The Relationship between Information Systems Strategy and the Perception of Project Success

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ABSTRACT

This article reports an explorative study on the relationship between Information Systems Strategy and the Perception of Project Success. The authors built upon the theoretical foundations of prior research and constructed their conceptual research model from literature. The authors’ study defines IS strategy as the degree to which the organization has a shared perspective to seek innovation through IS. The authors operationalize project success by grouping six project success criteria into process-orientation and outcome-orientation. The authors use a quantitative and conclusive descriptive design to study associations between these variables. The type of design they follow is cross-sectional where IS strategy and perceived project success are assayed in a sample of subjects once and the relationships between them are determined. The authors’ data is collected using an online questionnaire by a combination of business and IT managers and executives, working at organizations with a certain level of IS maturity. The authors’ research finds good support to posit that organizations with an innovative IS strategy are more focused on the outcome of a project than on the project process itself and that organizations with a conservative IS strategy do show some characteristics of a process-oriented view. Furthermore, their research indicates that a more innovative organization relates to a lower perceived importance of Cost and a higher perceived importance of Value and Learning. On the other hand, they find support that a more conservative organization relates to a higher perceived importance of Cost and a lower perceived importance of Use. Next to these findings the authors’ study concludes with implications for practitioners and suggestions for further explorative research.

Keywords: Information System Project Management, Information Systems Strategy, Outcome-Orientation, Process-Orientation, Project Success

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INTRODUCTION

Information Systems (IS) within the organizational context can be seen as the combination of its information topology, technology, staff and the management of those elements in an effort to improve its effectiveness and efficiency (Hevner et al., 2004). It “combines both technical components and human operators and users” in “an organization or a combination of organizations” (Davis, 2000). Although some authors (form example Carr, 2003) have provocatively questioned its value in the present knowledge era, IS has become an undividable part of today’s organizations and a strategic differentiator in the way an organization manages its business (Wade & Nevo, 2010; Sambamurthy et al., 2003. Starting in the early 70s of last century, IS has rapidly evolved into a critical area of managerial concern while gaining the interest of scholars in this emerging research domain at the same time (Chen et al., 2010). One of the managerial concern surrounding the effective use of IS in organizations, is to find or develop an IS strategy that fits the organizational goals best (Gregor, 2006). Among other studies Silvius (2009) concludes that IS strategies can be as diverse as business strategies: from “innovative” to “conservative” and from “business” to “essential”. Above all, there is simply no ‘one size fits all’ IS strategy.

It seems beyond reproach that, no matter what IS strategy is adopted, in order to make any IS investment live up to its promise, it must be successfully implemented to move the organization forward in the intended direction and leverage the chosen IS strategy. Or simply put: a plan is useless until it can be executed. There is an undeniable trend in using a project based approach in changing and shaping the organization for this purpose (Winch et al., 2012; Partington, 1996; McElroy, 1996). Guillemette & Paré (2012) argue that the successful delivery of projects is “the minimum level of contribution” of any IS strategy. Using projects to facilitate the implementation of technology and the managerial impact of such approach was already understood in the 50s of last century: “if we are to grow as advanced technology grows, we must realize the new importance of . . . the project manager” (Gaddis, 1959).

While the importance of IS and the implementation of IS strategy by the successful execution of projects might be obvious, it is worth noting that the term successful seems an all too ambiguous term to desire for. Though intensive research is available in the field of project success, little consensus is yet achieved on its definition (Thomas & Fernandez, 2008). And above all, different stakeholders have different perceptions of project success (Davis, 2014).

From the above we argue that project success — although being an elusive concept at first glance — forms an eminent key ingredient in executing IS strategy because “the challenge of effectively managing technological change in organizations and indeed across entire industries is becoming acute” (Thorp, 2007). Or to put it differently: we posit that if an organization is not able to successfully realize projects it’s IS strategy cannot be fulfilled because it prevents them from “executing IT strategies that deliver business value” (Symons, 2007).

Combining the observation that (1) a variety of IS strategies exists, (2) projects are needed for the successful implementation of the IS strategy and (3) project success can be defined in different ways, this study explores whether the perception of project success is in any way related the IS strategy of an organization?

From the existing research on IS strategy and project success, some indications of this relationship are visible. For example, again from the IS strategy topology in Silvius (2009) and the project success retrospective in Jugdev & Müller (2005), an innovate IS strategy (i.e., driving business initiatives with the potential of emerging IS capabilities) might be focused more on the “appreciation of success over the entire project and product life cycle” as they seek to “deliver superior, value-added service” and use performance criteria such as “market share, growth, or new product introduction” (Henderson & Venkatraman, 1993). On the other hand, a conservative IS strategy seeking to avoid uncertainty and aiming to leverage
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