

Burt's 'Social Origin of Good Ideas' paper

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Study Design

- Ask people (673 managers) to generate ideas for improving supply chain management for the company
- Top management then rated quality of all 455 ideas that were generated
- Network data also collected
 - Who discuss work matters with
 - Years of acquaintance, etc
- Each manager's structural holes calculated
- Structural holes correlated with idea quality

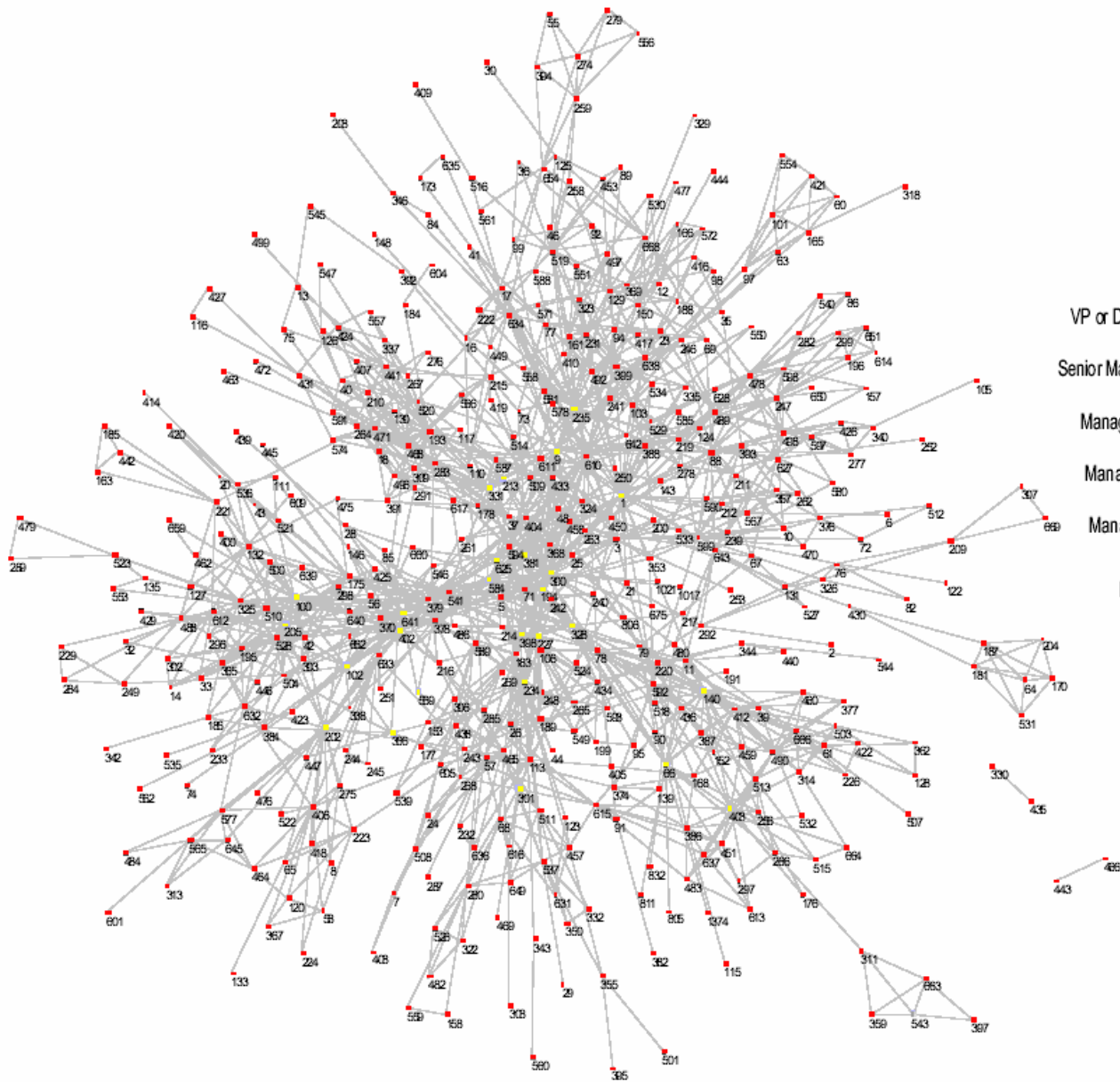
Dependent Variables

- Idea value
 - The 48 ideas from top 3 ranks were rated first, the remaining 407 were rated second
- Ideas dismissed
- Ideas unexpressed

Table 2. Four Illustrative Ideas, Two High-Value and Two Low-Value.

