

ARTIFICIAL INTELLIGENCE AND HUMAN RESOURCE: SOME SIGNIFICANT RESEARCH GAPS IN INTEGRATION AND FUTURE RESEARCH OPPORTUNITIES

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INTRODUCTION

In the era of digital transformation, the organization's most valuable asset is its human resources, which requires special care. The objective of human resource development in the digital age is to advance both individuals and organizations. The presence of artificial intelligence in the current digital era has raised many questions. On one hand, artificial intelligence has a positive impact on the organization or business, while on the other hand, its presence is viewed as a threat that has the potential to replace humans. The scope of artificial intelligence extends beyond the application of technology to the industry in value creation and productivity enhancement. However, technology cannot create business value if the issues in the industry, particularly those related to human resources, are not well understood and studied. Humans and technology complement one another, and the effects of the integration of human resources and artificial intelligence must be identified. Humans are influenced and challenged by artificial intelligence in certain activities such as building trust, enhancing interpersonal skills, and increasing productivity and returns. All of these factors, however, necessitate the improvement of human resource skills to adapt to technological change; consequently, artificial intelligence raises many questions and poses a dilemma for human resources in organizations regarding the potential or future benefits, consequences, and impact of artificial intelligence. To enhance capabilities, artificial intelligence requires that human resources possess digital expertise. Utilization of technology will allow members of an organization to work optimally, thereby enhancing performance. Hence, technology will be able to support management functions within an organization (Usman, 2022). Little empirical research has been conducted on the factors influencing the introduction of Artificial Intelligence into the talent acquisition process (Niehueser & Boak, 2020). Future research should investigate the nature of the various effects of artificial intelligence on diverse employee groups when this technology is implemented (Kshetri, 2021). Due to expanding and diverse artificial intelligence applications in human resource management, the academic literature in this field is currently dispersed (Qamar et al., 2021). Therefore, it is a timely requirement to research the integration of human resources and artificial intelligence. This study aims to identify significant research voids about the integration of human resources and artificial intelligence, particularly in the context of Sri Lanka. The main research question in this study is “What are some of the major research gaps in the integration of human resources and artificial intelligence?” The primary research objective is to identify major research gaps and suggest potential future research directions related to the integration of human resources and artificial intelligence.

METHODOLOGY

Systematic Literature Review was conducted according to the method explained in Xiao & Watson, 2017. Using Science Direct, Emerald, Taylor & Francis, JSTOR, and Google Scholar databases and the keywords "Artificial Intelligence", "AI", and "Human Resource", a systematic literature review was conducted. Only journal articles were used in this study. Abstracts of the journal articles were examined for relevance to the research topic, and studies from all disciplines were included in the literature search. Correspondingly, only studies written in English were selected for this conceptual study. The quality and eligibility of the studies were assessed by reviewing the selected journal articles.

RESULTS AND DISCUSSION

A comprehensive integration framework for artificial intelligence and human resources is needed to obtain a broad view of the issue under concertation. The following significant gaps have been identified during this study.

There's a substantial contextual gap related to this field. Researchers have found that research studies related to artificial intelligence and human resources conducted in some areas of the United States are not applicable in other areas. There's a large contextual gap in this area and further research can be conducted in different parts of the world to explore the implications of the integration. There's a dearth of research conducted in Sri Lanka related to this integration, and more studies are needed in the future. This will assist the growing economy in Sri Lanka in maximizing the use of artificial intelligence in its recovery from recession.

Culture plays a significant role in evaluating the integration between artificial intelligence and human resource. More studies from various cultures are required to understand the depth of the issue. The culture in Sri Lanka is different from other countries. The extent to which artificial intelligence is integrated with human factors may be different in Sri Lanka compared to other nations. This could be a critical area of research given the current economic conditions.

Moreover, there is an empirical gap in this area, and more empirical studies related to worker experiences, attitudes, and behavior of human resource in the integration of artificial intelligence are required. The country would benefit if this research were conducted in the context of Sri Lanka.

There is a significant methodological gap in this area of research. There is a lack of qualitative research related to this topic. A qualitative approach would provide rich insights into the issue. To understand the problem in-depth, more case-study type research can be conducted. Enablers, barriers, and challenges of integration can be explored. Thus, industry managers can prepare for future obstacles.

FUTURE RESEARCH DIRECTIONS

There is a need to assess the readiness of human resources to integrate with artificial intelligence methodologies. Further, the training, competencies, and educational needs for integration should be identified. Future research should identify the environmental factors influencing the integration as well. Additional research can be done to understand how specific tools and techniques of artificial intelligence affect human resources. Moreover, researchers should explore the effects of artificial intelligence on attributes of human resources such as attitude, behavior, organizational learning, knowledge management, and innovative performance. Ethical concerns related to the integration of human resources and artificial intelligence provide another avenue for future researchers. It is imperative to investigate how

managers at different levels perceive integration in business organizations. A qualitative approach would offer rich insights into this issue.

CONCLUSION AND IMPLICATIONS

This study has identified significant research gaps related to the integration of artificial intelligence and human resources. It has also highlighted critical future research opportunities that future researchers can utilize to contribute to the literature. Key literature related to integration has been reviewed, and significant contextual, empirical, and methodological research gaps have been identified. Important future research directions have been provided, answering the main research question of this study.

Humans possess greater capabilities than machines. Moreover, industry administrators are keen to understand, from a research perspective, the implications for the human factor during the implementation of digital systems and their effects on people. The integration of human resources and artificial intelligence should be examined from both technological and sociological perspectives. It is imperative to address the aforementioned research gaps to gain a comprehensive understanding of the issue.

Keywords: Artificial intelligence, ethical concerns, human resource

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