
Abstract:
Senior executives continue to be concerned about factors influencing the business effect of information technology (IT). Prior research has argued that business–IT strategic alignment facilitates business effect of IT and that contextual factors affect business–IT alignment. However, the role of knowledge considerations in the relationship between contextual factors and alignment, and the role of IT projects in the relationship between alignment and business effects of IT, have not been explicitly examined. Therefore, this paper pursues the following two research questions: (1) Based on knowledge considerations, how do planning behaviors (specifically, IT managers’ participation in business planning and business managers’ participation in IT planning) and top management knowledge of IT mediate the effects of two contextual factors—organizational emphasis on knowledge management and centralization of IT decisions—on business–IT strategic alignment? (2) How do aspects of IT projects (specifically, quality of IT project planning and implementation problems in IT projects) mediate the relationship between business–IT strategic alignment and business effects of IT? Results from a survey of 274 senior information officers indicate that organizational emphasis on knowledge management and centralization of IT decisions affect top managers’ knowledge of IT, which facilitates business managers’ participation in strategic IT planning and IT managers’ participation in business planning, and both of these planning behaviors affect business–IT strategic alignment. Moreover, the results indicate that quality of IT project planning and implementation problems in IT projects mediate the relationship between business–IT strategic alignment and business effect of IT. These findings highlight the importance of considering the planning and implementation of IT projects when examining the effects of business–IT strategic alignment, and highlight the importance of considering shared domain knowledge (i.e., top managers’ knowledge of IT) and planning behaviors when examining the effects of contextual factors on business–IT strategic alignment. Managers can use these results to develop more comprehensive action plans for achieving greater business–IT strategic alignment, and for translating alignment into enhanced IT effects on business performance.

Keywords: Business-IT strategic alignment, Information technology planning, IT project planning, Knowledge management