- (4.5 value, 38 network constraint) Involve SCM in the proposal process. Most of the risk in supply chain is at the front end of the business, where little involvement from the SCM community is found. Opportunities to improve our win rate through innovative SCM ideas and out-of-the-box procurement are often overlooked or missed altogether. For example, on a proposal with a plug number for material, SCM is oftentimes not considered. We could be utilizing our powerful processes to decrement that material cost substantially, thus creating a competitive advantage.
- (4.5 value, 31 network constraint) We need to develop and train our SCM people in the Subcontracts area to manage our critical subcontractors. We need to institute a standard process for subcontract management and a training program to deploy this process within SCM across our locations. We also need to have sufficient experienced subcontract people available to support the program offices in order to adequately manage the subcontract process.
- (1.0 value, 72 network constraint) If you go through all the training to unify a process then the whole supply chain regardless of location should be required to continue to use the process. We tend to train a lot, but are not required to continue to use the process once it has been incorporated. Supply Chain has a lot of great processes, but they get lost after the initial training, or not everyone is required to follow the process, based on location. We need to continue to work with our counterparties to ensure that the processes are being followed. Where there is a lack of training, we must take the time to train our fellow team members so that it benefits us in the long run.
- (0.5 value, 80 network constraint) My SixSigma Team was tasked with developing an easier method to get Budgets and Targets posted, by part number, so that the buyers would not waste time contacting individual SCMs. This process requires utilizing the Materials System and Buyer Web System. The team ran into several roadblocks, but we identified solutions to resolve those roadblocks. Some programming changes were required (none of which was extremely high cost). In addition, we tried to have all SCMs directed to get all of their contracts loaded into the system by a certain cut-off date. We went through three or four cut-off date delays for various reasons, and each time our team met the challenge. So much time went by, however, the programmers were all diverted to the new SAP system. Without the programming changes, meeting the initial goals of the team (making ALL budgets and targets available to the buyers) is no longer possible. Therefore, the one thing I would change is to implement the changes that my team came up with. This would make the buyer much more efficient, and less frustrated.

NOTE — SCM stands for supply-chain management or supply-chain manager.



	Percent Social Isolates	Mean Network Size	Mean Network Constraint	Mean Number Cited as Discussion Partners	Mean Network Constraint Cited Discussn. Partners	Mean Path Distance (min-max) for the 476 connected managers in graph
VP or Director (25)	0%	12.6	29.8	4.9	70.2	3.3 (2.7-4.2)
Senior Manager (41)	5%	8.5	37.3	3.8	78.1	3.7 (2.9-6.4)
Manager III (121)	11%	6.4	50.2	3.7	77.9	4.0 (3.0-6.4)
Manager II (199)	27%	4.1	65.0	2.8	83.1	4.3 (2.8-6.4)
Manager I (287)	44%	3.4	73.6	2.4	83.4	4.6 (3.4-7.4)
Mean (673)	29%	5.0	60.5	2.9	81.0	4.2 (2.7-7.4)

