

Chapter 11

Reskilling and Upskilling the Workforce for the AI-Driven World

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ABSTRACT

The rapid emergence of artificial intelligence (AI) is altering the workplace, making traditional knowledge sets insufficient for success. This study reveals the crucial skills required for diverse generations of workers to succeed in an AI-powered future. The emphasis is on human strengths that complement, rather than replace, AI, such as critical thinking, problem-solving, creativity, communication, and flexibility. This study delves into the importance of skills across different age groups within the workforce that helps them to compete in a competitive environment. The findings aim to equip educators with the knowledge to design targeted educational initiatives that cultivate these essential skills in future generations. Organizations, too, will benefit from insights on how to develop training programs to ensure their existing workforce is well-equipped to collaborate effectively with AI and navigate the ever-evolving work landscape.

INTRODUCTION

The rapid advancement of artificial intelligence (AI) is ushering in the “fourth industrial revolution” (Leopold et al., 2016), drastically transforming the professional environment. Traditional skill sets are becoming insufficient, forcing organisations to create new competencies for competitiveness (Wirtky et al. 2016). One key part is to provide their personnel with the skills required to thrive in this changing climate.

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According to studies, a considerable chunk of the global workforce (estimated at 40% by 2025) will require reskilling. These skills are likely to include critical thinking, problem solving, creativity, communication, and flexibility - human strengths that complement, rather than compete with, AI.

The necessity for reskilling is underlined in studies. The World Economic Forum and Boston Consulting Group (2020) estimate up to one. The necessity for reskilling is underlined in studies. According to the World Economic Forum and the Boston Consulting Group (2020), automation would require the reskilling of up to 1 billion jobs by 2025. Similarly, the McKinsey Global Institute (2017) emphasises the need of developing human qualities such as critical thinking and problem solving. Upskilling existing personnel has various benefits, including increased morale, a learning culture, and a larger talent pool. A recent Harvard Business Review article (2023) emphasises the strategic importance of reskilling, which enables businesses to adapt and retain valued talent.

As, the exponential growth of artificial intelligence (AI) is causing a paradigm shift in the workplace, ushering in “Industry 4.0” (Schwab, 2017). This demands a large-scale reskilling initiative, as old skill sets become obsolete. Businesses must prioritise the development of human-centred competencies in their workforce, such as critical thinking, problem-solving, and creativity, as these complement rather than compete with AI (Brynjolfsson and McAfee, 2011). This strategic investment, as echoed by Deloitte (2023) in their report on the future of work, promotes a culture of continuous learning, boosts employee morale, and, most importantly, cultivates a future-proof workforce capable of thriving in the face of technological disruption (Carney, Seamans, and Burrus, 2019).

Some Important Soft Skills of Modern Period

Soft skills are non-technical skills that describe how you work and interact with others. They are different from hard skills, which can be learned in a course. Soft skills are often built through experience (Kaplan 2023). Time management, communication, adaptability, problem-solving, teamwork, creativity, leadership, work ethics, interpersonal skills.

Research Methodology

This research focuses on a theoretical review of existing research papers and newspaper articles to analyse the discourse surrounding core description skills development and reskilling/upskilling in the context of an AI-driven workplace.

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