating equipment to the owner but instead offers a guaranteed temperature all year around for a predefined rate. In the tourism industry, all-inclusive vacation resorts target customers who prefer to pay a fixed price for their entire stay instead of being charged for individual purchases. In professional services, some innovative consulting companies and law firms have moved away from charging by the hour or the day and instead charge fees according to the results of their work.

The second option for changing the role of the payer requires managers to move from an isolated firm-customer relationship toward a value constellation perspective. An example serves to illustrate how a firm can interest a third-party payer in an opportunity: A European disco targeting young people realized that its growth potential was limited because of the low purchasing power of its target segment and its lack of credibility in securing a location. Considering the larger value constellation, the disco realized that a major bank was targeting the same segment of younger consumers to build lifelong, loyal customers. The disco sold its entertainment services to the bank for a fixed fee, then the bank sold tickets exclusively in its branches at a steep discount. With the assistance of its credible partner, the disco no longer had a problem renting event locations.

Finally, a combination of both approaches can increase affordability for non-customers. The mobile phone industry in developing countries serves as a good example. Acquiring customers (often through subsidized phones), offering extensive service bundles, and billing on a monthly basis are all expensive. Yet the business model of the Village Phone program, by Grameen Phone in Bangladesh, serves very poor customers profitably. By innovating the value constellation, Grameen helps entrepreneurial women obtain loans to subscribe to phone service. It then trains them how to operate the phones and charge other households to use them. Although disposable income in each household is very low, many households use a single phone, allowing the phone company to generate average revenues of \$90 per month per Village Phone.<sup>35</sup>

### *Change the Role of the Buyer*

Service-logic innovation also can improve or reconfigure the buying process. Web-based platforms such as Expedia and Travelocity have radically changed how travelers buy travel services, Netflix has altered the way customers rent DVDs, and HMOs have recreated the “shopping pattern” for doctors and hospitals.

Managers can also innovate the buying process by eliminating waste in the supply chain. For example, the role of the buyer might be innovated by saving customers’ time and eliminating redundant information. Retailers’ use of radio frequency identification (RFID) technology changes the buyer role significantly. Supply chains are better integrated, out-of-stock items can be reduced, and forecasts can be improved. Managers can use lean management techniques to map the buying process from both the provider’s and the customer’s perspective, indicating where time is wasted and where information is exchanged. Using this information, firms can reduce unnecessary steps to save time and simplify communications.<sup>36</sup>

### ***How to Change a Firm’s Value Creation: Inside-Out Innovations***

The guidelines and examples we offer to illustrate ways firms can develop inside-out service-logic innovations focus on changing their own value creation through smart offerings, value integration, and value constellations.

#### *Make Customers Smarter through Smarter Offerings*

Creating “smart” offerings has always been a primary objective of innovation management. Yet the contribution of our approach for service-logic innovations lies in its inherent customer orientation—or, more specifically, in asking how smart offerings might make customers smarter.

As our framework suggests, smart offerings can innovate the user’s role, the buyer’s role, and even the payer’s role. For example, GPS systems shift the user’s role by helping people find certain locations. The web pages established by some retailers assist with the buyer’s role, because they show the customer the nearest locations of the store. Telecommunications companies even help inno-

vate the payer's role by calculating and applying the optimal plan according to the customer's monthly phone usage.

### *Integrate to Relieve or Enable Customers*

Value integration represents a particular pattern of service-logic innovation that recognizes market offerings (products and services) cannot be defined by the provider but rather must be identified by the customer. Consequently, customers' perceptions about an offering do not pertain to "what it is" but to "what it does" in relation to their value co-creation. In general, offerings relieve customers from or enable them to do something. Most existing literature suggests that innovations are successful when they enable customers to co-create value,<sup>37</sup> but we find that service-logic innovations also relieve customers from undesired activities. Opportunities for innovation thus exist for managers who can identify and understand the activities from which customers want relief. For example, American universities have recognized that many of their graduating students do not want to initiate contact directly with prospective employers on an individual basis. Consequently, they offer career placement services that relieve graduates from the responsibility of making initial contact with potential employers. Another example is Virgin Atlantic Airlines' offer of door-to-door service for its business class passengers, which relieves them of some of the inconveniences of driving to and from the airport.

