International Journal of Information Management 33 (2013) 390–400

Contents lists available at SciVerse ScienceDirect

International Journal of Information Management

journal homepage: www.elsevier.com/locate/ijinfomgt

Reconciling two approaches to critical success factors: The case of shared services in the public sector

Mark Borman [a,*], Marijn Janssen [b]

[a] The University of Sydney, Australia
[b] Delft University of Technology, The Netherlands

ARTICLE INFO

Article history:
Available online 13 June 2012

Keywords:
Critical success factors
Decision making
Shared services
E-government
Case study

ABSTRACT

Shared services have been embraced by the private, and increasingly, the public sectors. Yet implementation has often proved to be difficult and the factors which are critical to success are not yet well understood. In this paper existing research in the area of critical success factors (CSFs) is examined and it is suggested that that research actually covers two distinct phenomena. One approach is focused on identifying the factors required for a specific individual to achieve their outcomes. The second on determining the general success factors for implementing a project of a certain type. A reconciliation of the two approaches is proposed within a framework that distinguishes between three different types of CSF – outcome, implementation process and operating environment characteristic. A case study of a project to implement shared services in the Australian public sector is examined using the reconciled framework. The case shows that the reconciled approach by including, and differentiating between, outcome, process and operating environment characteristic factors provides a richer and more complete picture of requirements. Further benefits from the synthesis are also highlighted including that factors are a mix of universal and context specific, different perspectives on factors exist and not all environmental factors perceived to be critical have to necessarily be present.

1. Introduction

While many definitions of shared services with slightly different nuances exist – see Schulz and Brenner (2010) for an extensive review – the fundamental essence remains broadly the same. A shared service is one where the provision of a back office service – such as payroll processing, accounts payable or foundational IT services – is consolidated within a single area of an organization (Longwood & Harris, 2007; Quinn, Cooke, & Kris, 2000; Ulbrich, 2006). It typically replaces arrangements where there is a duplication of efforts among different business units. Initially the focus for the introduction of shared services was the private sector and there are some well-known success stories. Bergeron (2003) provides the example of Bristol Myers Squib's global business service unit realizing annual savings of $1.5 billion through shared services while Cecil (2000) cites Ford being able to reduce its finance department staffing from 14,000 to 3000. More recently the potential of shared services in the public sector has started to be investigated (Janssen, Joha, & Weerakkody, 2007; Niehaves & Krause, 2010; Ulbrich, 2008). Janssen and Joha (2006), for example, suggested that shared services can offer multiple benefits such as reducing costs, improving access to innovation and allowing an increased focus on core operations. Yet, it is also being realized that shared services success is not guaranteed. Wagenaar (2006), for example, detailed the failure of a major shared services initiative in the Netherlands. More recently the government in Western Australia cancelled a project, based on the implementation of a common ERP, to merge finance and payroll processing services across multiple departments. The project, started in 2007, had been estimated to cost AU$82 million and deliver annual savings of AU$57 million. However by the time of termination AU$401 million had been spent (Kerr, 2011).

Shared services are of specific interest from an information systems (IS) perspective not only because of their direct potential with regard to IT services but also because – as highlighted above – many other services such as payroll processing or accounts payable are dependent upon IS for their delivery. The IS academic discipline increasingly recognizes the merit of looking beyond the IS itself to examine the functions and activities that are enabled by IS – see for example Willcocks, Lacity, and Cullen (2007), Leonardi and Bailey (2008), or Hagel and Seely Brown (2001).

Given the potential benefits and risks associated with implementing shared services this paper seeks to provide a framework that can enable a proposed project to be rigorously assessed before the decision to proceed is taken. It has been suggested previously

* Corresponding author.
E-mail addresses: mark.borman@sydney.edu.au (M. Borman), m.f.w.h.a.janssen@tudelft.nl (M. Janssen).

0268-4012/$ – see front matter © 2012 Elsevier Ltd. All rights reserved.
http://dx.doi.org/10.1016/j.ijinfomgt.2012.05.012

