

Social Network Analysis

^[1] G Purushotham ^[2] E Teja

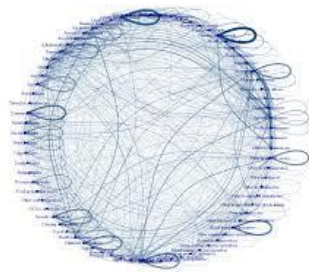
Student, NTR GOVT Degree College, Valmikipuram,
Chittoor (Dist.), AP.

Abstract:-- Social Network Analysis is a fascinating multi-disciplinary endeavor that uses techniques from complex network analysis and graph theory to study the system of relations between a set of actors. Actors are discrete individuals, or collective social units.

A social network is a finite set of actors and the relationships defined on them. Such networks are studied using metrics and techniques stemming from complex network analysis, typically involving estimating diameter, cores, groups, degree distribution of nodes, centrality measures (e.g., eigenval centrality, Google page-rank), clustering coefficient and navigability.

Keywords: multi-disciplinary, relationships, encompasses etc.

I. INTRODUCTION



Social network analysis [SNA] is the mapping and measuring of relationships and flows between people, groups, organizations, computers, URLs, and other connected information/knowledge entities. The nodes in the network are the people and groups while the links show relationships or flows between the nodes. SNA provides both a visual and a mathematical analysis of human relationships. Management consultants use this methodology with their business clients and call it Organizational Network Analysis [ONA]. ONA allows you to x-ray your organization and reveal the managerial nervous system that connects everything.



Explanation: Social network analysis is based on an assumption of the importance of relationships among

interacting units. The social network perspective encompasses theories, models, and applications that are expressed in terms of relational concepts or processes. Along with growing interest and increased use of network analysis has come a consensus about the central principles underlying the network perspective. In addition to the use of relational concepts, we note the following as being important:

- ◆ Actors and their actions are viewed as interdependent rather than independent, autonomous units
- ◆ Relational ties (linkages) between actors are channels for transfer or "flow" of resources (either material or nonmaterial)
- ◆ Network models focusing on individuals view the network structural environment as providing opportunities for or constraints on individual action
- ◆ Network models conceptualize structure (social, economic, political, and so forth) as lasting patterns of relations among actors

The unit of analysis in network analysis is not the individual, but an entity consisting of a collection of individuals and the linkages among them. Network methods focus on dyads (two actors and their ties), triads (three actors and their ties), or larger systems (subgroups of individuals, or entire networks).

Contents:

- ◆ Social network data
- ◆ Why formal methods
- ◆ Using graphs to represent social relations
- ◆ Working with network data
- ◆ Using matrices to represent social relations

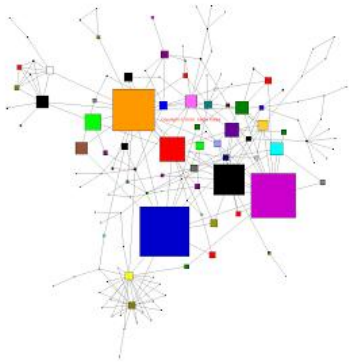
**International Journal of Engineering Research in Computer Science and Engineering
(IJERCSE)**

Vol 4, Issue 4, April 2017

Conclusion:

Congratulations!! You have learned about SNA in an example. Now, you can analyse and interpret the structure of network.

I hope this journey has opened your minds.



REFERENCES:

- www.dm.unipi.it
- Soc.sagepub.com
- www.orgnet.com
- Conclusion - Social Network Analysis sites.google.com

