

# Chapter VI

## The Human Aspects of Change in IT Projects

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### ABSTRACT

*In this chapter we describe the transition phase (capability crisis) of the change process linked to health IT projects, indicate how it can be identified, and outline the ways in which we can use change management to intervene and assist people in their journey of change. Despite IT projects being considered a failure more often than not, we continue to implement IT innovations encapsulated in health information systems in healthcare services. These projects bring about considerable organizational change. Good project management includes the use of critical success factors such as change management in our attempts at ensuring success. The purpose of this chapter is to examine the ways in which we can identify (diagnose) the capability crisis and intervene (with change management) by means of learning, leadership, communication and workload management.*

### INTRODUCTION

The purpose of this chapter is to provide some insight into the way people transition from one way of working to another and the ways in which managers and leaders can assist in this transition. The principles of change are outlined from literature studies and from the events and experi-

ence of a major research project that charted the merging of the IT services of two large district health boards in New Zealand.

Health IT projects implement innovations which in turn are disruptive and result in changed organizational and individual processes, technology and relationships. In this chapter we outline the change process that most people follow and match

it to the change journey people tend to follow from the simple, known and familiar to the complex, unknown, ambiguous and uncertain future and return as we master new processes, technology and relationships. An overview of change theory and complexity theory is provided as it relates to health IT projects. These projects are notorious for their failures—the reasons for failure are explored and critical success factors outlined.

The transition phase of the change process will be covered in depth in terms of its relationship to health IT projects. Recommendations on incorporating the management of this transition are provided in terms of change management practice.

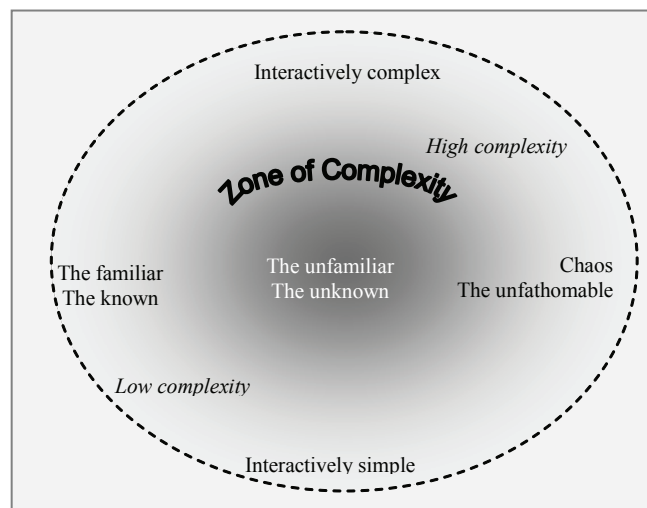
## THE COMPLEXITY OF CHANGE IN THE HEALTHCARE SYSTEM

Healthcare can be viewed as a complex adaptive system, in which many parts of the system interact interdependently in varying and unpredictable degrees with one another and their environment. The continuum of complexity ranges from simple and unambiguous with high degrees of perceived certainty, to chaos which extends beyond

complexity, uncertainty and ambiguity. Within this context, the capability to perform well is potentially at its best in the “zone of complexity” (Fraser & Greenhalgh, 2001, p. 800), as shown in Figure 1, where change is most stimulating and best received, usually in a non-linear, or illogical manner. We usually function well in the position where most of our world is reasonably certain and predictable, fairly unambiguous, familiar, mostly known and knowable, and where interdependencies and relationships are fairly simple (Plesk & Greenhalgh, 2001).

While we are in the zone of complexity decisions are no longer simple: we are in a situation that is neither simple nor chaotic. Our natural tendency is to reduce ambiguity and uncertainty by attempting to create firm plans from which to work, seeking logic and simplicity, or to strip some of the paradoxes around us by simply ignoring them. Others have found that it may be more productive to work with ambiguity and uncertainty by being reflective, learning from the consequences of our actions as we go, or creating a cycle of plan, act, review and modify as used in action research (Brydon-Miller, Greenwood, & Maguire, 2003) and in quality improvement practice (Shin & Jemella, 2002). We tend to move in and out of

*Figure 1. Change in a complex environment (after Tan, Wen, & Awad, 2005)*



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