

Chapter 18

A Process Architecture Approach to Manage Health Process Reforms

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ABSTRACT

Business Process Management (BPM) is often perceived as a top priority concern in organisations; both in public and private sectors. This has been clearly noticed in the Australian health care sector, evidenced by the Australian Government's commitment to pursuing a reform agenda that reflects a new approach to improving health and aged care services. The adoption of a business process management approach can be a key tool to facilitate health reform in the public and private sectors. This approach provides a structured and hence rigorous approach to ensure that health processes are reviewed, improved and implemented consistently throughout the organisation, especially where public health services are provided from multiple service points. Process modeling is an embedded component of most BPM initiatives, yet a resource intensive task. How process models can be derived efficiently (i.e. with less resources and time) and effectively (at a high quality to meet the specific needs) is an integral element of interest to most organisations, however, this area of research is still in its infancy. This paper aims to address this gap by proposing a 'process-pattern' based approach to process modeling where models are created and managed within a 'process architecture'. The process pattern approach is explained with evidence from a large state based health organisation using an integrated risk management process for health care service management as an example. The study employed an action research approach and the chapter unfolds its findings around the main phases of the research method. The contributions from this work are twofold. From the perspective of practice, it offers a validated high level example of a process pattern for an Integrated Risk Management Program for health. From an academic perspective: it presents a validated Risk Management process pattern for delivering health services which can be used as or a benchmark in further research.

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INTRODUCTION

Australia's growing health demands are creating new challenges for governments at the national, state, territory and local levels (Minister of Ageing, 2008). The Australian Federal Health Department intends to spend \$51.8 Billion dollars on National Health initiatives in 2008-2009 through the National Health and Hospitals Reform Plan. The aim is to improve the capacity of the states and territories to deliver health services when and where the citizens (in particular, working families) need them. The current Australian Health Care Agreements will be extended for 12 months with an extra \$1 billion in provided funding. New agreements will be finalised by the end of 2007, with opportunities for major reform (Department of Health and Ageing, 2007). One of the major challenges to implement the intended reforms relates to how Hospitals are currently organized using logical groupings (functions) of clinical specialties instead of being grouped according to process groupings. Taking a process-oriented approach to improving processes can be challenging as these processes need to cross the traditional functional boundaries in order to realize process efficiencies (Vera, A. & Kuntz, L. 2007).

The adoption of a Business Process Management (BPM) approach can be a key tool to facilitate health reform in the public and private sectors. Business Process Management (BPM) provides a structured and consequently a rigorous approach to ensure that health processes are reviewed, improved and implemented consistently throughout the organisation, especially where public health services are provided from multiple service points.

BPM in general, includes methods, techniques, and tools to support the design, enactment, management and analysis of business processes (van der Aalst et al., 2003). One of the key concerns and challenges when applying BPM is the lack of accepted methodologies, and resources to guide these initiatives (Larsen and Myers, 1998; Murphy

and Staples 1998; Amoroso, 1998; Indulska et al., 2006). A common BPM methodology that can be utilised and catered for all specific contexts is yet to be derived; and may not be feasible due to the complexities that each individual context brings in. However, a common aspect of all BPM approaches is the orientation towards understanding the current-processes and aim towards an improved better-process. Business process articulation in the form of high-level and detailed process models is a common component of most process improvement projects (Indulska et al., 2006; Bandara 2005). Process Modeling provides a structured and consequently a rigorous approach to ensure that all required aspects of processes are reviewed, improved and implemented consistently. However, detailed process modeling can be an expensive exercise (Becker et al, 2003), and also complex in terms of managing all the different types and levels of processes (and their models), their relationships and interdependencies. While Process Architectures are highly recommended for this (Davis and Bradander, 2007), there is a dearth of examples and information on how to implement such an approach. Addressing this gap is the main aim of this chapter.

In this chapter, we propose a Process Architecture approach where Process Patterns are used at different levels to capture and deploy s for health processes. A risk management process in the health arena is selected to demonstrate the design and application of the proposed Process Architecture concept. This research combines diverse concepts in the area of risk management, business process analysis and health treatments services. The remainder of the chapter commences by first briefly introducing these concepts. The chapter then introduces the Organisation in which this research was designed and implemented at. The paper then proceeds to provide a detailed example which demonstrates how a Process Architecture is designed and implemented (by using process patterns). The details are presented in the form of empirical evidence gathered through an action

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