The Impact of Strong and Weak ties on social network of directors

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Abstract

The dissertation focuses on methodical analysis of social networks, consisting of nodes (actors) and ties (relationship) of directors of S&P 1500 companies. These social networks or for that matter every socioeconomic structure consists of acquaintance (weak ties) and close friends (Strong ties). The study investigates the impact these strong and weak ties on social network of director. The research is based on developing a weighted model of network, for which a formula was devised. In dissertation, four attributes were considered that can initiate a connection between two directors namely past employment, current employment, activity and education. Different kinds of connections between directors in network were classified in different types. Type of tie was dependent on attributes of a link or connection they shared with other director. On that basis four types (1, 2, 3 & 4) where identified in the network.

Consistent with the previous researches, it was seen that weak ties covers majority of the network, in our case it was 56.54% of overall network. It was also concluded that two directors connected with each other with more than one attribute (strong ties) were more important in the network. The trend was repeated for clustering coefficient and it was found that strong ties are more cohesive. In strong ties, two directors having a tie because of same past & current employment and a common activity were found to be more significant and formed more cohesive structure. Finally, by analyzing the network conclusions on strength of strong and weak ties are drawn.

Keywords: Social Network, Centrality measures, Director Importance, Social network analysis.