Using Social Network Analysis to Improve Organizational Performance

Tuesday, 7 February 2006
Overview of the Session

- Defining Social Networks
- Social Networks and Organizations
- Social Network Analysis Methodology
- Client Case
- Small-Group Breakout
- Close
What if...

...you could x-ray your organization to learn how work was really getting done...
Imagine if You Could Use the Information to...

1. **Accelerate** the **innovation** of new products and services
2. **Promote** top leadership team **effectiveness**
3. **Improve** the **performance** of critical units
4. **Execute** corporate strategy **faster**
What is Social Network Analysis (SNA)?

- A social network represents the **web of relationships** between individuals, groups, or organizations.
- These relationships are important because they **affect attitudes, behavior and effectiveness**.
- SNA provides **a way to uncover, measure, and analyze** these relationships.
Social Network Examples

Intra-Departmental
‘Water Cooler’ Network

Inter-Departmental
Information-sharing Network

Organizational
Employee Transfer Network
Role of Informal Social Networks within Organizations

Formal

- Safarikas
- Baker
- McDonald
- Jolley
- Couch
- Schieble
- Joyner
- Hopkins
- Atkins
- Burke
- Spradley
- Stern

Driving new “star” products to market

Stage 1 → D1 → Stage 2 → D2 → Stage 3 → D3 → and so on...

Informal

- Joyner
- Schieble
- Atkins
- Spradley
- Jolley
- Hopkins
- Baker
- Musk
- Collins
- Couch
- Zhang
- Safarikas
Networks Affect Organizational Effectiveness

"Research shows that appropriate connectivity in well-managed networks within organizations can have a substantial impact on performance, learning, and innovation," (Cross & Parker, 2004)

"Increasingly, it is through these informal networks -- not just through traditional organizational hierarchies -- that information is found and work gets done," (Cross & Prusak, 2005)

"Many executives invest considerable resources in restructuring their companies, drawing and redrawing organizational charts only to be disappointed by the results. That's because much of the real work of companies happens despite the formal organization. Often what needs attention is the informal organization, the networks that employees form across functions and divisions to accomplish tasks fast," (Krackhardt & Hanson, 1993)

Now at the top of my list is organizational structure—but not hierarchical factors. Rather, I would like for us to understand more about self-directed groups, cells, and especially networks, the web that holds cells together," (Burke, 2002)
A Few Business Applications...

1. Strategic Projects
   - Efficient and effective results through better collaboration
     - Cross-boundary information sharing
     - Engendering trust
     - Faster and more efficient decision-making

2. Leadership Development
   - Improved leadership performance and teamwork:
     - Optimize leaders' personal networks in/outside the organization
     - Connect leaders to helpful information and resources.
     - Identify successors for talent management program for increased bench strength

3. Promoting Innovation
   - More, better products and services faster:
     - Expand access to new ideas
     - Leverage expertise across new product development process
     - Drive innovation with the “right people” having the “right conversation”

4. Mergers & Acquisitions
   - Faster and more successful integration:
     - Identify and retain key talent
     - Identify areas of synergy
     - Leverage critical individuals during integration
     - Track inter-organizational cooperation

5. Managing Change
   - Accelerated adoption and less resistance to change:
     - Identify and leverage influential change agents
     - Connect appropriate stakeholders to the change network
     - Map optimal pathways to cascade information faster
Typical SNA Methodology

Identify Business Objectives
- Interview managers and key staff to understand specific business problems or opportunities

Conduct SNA
- Define the network
- Survey members to identify existing relationships
- Use computer modeling tools to illustrate and analyze the network

Design & Implement Interventions
- Identify possible challenges or improvement opportunities
- Design and conduct interventions to align the network with business goals

Follow-up
- Map the network again after a period of time to track and evaluate progress
A Client Case

- **Goal:**
  - Fortune 500 company wished to increase sales 10% through use of innovative packaging

- **Need:**
  - Required Manufacturing and R&D to collaborate on packaging development

- **Constraints:**
  - Groups fragmented by functional, geographic and cultural boundaries
  - Packaging development problems delaying new product launches by 3-12 months
Initial Interviews

“Previously, it was just line extensions. Now they want 10% sales growth from new SKUs, but the process and organization didn’t evolve accordingly.”

“There is a lack of proper representation from design: on projects that had compatibility and engineering issues, secondary design people came to the meetings.”

“The main area for improvement is having adequate resources in design. If I had one resource, I would put it in design to deal with packaging issues.”

“Manufacturing worries about how packages are manufactured. They don’t think about how design can help consumers buy more products.”

“Lots of compatibility testing is done but the information is not used...The information is generated but not leveraged.”

No standardized design process
Different group missions and goals
Ill-defined roles and responsibilities
Inadequate cross-functional communication
Lack of design resources
Initial Social Network

- Confirmed and quantified lack of cross-functional communication
- Implied unclear roles might stem from people only contacting familiar individuals
- Revealed that design expertise was not effectively utilized
Post Social Network

- 105% increase in cross functional communication
- Balanced utilization of design resources
- Informal and formal roles aligned
- Evolution from routine to customized network architecture
Business Result

A reduction of at least 45 days in the time required to develop innovative new packaging*

*Quantification derived from project management data and validated by client
Exercise: Identification of SNA Applications

Duration: 5 minutes

Directions:
1. Split into groups of 4-5 people
2. List potential SNA applications
3. Be prepared to describe 2-3 that you feel are particularly relevant

Consider:
- In which collaboration across functions, teams, or geographies is important
- That entail cross-organizational partnerships or alliances
- Where individuals need to rely on others
- That requires organizational restructuring
For More Information...

- Popular Books on Networks

![Book Covers]

- PhilosophyIB, sgarcia@philosophyib.com
- International Network for Social Network Analysis
- Yahoo! UCI NET User Group
- International Sunbelt Social Network Conferences
- University of Virginia’s Network Roundtable