

Innovation Management in Virtual Enterprise

Xu caozhi, Xu qingrui

(Management school, Zhejiang university, Hangzhou city, China)

Postcode: 310027 Tel/fax: 86-571-87951886

Email: xucaozhi@263.net

The idea of virtual enterprises is to implement modern management-trends like “concentration to key operations”, “distributed production”, “establishing core competence” and “maximal customer orientation” with the support of advanced computer and telecommunication systems. An important feature of virtual organization is a distinctive form of a network organization in combination with a high degree of organization flexibility. The organization concept of virtual enterprises can be interpreted as an intermediate form between the poles: market and hierarchical structured enterprises. In this context transaction costs are helpful criteria for the definition of the structure of virtual enterprise.

Concentration on core competencies: in this context two categories of competencies can be distinguished. The first category denotes technical respectively project specific competencies. The second category denotes meta competencies like “experience in distributed project management” and a certain kind of “cultural flexibility”. The second category denotes technical-specific competencies.

Network orientation: Virtual enterprises form a network of independent companies, which in many cases represent a special type of a project team. The relations between the single elements depend on the type of transactions.

Organizational flexibility: Besides the network organization a maximum amount of organizational flexibility is typical for virtual enterprises. The goal is a cost “optimal” adaptation of skills and services according to the requirements of a dynamically changing market.

Technical infrastructure: The computer and telecommunication systems and services can be interpreted as the nerve system of a virtual enterprise. It is a preassumption to join a global partnership characterized by a maximum amount of flexibility and minimal production and transaction costs.

Hierarchy: One of the main interesting features of virtual enterprises is the required lack of hierarchies. This means in an ideal virtual enterprise, none of the system elements should dominate the other elements in order to maintain a maximum degree flexibility.

Project character: A further feature of virtual enterprises is the project character. Typical for virtual enterprise is the fact that with decreasing profits the network will often be resolved.

Virtual enterprise is a complex system. How to manage virtual human resource and virtual R&D? How to manage the operation from R&D to commercialization? Based on core competencies and transaction costs, the paper establish the system dynamics model for innovation management of virtual enterprise and provide some suggestions for managing virtual enterprise.