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Evaluating critical success factors in implementing E-learning system using multi-criteria decision-making (Article) (Open Access)

Naveed, Q.N.[a], Qureshi, M.R.N.[b], Tairan, N.[a], Mohammad, A.[c], Shaikh, A.[d], Alsayed, A.O.[e], Shah, A.[f], Alotaibi, F.M.[g]

[a]College of Computer Science, King Khalid University, Abha, Saudi Arabia
[b]College of Engineering, King Khalid University, Abha, Saudi Arabia
[c]Department of Computer Science, Bahria University, Lahore, Pakistan

View additional affiliations

Abstract

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Learning using the Internet or training through E-Learning is growing rapidly and is increasingly favored over the traditional methods of learning and teaching. This radical shift is directly linked to the revolution in digital computer technology. The revolution propelled by innovation in computer technology has widened the scope of E-Learning and teaching, whereby the process of exchanging information has been made simple, transparent, and effective. The E-Learning system depends on different success factors from diverse points of view such as system, support from the institution, instructor, and student. Thus, the effect of critical success factors (CSFs) on the E-Learning system must be critically analyzed to make it more effective and successful. This current paper employed the analytic hierarchy process (AHP) with group decision-making (GDM) and Fuzzy AHP (FAHP) to study the diversified factors from different dimensions of the web-based E-Learning system. The present paper quantified the CSFs along with its dimensions. Five different dimensions and 25 factors associated with the web-based E-Learning system were revealed through the literature review and were analyzed further. Furthermore, the influence of each factor was derived successfully. Knowing the impact of each E-Learning factor will help stakeholders to construct education policies, manage the E-Learning system, perform asset management, and keep pace with global changes in knowledge acquisition and management. © 2020 Naveed et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

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MeSH: Academic Success | Computer-Assisted Instruction | Curriculum | Digital Divide | Fuzzy Logic | Humans | Implementation Science | Internet | Internet Access | Knowledge | Learning | School Teachers | Students | Teacher Training

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