Chapter 9
Aligning IT/IS with Business Strategy Re-Visited:
A View from Complex Adaptive Systems

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ABSTRACT

This paper explores the co-relational process activities of information technology and systems (IT/IS) and business strategy alignment. The notion of "process" as being strategy and strategic alignment has been observed but not examined. Organizations are both complex and adaptive, and these attributes create significant challenges for managers when assessing strategic requirements. A need exists to further understand alignment as a process and embrace this concept when aligning business IT/IS with the strategic goals of the organisation. This highlights an important distinction of "process" that recasts the nature of congruence and reassesses the appropriateness and usefulness of current practice. The authors propose the use of principles underpinning complex adaptive systems as a way to re-orientate IT/IS alignment in a meaningful and more appropriate manner. The context for the study is the UK Health Service, and informed by a case analysis of 26 senior members from a Scottish Health Board.

INTRODUCTION

Business alignment is recognized as a critical factor in business success. In simple terms, business alignment is concerned with 'linking and configuring the strategic elements, key organi-zation systems, processes and structure in such a way that their implementation achieves the organization's shared vision and results beyond expectations' (Strategic Alignment Inc, 2007). Alignment is usually supported, these days, by information, systems, and information systems, some of which may be computer based. Business alignment helps to improve business processes,

reduces operational costs, and promotes real-time visibility in business performance. In recent years, businesses have moved increasingly from centralized and closed environments to environments that are more distributed, open and collaborative or shared, in nature and scope.

As a result, business processes have become increasingly complex and dynamic as they seek to cope with a wide range of internal and external interactions and changes, which, more traditional views of strategy are struggling to explain and address fully.

One way of extending our thinking regarding IT/IS alignment is to think of businesses as eco-systems (Iansiti & Levien, 2004), and thus a set of interconnected and interdependent relationships, which relates to all activities, and in particular, IT/IS alignment. This eco-systems view supports the need for this paper and others to conceptualise IT/IS alignment from a 'process' ideological paradigm, which introduces and argues for the use of complex adaptive systems as a meaningful way to help make sense of what is happening in and during the process of IT/IS alignment. It is the intention of this paper by taking this eco-systems/complex adaptive systems perspective to assist practitioners to conceptualise and determine how to manage the complex actions and interactions that exist during IT/IS alignment.

IT/IS ALIGNMENT[1]

Given the plethora of definitions that exist, it is necessary to unpack some of the key elements of what constitutes IT/IS alignment. The concept or, perhaps more precisely, the notion of strategic IT/IS alignment, as portrayed in the academic literature, centres on three arguments, captured eloquently by Hirschheim and Sabherwal (2001):

- Organizational performance depends on structures and capabilities that support the successful realization of strategic decisions;

- Alignment is a two-way process, where business and IS strategies can act as mutual drivers;
- Strategic IS alignment 'is not an event but a process of continuous adaptation and change' (Henderson & Venkatraman, 1993).

Taking a more contemporary view, there are potentially five dimensions that can be considered in order to conceptualize IT/IS alignment fully. In effect, the five dimensions are not exhaustive, but are an attempt to explore the fact that IT/IS alignment rests in difficult terrain. A terrain typified by shifting perspectives and views, and across variables relating to intellectual, technical, operational, political, practical and strategic aspects impacting at different times and to different degrees.

The five dimensions relate to strategic and intellectual, formal structures, informal structures, social and cultural domains, taking each in turn.

1. Strategic and intellectual dimension is the state in which IT and business objectives are consistent, valid, and 'working' in harmony. The issue here is to try to separate the IS and business plans from the actual alignment model (Kearns & Lederer, 2000). The IS and business plans signal how much IT/IS staff need to know about the business and how much the business needs to know about the capacity and capability of IT/IS.

2. Structural dimension is the degree of structural fit between the technology, business processes and those who use or are served by technology. This degree of fit is influenced by the power and political base and the location of the key players who decide on IT/IS issues. Knight and Murray argue that power is at the heart of the organization, and it is not tied to individuals: 'By politics we mean the very stuff, the marrow of organizational process; by politics we mean managerial and staff concerns to secure careers, avoid

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