that the implementation of shared services represents a *strategic* decision (Bergeron, 2003; Su, Akkiraju, Nayak, & Goodwin, 2009). One of the criteria suggested by Eisenhardt and Zbaracki (1992) to classify decisions as strategic is the scale of the resources being committed and there appears little doubt that the shared service examples provided earlier satisfy that criteria. As such the strategic decision making literature could be a good starting point to look for a suitable framework. Strategic decisions typically are not simple with clear objectives, boundaries and considerations but are rather a complex "mess" (Ackoff, 1979). Often multiple criteria and variables need to be incorporated and balanced (Belton & Stewart, 2002). Yet it has long been recognized that decision makers are poor at handling such complexity (Duhame & Schwenk, 1985; Malhotra, 1982). Indeed there is a long tradition of research arguing the need for simplification. Simon (1957) for example argued that "the description of the real-world situation is radically simplified until reduced to a degree of complication that the decision maker can handle" (p. 170). Miller (1956) suggested that decision makers have a limited information channel capacity and can only effectively incorporate consideration of a limited range of variables. Research by Hodge and Reid (1971) argued the need for focus finding that the provision of irrelevant information to a decision impeded the ability to identify and assess relevant information and thus reduced decision making performance. A focus on *critical success factors* (CSFs) could be an appropriate simplification vehicle. While Daniel (1961) is credited with first developing the concept of CSFs, Rockart (1979) popularized it. He defined CSFs as the *few key areas* in which favourable results will ensure successful competitive performance. The intention was to identify the structural variables that most contribute to the attainment of strategic goals and objectives. The CSF approach was originally developed to assist managers determine their information needs – but has since been ported to a wide variety of contexts. It has, for example, been used to examine business process management (Trkman, 2010), the adoption of e-banking (see Shah & Siddiqi, 2006 for an extensive review), e-Government implementations (Sagheb-Tehrani, 2010), the deployment of mobile applications (Al-Hadidi & Rezgui, 2009) and the alignment of information systems and business plans (Teo Thompson & Ang James, 1999). It does not appear however to have been applied to shared services. It is suggested here that taking a CSF focus could be beneficial when making a decision regarding whether or not to introduce shared services.

However before applying CSFs it is seen as necessary to provide some clarity regarding the approach itself. The work of Rockart (1979) on CSFs was further developed by Bullen and Rockart (1981) but appears to differ from much of the subsequent work in the area in three key ways. Firstly, Bullen and Rockart (1981) concentrated on uncovering what *outcomes* were necessary to achieve desired objectives. Specifically they were interested in identifying what information needed to be delivered to executives in order for them to do their job. Later work however has typically focused on determining the requirements to *implement* projects. Secondly, while Bullen and Rockart (1981) suggested that CSFs are *context specific* – "CSFs are the particular areas of major importance to a particular manager in a particular division at a particular point in time" (p. 3) – other research often appears to be oriented, either implicitly or explicitly, toward identifying *universal* factors. Thirdly, and relatedly, Bullen and Rockart (1981) examined CSFs from the perspective of the *individual* seeking to identify those of specific executives. Later work by contrast has focused on CSFs from a broader, anonymous, perspective identifying general sets associated with *projects*, such as successful alliances (Rai & Borah, 1996) or systems implementations (Wixom & Watson, 2001), rather than individuals. In short, there are two approaches. One focused on outcomes individuals and specificity the other on process, projects and universality (see Table 1). Interestingly the second approach does not appear to have emerged as a result of criticisms of the original but simply as a different interpretation of the underlying concept of critical success factors. Even Rockart appears to have participated in this reinterpretation to some degree (see Rockart, 1982).

Rather than choosing one approach or the other this paper proposes that the usefulness of CSFs would be enhanced if *both perspectives* were to be combined. Such a reconciliation will allow for consideration of the necessary outcomes of an initiative and the requirements for delivering it, individual and overarching perspectives and a recognition that some factors may tend toward being universal in nature while others will be more context specific. The paper also puts forward two enhancements. Firstly, that a third type of CSF – relating to an organization's operating environment – that has been implicitly considered by both approaches should be explicitly separated out. Secondly, that including missing CSFs in deliberations would be beneficial.

The paper contributes to the literature in two ways. Firstly it identifies specific factors perceived as being critical to a successful implementation of shared services which may provide guidance to others. Secondly, and perhaps more important in the long run, is the reconciliation of the two different CSF approaches.

The remainder of the paper is structured as follows. The next section presents the rationale for the proposed CSF reconciliation. Section three briefly describes a case study of a project to implement shared services demonstrating the application of the reconciled CSF approach and identifying specific CSFs. Section four discusses that empirical work and the final section provides conclusions, limitations and suggestions for future work.

2. Critical success factors

The original concept of CSFs quickly gained acceptance among both academics and practitioners and was utilized in a variety of industries such as manufacturing, health care and aeronautics (Bergeron & Bégin, 1989). As the concept subsequently morphed to focus on factors key to the process of successfully implementing projects it retained its value due to the high failure rates encountered on such projects and the desire to understand how the chances of success can be improved (Pinto & Mantel, 1990; Poon & Wagner, 2001; Umble, Haft, & Umble, 2003). This paper proposes that the value of CSFs will be enhanced if the two approaches are reconciled. Such a reconciliation is seen as desirable for two principal reasons. Firstly each approach on its own gives only a partial perspective – and a project's success requires ensuring it is both focused on delivering the right outcomes and is implemented successfully. While it could be argued that this problem could be

Table 1
Summary of differences.

CSF characteristic	Original perspective	Subsequent perspective
Focus	Outcome	Implementation process
Generalizability	Context specific	Universal
Level	Individual	Project
Examples of research	Rockart (1979), Munro and Wheeler (1980), Bullen and Rockart (1981), Boynton and Zmud (1984), Leidecker and Bruno (1984), and Bergeron and Bégin (1989)	Pinto and Mantel (1990), Poon and Wagner (2001), Angeles et al. (2001), Umble et al. (2003), Lu et al. (2006), and King and Burgess (2006)