Digital Transformation on Higher Education: A Systematic Literature Review

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Abstract

Digital transformation (DT) has become essential to organizational change across various industries, including higher education (HE). It is characterized by integrating digital technologies into all facets of an institution's operations, fundamentally reshaping processes, culture, and strategies. DT in higher education has emerged as a critical factor in ensuring institutional competitiveness, operational efficiency, and the delivery of high-quality educational services. This transformation impacts how institutions manage administrative tasks and influence how education is delivered, experienced, and perceived by learners. This research explores the impact of digital transformation in higher education. A bibliometric analysis was conducted to explore trends in DT research within HE. This review utilizes data from 552 articles published between 2012 and 2023, sourced from databases like Web of Science and Scopus. The Biblioshiny R package was employed to analyze keyword co-occurrence, thematic maps, and citation patterns. The analysis identifies the evolution of digital transformation in higher education. Over the period 2012 and 2023, the annual growth rate of publications reached an impressive 59.92%, reflecting a rapidly expanding interest in DT in HE. Although a higher education's digital maturity is linked to the scope of its digital transformation efforts, the gap that persists in this literature consists of analysing the impact of digital transformation in higher education, namely in two complementary dimensions for co-creating value: digital management and the learner experience arising from technological absorption. The study indicates two main future directions, namely, (1) conceptual and (2) empirical models of digital transformation in higher education, capturing its management and learning experience. Future research should focus on examining the long-term effects of digital transformation on educational outcomes, engagement, and satisfaction. Moreover, it is necessary to explore how institutions can balance adopting new technologies with developing digital competencies among students and educators, ensuring that the benefits of digital transformation are fully realised.

Keywords: Digital Transformation, Higher Education, Systematic Literature Review, Bibliometric Research

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