Centrality

Centrality theory pinpoints critical network nodes using its three concepts of degree, betweenness, and closeness. Degree is the node with the most ties, relationships to the other nodes. Another form is a bridge node which connects one cluster of nodes to other clusters. This is called betweenness. When one node is equidistant to all other nodes in the network, it takes the aspect of closeness centrality. In business, implementing the fastest and most efficient solutions can often be the difference between success and failure. By analyzing the most indispensable nodes, centrality provides vital information about the business.

The degree form of centrality is present in the Dawn node as it connects six separate nodes. The Haley node connects a separate otherwise inaccessible node to the main network, acting as the betweenness form of centrality. The quickest nodes to reach all other nodes are Frank and Barbara; therefore, representing closeness centrality. The Dawn node excels at redundancy and speed, but its failure would not collapse the network. The Frank and Barbara nodes links two halves of the network cluster; their removal would result in a choke point. The Haley node controls 30% of all nodes and is the bridge between clusters and its loss would separate the clusters. By removing the abovementioned nodes, the business has ties of no more than two nodes, thus severely limiting the flow of information.

Centrality provides a visual of a business hierarchy. People who lack numerous connections may be deficient as it pertains to centrality, but depending on the hierarchy, they may be imperative in an organization. As it stands in this business, Ian and Janet are most likely the vice-president and the president respectively. Dawn in all likelihood would be middle management as she communicates to over 60% of personnel. Her ties with higher level supervisors such as Frank and Garret ensure informations flows. All organizations have flaws like Haley for example, but by using the centrality concept, businesses can isolate and solve errors like these efficiently.

The ability of centrality to have multiple varied applications shows its importance. Identifying the centrality within a network allows one to mark the necessary nodes that aid in speed and efficiency. By using the different ways of measuring centrality, the most central and important nodes can be identified. Correctly identifying the most central nodes can often be the difference between success and failure. Looking at it from a business perspective, centrality can expose the company’s hierarchy by establishing connections between workers. Centrality also acts to identify and correct the flaws and weaknesses of a network or business. On any network or business model, measures of centrality show the nodes that act as the backbone of the business that, if taken out, can either make or break the business.