Chapter 1
The Need for Developing Learning Healthcare Organisations

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ABSTRACT

As the volumes of data generated in healthcare delivery grows, the need for embracing big data strategies and data analytic techniques to better navigate dynamic and complex healthcare environments becomes more and more pressing. This focus has been further fuelled by the advances in technologies and medical science and the incorporation of digital health solutions that enable us to isolate genome sequencing data. However, it is the thesis of this chapter that unless healthcare organisations become learning organisations and incorporate the techniques of knowledge management and organisational learning, these large and essentially raw data assets will become a burden and not a benefit. Thus, healthcare systems need to be redesigned into intelligent health systems that maximise technology and utilise valuable knowledge assets. To do this, it is imperative to understand the link between the principles of organisational learning and knowledge management (KM) to facilitate the building of learning healthcare organisations.

INTRODUCTION

In knowledge-based organizations, knowledge is an essential element that is generated, developed and circulated by knowledge workers and through doing so business growth, sustainability and competitive advantage are enabled (Ganguly et al., 2012). In fact, many have noted that knowledge is the only sustainable source of competitive advantage for organisations (Davenport & Prusak, 1998 Davenport & Grover, 2001; Wickramasinghe, 2003, 2005; Wickramasinghe & Lichtenstein, 2006; von Lubitz & Wickramasinghe, 2006). The change in knowledge occurs both at an individual level and at an organisational level when learning takes place (Senge, 1990) which is usually when new data and

/or information are added to the extant knowledge base (Senge, 1990) .The longer-term impact of well-managed knowledge depends on the approach and systems tailored for the continuity of sharing of knowledge workers' skills and know-how (Senge, 1990) in which a significant part of this organizational knowledge is retained by the experienced employees. This is why organizations are affected when these employees leave and take with them their expertise as well as part of the organization's memory (Senge, 1990). In contrast, the ability to store generated knowledge and apply it to enhance superior decision making when required, as well as continue to build on this extant knowledge is quintessentially the domain of organisational learning (Ganguly et al., 2012). This not only ensures that the organisations horse power and intellect is applied to specific problems at all times but also ensures knowledge is not lost when knowledge workers leave the organisation. It is the thesis of this chapter that it would be prudent for healthcare organisations to develop into learning organisations and thereby, ensure that at all times the extant knowledge is applied to current problems as well as ensuring that the extant knowledge continually grows and is enriched as the organisation evolves with time. Given the current challenges facing healthcare of escalating costs, growing and aging populations as well as the rise of chronic diseases, this appears to be a prudent strategy. Moreover, given the rise of big data and data analytics, such a strategy would also ensure maximisation of current large amounts of raw data assets.

Generally, organisations have been slow to maximise the potential of their raw data asset while healthcare organisations have been particularly deficit. In the case of healthcare organisations, these data assets are generated during the care processes and are used in part to develop new treatment models and more efficient administrative processes between providers, insurers, payers and patients (Wickramasinghe and Schaffer, 2006). Given the significant volumes of heterogeneous data that are generated during the care processes and the considerable impact that these data can have on treatment outcomes, this current state of incomplete utilisation of knowledge assets is unacceptable. Creating a learning healthcare organisation requires the integration of organisational learning techniques and a process centric perspective to KM.

KM, Organisational Learning And The Learning Organisation

Knowledge management (KM) is a rapidly evolving domain aimed at addressing current challenges to increase efficiency and efficacy of core business processes while simultaneously incorporating continuous innovation. The need for knowledge management is based on a growing realisation by the business community that knowledge is central to organizational performance, and integral to the attainment of a sustainable competitive advantage (Davenport & Grover, 2001; Drucker, 1993). Such a fundamental macro-level shift also has consequent and significant implications upon both meso-level and the micro-level processes throughout organizations. Indeed the assimilation and implementation of knowledge management concepts, tools, techniques and strategies, i.e., the adoption of Knowledge Management Systems (KMS) and subsequent transforming to become a knowledge-based requires the correct choice of various tools and techniques to be applied in a coordinated fashion to all organizational operations so that knowledge driven and knowledge generating business process and activities result. To do this effectively and systematically, it is essential to have in place an appropriate KM strategy.

Siemens, affiliating with CIBIT (a Dutch knowledge management company), has developed a suitable Knowledge Strategy Process (KSP) (Hofer-Alfeis, 2003). This KSP can be used as a strategic

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