

ABSTRACT

Organizations are constantly facing challenges of managing their strategic resources to remain ready, resilient, and fluid. Knowledge has been widely accepted as a strategic resource and Knowledge management as a business practice has been used to create value for the organization. In software organizations, it is imperative for managers to possess diverse capabilities and take a holistic approach to capture, store, retrieve and distribute organizational knowledge. Competing successfully on knowledge requires either aligning strategy to what the organization knows, or developing new knowledge capabilities needed to support a desired strategy.

The current study has been carried out to investigate the interdependencies between business strategy, knowledge management and knowledge management strategy from a technology perspective and to develop a maturity model for Indian software organizations.

A maturity model called 'Information Technology- knowledge management maturity model (IT-KMMM)' has been developed based on the analyses of existing maturity models available in the literature and by explorative study of software organizations with specific focus of the role of information technology on their strategy. The model developed consists of five stages and three Key process areas i.e. People, Process and Technology.

To examine the progression of knowledge management endeavors, an instrument consisting of five sections and 130 questions was developed based on the maturity model (IT-KMMM). The questionnaire identifies and highlights the role of 3 key process areas and establishes 5 stages of progression to reflect the maturity level of an organization.

The instrument was tested among 345 software organizations in India. Findings have helped to measure and validate specific key process areas and the stages in the knowledge management maturity progression. Results indicate that Information technology infrastructures are highly institutionalized and software organizations prefer codification strategy over personalization strategy based on information technology tools usage. Also, there is high awareness relating to knowledge management principles, policies and strategies and use of technology decreases as knowledge management maturity increases. Significant differences between the maturity levels have been observed based on size of organizations.

To bring more conceptual coherence to the body of knowledge management and knowledge management strategy from a technology perspective, the main contribution of the research was the development of the knowledge management maturity model and the knowledge management maturity assessment questionnaire.

Keywords: Information and Communication Technology, Information Technology, Knowledge, Knowledge Management, Knowledge Management Strategies, Strategic Management.