

The use of social network analysis and technology acceptance models to support enterprise-wide technology implementations

ABSTRACT

Information System (IS) implementations are a risky business with studies showing only a 16% - 29% success rate. This research explores the use of social capital to support technology implementations. This research brings together two distinct bodies of knowledge: social network analysis and technology acceptance models, in order to better understand the relationship between social capital and technology acceptance. The first aspect of the research looks at social network centrality and influence measures as an alternative means to measure social influence in the UTAUT model. The social influence construct has proven to be inconsistent in past research. An individual's decision to adopt a new technology is influenced by their social context or the informal social network within which they work. The social capital of others influences their attitudes and decision to adopt a new technology. Social Capital, as measured through social network analysis, could be substituted for the social influence construct of the UTAUT model. Two revised UTAUT models are developed and tested as propositions for this research. The second aspect of this research uses social capital measures to inform the creation of a Community of Practice (CoP) to support a Finance Management System implementation in a higher education organization. SNA can be used to gain an understanding of the social network and how individuals with high social capital can be identified. There is growing evidence that CoP support successful organizational change initiatives but it is less clear how CoP membership might be agreed. SNA provides an evidence-based approach to CoP formation. The IS implementation cases described in the paper demonstrate an innovative approach to IS implementation grounded in social capital and technology acceptance research that add to the body of knowledge in both theory and practice.