

Analyzing and Managing Organizational Networks
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Fall 2012, Th 4:30-7:10p.m., JLB 106

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COURSE OVERVIEW

There has been an explosion in social media and social networking tools over the last five years, and organizations are increasingly thinking about how to apply these tools to the HR function. The first and most obvious use of social media and social networking tools is for attracting talent and building employer brands, but HR leaders are also creatively applying these tools to enhance internal connections between employees, create internal communities of practice, build and support diversity initiatives, broadly communicate HR initiatives and messages from senior executives, and connect emerging talent with senior mentors and coaches. While the HR function may be relatively late adopters of this technology, it is clear that social media is a potentially powerful tool to help drive important outcomes for the business.

In this course, we will focus on an array of topics related to how the HR function can and should best leverage social media and social networking tools for significant HR and business outcomes, primarily focusing on how to effectively use this technology inside the organization. We will explore network components such as centrality, brokerage, and diffusion, and the role they play in individual and collective behavior.

CLASS FORMAT & COURSE REQUIREMENTS

Format: During the first half of each class we will discuss readings and concepts. After the break, we will work on identifying, analyzing, and interpreting network concepts and/or discuss cases. You will spend a good part of this course analyzing data using Ucinet¹, a widely used organizational network program. You will begin with data that is included with the program. You will then learn to design, collect, and interpret these data, and move on to analyzing additional sites, which may include student, University, or work organizations. For most classes, you will need your computer², Ucinet, and a USB (flash) drive.

Written Assignments: Unless otherwise noted, all individual and group assignments (including the final group project) should be submitted through the Sakai course site by **11:59pm the day before Thursday's class**.

Participation: Participation is comprised of 40% attendance (20 points) and 60% class discussion (30 points). Students are expected to attend every class. You are responsible for contacting me if you must be absent. More than two absences will adversely affect your grade. Everyone begins with 40 out of the total possible 50 points. Points can be gained for insightful contributions to class and good attendance, and points can be lost for frequent absenteeism, being unprepared, and misconduct during class. For each class session, you are expected to have read the assigned reading for that particular session, as well as be prepared to discuss topics in class.

¹ Note: For free trial version or purchase see: <https://sites.google.com/site/ucinetsoftware/home>. It can be used free for 90 days, or costs \$40 for full-time students. Ucinet is a PC-only program. Mac users (I am one!) will need BootCamp, VMWare, Parallels, or similar software.

² If you do not own a laptop and cannot borrow one, please contact me and we will work something out.

Final Group Project: The final group project involves collecting, analyzing and interpreting social network data. Details about this project will be provided in class and on Sakai.

Software Assistance: I will be available during office hours, and by appointment, to provide help with Ucinet. You may also post your question on the Sakai course site, under the Discussions tab, and I will get back to you promptly.

You, as a member of the class, are welcome to answer your fellow students' questions when posted on the Discussion board. In fact, you are encouraged to do so! You can all benefit from each other's knowledge and support.

GRADING

Activity	Points
Individual Assignments (5 total @ 20 points each)	100
Group Assignments (4 total @ 25 points each)	100
Final Group Project	150
Attendance/Participation	50
Total	400

Percentage	Points	Grade
90-100%	360-400	A
85-89.9	340-359	B+
80-84.9	320-339	B
75-79.9	300-319	C+
70-74.9	280-299	C
65-69.9	260-279	D
<64.9	< 259	F

REQUIRED READINGS, CASES, AND COURSE MATERIALS

Chapters & Articles:

1. Ballinger, G., Craig, E., Cross, R., Gray, P. (2011). A stitch in time saves nine: Leveraging networks to reduce costs of turnover. *California Management Review*, 53, 111-133.
2. Baskin, E. C. (30 March, 2012). *Employee engagement in a social media world*. RetailingToday.com.
3. Borgatti, S. P., & Molina, J. L. (2003) Ethical and strategic issues in organizational social network analysis. *Journal of Applied Behavioral Science*, 39, 337-349.
4. Brass, D. J. (1995). A social network perspective on human resource management. In G. Ferris (Ed.), *Research in Personnel and Human Resource Management*, Vol. 13, 39-79. Greenwich, CT: JAI Press.

