Chapter 5.11

Web Services in National Healthcare: The Impact of Public and Private Collaboration

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ABSTRACT

The implementation of a national programme for information technology into the complex environment of the UK’s National Health Service (NHS) system is only the first step in a system modernisation journey for this multifaceted organisation. This article reports the findings of a two-year research study on the decline of the ASP (application service provision) industry, from which the current move to Web services was born. It combines the case of the NHS with existing literature on disparate research perspectives to explore the effects of the ‘Not Invented Here’ syndrome on an IS implementation journey. The article also suggests ways that project leaders can redirect such strong feelings about a new system to increase the chances for a successful outcome. Information systems (IS) is “an instantiation of information technology (IT), where the same information technology is instantiated in different ways” (Lee, 1999). A rich organizational and political process is required for a given set of IT to be instantiated, relying greatly upon the continual managing, maintaining, and changing of technology to sustain the instantiation. Within a rather diverse NHS environment, IS may include relational aspects like the effectiveness of system design, the timely delivery of such systems, an appropriately obtained usability training by all users, and future impact of IT in the organisational and entire society.

BACKGROUND

The National Health Service for the United Kingdom (NHS) has been responsible for the provi-
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The NHS is experiencing massive changes in the structure of information systems provision markets and organisations. The local service provision (LSP) and national service provision/provider (NSP) models, in use by the National Programme for Information Technology (NPfIT), are in a state of ferment. The payment methods borrow from both capitation and ‘fee-for-service’, and methods of utilisation management that compromise between arm’s-length review and full delegation. LSP and NSP consist of large and more complex entities. These are the result of merger, acquisition, and product diversification. The service providers involved have had to take on a visible feature of ceaseless acquisition and divestiture, integration and outsourcing, and combination and recombination. Providers of medical systems, hospital administration systems, and health plans are coming together and then coming apart. They are substituting contract for joint ownership, creating diversified conglomerates and refocused facilities, and experimenting with ever-new structures of ownership, finance, governance, and management (Robinson, 2000). These would give the NHSIA the benefits not only of a middle ground between the extremes of vertical integration and spot contracting, but also a balance of coordinated and autonomous adaptation in the face of its ever-new challenges.

The general assumption is that expenditures in the nation’s health will outpace the overall growth in the economy (Collins, 2003; Pencheon, 1998). This is reflected in the percentage of gross domestic products (GDPs) of the U.S. (13%), Germany (10.7%), France (9.6%), and the UK (7.6%) being devoted to the total cost of healthcare resources (Brown, 2002). Unlike the UK, however, some of these countries are faced with limitations in social willingness to pay. It has been documented that millions of U.S. residents currently lack the most basic insurance coverage (Institute of Medicine, 2002).

Response to Emerging Technologies in the NHS

Over the years, non-technologists in the NHS have managed to muddle through one powerful new system after another. ‘Generational strategy’ is one continuously being used to deal with some of the pressures induced by IS. Adopting such
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