

A System Dynamics Approach for Community of Practices

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In now turbulent business environment, organizational learning and knowledge management capability has become the requisite competences to survive and win the fiercely competitiveness. Managing organizational learning effectively is the main challenge for most organizations. Community of Practices (CoPs) is one of the most effective organizational learning if organizing well. However, group learning in social interactive environment is very complex. In fact, CoPs are very complex system in which the members interact each other. Using system dynamics model to simulate the process of the members learning is a useful approach to explore the learning mechanism in CoPs. In this article we will disclose the key factors for organizing CoPs successfully based on simulation.

In the first part of this paper, the concept of CoPs and the basic operational approach is given for the purpose of following modeling.

In the second part, the key variables for modeling CoPs are identified. The level of variable using to measure the learning results in CoPs is intellectual capital. The rate variables that decide the level variable in the model is the increasing rate and devalue rate. The factors that affect the rate variables are extracted from the CoPs operating in some Chinese enterprises. The key factors considered are organizational structure, the IT infrastructure, organizational culture, the interactive mode of members within CoPs, the number of members in CoPs, frequency of interaction and meeting, the stability of CoPs, the environment of enterprises facing, diversity of membership, the percentage of knowledge transferred benefit to organization etc.. The causal loop and the interactive relationship is shown as figure one. The system dynamics modeling will be provided in the full paper.

In the third part, policy analysis is given. The focus of this part is to highlight the key factors that affect the CoPs operating result in various and at the different stage of CoPs by the modeling result.

In the final part, a case is given to validate the modeling.

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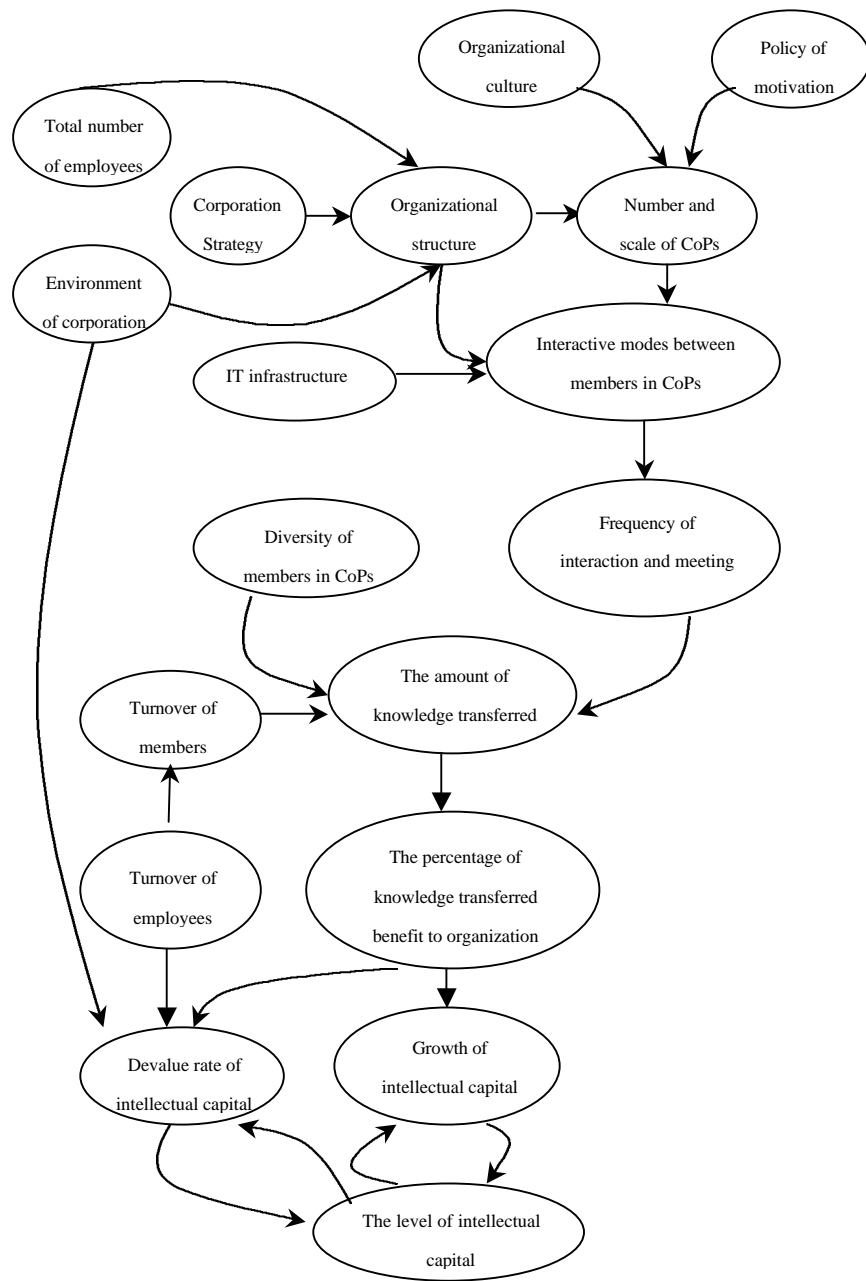


Figure one: The casual loop of intellectual capital increasing by organizational learning in CoPs