Alignment of Business Strategy and Information Technology Considering Information Technology Governance, Project Portfolio Control, and Risk Management

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ABSTRACT

Information technology (IT) governance is an important component in developing an overall business and IT strategy. Factors to consider in the IT governance and strategy relationship are project portfolio control, risk management. Using a quantitative survey of 201 IT executives a significant relationship was shown between effective IT governance and project portfolio control and risk management. However, the results of the study did not support a significant relationship between effective IT governance and business/IT alignment. Ultimately, this study helped to shed light on the relationship between effective IT governance and project portfolio control as well as provided support to the existing literature on the relationship between effective IT governance and risk.

KEYWORDS
Business/IT Alignment, IT Governance, IT Project Portfolio, Risk Management

THEORETICAL FRAMEWORK

This study is based on the notion that there is a relationship between effective IT governance and portfolio control, risk management and business/IT alignment. Weill and Ross’s (2005) conceptualization of effective IT governance informed this study. The theoretical framework for this study is based on the concept of IT governance performance as postulated by Weill and Ross. Weill and Ross (2004) evaluated IT governance effectiveness based on four outcome measures. These outcome measures are cost-effective use of IT, effective use of IT for growth, effective use of IT for asset utilization, and effective use of IT for business continuity.

Bradley and Pratt’s (2011) research work on the relationship among entrepreneurship, IT governance, and risk management guided this study. Bradley and Pratt found that IT governance has and positive effect on IT risk management. Müller et al.’s (2008) conceptual model on project portfolio control also guided this study. Finally, Tanriverdi’s (2006) study on business/IT alignment also guided this study. Weill and Ross (2005) maintained that effective governance leads to alignment between an organization’s IT investments with overall business priorities.

Effective IT governance is vital for achieving and sustaining business–IT alignment (De Haes & Van Grembergen, 2008), aligning IT investments with overall business priorities, determining IT decision rights, and assigning responsibility for the results (Weill & Ross, 2005). Tanriverdi (2006)
posited that coordinated business strategies entail coordinated IT strategies. In effect, the two go together. For this study, the two key variables on business/IT alignment will be the degree of process standardization and the strategic rationale for investing in IT, to include cost reduction, differentiation, and strategic flexibility (Tanriverdi, 2006).

The relationship between effective IT governance and project portfolio control, risk management, and business/IT alignment is diagrammatically depicted by Figure 1.

Effective IT Governance

The concept of IT governance gained prominence in information systems and project management literature in the late 1990s (De Haes & Van Grembergen, 2009; Weill & Ross, 2004) or early 2000 and peaked in 2002 (Crawford, 2006). Compared to other areas in organization research, there have been fewer studies on the relationship between IT governance and project portfolio management partly because both concepts are recent to the field of organizational research. Some studies on IT governance have concentrated on discussions of the relationship between IT governance and project management (Sambamurthy & Zmud, 1999; Sharma, Stone, & Ekinci, 2009). Other research on IT governance have centered on the relationship between IT governance maturity and IT governance performance (Simonsson et al., 2010); IT governance and business/IT alignment maturity (De Haes & Van Grembergen, 2009); correlation between process maturity and project success (Mullaly, 2006) and IT governance maturity and IT outsourcing (Dahlberg & Lahdelma, 2007).

There is a paucity of research on the relationship between IT governance and project portfolio management, especially research applying quantitative methods. However, the previously mentioned areas of research point to existence of relationships among business strategy, IT strategy, IT governance, and project management success. This relationship is encapsulated in the strategic alignment model by Henderson, Venkatraman, and Oldach (1993). The objective of this dissertation was to investigate the relationship between effective IT governance on project portfolio control, risk management, and business/IT alignment in an organization.

There is a difference between IT management and IT governance. Whereas IT management is concerned with the most prudent internal provision of IT services as well as the management of present IT operations, IT governance focuses on the performance and transformation of IT to meet present and evolving requirements of the business customers (De Haes & Van Grembergen, 2008; Peterson, 2004).

Figure 1. Model of relationship between IT governance effectiveness and project control, risk management, and business/IT alignment
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