

# Chapter 11

## Learning and Knowledge Creation under Perpetual Construction: A Complex Responsive Approach to Applied Business Research

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### ABSTRACT

*Organizations are changing places where learning and knowledge creation is under perpetual construction. In order to keep pace with these changes, applied business research courses for graduate business students need to go beyond the ideology that business decision making is a tidy and rational process. To portray business decision making as a strictly goal-oriented and rational process overlooks the reality of the complexity of contemporary organizations, and this perspective may result in rigid thinking and single-loop learning. The purpose of this chapter is to present a complex responsive approach to applied business research that encourages flexible thinking and double-loop learning. The most comprehensive applied research studies in the future will be those where researchers become immersed in the research process and engage with participants in the process of learning and knowledge creation. Through this process, researchers help unleash the creative potential of the organization and gain a valuable learning experience.*

### INTRODUCTION

Today's organizations are ever changing, and the way individuals respond to these conditions influence how people solve problems and make decisions. When organizational members possess the capacity for flexible thinking, the problem solving

and decision-making process nudges the system into new rhythms as people work and cope with daily challenges. In these types of organizational environments, an atmosphere of collaboration and support develops and permeates throughout the organization as individuals interact with and adapt to one another (Stacey, 2001). Through this

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process, learning and knowledge creation occurs at individual and collective levels, and the capacity of the organization changes in positive ways and becomes more competitive.

In contrast, individuals who are rigid thinkers stall problem solving and decision-making processes, exacerbate challenges, and have difficulty thinking about things in different ways (Ashley, 2007). Changes are experienced as threats or mistakes, and the culture of these organizations becomes representative of “nonlearning, if not actually anti-learning” (Marquardt, 2002, p. 76). Opportunities for transformation are lost as members espouse the need for change but behave in ways that preserve the status quo (Argyris, 2006). These faulty reasoning and dysfunctional decision-making tendencies result in defensive reasoning mindsets and organizational defensive routines. Defensive reasoning inhibits effective response to external stimuli and blocks learning and knowledge creation (Argyris, 1990). When defensive reasoning mindsets and organizational defensive routines take hold, people over rely on single-loop learning and attempt to maintain existing patterns of relating as they persist toward proximal goals without questioning underlying assumptions or changing at the core.

In organizational settings, complexity, uncertainty, and changing circumstances create an impact on people, plans, and processes. Goldberg (2002) reports most executive leadership challenges are inherently ambiguous, and require adaptive decision-making. According to Sofo, Colapinto, Sofo, and Ammirto (2013), “*Adaptive decision-making* means having both a strategic and systems mindset with a capacity to continually adjust when dealing with challenges” (p. 15). The adaptive decision-making process involves going beyond single-loop learning and also requires double-loop learning. *Single-loop learning* is a process of detecting errors and choosing corrective action whereas *double-loop learning* involves recognizing a need for change, adjusting the basis for choice of action, and developing

new frames of reference as a result of learning, and knowledge creation (Argyris, 1976, 1990; Stacey, 2001). Proficient learners integrate both single- and double-loop learning, use adaptive decision-making skills, and positively contribute to the perpetual construction of knowledge within organizations.

Becoming a proficient learner with a flexible mindset and developing adaptive decision-making skills represent necessary competencies for 21<sup>st</sup> century business professionals. Business schools espouse the value of creating learning activities that foster this level of learning and adaptability but in practice continue to design and integrate deterministic learning activities into the curriculum, which limits opportunities for the activation of higher-order thinking and use of adaptive decision-making skills. Goldberg (2002) points out,

*In school we are given a problem and must find the correct answer. Only one correct answer usually exists. The answer is hidden. The question is clear-cut. But most real-life situations outside of the realm of narrow technical problems are inherently ambiguous. The answer is hidden, and so is the question. (pp. 77-78)*

Vaill (1996) describes a similar phenomenon while working in institutions of higher learning where he experienced a split between theory and practice in management education. “Everybody ‘knew’ business was supposed to be a boring subject, so when it turned out to be so, no one complained” (Vaill, 1996, p. xiii).

Professional business people sometimes enter graduate school programs espousing the need for growth but lack readiness to change and unwittingly hold onto existing frames of reference. Individuals with a rigid mindset and adept at organizational politics may have observed and learned these organizational defensive routines from work colleagues and believe these behaviors are normative. Defensive thinking may become a major obstacle on the path toward goal pursuit and

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