

FAZLOLLAHTABAR, Hamed; ABBASI, Ali, *HEURISTIC PROBABILISTIC APPROACH FOR PRIORITIZING OPTIMAL COURSE DELIVERY POLICIES IN E-LEARNING SYSTEMS*

Abstract: The popularity of the Internet as an information source has grown extensively. Its sheer expanse and convenience is ideal to disperse information. More and more online services have now become available such as online banking, e-government, e-learning and e-commerce. Our interest lies with e-learning and in particular with the delivery of course material online. Strategic management can be understood as the collection of decisions and actions taken by business management, in consultation with all levels within the organization, to determine the long-term activities of the organization. Many approaches and techniques can be used to analyze strategic cases in the strategic management process. Among them, Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis, which evaluates the opportunities, threats, strengths and weaknesses of a system, is the most common. SWOT analysis is a significant support tool for decision-making, and is commonly used as a means to systematically analyze a system's internal and external environments. In this paper, we apply SWOT analysis to evaluate possible strategies to deliver an online course in an e-learning system. Then using probabilistic approaches we rank the strategies and select the optimal one. We present the effectiveness of the proposed approach in a case study.

Keywords: Strategic Planning; e-learning; Loss Function; Risk Analysis

ACM Classification: K.3.1, K.6.1, K.6.4