A collaborative agent based green IS practice assessment tool for environmental sustainability attainment in enterprise data centers

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ABSTRACT
Purpose; The purpose of this paper is to develop a collaborative agent-based web architecture and an agent-based green IS assessment tool to aid information technology (IT) practitioners in data centers assess their current green information systems (IS) practice toward attaining sustainability. Design/methodology/approach; The methodology comprises that the collaborative agent-based web architecture, agents' algorithm and the green IS assessment tool, which is validated by employing focus group questionnaire targeting IT practitioners in seven Malaysian-based enterprises that have an in-house data centers. With 105 valid samples at hand, descriptive analysis and exploratory factor analysis was utilized to determine the applicability of the implemented agent-based green IS assessment tool.