

Machine Learning and Artificial Intelligence in the UK Higher Education (HE); Investigating the Impact of an Integrated Model on the Organizational Performance

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Abstract

Today's world is absolutely technology driven and Machine Learning and Artificial Intelligence are one of the most promising applications of the information technology where the application is almost unlimited. In the sphere of Higher Education, Machine Learning and Artificial Intelligence are the technologies that can be used to recognize patterns in education, natural language processing and bioinformatics. Moreover, the application of these technologies enable researchers and practitioners to predict student's performance, grading of their works, improving student retentions, support teachers and staffs to manage their works better. The purpose of this paper is to investigate the impact of Machine Learning (ML) and Artificial Intelligence (AI) on the Higher education performance in terms of student learning, student's retention and improving the grading system. Existing literature mainly focused on the attributes of machine learning and there is a research void in terms of investigating them collectively and evaluating the impact on HE performance. Therefore, our research would contribute to fill in the research gap. This research has opted for a quantitative analysis and a database of the HE organizations would be used to administer a random online survey

technique for data collection from the HE organizations in the UK. Structural Equation Modelling (SEM) would be used to evaluate the conceptual model and to investigate the impact.

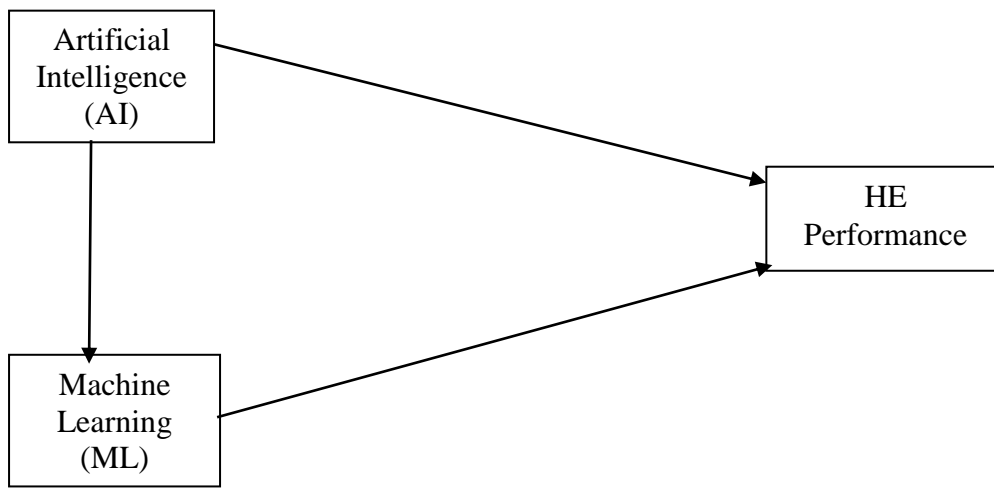


Figure: - *The Conceptual Integrated Model*

Keywords: machine learning, artificial intelligence, retention, HE performance, SEM