

Organizational Network Analysis

Suresh Bhagavatula

NS Raghavan Centre for Entrepreneurial Learning





- Organizations are social systems with boundaries
- Like any social systems, the social networks of individual permeate within and outside the boundaries
- Who are in these networks?
 - Colleagues in the same group
 - Colleagues from other groups within the same org
 - Ex-colleagues
 - College mates
 - Perhaps friends and family





Social Capital

Since different networks contain different levels of social capital, researchers are interested in finding out:

- What are the different kinds of benefits?
- How can these benefits be captured?

Social capital operates at three levels:

- Individual
- Group / Organization
- Society / Inter organizational





Importance of networks in Orgs.

- It was found that in a consulting company with extensive data warehousing system populated by a active knowledge management software
 - 85% of the managers contacted other people for knowledge that was critical for the successful completion of the project
- Consistent finding in literature is that who you know often has a great deal to do with what you come to know





Importance of networks (Contd.)

- One reason why people talk to other people, as opposed to accessing online documents is that:
 - Tacit and system dependent knowledge is not ease to document/code
 - Even if it can be codified, changes in the context from its original use will require changes. These changes are rarely spelled out by the online sources
 - People prefer interacting with other people and like to seek information orally as opposed to seeking out written documents



Organization Network Analysis

Org communication : Formal & Informal

Formal networks : are mapped

Informal networks : are not mapped

ONA helps in mapping informal networks





Act as X-ray into inner workings of an organization

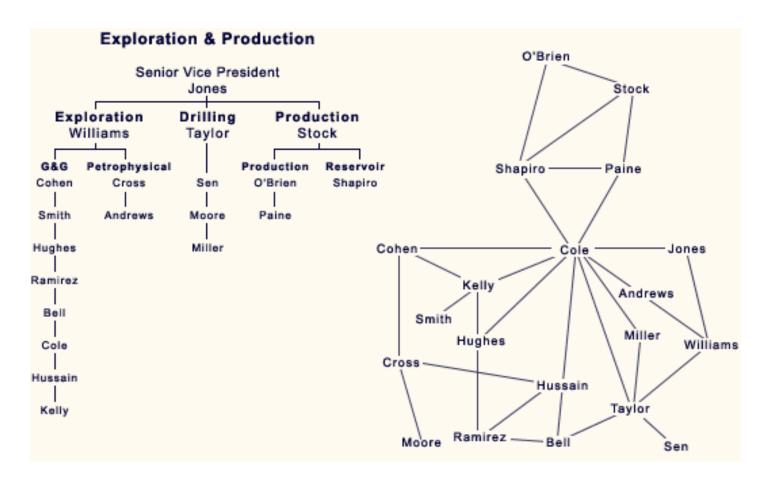
Makes invisible patterns of information flow visible

Identify strategic important groups





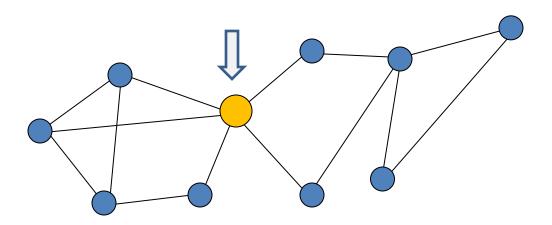
Organizational Networks







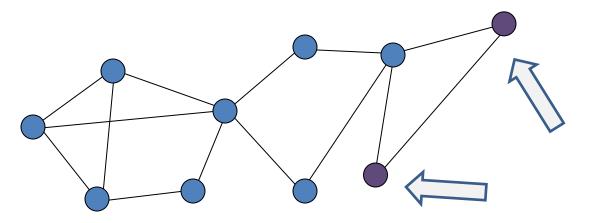
 Identifying people that are central in networks who can impact a group's communication can help a manager to take steps to improve communication







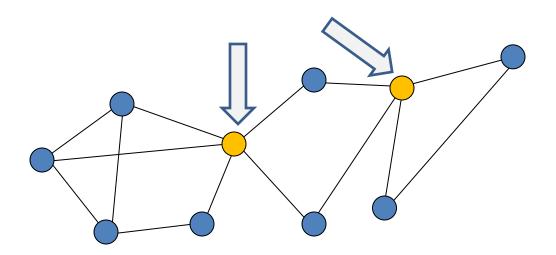
- Understanding who is peripheral and crafting ways to engage these persons ensures
 - all the expertise that exists within groups is utilized
 - Lesser employee turnover







 Identifying potential fragmenting junctions in organizations can help integrate disparate groups