5. Buffet, M., Janicik, G. A., Gallegos, M., Quaggiotto, G., & Ashwell, L. (2010). Chpt. 25: A network approach to onboarding. In Cross, R., Singer, J., Colella, S., Thomas, R. J., Silverstone, Y. (Eds.), *The organizational fieldbook*. San Francisco, CA: Jossey-Bass.
6. Casciaro, T., & Lobo, M. S. (2005). Competent jerks, lovable fools, and the formation of social networks. *Harvard Business Review*, 83, 92-99.
7. Cross, R., Ehrlich, K., Dawson, R., Helferich, J. (2008). Managing collaboration: Improving team effectiveness through a network perspective. *California Management Review*, 50, 74-98.
8. Cross, R., Gray, P., Cunningham, S., Showers, M., & Thomas, R. J. (2010). The collaborative organization: How to make employee networks really work. *MIT Sloan Management Review*, 52, 83-90.
9. Cross, R., Laseter, T., Parker, A., & Velazquez, G. (2006). Using social network analysis to improve communities of practice. *California Management Review*, 49, 32-60.
10. Cross, R., Liedtka, J., & Weiss, L. (2005). A practical guide to social networks. *Harvard Business Review*.
11. Cross, R., & Parker, A. (2004). The hidden power of social networks: Understanding how work really gets done in organizations. Boston: Harvard Business School Press. [Various Chapters]
12. Cross, R. & Thomas, R. J. (2009). Driving results through social networks: How top organizations leverage networks for performance and growth. San Francisco: John Wiley. [Various Chapters]
13. Hill, L. A. (1994). Exercising influence. *Harvard Business Review*.*
14. Hill, L., & Kamprath, N. (1998). Beyond the myth of the perfect mentor. *Harvard Business Review*.*
15. Ibarra, H., & Hunter, M. (2007, January). How leaders create and use networks. *Harvard Business Review*, 1-9.
16. Kadushin, C. (2012). *Understanding social networks: Theories, concepts, and findings*. New York: Oxford, Univ. Press. [Various Chapters]
17. Krackhardt, D. & Hanson, J. (1993). Informal networks: The company behind the chart. *Harvard Business Review*, 71, 104-111.
18. Krebs, V. (2000). Working in the connected world. *International Association for Human Resource Information Management (IHRIM) Journal*, June, 89-91.
19. Krebs, V. (2007). Managing the 21st century organization. *International Association for Human Resource Information Management (IHRIM) Journal*, 11, 2-8.
20. McGregor, J. (11 March, 2009). Performance reviews take a page from Facebook. *Businessweek*.
21. McInnes, W. (31 July, 2012). Gamification in HR: The reinvention of work. *HR Magazine*.
22. Miemis, V. (25 May, 2011). Facebook: The social accelerator? *Forbes*.
23. Miller, L. G., & Christakis, N. A. (2011). Tapping the power of social networks. *Harvard Business Review*.
24. Osawa, J., & Mozur, P. (1 August, 2012). In China, Recruiting gets social. *The Wall Street Journal*.
25. Prost, M. (27 August, 2009). Using social networks for training. *HR Executive Online*.
26. Reuell, P. (2011). Nice guys can finish first. *Harvard Gazette*.
27. Silverman, R. E., & Kwoh, L. (31 July, 2012). Peer performance reviews take off. *The Wall Street Journal*.
28. Stevenson, S. (24 April, 2012). What your Klout score really means. *Wired Business*.
29. Thompson, C. (2009), September 13). Are your friends making you fat? *NY Times Magazine*, retrieved from <http://www.nytimes.com/2009/09/13/magazine/13contagion-t.html?pagewanted=all>. Based on Christakis, N. A., & Fowler, J. H. (2009). *Connected: The surprising power of our social networks and how they shape our lives*. New York: Little Brown.
30. Uzzi, B., & Dunlap, S. (2005). How to build your network. *Harvard Business Review*, 83, 53-60.
31. Vaccaro, A. (2011). Ethics hold the key to network contradictions. *IESE-Insight Magazine*, 37-43.

Cases/Assignments:

1. Burton, M. D., & Lawrence, K. (1998). Jerry Sanders and X-Cadia Corp. Harvard Business School. *
2. Chang, V., & Aaker, J. (2009). Obama and the power of social media and technology. *The European Business Review*.
3. Cross, R., Gulas, V., Halliday, A., Parker, A., & Vigneaux, T. (2009). Building a networked organization: Restructuring the IT Department at MWH (A) and (B). Darden School of Business. *
4. Fischbach, K., Schoder, D., & Gloor, P. A. (2009). Analysis of informal communication networks. *Business & Information Systems Engineering*, 2, 1-8.
5. Higgins, M. (2004). Developmental network Questionnaire. *Harvard Business Review*. *
6. Ibarra, H. (2002). Network assessment exercise. *Harvard Business Review*. *
7. Thomas, D. A. (2009). Mapping your professional network. *Harvard Business Review*. *

*These readings/cases are included in the HBR course pack for purchase. (A total of 7).

