Modeling Academic Research Collaborator Selection Using an Integrated Model

ABSTRACT

Expert finding systems try to alleviate the information overload problem and recommend experts who can satisfy users' needs. They support researchers to find research collaborators automatically. The main challenge of current expert finding systems is that they retrieve experts based on the content of their documents but ignore the human interaction perspective. The human interaction perspective comprises the factors that influence collaborator selection decisions in real life. This study aimed to develop a collaborator selection model for expert finding systems in research universities. This model includes human capital, social capital, and cultural capital factors that influence collaborator selection. The researchers integrated the Scientific and Technical Human Capital (STHC) model and Social Capital Theory to determine these factors. The authors conducted a survey comprising 349 researchers from Malaysian research universities to validate the research hypotheses. A partial least squares structural equation model (PLS-SEM) was employed to analyze all the survey data. The empirical results revealed that the significant factors that influence collaborator selection in the research universities context were cognitive accessibility, reliability, relevance, commitment, physical accessibility, cultural experiences, complementary skills, and research experience. Surprisingly, the results revealed that network ties, relational accessibility, and reputation were insignificant factors for collaborator selection. This study proposed a research model for collaborator selection in the research universities context and provided several recommendations for the policymakers and practitioners. The model will help to provide sufficient criteria to select academic research collaborator in universities and can be used by expert finding systems designers, researchers, collaborators, and universities.