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Decision model for partnership development in virtual enterprises

CHIN-YIN HUANG* and YU-WEN WU

A virtual enterprise has been considered as a temporary consortium of companies. Recently, researchers have investigated virtual enterprises from various perspectives, such as business activities and workflows, information exchanges and their standards, organizational behaviours between companies, etc. However, real collaborative activities among companies in a virtual enterprise cannot be done before a partnership is developed among companies. Besides, though partnership is important in virtual enterprises, a decision model for partnership development is seldom studied. This research develops a decision model from a micro view (i.e. from a company's perspective). A company may use the model to specify its current partnership strategy and determine its future partnership strategy with another company. Four factors are considered in the model: the format of the relationship with suppliers, the number of suppliers, the type of service provided by suppliers and the method of service delivery from suppliers. However, a partnership strategy has to be updated based on internal and external changes. This research finds out that six factors are associated with a change on partnership. With those factors, a decision process is developed for a company to update its partnership strategy. The partnership of IBM to Acer is also investigated to illustrate the application of the model. The results validate the applicability of the decision model.

1. Introduction

To catch a transient opportunity in the market, today's companies would rather collaborate with other companies than invest in resources that might be scarcely used when the opportunity goes away, though the investment may seem right at the moment of opportunity arrival. Additionally, companies that collaborate for the specific opportunity may dissolve afterwards. Recent research has classified those temporary collaborative behaviours into a new term—virtual enterprise. A virtual enterprise is a temporary consortium of companies that come together to respond to a transient market opportunity through collaboration of their individual core competencies (including resources and knowledge) (NIIIP 1998, Strader *et al.* 1998, Zhou *et al.* 2000, Camarinha-Matos 2001).

Companies in a virtual enterprise may obtain complementary assets from partners for improving the processes of production innovation, enlarging market shares and shortening the time of product development (Teece 1996, Domberger 1998). Partner companies may also reduce their costs in research and development, procurements, production, and marketing in a consortium because the economies of scale are reached when those activities are collectively performed (Lewis 1995, Domberger 1998, Essig 2000, McCutcheon and Stuart 2000). Besides, the partner

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