

Network Leadership Network Diagnostic Notes (page 1)

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Project Report

The project assignment in this course is to get an INSEAD report on the social capital of your network, and write a project report from the results. Your project write-up should be two pages, Arial 12 font, single spaced. You are free to attach images from your INSEAD report (in fact, I recommend it), but put them after the initial two pages. Invitations to the INSEAD website will go out by October 17 (next week). The deadline for completing the INSEAD network questionnaire is November 6. (No report if you miss the deadline.) I'll go through a couple example reports in the November 7 class session. Your project report should be submitted by November 27 (submit through Blackboard).

Here are the four steps to completing the project report:

1. As a registered student in the course, you will receive at your Bocconi student email address an invitation to the INSEAD social capital website. Your user name is your Bocconi student email address. The invitation contains the URL for the website, a deadline for completing the network questionnaire, and an admission password that is unique to you. Your report is confidential information that will not be shared with other students. After you have your report, you are of course free to use it as you wish.



Personal Report on the Social Capital of Your Network

This report analyzes your core network - that is, the people that are most important to you and your job at this particular time. It uses your responses to the Social Capital Questionnaire to compute indexes that summarize important aspects of your core network. To facilitate the interpretation, we compare your scores with those of a reference group set up by your instructor.

The report highlights the benefits and limitations of different types of core networks according to established research. Yet, we also know that the benefits of a specific type of network may vary across contexts.

This is why you should consider your specific personal and professional situation when reflecting on the insights included in this report. A network that serves you well today may become a liability when you move to a professional role with a broader and different span of responsibilities.

2. Once you are in the INSEAD website, you will be asked a series of questions about your network. Your answers are used to build, and send to you, a report on your network.

Remember, these network questions are intended to elicit networks from managers, so some will be above your pay grade. You are the one who is going to interpret your network report, so answer the questions as they apply to your current life. For example, the question about "discussing matters important to you" is as meaningful to you as it is to managers. For essential buy-in, think of the advice you would give to a student new to Bocconi who you like and will be taking the same degree as you: Who are key contacts you would recommend to the incoming person? With respect to difficult contacts, who among the people you know has made it difficult for you to achieve whatever it is you hope to achieve at Bocconi? With respect to job options, who are the people with whom you would most likely discuss which of two graduate schools you plan



to attend after Bocconi, or people with whom you would most likely discuss which of two alternative job offers you should accept after graduation? With respect to socializing, I expect you can figure out who are the people with whom you most enjoy informal socializing.

3. After the November 6 deadline, I'll have the INSEAD website pool the data and produce individual reports. When the reports are ready, you will receive an email message with a URL where you can download your report. To download your INSEAD report, you'll need your email address and the INSEAD password in your invitation email.

4. Now write the two-page project report answering the following questions:

a. How would you characterize your network? Are you positioned more for top-line growth (brokerage) or to secure trust and cooperation (closure)? Is that where you want to be?

b. Where is your contact diversity? That is where you are likely to have good ideas. Diversity could be contacts of different ages, different functional areas, different companies, etc. Is your area of greatest diversity the area in which you want to have good ideas? If yes, great. If no, look for more varied contacts in the target area (e.g., head of engineering).

c. Where is your greatest network constraint? Constraint can be in the form of a bottleneck contact or a cluster of homogeneous, interconnected contacts. Does the constraint affect your ability to deliver on good ideas? If no, great. If yes, look for more varied contacts to erode the constraint (e.g., dense commercial bank), but be careful to appear to conform to social norms in the dense cluster constraining you.

d. Is anything missing from your network that could enhance your value? The report shows how you see your social network. What is missing that might be obvious to a new person entering from outside your area, or from another organization (e.g., head of engineering)? Here are a couple questions to ask yourself: When was the last time you did something for the first time? Who, outside your family, is happy to meet you whenever you two meet?

e. What advantages/disadvantages for your career post-Master's degree do you see in the way you have built your network? Networks are a learned activity. What you do today is your template for tomorrow. Connect your discussion to network concepts and effects we have discussed in class. You might go to ChatCGP and enter your network parameters to get ChatGPT's opinion on your future. Enter "My core network contains N contacts (of 22 possible), with density D, and centralization C. What are the implications for X?" where N, D, and C are scores from your INSEAD report, and X is a topic you'd like to see implications for. Example implication topics could be "my career as a XXX?" (you fill in the XXX profession) "my well-being?" "my opinions of new colleagues?" "my ability to learn new skills?"

