MASK-CO: multi-agent system based knowledge management system to facilitate knowledge sharing in construction organization environment

ABSTRACT

Multi-agent system based knowledge Management system construction organization environment (MASK-CO) is a set of agents, software and technology designed to focus and enhance the communication, deliberations, and decision-making of groups. MASK-CO is successful in improving the efficiency, reliability and quality of the group decision-making process. Knowledge management (KM) has received considerable attention in recent years. Some consider knowledge the most strategically important resource, and learning the most strategically important capability for business organizations. Major construction organizations have recognized the benefits that KM can offer and have thus invested in KM. This paper reports on a survey of these companies. The purpose of the survey was: (1) to examine the importance of KM to construction organizations; (2) to investigate the resources used to implement KM strategies. The survey found that the main reasons for implementing a KM strategy was the need to share the tacit knowledge of key employees and to disseminate best practice. In addition, significant resources in terms of staff time and money were being invested in KM. In order to resolve the problems in construction organization and promote the performance of construction organization, a MASK-CO is designed based on Prometheus Design Tool (PDT).