
Understanding how IT contributes to a firm's competitive advantage has long been of interest. While managers have made significant investments in IT, inflexible legacy systems hinder their ability to respond quickly to market opportunities. Our study examined how the flexibility of an organization's IT infrastructure enhanced information generation and dissemination and that this increased their ability to respond to rapidly changing environments. Our discussion of these information building and information leveraging effects was grounded in the resource-based view of the firm. We empirically tested our model using data collected from senior executives of 105 manufacturing and service firms. We found that IT infrastructure flexibility was positively related to information generation and dissemination. Moreover, information generation was significantly related to organizational responsiveness. Finally, organizational responsiveness was positively related to the firm's competitive advantage. These results showed the importance of developing a flexible IT infrastructure that can be quickly adapted and reconfigured to meet information processing demands in dynamic environments.