## Managing the Innovation Process

Intra-Organizational Networks

#### Overview

- Take-Away
- Required Readings
- Supplemental Readings
- Caveats

## Take-Away

- Innovation can arise through structural holes
- Innovation is transferred through informal networks
- Innovation can arise through weak ties as well
- Innovation often requires change in social structure

## (Burt, 1992)

- "Structural holes Chapter 1: The social structure of competition"
- <u>Network Benefits</u>

   (information access, timing, referrals)
   (control tertius gardens, entrepreneurial motivation)
- <u>Structural Holes</u> (separation between non-redundant contacts)
- <u>Competition</u> (players with structural holes have higher rate of return)

## (Krackhardt & Hanson, 1993)

- "Informal networks: The company behind the chart"
- <u>Informal Networks vs Formal Networks</u> (naturally-occurring ties vs reporting relationship ties)
- Three Types of Networks (advice, trust, communication)
- <u>Implementing Change</u> (identify key players using a network map)

# (Constant, Sproull, & Kiesler, 1996)

- "The kindness of strangers: The usefulness of electronic weak ties for technical advice"
- <u>Weak Ties</u> (relationships with acquaintances or strangers)
- <u>Electronic Communication</u> (can facilitate access to useful technical advice)
- Organizational Motivation
   (important for increasing likelihood of help from a request)

# (Gargiulo & Benassi, 2000)

- "Trapped in your own net? Network cohesion, structural holes, and the adaptation of social capital"
- <u>Network Closure vs Structural Holes</u> (cohesive ties vs non-redundant ties)
- <u>Tradeoff</u> (safety from cohesiveness vs flexibility from 'holes')
- Adapting to Change
   (managers with structural holes had an easier time adjusting)

### (Rogers, 1995)

• "The diffusion of innovations – Chapter 1: Elements of diffusion"

#### • <u>Diffusion</u>

(process by which an innovation is communicated through certain channels over time among the members of a social system)

#### • Process

(innovation – idea, practice, or object perceived as new) (communication – create and share info towards understanding) (time – first awareness, current stage, and rate of adoption) (social system – interrelated units engaged in solving problem)

#### Caveats

- What if structural holes aren't feasible to create?
- What if formal networks constrain informal networks?
- What if there are no incentives for weak ties?
- What if network closure is required for consensus?