Executive Turnover and Company Performance in the ICT Sector

Olav Spiegel, Puja Abbassi, Johannes Putzke, Kai Fischbach und Detlef Schoder¹

Abstract

Recent articles in online media suggest that competition around highly skilled knowledge workers in the Information and Communication Technology (ICT) sector has reached a new level. *The Wall Street Journal* even calls it the "War for Internet Talent" (Efrati and Tam 2010), building on and refining the war for talent as proclaimed by Chambers et al. (1998) and Michaels et al. (2001). Web firms such as Google, Facebook, Twitter, and others are adding staff at high rates, increasingly at the expense of their competitors. More than 10 percent of Facebook's employees previously worked for Google (Efrati and Morrison 2010). At the same time, talented employees become entrepreneurial and establish their own startups (e.g., Kessler 2010; Mourmant et al. 2009; Taylor 2011), spurred by venture capitalists seeking lucrative investment opportunities (Mendell and Volpi 2011).

Knowledge is the most important resource in the so-called new economy (Grant 1996; Nonaka 1994). Thus, attracting and retaining employees, especially in knowledge-intensive firms (Alvesson 1995; Starbuck 1992), is an ongoing subject of interest for academic research (e.g., Hiltrop 1999; Holland et al. 2007; Kyndt et al. 2009; Mitchell et al. 2001).

Traditionally, the effect of human resources on company performance has been assessed from a human capital point of view, focusing on knowledge, skills, and experience (e.g., Hitt et al. 2001; Kor and Leblebici 2005). Increasingly, organizational research has adopted a perspective of the firm as a social community or collective (Kogut and Zander 1996), incorporating Granovetter's (1985) argument of embeddedness of economic action in social structures. In particular, the construct of social capital has been applied to explain organizational advantage (Leana and Van Buren 1999; Nahapiet and Ghoshal 1998). "Social capital is the contextual complement to human capital in explaining advantage. Social capital explains how people do better because they are somehow better connected with other people" (Burt 2005). The value of employees with a strong network of relationships goes far beyond their base of individual knowledge and skills (Dess and Shaw 2001). Shaw et al. (2005) build on that earlier work and provide initial evidence for a causal relationship between social capital loss from employee turnover and company performance.

There are two distinctive notions to structural social capital as a construct from the field of social network research (see Borgatti and Foster 2003 for a typology). On the one hand, it is seen as a property of intraorganizational networks (Adler and Kwon 2002), motivated by Coleman's work on the advantage of closure and cohesiveness between members of an organization in that it facilitates the pursuit of common goals (Coleman 1988). On the other hand, there is social capital of brokerage, focusing on the structure of an actor's external relationships. According to Burt's seminal work (Burt 1992), a network rich in relationships that bridge structural holes and connect non-redundant sources of information creates a competitive advantage for its owner. These two perspectives on social capital integrate very well: the highest performance can be realized when individuals in a group or company span structural holes external to the group but retain cohesiveness within the group (Burt 2001).

Although there is a growing body of research on social capital that has generated considerable insight at the interpersonal, interunit, and interorganizational level (see for example Adler and Kwon 2002; Borgatti and Foster 2003 for overviews), there is an intriguing gap in that the majority of academics in this area have focused on single- and within-level network structures and relationships (Moliterno and Mahony 2011). Building on Breiger's duality principle (1974), the interpenetration of

¹ Universität zu Köln, Seminar für Wirtschaftsinformatik und Informationsmanagement, Albertus-Magnus-Platz, 50923 Köln, {spiegel|abbassi|putzke|fischbach|schoder}@wim.uni-koeln.de

interpersonal ties and networks of intergroup ties, and the theory of systems of nested networks (Harary and Batell 1981), Moliterno and Mahony (2011) calls for research that combines multiple levels of organizational networks as organizations are multilevel systems.

Research has shown that the construct of social capital has an effect on organizational performance (Leana and Van Buren 1999; Nahapiet and Ghoshal 1998). Social capital complements the conventional human capital constructs (Burt 2005; Shaw et al. 2005) in the tradition of both the resource-based and knowledge-based views of the firm. Thus far, employee turnover has been associated with a loss in social capital and, consequently, with a drop in company performance (Shaw et al. 2005; Ton and Huckman 2008). Furthermore, it has been stated that social capital on the level of the individual aggregates into social capital at the organizational level (Burt 1992; Leana and Van Buren 1999). However, researchers typically focus on a single level of investigation (Moliterno and Mahony 2011).

