Miskolci Egyetem Gazdaságtudományi Kar
University of Miskolc Faculty of Economics

KONFERENCIAKIADVÁNY

„MÉRLEG ÉS KIHÍVÁSOK”
XI. NEMZETKÖZI TUDOMÁNYOS KONFERENCIA

Ph.D. szekciók tanulmánykötete
ISBN 978-963-358-203-9

2019. október 17-18.
Miskolc-Lillafüred

Felelős szerkesztők:

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TRUST AND COMPETENCE – RELATIONAL CONDITIONS OF ADVICE-SEEKING IN ORGANIZATIONAL SOCIAL NETWORKS*

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SUMMARY
The revolutionary advancement of technology brought the attention of academics and management practitioners to the innovative capability of organizations in the past decade. Companies in knowledge-based industries increasingly focus on their ability of self-renewal and adaptation. Simultaneously, the amassment, management, sharing, and employment of knowledge have grown in importance. Codification of knowledge is an efficient way, although not always viable, to make it accessible to many employees. Tacit or hidden knowledge, however, spreads only through employee interactions, while it also plays an essential role in most organizations. Organizational network analysis, an established diagnostic tool in consulting practice, provides the apparatus to explore knowledge networks in organizations. What are the conditions of advice-seeking and knowledge-sharing in organizational social networks? What are the relational prerequisites of asking for help? In this paper, I present the knowledge network analysis of a small Hungarian based knowledge-intensive company.

1. INTRODUCTION

The ever-fiercer global competition has attracted the attention of management researchers and practitioners to the innovative capability of organizations. Researchers argue that prerequisites of innovation changed in the past decades: new intellectual contents emerge from collaboration and collective contemplation of people with different knowledge and background (Cheng et al., 2019; Faraj & Wasko, 2015). This marks a significant move from the conventional images of lonely polymaths of the age of Renaissance or the systematic but still solitary scientists of the age of Enlightenment. Nowadays, cooperating teams and *networks* whose members share their knowledge lead the way to innovation (Sára et al., 2014).
The broad concept of knowledge management includes organizational processes that aim to reach strategic objectives through the efficient use and provision of knowledge at the right time and at the right place (Qureshi et al., 2018). This definition encompasses activities related to (1) creation or construction of knowledge; (2) storage and retrieval of knowledge; (3) transfer, and (4) application of knowledge (Alavi & Leidner, 2001; García-Sánchez, García-Morales, & Bolívar-Ramos, 2017). Knowledge-sharing is a type of knowledge transfer in which individuals pass on knowledge, experience, or other work-related informational content to co-workers (Stenius et al., 2017).

* This study was supported by the ÚNKP-19-3-I New National Excellence Program of the Ministry of Technology and Innovation.

Knowledge-sharing has a positive effect on organizational performance (Quigley et al., 2007). Those companies that motivate their employees to share their knowledge tend to create more innovations concerning their products or procedures than those who do not (Ahmed et al., 2018). The transfer of tacit knowledge may also contribute to the improvement of key-competences and competitiveness of companies (Cheng et al., 2019). This is also true for individual achievements: according to Quigley et al. (2007), employees provide the best performance if knowledge and information owners assist their efforts.

1.1. A network perspective of knowledge-sharing and advice-seeking

Network studies examine complex systems of various kinds. The network perspective of organizational knowledge-sharing and advice-seeking offers a unique approach to analyze connections between employees and information content that flows through them. Knowledge networks are interconnected systems of actors who aim to share knowledge and generate new knowledge through a combination of knowledge elements (Škerlavaj, Dimovski, & Desouza, 2010; Tortoriello, Reagans, & Mcevily, 2012). Researchers of this field examine different knowledge networks at (1) interpersonal, (2) inter-group, and (3) inter-organizational levels (Csontos & Szabó, 2019; Phelps, Heidl, & Wadhwa, 2012). In this paper, I focus on interpersonal networks in which advice-seeking and knowledge-sharing occur.

Managing the knowledge necessary for their operation is essential for all organizations. Although, as it is the most critical tool of production in knowledge-intensive organizations (e.g., professional service providers and consultants), its proper use is a key-competence for competitiveness. In many cases, knowledge management systems fail: even if the required knowledge or information is present in the organization (possessed by some of the employees), it is not available at a given moment. Ambient awareness is the knowledge of who knows whom and who knows what (Leonardi, 2015). This meta-knowledge is vital to accessing critical information in an organization: the less formalized and codified a piece of knowledge is, the more likely ambient awareness is needed to retrieve it. Knowledge-sharing often occurs in informal relationships that remain in the blind spot of managers. A network perspective might help to explore these relationships that would otherwise be missed from organizational charts (Phelps et al., 2012).

From a network perspective, actors (nodes) in a knowledge or innovation network are members or other stakeholders of the organization, and relationships (ties) between them represent advice-seeking or collaboration. These directed or undirected connections transmit diverse flows of information and emotions (Borgatti, Brass, & Halgin, 2014). With the tools of organizational network analysis, researchers and consultants can examine and compare patterns of interpersonal interactions in organizational social networks (Vohra & Thomas, 2016). Actors in knowledge networks are (1) knowledge owners in possession of valuable intelligence, (2) intermediaries in knowledge transfer and (3) creators of new knowledge or innovation. Ties in a knowledge network also have multiple functions: these are (a) tools that help in the re-combination of knowledge elements (Škerlavaj et al., 2010), (b) channels in which information flows (Borgatti et al., 2014), and (3) filters that influence the perception of actors on each other's expertise.