Methodology

- Used a "name generator" instrument
- Was first used by Burt in the 1985 GSS a nation wide survey to identify personal networks of Americans
 - From time to time, most people discuss important matters with other people. Looking back over the last six months – who are the people with whom you discussed an important personal matter? (Baily and Marsden, 1999, pg. 288)
- In this study, this instrument was used for three different networks
 - Work related communication networks
 - Innovation communications networks and
 - Problem solving networks





 Results of a study conducted in a IT services company based out Pune, Mumbai and Chennai



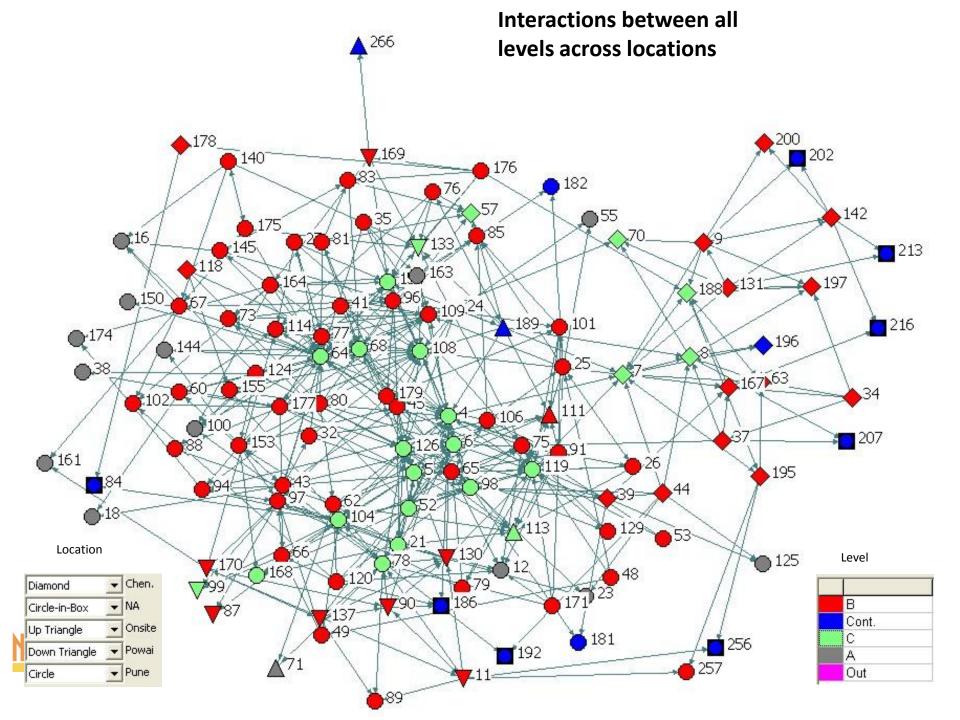


Network patterns in Communication networks

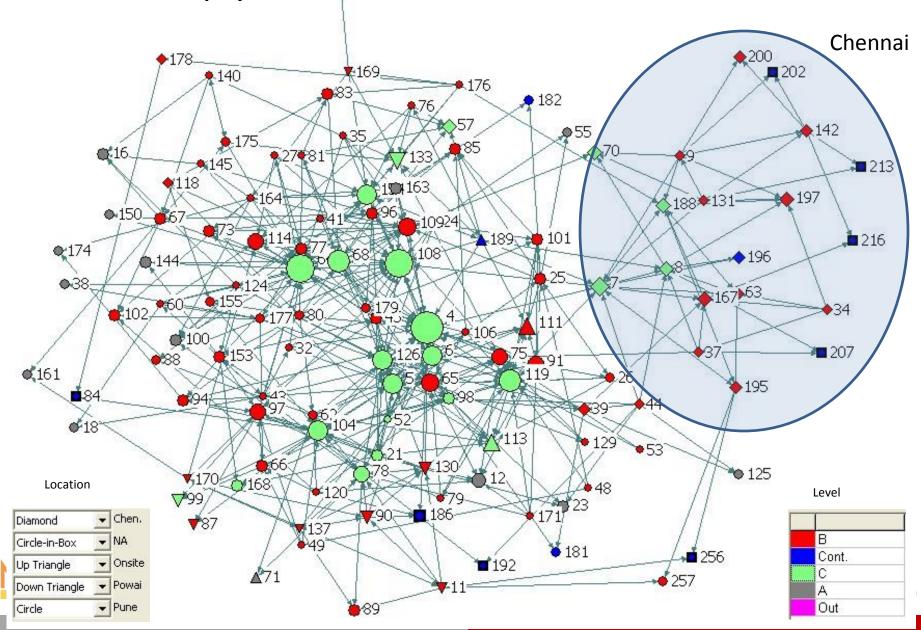
(go to people for getting work done)