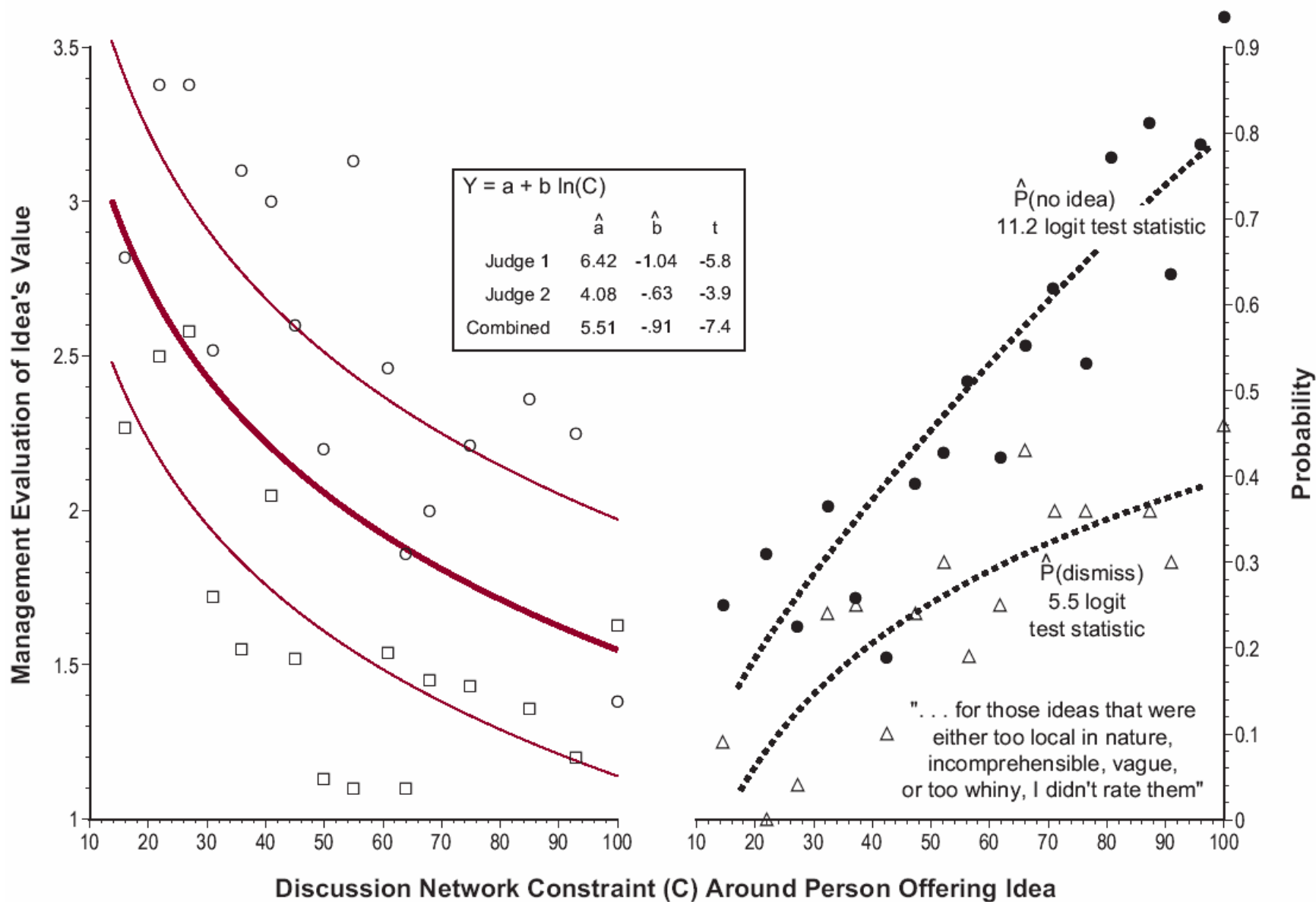
Figure 2. Supply-Chain Discussion Network
(excludes 193 social isolates)

Table 4. Predicting Good Ideas

	V. Idea Value (n=455)	VI. Idea Dismissed (n=455)	VII. No Idea (n=673)	VIII. Discuss Idea (n=455)
Intercept	4.082	-3.739	-9.689	5.328
Manager 1	-.228 (.159)	.721 (.285)*	-.015 (.281)	-.300 (.290)
Manager 2	-.133 (.168)	.287 (.313)	-.054 (.283)	.067 (.319)
Manager 3 (reference)	—	—	—	—
Sr. Manager	.042 (.276)	—	.401 (.458)	-.295 (.525)
Executive	.291 (.336)	—	.438 (.621)	.210 (.758)
Purchasing	.335 (.177)	-.715 (.513)	.399 (.322)	-.160 (.323)
Age	.004 (.008)	-.006 (.015)	-.012 (.012)	-.013 (.015)
Bachelor	.226 (.148)	-.472 (.266)	-.101 (.239)	-.019 (.267)
Graduate	.094 (.143)	-.367 (.289)	-.205 (.210)	.198 (.270)
HighTech	.086 (.138)	.071 (.260)	-.099 (.212)	-.151 (.251)
LowTech	.404 (.231)	-.595 (.465)	.697 (.372)	.338 (.451)
Urban 1	.004 (.183)	-.590 (.371)	.488 (.253)	.165 (.349)
Urban 2	.071 (.174)	-.277 (.332)	.323 (.243)	-.531 (.313)
Length of Idea	-.0002 (.0002)	-.0001 (.0005)	—	.0013 (.0006)*
Sequential Order	-.0005 (.0005)	.0011 (.0010)	—	-.0006 (.0010)
Network Constraint	-.694 (.144)**	.972 (.281)**	2.356 (.243)**	-.939 (.267)**

NOTE — Network constraint is the log of constraint in this table. Model V predicts idea value on a one-to-five scale (.15 squared multiple correlation; network effect plotted in Figure 5). Models VI to VIII are logit predictions of the idea being dismissed (64.6 chi-square with 13 d.f.; network effect plotted in Figure 5), no idea being expressed (177.2 chi-square with 13 d.f.; network effect plotted in Figure 5), and discussing the idea with a named colleague (35.2 chi-square with 15 d.f.). Standard errors are given in parentheses (* P < .05, ** P < .001).

