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Digital Business Strategy as an Initiator of E-business Capability

Generation

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Abstract: Nowadays, many firms formulate and execute digital business strategy to leverage the opportunities of e-business value-creation. In this study, we present a business-level strategic perspective of e-business value-creation and suggest that e-business capability is enabled from strategically deploying IT resources in the inter-organizational context. We propose a research model to capture multiple relationships among digital business strategy, IT resources, and e-business capabilities. The research model was tested using a national survey data from 131 Chinese manufacturing firms. Empirical findings showed that steered by digital business strategy, firms focused on leveraging digital linking, IT human resources, and channel partner relationship in e-business, whereas the exploitation of these resources generated inter-organizational e-business capabilities. This study extends our understanding of the initiation mechanism and the evolving process of e-business values captured through digital business strategy.

Keywords: Digital business strategy, IT resources, e-business capabilities

Digital technologies shape new business infrastructures and enable new organizational logic and patterns of coordination within and across firms ^[1]. Many organizations implement digital business strategy to achieve strategic objectives and optimize business profits through the use of digital technologies. For example, with an understanding of how business plans can be integrated with technological innovations, Toread, an Australian outdoor clothing and equipment supplier, has leveraged tmall.com in China and expanded with over 30 online franchise stores in the Chinese market. Its e-business model helps streamline product distribution to Toread's franchisees and enhance Toread's capabilities of managing its business partners and outbound logistics. With an in-place digital business strategy, the companies in the above examples have looked beyond functional activities and treated IT as a strategic asset, which allows them to effectively utilize e-business to explore online sales channels and maintain strategic competitiveness, hence increasing the values generated from e-business operations.

The focus of this study is on the role of digital business strategy in e-business capability generation. First, comparing to the functional-level perspective of IT business value, digital business strategy is a business-level strategy which focuses on the integration and interaction of different IT resources and the pursuit of multiple goals simultaneously ^[2]. Therefore, digital business strategy goes beyond functional levels and emphasizes the strategic implications of IT resources ^[3], which encompass physical IT infrastructures, IT human resources, and relational/social resources ^{[4][5]}. Second, digital business strategy highlights the innovative roles of digital

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technologies and emphasizes the capability of digital managerial skills ^{[3][6]}. Thus, IT human resources are treated as strategic-level and critical resources for modern companies. Third, digital business strategy extends strategic scope beyond firm boundaries and enables cross-boundary collaborations and innovation disruptions ^[1]. Therefore, a business-level perspective involving digital business strategy captures the effects of electronic channel relationship and other novel digital opportunities in the process of IT business value creation. Given these advantages of digital business strategy, we intend to explore how organizations implement digital business strategy to deploy IT resources of e-business to stimulate new capabilities and generate values. We believe our effort will make a good starting point for understanding how strategic, technical, relational and organizational factors jointly contribute towards achieving e-business values.

Empirical results supported our hypotheses that a firm's emphasis on digital business strategy would lead to the development of digital linking (H1), IT human resources (H2), and channel partner relationship (H3). These findings imply that digital business strategy plays a key role in initiating e-business value creation, as it guides the allocation and utilization of internal and external IT resources in alignment with the strategic objectives of conducting e-business. Results also showed that the impact of digital business strategy on IT human resources ($\beta = 0.65, p < 0.001$) was greater than its effect on digital linking ($\beta = 0.61, p < 0.001$) and channel partner relationship ($\beta = 0.51, p < 0.001$) respectively, indicating that e-business initiation should first involve focusing on leveraging staff's digital skills and training plans before exploiting digital linking and channel partner relationship. In other words, IT human resources are a critical factor in supporting digital business strategy and enabling IT-business alignment.

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