Required Software:

- Ucinet (<https://sites.google.com/site/ucinetsoftware/home>). Free for 90 days, or \$40 for students (order and download online). See footnote 1 for more information.
- Gephi (www.gephi.org). Gephi is free software, and runs on Windows, Linux, and Mac OS X.

Other Course Material:

Class material, including PowerPoint slides for the lectures and assigned article readings, will be posted on the course's Sakai website: <https://sakai.rutgers.edu> (use your Rutgers ID and password). Please be prepared with the material before coming to class. Several HBR articles/cases are not publicly available, so you may purchase them by visiting this link: <http://cb.hbsp.harvard.edu/cb/access/14585980>.

Additional Resources:

<http://www.thenetworkroundtable.org/>
<http://www.orgnet.com/>
<http://faculty.ucr.edu/~hanneman/nettext/>

UNIVERSITY GUIDELINES AND RESOURCES

ACADEMIC HONESTY

The University's honesty policy on cheating and use of copyrighted materials will be enforced in this class. Students are expected to pursue knowledge with integrity. Please refer to the Academic Integrity Policy for more detail regarding these policies: <http://academicintegrity.rutgers.edu/integrity.shtml>

STUDENTS WITH DISABILITIES

Students requesting accommodations for disabilities should contact the Office of Disability Services to determine his/her Coordinator. The Coordinator will then provide documentation to the student. Upon review and approval, the student must then provide this documentation to the instructor. Please refer to the Office of Disability Services for Students for more detail regarding this policy: <http://disabilityservices.rutgers.edu/request.html>

TENTATIVE COURSE SCHEDULE

The content of the course will be covered in the following sequence (**see next page**). Please note that dates are tentative and subject to change (some topics may take more time and others less time, depending on students' interests).

SECTION 1: NETWORK DESCRIPTION

Class 1 (September 6)

Introduction to Social Networks

What are social networks and why are they important?

Read:

1. Kadushin, C. (2012). *Chpt 1: Introduction*.
2. Cross, R., & Parker, A. (2004). *Chpt. 1: The hidden power of social networks*.

Class 2 (September 13)

Social Networks in Human Resource Management

How is social network analysis applied to the HR function?

Read:

1. Brass, D. J. (1995). A social network perspective on human resource management. In G. Ferris (Ed.), *Research in Personnel and Human Resource Management*, Vol. 13, 39-79. Greenwich, CT: JAI Press.
2. Krebs, V. (2000). Working in the connected world. *International Association for Human Resource Information Management (IHRIM) Journal*, June, 89-91.
3. Krebs, V. (2007). Managing the 21st century organization. *International Association for Human Resource Information Management (IHRIM) Journal*, 11, 2-8.

In-class Activity:

1. Group Assignments
2. Discuss group project
*Select a Group Project Dependent Variable

Assignment (should be completed prior to attending Sept. 13 class):

1. Bring your computer to class
2. Download and install Ucinet (<https://sites.google.com/site/ucinetsoftware/home>). You should be able to use the free version through the entirety of the course (it lasts for 90 days).

Class 3 (September 20)

Describing Important Network Connections

Which connections are important and why?

Read:

1. Kadushin, C. (2012). *Chpt 2: Basic network concepts, Part I: Individual members of networks*.
2. Kadushin, C. (2012). *Chpt 3: Basic network concepts, Part II: Whole social networks*.
3. Cross, R., & Parker, A. (2004). *Appendix A: Conducting and interpreting a social network analysis*.
4. Miemis, V. (25 May, 2011). Facebook: The social accelerator? *Forbes*.

Lab:

1. Ucinet Lab 1: Introduction to Ucinet
2. Ucinet Lab 2: Data Entry Exercise
3. Ucinet Lab 3: Running Centrality Measures

Assignment: Individual (Due by Wednesday, Sept. 26 at 11:59pm):

1. Answer questions associated with Ucinet Lab 3: Centrality (see Sakai site for instructions) (10 points)
2. Facebook visualization using Netvizz and Gephi (see Sakai site for instructions) (10 points)

Class 4 (September 27)**Legal and Ethical Issues in Social Network Analysis**

What are the legal and ethical implications of social networks in organizations?

Read:

1. Borgatti, S. P., & Molina, J. L. (2003). Ethical and strategic issues in SNA. *The Journal of Applied Behavioral Science*, 39, 337-349.
2. Kadushin, C. (2012). *Chpt 11: Ethical dilemmas of social network research*.
3. Vaccaro, A. (2011). Ethics hold the key to network contradictions. *IESE-Insight Magazine*, 37-43.