In contrast, firms can often offer more to their customers by integrating less. Offering less integration can help spawn innovation by enabling customers to create more customized value for themselves. Traditionally, the music industry has sold vinyl albums and CDs that combine a fixed selection of songs. Newspapers combine news and stories and thereby pre-select content for readers. Traditional computer manufacturers specify a range of models, produce them, and then sell them through retail stores. Instead, managers today can try to unlock this integration of resources and offer the customers disintegrated components, which enables them to co-create more individualized value. For example, customers can now buy individual songs on iTunes or compile their own playlists; readers can customize their news through RSS-feeders; and shoppers can build personalized computers on Dell's web site.

### *Reconfigure Value Constellations Around Customers*

Finally, managers should study threatening and opportunistic trends in their value constellation and search for ways to profit from these trends through inside-out service-logic innovations. One illustration is the newspaper industry, which faces many challenges. A growing young population that more often uses the Internet for news threatens a pillar of their revenue stream, namely, readers' subscription and single purchases. To target this young segment, several challenges must be addressed, including their preference for short paragraphs, their lack of time to read a full newspaper (user role), their unwillingness to pay for information (payer role), and their existing habits, which do not involve purchasing a newspaper (buyer role). Although this segment is hard to reach by

## Applying the Service-Logic Innovation Framework to Business Travel

Managers should aim for a broad customer perspective rather than a more narrow, product-focused view when applying the framework introduced in this article. For the purpose of illustration, we suggest some questions a firm might ask itself to become more innovative in the business travel market.

	User	Payer	Buyer
<b>Smart Offerings</b>	Can we use the customer's mobile phone to make his or her stay more enjoyable?	Can we innovate our loyalty program with better price metrics to increase customer value and capture more of that value?	Can we use a GPS-based system to automatically reschedule missed flights, dispatch taxis, or suggest dining reservations?
<b>Value Integration</b>	Can we enable the customer to achieve his or her personal goal, such as losing weight while on business trips?	Can we enable the payer and buyer to incentivize the user to save money on business trips by sharing the savings with all of them?  Can we relieve the user from financing a business trip for the payer until the expenses are reimbursed?	Can we enable the buyer to make best use of the airlines' and hotels' yield management systems and loyalty programs?  Can we relieve the buyer from all routine tasks when making reservations and ticketing?
<b>Value Constellation</b>	Can we connect the customer abroad with his or her family doctor or with alumni who happen to be in the same city?	Can we relieve the traveler from filling out an expense form by pooling all the data from the involved third parties?	Can we create a seamless reservation experience by improving communication among the buyer (manager's assistant), the user (business traveler), the payer (account department), and involved third parties?

traditional media, it still offers lucrative revenue opportunities. Recognizing these factors and the changes needed in the three customers' roles, a service-logic innovation has, of course, emerged. In major European and U.S. cities, free, quick-read newspapers are now available for commuters, many of whom are young. In Switzerland, for example, the newspaper *20 Minuten* is distributed for free at train and bus stations and used by readers to inform themselves during their commute to work. *20 Minuten* has changed the way customers use a newspaper (quick read, no long stories, no background information), how they acquire it (from train and bus stations or as "second readers" in trains and buses), and how they pay for it (free). The value constellation goes beyond a reader-publisher relationship and includes advertisers who cover the full costs of the paper, including its distribution. Buses and trains are the main distribution outlets, providing the space and time to read the paper. Thus, *20 Minuten* offers one of the fullest illustrations of a service-logic innovation that is transforming

the whole media industry landscape, yet traditional innovation theory would hardly recognize it as a discontinuous innovation.

An example of a technically more advanced reconfiguration pertains to remote surgery, or telesurgery. Remote surgery enables a doctor to perform surgery on a patient, even though they are not physically in the same location. This capability creates a new value constellation with many players, combining elements of robotics, cutting-edge communication technology, and facets of management information systems.<sup>38</sup>

## Conclusion

All innovation is service-logic innovation. This challenge to traditional, attribute-based views of innovation rests on the understanding that any innovation changes the way customers co-create value with the firm. This new perspective overcomes an artificial distinction between product and service innovations. Furthermore, it facilitates a more customer-centric view of innovation rather than the traditional and limiting product-centric view.

Our inductive research has produced a managerial framework that corresponds with the growing body of service-logic literature. By looking outside-in, managers change customers' roles as users, buyers, and payers. By working inside-out, managers help customers become smarter through smarter offerings, by relieving or enabling them of certain co-creating activities, and by reconfiguring value constellations. Managers who understand these patterns of service-logic innovation can systematically and proactively explore new opportunities and, at the same time, anticipate competitive threats from competitors' innovations.

