Social Network Analysis

Objective: To study about the various social networks and its impact Human resources management.

Social Network Data, Relations and Structures

What are networks and what use is it to study them? An Introduction - The Development of Social Network Analysis- with an Emphasis on Recent Events - Social Networks in Network Theory - Social Physics and Social Networks - Social Networks in Economics - Relational Sociology, Culture, and Agency – Fundamental concepts in Network Analysis – Distinctive features

Dimensions and Displays

Networking Online - Cybercommunities - Corporate Elites and Intercorporate - Political Dimensions of Corporate Connections Networking Online Cybercommunities - Random network models - connected components - giant component - average shortest path – diameter - breadth-first search - preferential attachment

Structural and Locational properties

Network centrality - Betweenness, closeness, eigenvector centrality network centralization (your Facebook graph, the Enron corporate email network, Twitter networks, etc.) - Community – clustering - Small world network models – optimization - strategic network formation and search - small worlds - geographic networks - decentralized search – Contagion - opinion formation - coordination and cooperation - Network Dynamics - Models and Methods to Identify Peer Effects - Kinship Network Analysis - Large-Scale Network Analysis - Network Visualization

Mathematical Representation of Social Networks

Notation for Social Network data -- Graph Theoretic Notation - Sociometric Notation p- Algebraic Notation – Two sets of Actors – Graphs and Matrices

Applications of SNA

Predicting economic development using product space networks (which countries produce which products) - Learning about cooking from ingredient and flavor