# Chapter 43 The Value of Adaption and Innovation as a Function of Diversity

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### **ABSTRACT**

When one is asked to put a diverse team together to solve a particular problem, one often thinks of diversity as differences in ethnicity, gender, social economic status, and age. However, one variable not often considered is problem-solving style. Kirton's Adaption-Innovation (AI) theory explains how some people are more adaptive while others are more innovative in their style of solving problems. Because many of today's problems are complex, if not wicked, both more adaptive and more innovative individuals need to work together on teams to solve problems so that unintended consequences of problems may be anticipated. A case study is presented in this chapter providing evidence to suggest distinguishing characteristics of those who are more adaptive or more innovative may be misattributed to nationality or culture, despite evidence of independence between these variables. Finally, Kirton's AI theory is linked to the study of leadership.

### INTRODUCTION

As humans continue to provide solutions to problems which make our society better, it is inevitable that there will be unintended consequences, producing new problems to be solved (Merton, 1936). Thus, our society becomes more complex as unintended consequences of problems solved become new problems affecting other systems. Take for example the case of adding wheels to suitcases to ease the burden of travel, especially in airports. Nowadays, one would find it difficult to imagine an airport without seeing someone pulling their luggage behind them and not think this was a grand idea. However, the addition of wheels did provide some limitations to luggage and also unintended problems we travelers have given away for others to solve. A quick comparison online between wheeled luggage and equivalent duffle bags offered by the same company find the

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wheeled luggage having 18% less capacity and being 270% heavier due to the frame needed to support the handle and wheels. Further, the wheeled luggage was 75% more expensive. Regarding the unintended consequences of wheeled luggage, people now prefer to carry luggage on the plane rather than checking luggage at the concierge. This leads to longer boarding times, which everyone complains about, but no one blames on wheeled luggage. Airlines have done their best to accommodate the extra luggage by developing larger overhead storage bins. Still, an estimated 4,500 injuries occur every year in the U.S. alone due to falling luggage (Rozmaryn, 1998).

In this example of solving the problem of not having to carry heavy luggage, the simple solution of adding wheels has created an unintended problem of taking a longer time for passengers to board the plane and increasing the chance of injury during travel. If the simple solution of wheels on luggage can change society both positively and negatively with such effect, imagine how solutions to the other more complex problems may affect our world. Often times these unintended problems affect other systems which require an understanding of these other domains of knowledge. When people try to solve the more complex problems, they assemble teams to come up with solutions with each team member providing a different perspective of the problem given their expertise in a domain of knowledge, gender, ethnicity, social economic status, etc. However, one perspective that is not often considered when forming a team to solve a problem is that of problem-solving styles (Kirton, 2011). This chapter will examine Kirton's (1976) measure of problem solving style as it relates to his theory of Adaption and Innovation (AI), and why it should be a variable of consideration when leading teams to solve complex problems, and anticipating imminent problems to be solved arising from unintended consequences.

### **BACKGROUND**

Our western culture is currently focused on innovation. So much so that innovation has become a buzz word found in many television advertisements indicating how a company is better and more forward thinking through integrating new technologies and having breakthrough ideas. Consultants hired to facilitate innovative thinking within organizations will tout "innovate or die" (Oxford, 2013). This, however, wasn't always the case in the western world. Before World War II large companies were not sources of "outsidethe-box" thinking or paradigm breaking ideas to integrate systems for the purpose of being different than everybody else, but were sources of improving efficiency, "inside-the-box" thinking, and honing infrastructures to increase productivity (Chandy & Tellis, 2000). Inventions cherished during this time of our history include the assembly line, mechanized agriculture, and electric lighting. By Kirton's (2011) definition, these inventions were not innovative, but more adaptive (Kirton, 2011). The differences between the two will be discussed in the next few paragraphs.

The word innovation means many things to many people in our current popular culture, but in academia, and training outside of academia, we must appropriately define the word as a variable so that we can isolate it, measure it, and make conclusions about its significance with respect to the many other variables associated with human behavior and organizational change. Researchers often define innovation as a new idea, method, product, or a process in which something new is developed (Gopalakrishnan & Damanpour, 1997). Rogers (2003) defines an innovation as an "idea, practice, or object that is perceived as new by an individual or other unit of adoption" (p. 12). It seems the common theme among definitions of innovation is the characteristic of being "new." 17 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

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