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Abstract

Group Support Systems (GSS) play an important role in streamlining group activities and improving group outcomes. Various attempts have been made to help automate certain group tasks under GSS environment. Since concept classification in GSS requires group users to manually process a large volume of brainstorming comments into concept categories, it is useful to apply artificial intelligence techniques to automate concept classification in GSS. In this paper, we focused on automatic concept classification by designing a system with a technique called singular vector decomposition to generate a list of important concepts. The experimental result showed that the system generated a comparatively good list of topics with much faster speed than human subjects. With automatic concept classification, the system could significantly reduce burdens from group users' shoulder and thus promote the usefulness and further adoption of GSS.

Keywords: Group Support Systems, Singular Value Decomposition, Data Mining, Text Mining