Organizations are embedded in interorganizational networks (Granovetter 1985; Uzzi 1996). Structural holes in those networks serve as a source for social capital of brokerage (Burt 1992, 2005). Brokerage opportunities provide information and control benefits (Burt 1997) and, according to Granovetter's (1973) argument, it is the weak ties that play a pivotal role in information distribution. Executive turnover can lead to dissolution of interorganizational ties (Broschak 2004). *Ceteris paribus*, hiring an executive will create ties, potentially weak ties, between former employers and new employer. This conclusion is based on the duality principle (Breiger 1974) and has been drawn before, for example in research on board interlocks (Mizruchi 1996).

The guiding research questions in our study will be: Does social capital of brokerage from informal interorganizational ties have an effect on company performance? Which executives are the key resources in terms of their individual contribution to the aggregate social capital of their current employer? We follow a multilevel approach (Moliterno and Mahony 2011) in that we draw our conclusions on the company level from an underlying network of executives and their relationships resulting from turnover. We answer these questions by applying social network analysis (SNA) methodologies to a very large dataset on executive turnover between companies in the Information and Communication Technology (ICT) sector. We derive metrics for each company based on its structural position in the network, including betweenness centrality as a measure for aggregate social capital of brokerage (Burt 2001). Based on this aggregate, we can derive each executive's individual contribution.

Our research contributes to different areas of ongoing academic interest: we add to a better understanding of executive turnover in the ICT sector; we add a complementary social capital facet and new insights into sources of organizational advantage; and we add empirical evidence to the still small body of research on multilevel systems in the area of social network analysis.

In addition, our research will have direct practical applications. Only recently, Burt and Ronchi (2007) again confirmed the effect of social capital, based on a field experiment in teaching executives to see social capital. We increase awareness and effective use of social capital in two ways. First, we provide a way to differentiate companies in the ICT sector according to their social capital of brokerage. This can help explain and justify intuitive actions of companies and investors that seem otherwise irrational based on traditional views of human and social capital. Second, our results enhance the identification and understanding of strategic human resources, key employees rich in distinct social capital of brokerage. This is a prerequisite for effective retention management, and an additional decision criterion for selecting and hiring (or even enticing) future employees based on their relationship context.

References

Adler, P. S., and Kwon, S.-W. 2002. "Social Capital: Prospects for a New Concept," *The Academy of Management Review* (27:1), pp. 17–40.

Alvesson, M. 1995. Management of Knowledge Intensive Companies, Berlin: de Gruyter.

Borgatti, S. P., and Foster, P. C. 2003. "The Network Paradigm in Organizational Research: A Review and Typology," *Journal of Management* (29:6), pp. 991–1013.

Breiger, R. L. 1974. "The Duality of Persons and Groups," Social Forces (53:2), pp. 181-190.

