NORTH-HOLLAND

Achieving competitive capabilities in e-services

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Abstract

What implications does the Internet have for service operations strategy? How can business performance of e-service companies be improved in today's knowledge-based economy? These research questions are the subject of this paper. We propose a model that links the e-service company's knowledge-based competencies with their competitive capabilities. Drawing from the current literature, our analysis suggests that services that strategically build a portfolio of knowledge-based competencies, namely human capital, structural capital, and absorptive capacity have more operations-based options, than their counterparts who are less apt to invest. We assume that the combinative capabilities of service quality, delivery, flexibility, and cost are determined by the investment in intellectual capital. Arguably, with the advent of the Internet, different operating models (e.g., bricks-and-mortar, clicks-and-mortar, or pure dot-com) have different strategic imperatives in terms of knowledge-based competencies. Thus, the new e-operations paradigm can be viewed as a configuration of knowledge-based competencies and capabilities. © 2002 Elsevier Science Inc. All rights reserved.

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1. Introduction

The Internet is fast becoming an important new channel for businesses in many sectors, raising e-services as the emergent business paradigm in the industrialized world. E-services,

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according to Roth [1,2], "are comprised of all interactive services that are delivered on the Internet using advanced telecommunications, information, and multimedia technologies." In this paper, we discuss the challenges and opportunities for providing e-services (e.g., those delivered over the Internet) and attempt to answer the following research questions: What implications does the Internet have for service operations strategy? How can business performance of e-service companies be improved in today's knowledge-based economy?

In the past decade, services have faced intensified competition that can be characterized by substantial deregulation, technological progress, continuous fragmentation of markets, evolving customer expectations, shorter product life cycles, and the enormous growth in telecommunications and inexpensive computing power [3–5]. High quality and competitive prices are necessary, but they are no longer sufficient requirements for commercial success in the "hypercompetitive" market place of e-services [3,6]. Speed, whether defined as time to new products, real time information, or quick and flexible customer response, is increasingly becoming a standard, and hence, it is a pivotal capability in such a dynamic environment. Determining how best to take strategic advantage of Internet economics is an increasing concern for modern business.

In this paper, we make the case for incorporating the Internet technology strategy within the context of a knowledge-based, service operations strategy. While the Internet has rewritten many of the rules of customer engagement, it has not fundamentally changed the fact that business performance results from a portfolio of strategic operations choices that service providers make to delivery their offering [7,8]. Thus, strategic operations choices not only foster the firm's current competitive capabilities, they also impact their future capabilities because of the dynamic and long-term effects [9]. Moreover, the Internet has not changed the company's need to tailor the development of offerings and support the requirements of individual customers. Nor has it eliminated the need altogether for human contact in pre- and postsales in order to build and sustain relationships of key customers. What the Internet has changed, however, is the balance of power between companies and their customers. The Internet has dramatically altered the front-end, channel options for customer accessibility to the service delivery process and changed the scope of the customer encounter. First, on the most simplistic basis, customers have virtually unlimited access to the company, 24 hours per day, 365 days per year. Second, customers now have a more expanded scope in that the breadth of information available for purchasing decisions, distribution, and advice is altered and the possible nature of the encounter is more varied. Increasing the complexity of the service design, the encounters even extend beyond traditional communications, such as online chats (e.g., customer-to-customer communications). Consequently, Porter [4] argues, "The winners will be those that view the Internet as a complement to, not a cannibal of, traditional ways of competing."

Clearly, the tumultuous business environment and its increasing complexity [10] have created many new challenges and opportunities for the e-service component of a service operations strategy. In framing our discussion of e-services, Fig. 1 illustrates the strategic decision processes that managers face for investing resources that develop knowledge-based competencies. Whether the business model is a traditional "bricks-and-mortar" (e.g., services with a presence only in the physical space), "clicks-and-mortar" (e.g., services with a