## Notes

1. D. Tapscott and A.D. Williams, *Wikinomics: How Mass Collaboration Changes Everything* (New York, NY: Portfolio Hardcover, 2006).
2. H.W. Chesbrough, "Why Companies Should Have Open Business Models," *MIT Sloan Management Review*, 48/2 (Winter 2007): 22-28.
3. Stephen L. Vargo and Robert F. Lusch, "Evolving to a New Dominant Logic for Marketing," *Journal of Marketing*, 68/1 (January 2004): 1-17; S. Michel, S.W. Brown, and A.S. Gallan, "An Expanded and Strategic View of Discontinuous Innovations: Deploying a Service-Dominant Logic," *Journal of the Academy of Marketing Science*, 36/1 (2008): 54-66.
4. C.M. Christensen, S. Cook, and T. Hall, "Marketing Malpractice: The Cause and the Cure," *Harvard Business Review*, 83/12 (December 2005): 76.
5. The term "frozen activities" comes from R. Normann and R. Ramirez, "From Value Chain to Value Constellation: Designing Interactive Strategy," *Harvard Business Review*, 71/4 (July/August 1993): 65-77.
6. This distinction is made by C.M. Christensen and M.E. Raynor, *The Innovator's Solution* (Boston, MA: Harvard Business School Press, 2003).
7. Kim and Mauborgne have written extensively about "blue oceans," or "all the industries not in existence today . . . unknown market space." They contrast these with red oceans, or all industries in existence today. See W.C. Kim and R. Mauborgne, "Blue Ocean Strategy: From Theory to Practice," *California Management Review*, 47/3 (Spring 2005): 105. Christensen has written extensively about new growth markets, which are "created when innovating com-



- panies design a product and position its brand on a job for which no optimal product yet exists." See Christensen, Cook, and Hall, op. cit.
8. Normann and Ramirez, op. cit. p. 68
  9. Chesbrough and Rosenbloom approach this contention by stating: "There is no single inherent value for the technology: if it subsequently were to be developed in different ways, it would likely accrue different value to its developer." The key point of difference between this assertion and ours is the inclusion of customer co-production, that is, the element of value that we attempt to illuminate more clearly in this work. We contend that customers take charge of value definition and extraction through their level of participation and control of consumption. See H. Chesbrough and R.S. Rosenbloom, "The Role of the Business Model in Capturing Value from Innovation: Evidence from Xerox Corporation's Technology Spin-Off Companies," *Industrial and Corporate Change*, 11/3 (June 2002): 529-555.
  10. See H.W. Chesbrough, *Open Innovation: The New Imperative for Creating and Profiting from Technology* (Boston, MA: Harvard Business School Press, 2003): 51.
  11. Open innovation is how "firms commercialize external (as well as internal) ideas by deploying outside (as well as in-house) pathways to the market. Specifically, companies can commercialize internal ideas through channels outside of the current businesses in order to generate value for the organization....At its root, open innovation is based on a landscape of abundant knowledge, which must be used readily if it is to provide value for the company that created it." H.W. Chesbrough, "The Era of Open Innovation," *MIT Sloan Management Review*, 44/3 (Spring 2003): 35-41.
  12. This research design leads to a "winner's bias," because we do not study failed innovations. Furthermore, our research cannot explain how firms create and manage such innovations. Yet we contribute to managers' understanding of innovation through a new view of customer-focused and resource-integrated innovation.
  13. Robert K. Yin, *Application of Case Study Research*, 2nd edition (Beverly Hills, CA: Sage, 2003), p. 7. Our work differs from the process suggested by Eisenhardt in our single-source approach, which precludes triangulation. See Kathleen M. Eisenhardt, "Building Theories from Case Study Research," *Academy of Management Review*, 14/4 (October 1989): 532-619.
  14. R.J. Glushko and C. Sims, "Service Innovation Using Design Patterns," paper presented at the Berkeley-TEKES Service Innovation Conference, Berkeley, CA, 2007, p. 18.
  15. Ibid.
  16. J.N. Sheth and B. Mittal, *Customer Behavior: A Managerial Perspective* (Mason, OH: South-Western, Thomson, 2004).
  17. Vargo and Lusch argue that the application of specialized skills and knowledge is a fundamental unit of exchange. Knowledge and skills can be transferred directly, through education and training, or indirectly through embedding into objects. Vargo and Lusch, op. cit., p. 6.
  18. Normann and Ramirez, op. cit. See also Robert F. Lusch and Steven L. Vargo, "Service-Dominant Logic: Reactions, Reflections, and Refinements," *Marketing Theory*, 6/3 (September 2006): 281-288.
  19. C.M. Christensen, S.D. Anthony, and E.A. Roth, *Seeing What's Next. Using the Theories of Innovation to Predict Industry Change* (Boston, MA: Harvard Business School Press, 2004).
  20. Ibid.
  21. S. Zuboff, *In the Age of the Smart Machine* (New York, NY: Basic Books, 1988).
  22. R. Normann, *Reframing Business: When the Map Changes the Landscape* (Chichester: Wiley, 2001), p. 115.
  23. Consequently, frozen knowledge can lessen the requirements of customers' skills and knowledge and thereby create a "substitution effect." As Christensen, Anthony, and Roth note, "companies make it easier for customers to accomplish important unfulfilled (and often overlooked) outcomes—jobs people need to get done but can't." Christensen, Anthony, and Roth, op. cit., p. 7. In addition, frozen knowledge can create a "complement effect," whereby the new combination of the customers' knowledge with the offerings' frozen knowledge create new solutions.
  24. Lusch and Vargo, contend that "organizations exist to integrate and transform micro specialized competencies into complex services that are demanded in the marketplace." Lusch and Vargo, op. cit., p. 53.
  25. Christensen, Anthony, and Roth, op. cit., p. 19.
  26. This point is made clear by Normann and Ramirez, op. cit. It also matches the thinking of Lusch and Vargo, op. cit.