Enjoy. The project write up should be interesting and enlightening since it is all about you and your network. Good luck.



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n your contacts. The link between r network and the social capital of er, is not obvious. To understand it, pre analytical view at the pattern of n your contacts.

cture of your network

way to grasp the structure of your ze it. Below is a graphic representa-. Each shape represents one of your e the large light-blue circle. Shapes the diversity of your contacts along en for this report. Lines between cial ties. The thickness of the line trength of the relationship between , so the thickest line corresponds to s and the thinnest line to "distant" e you'll see only if necessary. To grasp the intuition behind network density and centralization, imagine a friendship network. The more friends are also friends with one another, the higher the density of the network. The more one of the friends is also a friend of the others, while these are not friends among themselves, the more the network is centralized on this particularly well-connected friend. Look at the diagram of your network below: the more lines connecting your contacts, the higher the density of your network. The more these lines go to one single person among your contacts, the higher its centralization.

The density and centralization indexes vary from 100 for a perfectly dense (or centralized) network to 0 for a perfectly sparse (or flat) network. In the next section, we report the scores for your network. We also explain what these values mean by comparing them with those of the people in your reference group and discussing how they define "styles" of social capital.

A graphic representation of your network

Social Capital

Identifying patterns in your network of relationships



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(Q143) On average, people know whether they have a good network. **True or false?**

- A. True, because they are the person at the center of their own network.
- B. True, if they have a lot of work experience.
- C. False, because people tend not to know how their network compares to the networks around other people.
- D. False, because social networks are complex and often change from day to day.
- E. False, because people believe they are more similar to their contacts than they actually are.



Self-Diagnosis Suffers from Ignorance, Arrogance, and Feelings of Inadequacy. Often Interesting, Rarely Useful.





Network Indices N = 4D = 0.0H = 0.0C = 25.0

N = 4

D = 100.0

H = 0.0

C = 76.6

N = 4

H = 16.8

C = 68.4



sparse, flat structure independent relations sustained by you abundant structural holes, low redundancy creates information access and control benefits associated with successful insiders

Clique Network: Deliver Value



vou



Partner Network: Sponsored Access to Create Value

sparse, center-periphery structure ties sustained jointly by you and strategic partner structural holes borrowed from strategic partner mean second-hand information access and control benefits

associated with successful outsiders (and unsuccessful insiders)

In Sum, **There Are** Three **Network Forms** of **Social Capital**

See Appendix III on seeming contradiction between strategic partners and secondhand brokerage.

An asterisk here indicates a page in the initial handout, "Brokerage."

from Burt, "Gender of social capital" (1998, Rationality & Society)



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The Situation Can Be Difficult To Self-Diagnose

Without network metrics, people rely on self-diagnosis — which is unreliable for various data and ego-preserving reasons. If no one contradicts the assumption that your network is fine, who's to say it isn't?





from Burt, "Gender of social capital" (1998, Rationality and Society) and Figure 7.4 in Neighbor Networks.

The Situation Can Be Difficult To See



Strategic Leadership Partners: Managing Barriers to Coordination (page 28)

Strategic Partners:

Network Leadership Network Diagnostic Notes (page 9) Assign Network to Three Broad Categories

Broker (lower left)

Clique (lower right)

> Partner (top half)

Graph is Figure 4.8 in Burt (1992), *Structural Holes*



Figure 4.8 Constraint, hierarchy, and kinds of manager networks. (The bold horizontal line marks the mean of hierarchy and the bold vertical line marks the mean of aggregate constraint.)





These graphs are based on MBA data from a previous year. The vertical axis is the measure of network centralization in the INSEAD instrument. Network density is computed from continuous-strength data on relations (versus "bdensity" from the INSEAD instrument which is based on binary relations). Network constraint is computed from continuous-strength data on relations in the usual manner.



