ABSTRACT

In this dynamic world, every organization faces several competitive forces irrespective of the domain of the organization i.e. may be business or academic. Magnitude of these competitive forces varies with change in social culture, economical conditions and technological preparedness. This research is done to develop methodologies for knowledge management (KM) from a system perspective with using situations of business and academic organizations, so as to use KM as one of the strategies to compete with competitive forces.

Objectives of the thesis are to, establish the need of KM for sustainable strategic advantage, identify various KM processes and KM approaches, identify methodologies and technologies enabling KM processes, develop KM processes from system perspective and develop methodologies enabling KM processes identified from system perspective.

With the use of five forces model, an exhaustive analysis of an academic Institution has been done. This analysis shows that ICT based KM can be used as one of the strategies to achieve sustainable competitive advantage.

Knowledge in the organization resides in various layers; also the knowledge has several dimensions, which makes KM a challenging task. KM can be implemented by managing KM processes. Knowledge codification is one of the KM processes that codify organizational knowledge in reusable form. Methodologies to codify organizational knowledge, scattered throughout the organization in knowledge layers, have been developed keeping system perspective in focus.

Knowledge map is one of the methodologies, to codify organization knowledge that may be in any knowledge layer, is the central focus of the thesis. Knowledge map categorization has been given a new perspective. Knowledge map development has not been formalized yet; this issue has been addressed by proposing a formal model for knowledge map development. The use of Structured System Analysis & Design tools like Context Diagram and Structure Chart has been proposed as system and process knowledge map. The issue of codifying dynamic knowledge has been addressed by devising a new Hybrid Concept Map.