Figure 5. Brokerage and Employee Best Idea



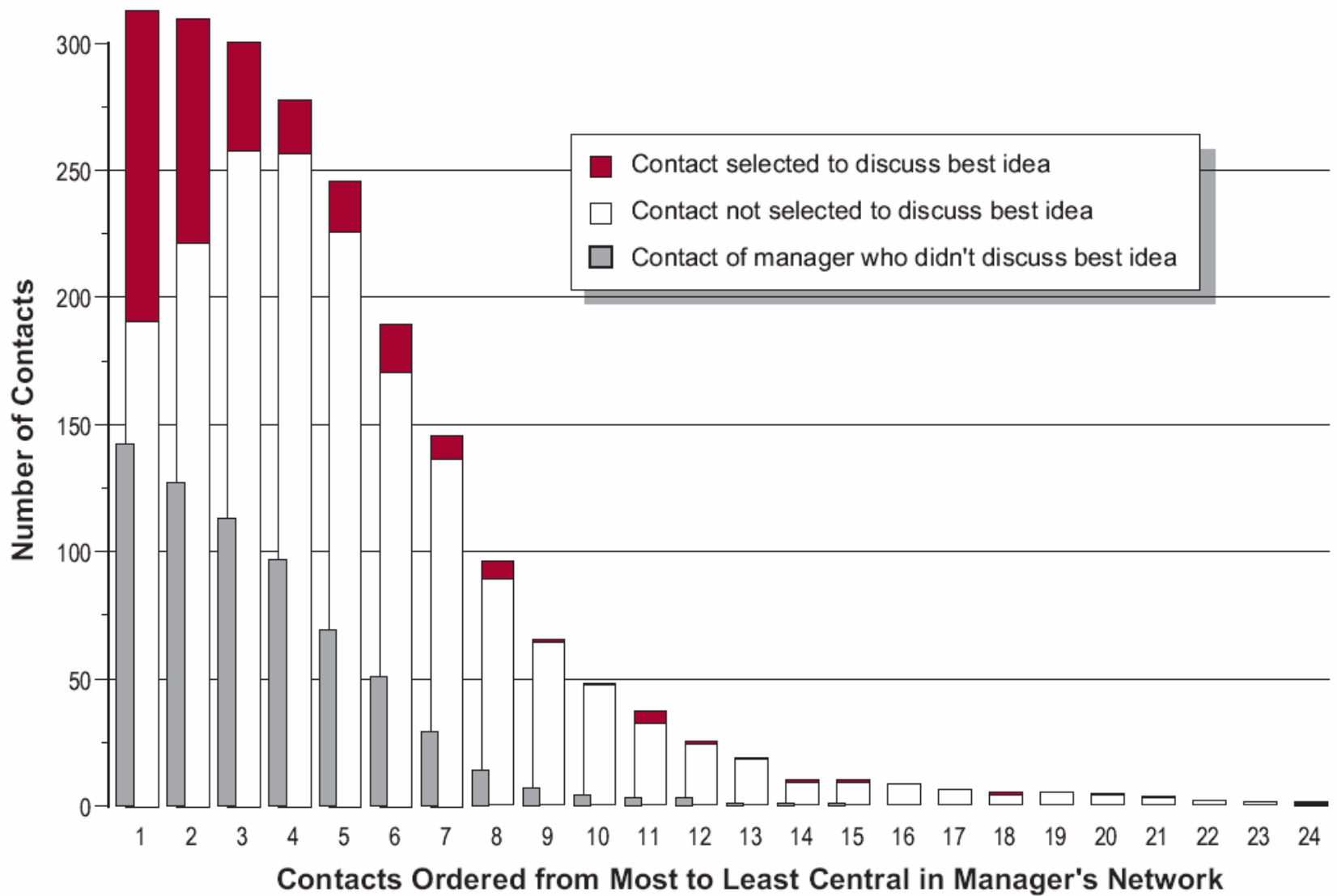


Figure 6. Idea Discussion and Individual Contacts

Network theory

- Human networks are often clumpy
 - Ideas, behavior are more homogeneous within groups
- Weak ties (at least those that are local bridges) connect the clumps
- Cosmopolitans bridge social worlds
- Structural holes increases chances of bridging
- Bridging creates value

Mechanisms

- 4 levels
 - Explaining constraints and interests of one group to another
 - Transferring best practices
 - Performing cultural translation as needed
 - Drawing analogy between groups ostensibly irrelevant to each other
 - People prefer to regard other groups situations as different so they can ignore their approaches
 - Synthesis, creation of something new out two older ways
- All four levels are useful for problem solving
 - All enable broker to be bearer of good ideas