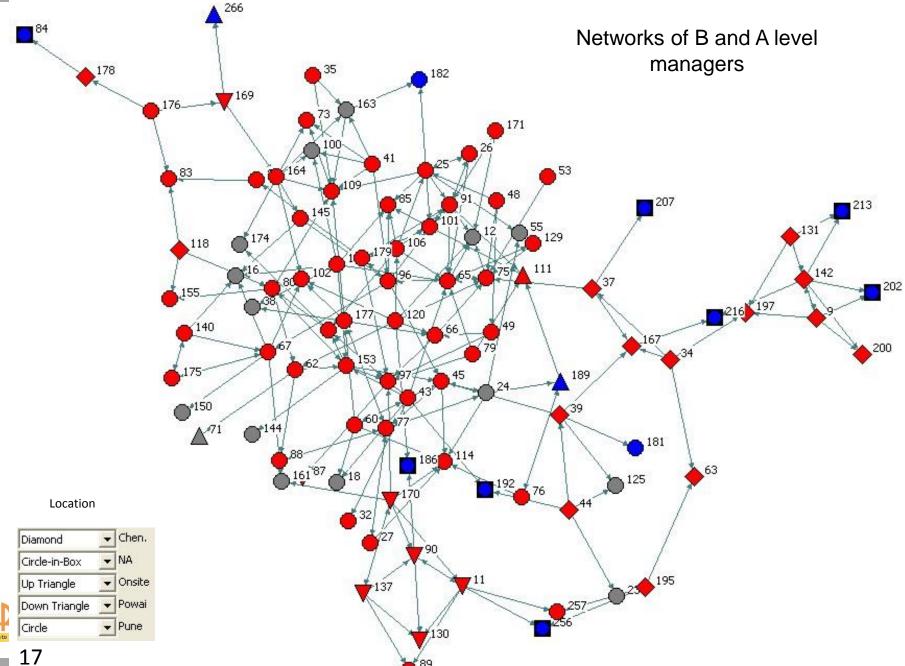


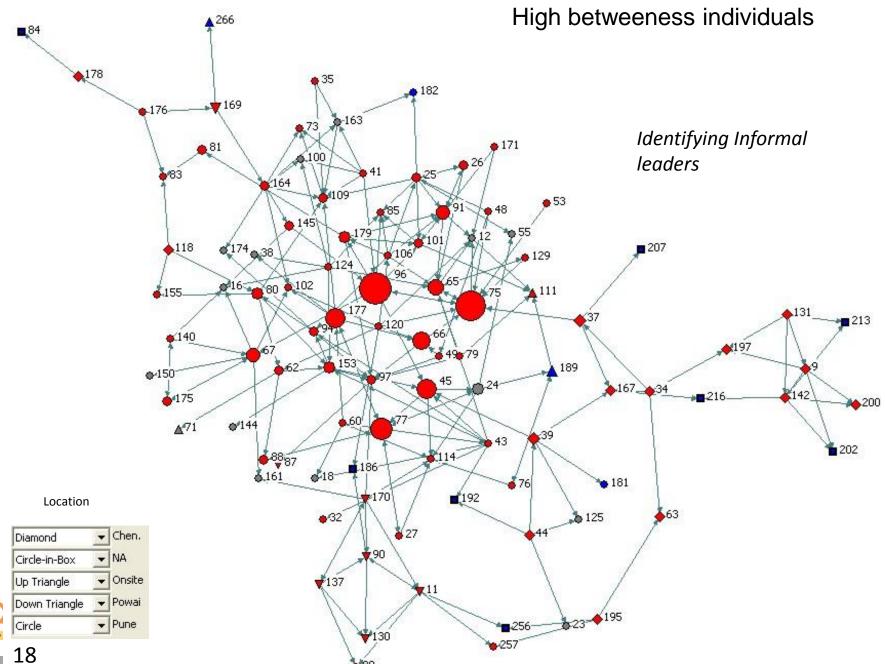




Prominent employees in Interactions between levels across locations





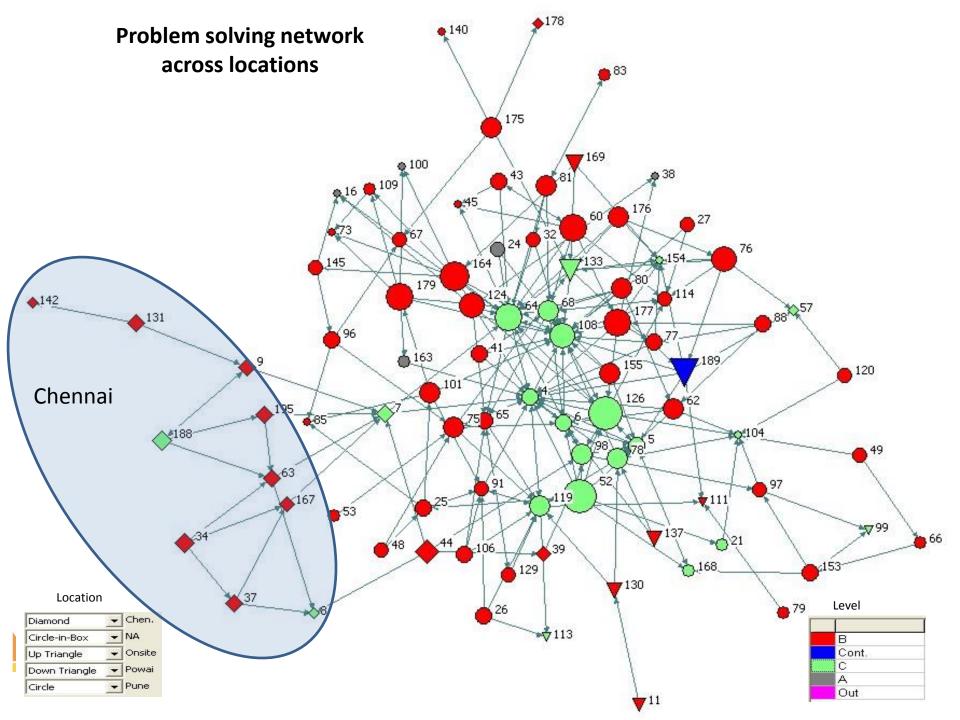




Network patterns in problem solving networks (go to people when in a problem)



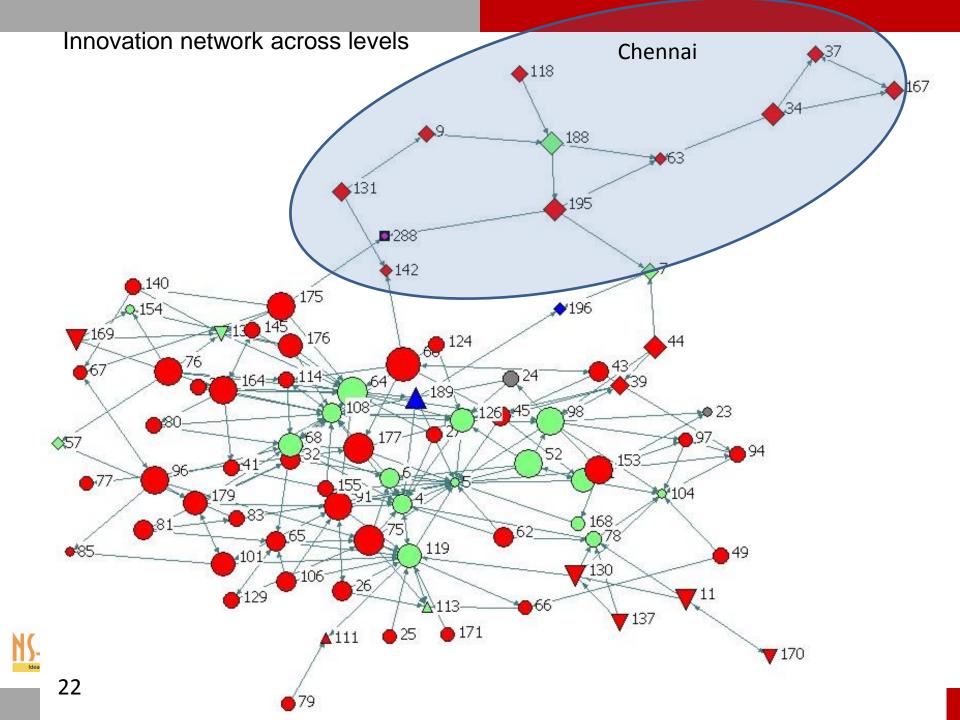




Network patterns in innovation networks (go to people to discuss innovation)







Social Isolates in Communication networks

S.No	ID	Outgoing Ties
4	120	10
1	120	10
2 3	124	10
3	176	9
4	171	9
5	34	8
6	41	8
7	44	7
8	131	6
9	165	5
10	48	5
11	118	4
12	35	4
13	53	4





Situations where network analysis has been used

Organizational change

Identifying key influencer for strategic change or restructuring Monitor integration of staff following mergers and acquisitions

Communities of Practice

Detecting and bridging gaps Measuring return on investment

Organizational effectiveness

Aligning collaborative activities with strategic objectives Team building

Bridging Relationships

Mergers and acquisitions Partner strategy





Business reasons for a network analysis

Leadership development

Identifying high performers Succession planning

Innovation

Connecting people and ideas
Identifying key energy sources in an organization

Knowledge management

Identifying expertise

Assessing connectivity and access of existing knowledge assets

The lost knowledge problem





• Thank you and ???



