Public sector information system project failures: Lessons from a New Zealand hospital organization

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Abstract

Information system (IS) project failures are so common as to be almost expected by planners. There is an expanding literature on IS project failures including both theory and case studies. This literature, however, is largely derived from private sector IS failures, despite the fact that the likelihood of failure appears higher in the public sector. This article seeks to fill the public sector case study void. It details the failure and abandonment of a large New Zealand public hospital IS development. The case corroborates findings from the private sector literature, namely that ill-planned and managed, large and multifaceted projects are more likely to fail and that contextual issues are highly influential. It also shows how much more complex project commissioning and development is in situations of public governance where political and organizational elements come to the fore. Finally, the article offers lessons for public sector IS planners.
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1. Introduction

As various assessments have found, information system (IS) project failures are almost so common as to be expected by planners. It is estimated that around 20–30 percent of projects are total failures and abandoned. Around 30–60 percent partially fail, with time and cost overruns or other problems.[54,55] The minority of projects succeed. A recent Standish Group study found success in only 29 percent of projects.[54] Failures appear to be more common in the public sector where the Royal Society of Engineering and British Computer Society found that 84 percent of projects fail.[52] The costs of failures are tremendous. Across both the public and private sectors, around $US150 billion is wasted per annum on IS failures in the United States and $US140 billion in the European Union.[11]

There is an expanding literature on IS project failures including both theory and case studies. Some of the literature is aimed at identifying 'factors' or 'variables' that underpin successful project management and failure avoidance, including technical, managerial, planning, resourcing, and environmental factors (e.g.,[24]). While providing a useful checklist for planners, critics of the factor approach suggest that it is too static and focused on project control; that important factors differ across projects; and that the approach fails to account for the dynamics of social, organizational, and political life that surround any IS project.[7,34,41] Thus, there is also literature that seeks deeper understanding of processes and contextual issues contributing to failure in individual cases. Again, 'factors' are involved, but these tend to be broader in scope and inclusive of the nuances and dynamics of individual projects. This literature focuses on issues such as the organizational and project history and the political, social, and economic context surrounding the IS project (e.g.,[7]). IS project failure literature, however, is primarily based on private sector studies. There is an almost complete lack of public sector IS failure case studies, despite the higher incidence of failures.

This article seeks to fill the void. It details the failure and abandonment of a large New Zealand public hospital IS development resulting in the waste of at least $NZ18 million ($US13million). The discussion draws on several thousand pages of documents, including reports, correspondence, and meeting minutes, obtained from involved organizations under New Zealand's Official Information Act. The case corroborates findings from the private sector literature, namely that ill-planned and managed, large and multifaceted projects are more likely to fail and that contextual issues are highly influential. It also shows how much more complex project commissioning and development is in situations of public governance where political and organizational elements come to the fore. The next section describes the IS failure and is followed by a discussion. Finally, the article considers lessons from the case for IS failure avoidance.

2. The case study

When the failure discussed in this article occurred, Health Waikato Limited (HW) provided hospital services across several sites to a population of 300,000. Under devolved governance arrangements, HW was guided by a politically appointed Board. In 1998, HW purchased a