

# Chapter 14

## Artificial Intelligence: The Missing Link Between Leadership and Knowledge Management

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### ABSTRACT

*Machines have emerged as intelligent players and are set to replace skilled practitioners in various fields. So, what would be a leader's contribution be if machines do the decision making? The chapter addresses this question by proposing that artificial intelligence will act as a catalyst enabling managers and leaders in the process of knowledge management. Further, the chapter aims to bring together the three constructs of leadership, artificial intelligence, and knowledge management and try to theoretically establish a relationship among them. The work is immensely relevant to the Indian context given the fact that at its current stage of development, artificial intelligence has the potential to add \$957 billion to the country's economy by 2035. Thus, the chapter will emphasize the relationship between leadership and artificial intelligence and how it supports knowledge management in organizations and influences its everyday decision making.*

### INTRODUCTION

Times are tough for organizations in today's business scenario. The decrease in funding from traditional revenue streams coupled with intensely competitive markets have taken their toll on them (Santora *et al.*, 1999). This has forced organizations to search for the competitive edge within and the answer lies in leadership. Leader is a person who influences the behavior, attitude, and values of the employees towards the long-term goals of an organization. King (1990) tried to bring together the previously proposed theories on leadership under one roof and developed an evolutionary tree of leadership theory. Nine

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phases of evolution of leadership were identified starting from the first era of personality and traits to the ninth era of transformational leadership. Authors have also indicated that leadership is a significant determinant in the performance of organizations thriving on research and development (Keller, 1992). The study found that leadership predicted higher project quality, especially for research and development related projects. Findings suggested that effective leadership inspires a sense of mission and objective, stimulates out of the box thinking and encourages people to do something more from what they are normally required to do. Talking of leadership, research suggests that one of the key attributes of effective leadership is managing knowledge in a way that leads to creating and sharing knowledge within an organization and this type of leadership style is defined as transformational leadership (Chi *et al.*, 2012). Effective management of knowledge is being considered as a critical success factor for contemporary organizations. Previous works have recognized the immense importance of knowledge management in organizational performance, whether contingent or universal (Alavi & Leidner, 2001; Becerra- Fernandez & Sabherwal, 2001; Kalling, 2003). An indispensable part of a leader's responsibility is to take decisions. There was once a time when machine was considered a 'moron' and the decision maker was supposed to be bright to take informed decisions. But today machines have emerged as key players and are all set to replace skilled practitioners in various fields. So what would be a leader's contribution if machines do the decision making? The present work of research addresses this question by bringing together the two critical success factors of leadership and knowledge management and a contemporary concept of artificial intelligence and tries to understand how leaders in contemporary organizations can better manage knowledge with the help of artificial intelligence.

## **BACKGROUND**

Over the years, there has been extensive research on leadership in different contexts and various theoretical foundations (Hogan & Kaiser, 2005; Horner, 1997; Yukl, 1989). These studies have brought out the phenomenal importance of leadership in organizations terming it as the single most important issue in human sciences. The studies clearly bring out the difference between good and bad leadership by suggesting that good leadership promotes effective team performance while bad leadership degrades the quality of life of everybody associated. Hence it can be concluded from these studies that leadership is hugely consequential for the success of not just organizations but also its employees. Not just well-being and success of employees, leadership has a direct bearing on the creativity and innovation capabilities of employees. This has been substantiated by previous studies where leadership has been studied as an umbrella terms and various mediating and moderating variables have been studied under the holistic term of leadership viz., transformational, transactional, empowering, authentic, ethical and servant leadership (Chen & Hou, 2015; Chiniara & Bentein, 2016; Hughes *et al.*, 2018). All the above studies examine the consequential importance of leadership whether ethical or servant, for creativity and innovation in organizations, for employees and overall achievement of organizational outcomes. Further mediating variables like attentive focus on employees and climate for innovation have been identified as catalysts which enable leadership in organizations to influence positive outcomes.

All these studies mentioned above, focus on leadership and its effects on organizational outcomes, performance, creativity, and innovation with the help of mediating and moderating factors. These are more or less generic factors which are applicable in all times. But if we look at the changing times and the changing ways in which organizations function, especially with the rising popularity of knowledge

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