Abstract

The structural position of a firm in the whole industry is one of the most important factors that affect the capability and potential of the firm. There are many financial indices that show a situation of a company, however, these measures do not reflect them in the context of its position in the industry. In that sense, social network analysis, which is one of the key techniques in research of complex relationships between members of social systems, can be used complementary to financial measures to capture a whole picture of the firm. In this research, we apply social network analysis to BtoB relation network in order to clarify how a structural position in BtoB network affects the valuation of a firm and give a road map for firms to take better position in the network.

In this research, we construct the BtoB network based on public data for listed firms in Japanese manufacturing industry. Positions in this network are clarified and firms are categorized based on social network analysis. The result of analysis is then compared with the comprehensive company valuation data published by Nikkei Inc., which consists of four perspectives: scale, profitability, safeness and growth. The result shows a strong correlation between certain measures of the BtoB network and the valuation of firms.