- Broschak, J. P. 2004. "Managers' Mobility and Market Interface: The Effect of Managers' Career Mobility on the Dissolution of Market Ties," *Administrative Science Quarterly* (49:4), pp. 608–640.
- Burt, R. S. 1992. *Structural Holes: The Social Structure of Competition*, Cambridge, Massachusetts: Harvard University Press.
- Burt, R. S. 1997. "The Contingent Value of Social Capital," *Administrative Science Quarterly* (42:2), p. 339.
- Burt, R. S. 2001. "Structural Holes versus Network Closure as Social Capital," in *Social Capital: Theory and Research*, N. Lin, K. S. Cook, and R. S. Burt (eds.), New Brunswick: Aldine Transaction, pp. 31–56.
- Burt, R. S. 2005. *Brokerage and Closure: An Introduction to Social Capital*, Oxford: Oxford University Press.
- Burt, R. S., and Ronchi, D. 2007. "Teaching Executives to See Social Capital: Results from a Field Experiment," *Social Science Research* (36:3), pp. 1156–1183.
- Chambers, E. G., Foulon, M., Handfield-Jones, H., Hankin, S. M., and Michaels III, E. G. 1998. "The War for Talent," *The McKinsey Quarterly* (3), pp. 44–57.
- Coleman, J. S. 1988. "Social Capital in the Creation of Human Capital," *The American Journal of Sociology* (94), pp. 95–120.
- Dess, G. G., and Shaw, J. D. 2001. "Voluntary Turnover, Social Capital, and Organizational Performance," *The Academy of Management Review* (26:3), pp. 446–456.
- Efrati, A., and Tam, P.-W. 2010. *Google Battles to Keep Talent*. http://online.wsj.com/article/SB10001424052748704804504575606871487743724.html. Accessed 3 May 2011.
- Efrati, A., and Morrison, S. 2010. *Google to Give Staff 10% Raise*. http://online.wsj.com/article/SB10001424052748703523604575605273596157634.html. Accessed 3 May 2011.
- Granovetter, M. S. 1973. "The Strength of Weak Ties," *The American Journal of Sociology* (78:6), pp. 1360–1380.
- Granovetter, M. S. 1985. "Economic Action and Social Structure: The Problem of Embeddedness," *The American Journal of Sociology* (91:3), pp. 481–510.
- Grant, R. M. 1996. "Toward a Knowledge-Based Theory of the Firm," *Strategic Management Journal* (17), pp. 109–122.
- Harary, F., and Batell, M. F. 1981. "What is a System?" Social Networks (3:1), pp. 29-40.
- Hiltrop, J.-M. 1999. "The Quest for the Best: Human Resource Practices to Attract and Retain Talent," *European Management Journal* (17:4), pp. 422–430.
- Hitt, M. A., Bierman, L., Shimizu, K., and Kochhar, R. 2001. "Direct and Moderating Effects of Human Capital on Strategy and Performance in Professional Service Firms: A Resource-Based Perspective," *The Academy of Management Journal* (44:1), pp. 13–28.
- Holland, P., Sheehan, C., and Cieri, H. de 2007. "Attracting and Retaining Talent: Exploring Human Resources Development Trends in Australia," *Human Resource Development International* (10:3), pp. 247–262.
- Kessler, S. 2010. *Life After Google: 15 Startups Founded by Ex-Employees*. http://mashable.com/2010/08/26/ex-googler-startups/. Accessed 3 May 2011.
- Kogut, B., and Zander, U. 1996. "What Firms Do? Coordination, Identity, and Learning," *Organization Science* (7:5), pp. 502–518.
- Kor, Y. Y., and Leblebici, H. 2005. "How Do Interdependencies among Human-Capital Deployment, Development, and Diversification Strategies Affect Firms' Financial Performance?" *Strategic Management Journal* (26:10), pp. 967–985.
- Kyndt, E., Dochy, F., Michielsen, M., and Moeyaert, B. 2009. "Employee Retention: Organisational and Personal Perspectives," *Vocations and Learning* (2:3), pp. 195–215.
- Leana, C. R., and Van Buren, H. J. 1999. "Organizational Social Capital and Employment Practices," *The Academy of Management Review* (24:3), pp. 538–555.
- Mendell, E., and Volpi, J. 2011. Venture Capital Industry Raises \$7.1 Billion In Q1 2011: Strongest Annual Start for Fundraising Dollars Since 2001.
 - http://www.nvca.org/index.php?option=com_docman&task=doc_download&gid=715&Itemid=9 3. Accessed 3 May 2011.
- Michaels, E., Handfield-Jones, H., and Axelrod, B. 2001. *The War for Talent*, Boston, Massachusetts: Harvard Business School Press.

- Mitchell, T. R., Holtom, B. C., Lee, T. W., and Graske, T. 2001. "How to Keep Your Best Employees: Developing an Effective Retention Policy," *The Academy of Management Executive (1993-2005)* (15:4), pp. 96–109.
- Mizruchi, M. S. 1996. "What Do Interlocks Do? An Analysis, Critique, and Assessment of Research on Interlocking Directorates," *Annual Review of Sociology* (22), pp. 271–298.
- Moliterno, T. P., and Mahony, D. M. 2011. "Network Theory of Organization: A Multilevel Approach," *Journal of Management* (37:2), pp. 443–467.
- Mourmant, G., Gallivan, M. J., and Kalika, M. 2009. "Another Road to IT Turnover: The Entrepreneurial Path," *European Journal of Information Systems* (18:5), pp. 498–521.
- Nahapiet, J., and Ghoshal, S. 1998. "Social Capital, Intellectual Capital, and the Organizational Advantage," *The Academy of Management Review* (23:2), pp. 242–266.
- Nonaka, I. 1994. "A Dynamic Theory of Organizational Knowledge Creation," *Organization Science* (5:1), pp. 14–37.
- Shaw, J. D., Duffy, M. K., Johnson, J. L., and Lockhart, D. E. 2005. "Turnover, Social Capital Losses, and Performance," *The Academy of Management Journal* (48:4), pp. 594–606.
- Starbuck, W. H. 1992. "Learning by Knowledge-Intensive Firms," *Journal of Management Studies* (29:6), pp. 713–740.
- Taylor, C. 2011. *Skype's Real P2P Network*. http://gigaom.com/2011/04/25/skypes-real-p2p-network/. Accessed 3 May 2011.
- Ton, Z., and Huckman, R. S. 2008. "Managing the Impact of Employee Turnover on Performance: The Role of Process Conformance," *Organization Science* (19:1), pp. 56–68.