

Chapter 9

Incorporating AI in Educational Leadership: Trends and Innovations

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ABSTRACT

This book chapter explores the integration of AI tools into higher educational institutions and uncovers the current trends in utilizing AI tools by educators and educational leaders. Via an interview, the research data was collected from six higher education leaders. Five themes emerged answering the three research questions. The themes highlighted the current practices of AI in Omani higher educational institutions, explained the perceived effects of AI tools on learning, teaching and educational leaderships, and pointed to AI-related challenges. Additionally, the interviewees proposed some strategies to overcome the challenges and recommendations for future implementations of AI. In light of the findings, it becomes clear that AI use in education is unavoidable. Thus, it is recommended that educational leaders offer on-going training to all concerned staff, encourage the participation of educators in making decisions regarding the appropriate application of AI as well as developing guidelines to address the ethical concerns.

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1. INTRODUCTION

The term Artificial Intelligence (AI) typically refers to computing systems that emulate human capabilities (Russell & Norvig, 2020). This technology is driving significant changes, particularly in the field of education. AI encompasses a range of technologies, including machine learning, data analytics, and natural language processing. These are considered vital tools capable of revolutionizing educational leadership. These innovations not only facilitate the adoption of innovative teaching methods but also enhance decision-making processes. Indeed, the level of success in educational institutions is prominently influenced by the competency of the leaders as the head of academic administrator. Leaders in educational institutions usually have numerous responsibilities and even expanded duties to empower especially the staff working under their supervision. They act as academic facilitators between the faculty governance, the needs of staff to be appropriately equipped to work in a successful manner with numerous interests so as to promote the mission of the institution and the academic unit they are heading. These educational leaders need to effectively participate in realizing various policy and principles related to the vision and mission of integrating artificial Intelligence (AI) into higher education. Thus, it became a main interest of this study to investigate the influence of AI on educational leadership at higher education institutions in Oman.

1.2 Overview of Artificial Intelligence (AI) in Omani Higher Education System

In the context of Oman, the integration of artificial intelligence (AI) into higher education systems has emerged as a transformative force. AI can improve learning experiences and streamline administrative tasks. Leadership has a great influence on organizational effectiveness in higher education. In Oman, leadership is an organizational management issue that has gone through rapid research and development, enabling institutions to focus on developing critical thinking skills and fostering innovative curricula. The interest in the issue is not surprising as leadership practices have become ideal measures of progress and prosperity for the improvement of educational institutions.

Thus, one's ability to serve as an effective leader within an academic institution represents a great challenge in the world of higher education. Moreover, the implementation of AI within leadership frameworks can facilitate making decisions and reflect on overall educational landscapes. Studies show that educational leaders dedicate great support to their faculty members and students' learning, along with developing numerous skills. Therefore, in Oman, the entrepreneurs and policymakers are in need for adaptive strategies that align with both cultural and global educa-

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