27. The linear value chain was introduced by Michael E. Porter, *Competitive Advantage* (New York, NY: The Free Press, 1985). The counterconcept of “value stars” was proposed by Normann, op. cit., p. 72.
28. Chesbrough, *Open Innovation*, p. 51.
29. Tapscott and Williams, op. cit.
30. George S. Day and Paul J.H. Schoemaker, *Peripheral Vision. Detecting the Weak Signals that Will Make or Break Your Company* (Boston, MA: Harvard Business School Press, 2006): 2.
31. For more, see Vargo and Lusch, op. cit. Chesbrough also has stated: “The inherent value of a technology remains latent until it is commercialized in some way.” Chesbrough and Rosenbloom, op. cit., p. 530. For us, this claim supports the view that value is not produced and then transferred to the customer but rather that value is co-created by a customer, who has recognized some potential value in actualizing the service that an offering provides him.
32. Consumer studies using observation remain rare. Examples include Jonathan Boote and Ann Mathews, “‘Saying Is One Thing; Doing Is Another’: The Role of Observation in Marketing Research,” *Qualitative Market Research*, 2/1 (1999): 15-21; Eric J. Arnould and Linda L. Price, “River Magic: Extraordinary Experience and the Extended Service Encounter,” *Journal of Consumer Research*, 20/1 (June 1993): 24-45.
33. Christensen, Anthony, and Roth, op. cit., p. 6. These authors highlight two reasons non-customers stay away: they cannot afford the product or service; or they lack the skills to co-create value. These explanations thus refer to the roles of users and payers.
34. Thomas T. Nagle and Reed K. Holden, *The Strategy and Tactics of Pricing*, 3rd edition (Upper Saddle River, NJ: Prentice Hall, 2002): 153
35. C.K. Prahalad and A. Hammond, “Serving the World’s Poor, Profitably,” *Harvard Business Review*, 80/9 (September 2002): 48-57.
36. J.P. Womack and D.T. Jones, “Lean Consumption,” *Harvard Business Review*, 83/3 (March 2005): 58-68.
37. Normann, op. cit.; C.K. Prahalad and Venkatram Ramaswamy, “Co-Opting Customer Competence,” *Harvard Business Review*, 78/1 (January/February 2000): 79-87.
38. One of the earliest remote surgeries was conducted on September 7, 2001 across the Atlantic Ocean, with a surgeon in New York performing a gallbladder operation on a patient 6,230 km away in Strasbourg, France. See <[http://en.wikipedia.org/wiki/Remote\\_surgery](http://en.wikipedia.org/wiki/Remote_surgery)>, accessed March 2, 2007.

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