In-class Activity: Group

1. Create a social media policy

SECTION 2: NETWORK CONTENT

Class 5 (October 4)**Exploring Network Content and Identifying Problems**

How do you figure out what's going on in social network data?

Read:

1. Cross, R., & Parker, A. (2004). *Chpt. 3: Knowing what we know: Developing a sense and respond organizational capability*.
2. Cross, R., & Parker, A. (2004). *Chpt. 5: Pinpointing the problem: Understanding how individuals affect a network*.

Case:

1. Building a networked organization: Restructuring the IT department at MWH (A) and (B)

Assignment: Group (Due by Wednesday, Oct. 10 at 11:59pm):

1. Answer Case questions
 - a. What situation does Vic Gulas find himself in? What is MWH's situation?
 - b. What does the ONA reveal to Gulas about iNet (Be sure you can point to specific items in the A cases's exhibits to support what Gulas uncovered)
 - c. What does the ONA reveal to Gulas about his own personal network?
 - d. Which network concepts are relevant to Gulas' situation? Why?
 - e. Refer to Exhibit 1 in Case (A). Do the formal organizational charts reveal about how work actually gets done?

Class 6 (October 11)**Affect and Energy in Networks**

How do our affective responses influence our use of social networks?

Read:

1. Casciaro, T., & Lobo, M. (2005). Competent jerks, lovable fools, and the formation of social networks. *Harvard Business Review*, 83, 92-99.
2. Cross, R., & Parker, A. (2004). *Chpt. 4: Charged up: Creating energy in organizations*.
3. Kadushin, C. (2012). *Chpt 6: Small groups, leadership, and social networks*.
4. Krackhardt, D., & Hanson, J. (1993). Informal networks: The company behind the chart. *Harvard Business Review*, 71, 104-111.

Case:

1. Fischbach, K., Schoder, D., & Gloor, P. A. (2009). Analysis of informal communication networks. *Business & Information Systems Engineering*, 2, 1-8.

(class 6 continued on next pg)

In-class Activity:

1. Group Project meeting to identify themes and write hypotheses (Interviews must be completed by this date)

Assignment: Individual (Due by Wednesday, October 17 at 11:59pm)

1. Ibarra, H. (2002). Network assessment exercise. *Harvard Business Review*.

SECTION 3: NETWORK FUNCTIONS

Class 7 (October 18)

Getting a Job and Career Development (Brokerage, Social Capital, and Careers)

How does social capital affect your individual career and the careers of others?

Read:

1. Cross, C. & Thomas, R. J. (2009). *Chpt. 7: Driving performance by replicating high performers' networks*.
2. Kadushin, C. (2012). *Chpt 10: Networks as social capital*.
3. Uzzi, B., & Dunlap, S. (2005). How to build your network. *Harvard Business Review*, 83, 53-60.

Case:

1. Burton, M. D., & Lawrence, K. (1998). Jerry Sanders and X-Cadia Corp. Harvard Business School.
 - a. What was Sanders trying to accomplish?
 - b. What strategies did he use to build his business? How effective was he?
 - c. What was his strategy for building a network of relationships?
 - d. What network traps did he or didn't he avoid (see Cross & Thomas reading)? Give examples.
 - e. Would his strategies and tactics be likely to prove successful in the future, or should he consider adapting his approach? If he should adapt it, in what way?

Assignment: Individual (Due by Wednesday, October 24 at 11:59pm):

1. Thomas, D. A. (2009). Mapping your professional network. *Harvard Business Review*.
 - a. Come prepared to discuss your results in class on October 25 (you do not need to make a formal presentation, just be involved in an informal discussion).

Class 8 (October 25)

The Employment Relationship: Recruitment, Selection, Onboarding, and Turnover

How do social networks impact the employment relationship?

Read:

1. Ballinger, G., Craig, E., Cross, R., Gray, P. (2011). A stitch in time saves nine: Leveraging networks to reduce costs of turnover. *California Management Review*, 53, 111-133.
2. Buffet, M., Janicik, G. A., Gallegos, M., Quaggiotto, G., & Ashwell, L. (2010). *Chpt. 25: A network approach to onboarding*.
3. Osawa, J., & Mozur, P. (1 August, 2012). In China, Recruiting gets social. *The Wall Street Journal*.
4. Stevenson, S. (24 April, 2012). What your Klout score really means. *Wired Business*.

Class 9 (November 1)**Employee Development**

How can social networks connect employees with peers and mentors, support training and development, and foster engagement?

