

# Chapter 7.4

## Internet–Based Customer Collaboration: Dyadic and Community–Based Modes of Co–Production

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### ABSTRACT

Co-production, which is the generation of value through the direct involvement of customers in the creation of a service context and in the design, delivery, and marketing of goods and services that they themselves consume, implies customer-firm collaboration. The nature of this collaboration, however, is highly dependent on the organization's service design, which increasingly includes Internet technology, as well as customer communities. Whereas dyadic co-production implies a single customer's involvement with a firm, community-based co-production implies multiple customers simultaneously engaged in value-adding activities with a firm. In order to build a theoretical understanding of these modes of customer collaboration and to explore the role

and implications of Internet technologies within them, we develop a contingency theory of customer co-production designs. We then use cases of Internet-based services to highlight the benefits and challenges of relying on Internet technology to implement customer co-production.

### INTRODUCTION

E-collaboration, which entails collaboration among individuals using electronic technologies to complete a common task (Kock, 2005), is prevalent in today's service sector, where it frequently takes the form of customer co-production enabled by Internet technologies. As the image of the customer as passive audience and consumer is being replaced by one of the customer as an

active co-creator of value (Prahalad & Ramaswamy, 2000), organizations increasingly view their customers as resources that contribute both knowledge and labor to the production process (Larsson & Bowen, 1989). This form of customer collaboration (or co-laboring) is not only evident in business-to-business (B2B) service delivery, where organizations' supply chains are becoming vertically integrated (e.g., Walmart shares daily sales information with Procter & Gamble), but also in business-to-customer (B2C) service environments where customers' actions not only trigger but also complete a transaction (e.g., customers assembling their IKEA furniture themselves) (Normann & Ramirez, 1993).

Internet technologies (e.g., e-mail, interactive Web sites, self-service applications) create new opportunities for customer co-production. For instance, customers increasingly purchase travel services, books and other products online. They do online research about their medical symptoms before they see a health service provider (e.g., Hogg et al., 2003), and they increasingly check their bank balance or the status of a delivery online instead of calling a customer service representative. As such, customers are increasingly co-laboring in the production of the goods and services that they themselves consume.

Customer co-production, however, is not limited to situations in which Internet technology is used to facilitate the dyadic interaction between an individual customer and a firm. Instead, collaborative Internet technologies (e.g., listservs, discussion boards and wikis) have created new opportunities for community-based forms of customer co-production. For instance, online gamers rely on a community of players to create the entertainment value of a collaborative game. The medical information that patients consult is frequently generated by a community of people who have had first-hand experience with a given condition. eBay would not exist if not for its community of buyers and sellers that create its dynamic and eclectic marketplace. Similarly,

personal network services such as MySpace and LinkedIn also rely on a community of customers to co-produce the value of their services.

Internet technologies present both opportunities and challenges for the design and delivery of services in general (Bitner, Ostrom, & Meuter, 2002), and customer co-production in particular. This is because the Internet facilitates a "shift in the role of the customer – from isolated to connected, from unaware to informed, from passive to active" (Prahalad & Ramaswamy, 2005: 2). For instance, by providing access to information in a cost-effective way (Malone, Yates, & Benjamin, 1987), Internet technologies erode the information asymmetry that has traditionally characterized many customer-firm interfaces (Kulkarni, 2000). This can create significant challenges for service providers.

For example, Hogg et al.'s (2003) report that the healthcare consultation process changed significantly as customers increasingly went online to learn about medical conditions and treatment options. Whereas the consultation process used to be one in which the health care provider acted as the primary source of information, advice, and decision-making, in the Internet-enabled service environment, the health care provider acts as interpreter and evaluator of information that patients gather from multiple online sources. Thus, as patients became more active co-creators of their own treatment, the interaction and power dynamics of the dyadic patient-provider relationship changed.

Furthermore, using Internet technology in community-based modes of co-production presents numerous opportunities and challenges for firms. Von Hippel (2005) cites many examples of customer-led innovations such as the open source movement, which would have been very difficult to achieve without the Internet. However, the lack of physical controls and social presence online proves especially challenging in community-based modes of co-production. For instance, even though eBay was founded on the beliefs

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