DOCTORAL PROGRAMME

EFFECT OF BUSINESS-IT ALIGNMENT ON INFORMATION SYSTEMS INTEGRATION SUCCESS IN M&A: A THREE STAGE ALIGNMENT MODEL

Ву

RAVIKUMAR NARASIMHAMURTHY



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$\mathbf{B}\mathbf{y}$

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Introduction

In 2019, more than 46,000 mergers and acquisitions (M&As) were recorded with a total value of more than US\$3.9 trillion (Thomson Reuters, 2019). Past research shows that only 30–40% of the M&As in the private sector create financial value for their shareholders (Headman et al., 2013; Henningsson et al. 2018). One of the main reasons attributed to merger failures is the lack of attention to the merging of information systems (IS) (Giacomazzi et al., 1997; Weber et al., 1996; Mehta & Hirschheim, 2007; Headman et., 2013). Since modern enterprises rely heavily on their IS to carry out business activities, they cannot function in an integrated manner unless the IS is appropriately integrated (Alranta et al., 2007). Difficulties in integrating the IS of the two companies is thus one of the leading causes of complications in leveraging anticipated benefits (Henningson, 2008).

Research indicates that successful IS integration has a positive influence on overall M&A success. For example, the successful acquisition by, for instance, Sallie Mae of USA Group in post-merger IS integration was attributed as an M&A success (Brown et al., 2003). Similarly, successful integration of the Commonwealth Bank of Australia and State Bank of Victoria Systems (Johnston & Yetton, 1996) suggests that IS integration contributes to overall merger success (Mehta & Hirschheim, 2007). Practitioners in the field also support the importance of IS integration. A study by research firm IDC (2002) based on 1,350 interviews indicates that more than 80% of CIOs and CTOs believe IS integration to be either mandatory for addressing mission-critical activities or a key enabler in meeting business-critical needs (Wing, 2007). Both research and practice recognise the importance of IS integration in realising business value.

Thus, considering the importance of the topic, there is a growing need for a deeper understanding of IS integration and M&A value creation (Hedman et al., 2015; Vieru et al., 2014).

As discussed earlier, about 40% of mergers fail to realise the value. The common causes of high failure rates identified in the literature result from leadership, integration, and, more specifically, IS integration (Karas LL, 2017). The M&A activities involve the integration of the business resources and capabilities of two organisations that are merging (Henningsson, 2008) and IT systems integration is critical for organisations to function. Several organisational and IS integration management factors influence the success of IS integration. Research indicates that ensuring Business-IT alignment (BIA) is an important step to improve the probability of successful IS integration. The extant literature on IS integration in the context of M&As builds on this notion and most of the studies are conducted at the firm level. Recent literature in BIA focusing on single organisations tends to concentrate on the process-level view, recognising that the first-order effects of IT use being realised at the process level. Though the firm-level alignment perspective provides great insights, it could mask the challenges of realising the alignment between business and IT strategy at a lower level. The extant studies in the area of post-merger IS integration have mostly taken a firm view of the strategic alignment. The recent IS literature points to the transitioning of alignment literature towards process-level alignment view, rather than firm-level as the latter could potentially mask new, unique insights (Tallon et al., 2016) such as 'why did a particular process choose to deviate from the initial strategic choice?' Also, Business–IT misalignment at any level can lead to system implementation difficulties (Chan & Reich, 2007) and the manifestation of such a misalignment could initiate at the process level. The studies in the post-merger implementation (PMI) literature do not look into process-level alignment; considering the possible insights it could provide, this research identifies this gap in the literature and focuses on the process-level IS integration.

M&A activities involve several phases. The BIA at these phases could pan out to be diverse, in line with the business activities and related IT activities. In this study, alignment is conceptualised as a continuum that needs to be managed at each phase considering the M&A phases. Though research has identified the need for alignment, the alignment at the M&A phases has not been studied. This research is about understanding the alignment at different phases of the M&A activities and its influence on the IS integration success.

Also, when two business processes of merging organisations need to be integrated, research indicates that there is little time for due diligence and integration planning (Mehta & Hirschheim, 2007) as IS personnel is often not involved in the pre-merger negotiations (Mehta & Hirschheim, 2007; Alaranta, 2012). IS personnel are expected to reconcile the diverse ISs swiftly after the M&As deal is closed (McKiernan & Merali, 1995; Wijnhoven et al., 2006), even if they have not had enough time for planning and preparation (Mehta & Hirschheim, 2007; Alaranta, 2012). Considering the time pressure, IS personnel involved in the IS integration are motivated to use pre-existing IT resources rather than rebuild IT resources to improve post-acquisition performance (Henningsson, 2013). Thus, the M&As context is susceptible to the difficulties of misalignment from an early stage. Thus, we would like to look at alignment at all phases of the M&A activity and its effect on the IS integration success. The M&As literature identifies several phases in the M&A activity: screening potential deals, transaction, integration, and operation. This study borrows from the existing literature and considers the IS activities that happened at M&A phases. This research conceptualises the stages of alignment in line with the M&A activities and how it works to influence the IS integration success. Hence, with this interest, we frame our first research question:

■ RQ1: How does Business IT alignment at pre-merger and post-merger phases influence IS integration success?

This study identifies the M&A activities at pre and post-merger phases from the literature and conceptualises the alignment at these stages, at both the organisational and the process level. This study considers the need for alignment between organisational objectives and process level objectives in M&As, in identifying the level of integration and enabling the identified digital options. The study considers alignment steps and proposes a conceptual framework.

Along the lines of the conceptual model, the study explores the influence of the alignment on the overall integration success. The model that is developed conceptualises alignment at three stages – pre-merger BIA, post-merger BIA, and merger objective alignment. The next research question aims to understand how these alignment stages are interconnected and influence post-integration success. Hence, our second research question is as follows:

• RQ2: What is the influence of pre-merger Business-IT alignment and Merger objective alignment on IS integration success?.

The study connects the alignment stages via the digital options exercised for integration with the IS integration success. This study thus attempts to answer the above questions and provide a deeper understanding of the process-level alignment challenges and their impact on the IS integration success.

In summary, the focus of this dissertation is to conceptualise the alignment at different stages of IS integration and how it influences the IS integration success. It attempts to provide clarity on the need for studying IS integration at the process level, specifically the alignment at the process and organisational level. The study investigates how these alignments at different stages interact via digital options and influence the IS integration success.

The study develops a conceptual model connecting the alignment at different stages with IS integration success. The conceptual model is supported by in-depth case studies. This research intends to contribute to the process-level BIA in the context of M&As and also attempts to

provide clarity on the manifestation of alignment at pre and post-merger phases and also at different levels (organisation and process levels). The study aims to assist practitioners in understanding alignment perspectives and in holistically looking at alignment as a continuum. Having this big picture helps practitioners drive the integration from a perspective that circles to and fro the organisation level and the process level.

The dissertation is organised as follows: Chapter 2 presents a detailed review of the literature on M&As, IS integration in the context of mergers, the notion of BIA, and the need for studying the same at a process level in the M&As context and the role of digital options. This is followed by an illustration of the research gap that is being addressed in the present study. Chapter 3 presents the conceptual framework that guides the research and Chapter 4 illustrates the research methodology; in particular, the data collection and analysis process. Chapter 5 elaborates on the findings from a within-case analysis of the collected data, followed by a discussion on cross-case analysis in the subsequent chapters, highlighting some propositions in response to the research questions. Finally, the concluding chapter describes the contributions of the study, its limitations, and guides towards possibilities for further research.