Read:

1. Baskin, E. C. (30 March, 2012). *Employee engagement in a social media world*. RetailingToday.com.
2. Hill, L., & Kamprath, N. (1998). Beyond the myth of the perfect mentor. *Harvard Business Review*.
3. Prost, M. (27 August, 2009). Using social networks for training. *HR Executive Online*.

Case: EMC – Using Social Media to Increase Employee Engagement in Key Decisions

Assignment: Individual (Due by Wednesday, November 7 at 11:59pm)

1. Higgins, M. (2004). The developmental network inventory. *Harvard Business Review*.

Class 10 (November 8)**Team Interaction, Collaboration, & Communication**

How do social networks help diagnose collaboration challenges?

Read:

1. Cross, R., Ehrlich, K., Dawson, R., Helferich, J. (2008). Managing collaboration: Improving team effectiveness through a network perspective. *California Management Review*, 50, 74-98.
2. Cross, R., Gray, P., Cunningham, S., Showers, M., & Thomas, R. J. (2010). The collaborative organization: How to make employee networks really work. *MIT Sloan Management Review*, 52, 83-90.
3. Cross, R., Laseter, T., Parker, A., & Velazquez, G. (2006). Using social network analysis to improve communities of practice. *California Management Review*, 49, 32-60.
4. Reuell, P. (2011). Nice guys can finish first. *Harvard Gazette*.

In-class Activity: Organizational design game.

Assignment: Individual (Due by November 14 at 11:59pm)

1. Ucinet Lab 4: Netdraw visualization (see Sakai site for instructions)

Class 11 (November 15)**Leadership, Power & Influence, and Key Opinion Leaders**

How do social networks help leaders emerge? Who are the influencers and the opinion leaders, and what social positions do they tend to occupy?

Read:

1. Kadushin, C. (2012). *Chpt 9: Networks, influence, and diffusion*.
2. Ibarra, H., & Hunter, M. (2007, January). How leaders create and use networks. *Harvard Business Review*, 1-9.
3. Hill, L. A. (1994). Exercising influence. *Harvard Business Review*.

Lab: Ucinet Lab 4: Brokerage

Class 12 (November 20 – Thursday classes moved to Tuesday)**Group Project Meeting Day**

In class Activity: Group Project meetings (data must be collected by this date)

SECTION 4: NETWORK RESULTS

Class 13 (November 29)

Diffusing Information and Generating Action

How do social networks influence individual behavior and the effective diffusion of information?

1. Blog post referencing “The Dragonfly Effect” by Aaker & Smith.
<http://coolinsights.blogspot.com/2011/10/dragonfly-effect-driving-social-change.html>
2. Cross, R., Liedtka, J., & Weiss, L. (2005). A practical guide to social networks. *Harvard Business Review*.
3. Miller, L .G., & Christakis, N. A. (2011). Tapping the power of social networks. *Harvard Business Review*.
4. Thompson, C. (2009), September 13). Are your friends making you fat? NY Times Magazine, retrieved from <http://www.nytimes.com/2009/09/13/magazine/13contagion-t.html?pagewanted=all>. Based on Christakis, N. A., & Fowler, J. H. (2009). *Connected: The surprising power of our social networks and how they shape our lives*. New York: Little Brown.

Case:

1. Chang, V., & Aaker, J. (2009). Obama and the power of social media and technology. *The European Business Review*. *Apply the model from “The Dragonfly Effect” blog post to the Obama case. Make sure to identify who “they” is/are in each of the following questions.
 - a. What did they do to Focus?
 - b. How did they Grab Attention?
 - c. How did they Engage the electorate?
 - d. How did they Empower small groups of people with little political power to make a big difference?
 - e. Based on your own experience and observation, what are the strengths and weaknesses of the Dragonfly Effect? If relevant: Have you ever tried to diffuse an idea or project before? Applying the Dragonfly Effect, why do you think it was successful or unsuccessful?

Class 14 (December 6)

Driving Financial Returns through Social Networks

How are social networks the drivers of value, revenue, and cost, and how do they impact performance, performance appraisals, and compensation?

Read:

1. Cross, C. & Thomas, R. J. (2009). *Chpt. 1: Aligning networks with strategic value propositions*.
2. Cross, C. & Thomas, R. J. (2009). *Chpt. 4: Driving financial return through network investments*.
3. McInnes, W. (31 July, 2012). Gamification in HR: The reinvention of work. *HR Magazine*.
4. Silverman, R. E., & Kwoh, L. (31 July, 2012). Peer performance reviews take off. *The Wall Street Journal*.
5. McGregor, J. (11 March, 2009). Performance reviews take a page from Facebook. *Businessweek*.

In-class Activity: Group Meetings