Network Brokers Tend To Be Recognized Leaders

But are you broker enough for your job rank? Senior people are punished for closed networks. Constraint and status here are computed from work discussion networks around twelve hundred managers in four organizations.



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These are the senior leaders in a large commercial bank.

Lines indicate people who have frequent and substantial face-to-face contact. Average such connection is embedded in 28 mutual friends (0 minimum, 63 maximum).





What are the implications of such a dense network for bank operations? Customer service? Employee engagement? Bank adaptation to the changing business environment?



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	NetDraw Quick Start						
*node data	Making your own appiagrome and computing network matrice						
id	Making your own sociograms and computing network metrics						
ego	for a group, project, organization, or market						
A							
В	1. DOWNLOAD THE FREE NETWORK SOFTWARE, NETDRAW (https://sites.google.com/site/netdrawsoftware/ download, then click on the "Exe only" option)						
С							
D							
Е	2. TYPE INTO A TEXT FILE THE LINES TO THE LEFT. FILE CAN HAVE ANY NAME, BUT END WITH EXTENTION						
F	".vna" (e.g., test.vna). The 21 lines in the file (listed to the left) are a roster of people in the network followed by						
*tie data	a roster of relations (e.g., ego has a relation to person A at strength 1). These data define the network illustrating						
from to tie	network constraint in the "Brokerage" handout (see next page of this handout).						
ego A 1							
ego B 1	3. LOAD THE .vna FILE INTO NETDRAW ("File" menu, "open" option, then "VNA text file" and "Complete")						
ego C 1							
ego D 1	4. GENERATE A SPATIAL DISPLAY OF THE NETWORK ("Layout" menu, "graph theoretic layout" option, then "graph						
ego E 1	theoretic layout"). YOU SHOULD GET THE SOCIOGRAM BELOW.						
ego F 1							
A B 1	To learn the wide capabilities of the software, play around with the data. Click and drag a node to move it and its						
E A 1	relations around. Remove arrows by clicking on the arrow button to the right of the row of command buttons just						
FA1	above the sociogram display. Save the sociogram to a file for editing, pasting, and printing ("File" menu, "save						
B D 1	diagram as" option, then "metafile").						

For more complex work, such as computing network metrics ("Analysis" menu, "structural holes" option, then "ego network model" and save the data). If you are not comfortable using new software, it might be wise to bring in someone who can play with the software then brief you. FOR TEXT EXPLAINING THE NETWORK METRICS, see Appendix II in the "Brokerage" handout. Caution: Some versions of NetDraw compute incorrect values of network constraint for isolates. Network constraint is infinite for isolates, so constraint should be its maximum of one. Some versions of NetDraw report a value of zero for infinity.





This is page 62 in the Brokerage handout (1_20979_Brokerage.pdf).

Illustrative **Network and** Computation

Constraint measures the extent to which a network doesn't span structural holes



Network constraint measures the extent to which your network time and energy is concentrated in a single group. There are two components: (direct) a contact consumes a large proportion of your network time and energy, and (indirect) a contact controls other people who consume a large proportion of your network time and energy. The proportion of i's network time and energy allocated to j, p_{ii}, is the ratio of z_{ii} to the sum of i's relations, where z_{ii} is the strength of connection between i and j, here simplified to zero versus one.

c _{ij} =	$(p_{ij} + \Sigma_q p_{iq} p_{qj})^2$	q≠i,j

contact-		network data								
constrai	nt (x100):									
	` ' /		A	•	1	0	0	1	1	1
Α	15.1		В	1	•	0	1	0	0	1
В	8.5		С	0	0	•	0	0	0	1
С	2.8 —	_	D	0	1	0	•	0	0	1
D	4.9	100(1/36)	E	1	0	0	0	•	0	1
E	4.3		F	1	0	0	0	0	•	1
F	4.3		gray dot	1	1	1	1	1	1	
			- •							

total 39.9 = aggregate constraint (C = $\Sigma_i c_{ii}$)

Figure 2.2 in Structural Holes.