Social networks are essential for the spread of innovations within a corporation, and network structures affect the way it happens. Network density and a central network position of source actors, for instance, might influence the speed of dissemination. Network experiments show that assuming gains from the transmission of knowledge (e.g., financial or emotional recognitions), it is not the inventors but the most successful disseminators who benefit the most (Takács, 2010). The more central position an actor occupies in an organizational social network, the more opportunity they get to collect and distribute pieces of information (Phelps et al.,

2012). The centrality of actors might be evaluated by a set of different measures (Robins, 2015). Degree centrality (in-degree centrality in case of directed networks) shows the number of people who ask a given actor for knowledge. Eigenvector centrality also takes into account the relative position of advice-seekers in the knowledge network: it assigns higher values to actors who share knowledge with other actors of high centrality.

1.2. Conditions and motives of advice-seeking

Actors in a knowledge network may choose to seek advice from former acquaintances or people they do not know personally but whom they perceive as experts or knowledge owners (Nebus, 2006). According to Borgatti & Cross (2003), the image you have about other people significantly affects your choice of target in an advice-seeking context. Thus, the visibility of expertise has a profound influence on knowledge-sharing requests. Seekers should be aware of typical organizational sites of knowledge creation and the location (i.e., knowledge owners) of specific knowledge elements they require.
Previous research shows that advice-seekers prefer turning to actors whom they deem sympathetic and accessible to those who have higher quality knowledge on a particular subject (Casciaro & Sousa Lobo, 2005). Casciaro & Lobo (2005) claim that personal relations and emotions weigh more than competence. They argue that network actors systematically avoid seeking advice from those colleagues they do not like, even if their expertise on a given subject is well-known and visible. The choice of knowledge source also depends on the specific content and the task it is related to. If the problem is well-structured and fully understood by the seeker, they might evaluate the necessary knowledge more efficiently and can choose more wisely (Nebus, 2006).
According to Borgatti & Cross (2003), advice-seeking behavior is usually the consequence of one or more of the five following motives. (1) Solution: a piece of information or knowledge that helps to resolve a task or answer a question. (2) Meta-knowledge: information on who knows what and who knows whom. (3) Re-definition of a problem: the seeker gains new perspectives that might help to reformulate their original problem. (4) Confirmation, reassurance: advice-seekers aim to reinforce their previous knowledge and gain self-confidence. (5) Legitimacy: the source of expertise legitimate the knowledge itself by his personality (e.g., position, public image). Borgatti & Cross (2003) also claim that anytime you contact another person, the most recent experience overwrite previous perceptions. Thus, the probability of future attempts on advice-seeking changes dynamically over time.

2. DATA AND METHODS

This paper aims to examine relational conditions of advice-seeking in an organizational knowledge network. Based on previous research findings in the relevant scientific literature, I analyzed actual advice-seeking relationships in the context of three other relationships: (1) sympathy, (2) trust, and (3) perceived expertise. I also compared network positions of actors to their standing in the formal hierarchy.
The empirical research was carried out in a Budapest-based management consultancy of multinational background. The company has been present in Hungary since the early 2000s and grew steadily in the past two decades. It is a knowledge-intensive organization as it uses and combines knowledge of its members to provide professional services for its customers. To safeguard its market position, the company needs to evolve and innovate continuously. In this research, we asked all 23 employees of the company, most of whom are junior or senior consultants, and partners. Respondents were asked to fill out a survey on their relevant social and advice-seeking relations, their opinion on the company's knowledge management practice,

and their demographic data. Questionnaires were administered by Ms. Nikolett Báder, a B.A. student of Corvinus University of Budapest.

Organizational network analysis requires a relatively high response rate as it relies heavily on relational data. In our sample, 21 out of 23 employees filled out the questionnaire which means a 91 percent response rate. The survey included attitude questions (on a 6-grade Likert-scale) on knowledge management practice and relational questions concerning the examined factors:

a. Whom do you like to meet outside the workplace? (Sympathy)
b. Whom do you turn to if you need to discuss personal problems? (Trust)
c. Which of your colleagues stand out with their expertise? (Competence)
d. Whom do you turn to for knowledge or advice related to your work (Advice-seeking)

Although recorded survey responses contain data that might support an in-depth analysis of the company examined, in this paper, I focus only on the correlation and interdependence of sympathy, trust, and perceived competence on actual advice-seeking relationships. I analyzed data by UCINET, a network research tool (Borgatti et al., 2002) and SPSS 25, an instrument of statistical analysis. *Table 1* summarizes the demographic data (age and position) of respondents.

Table 1 Demographic data of respondents (Source: own design)

Count					
		Position			
		Intern	Junior	Senior	Total
Age	<25	1	0	0	1
	25-30	2	7	1	10
	31-35	0	0	2	2
	36-40	0	0	7	7
	41-45	0	0	1	1
Total		**3**	**7**	**11**	**21**

To examine the influence of sympathy, trust, and perceived competence relationships on advice-seeking, I selected the latter one as dependent and the others as independent variables. Adjacency matrices of the relationship graphs contain 0 or 1 values meaning that a given $A_{i,j}$ relationship exists (1) or not (0). All networks include directed ties (i.e., relationships are not automatically reciprocal), hence the matrices are asymmetric. Actors could not choose themselves; thus, we might ignore the 0 values of the main diagonal. The theoretical maximum of relationships is 506; however, as respondents could choose four other actors at most, their actual maximum number is 92. I analyzed connections between different relationship types by binary logistic regression in the SPSS 25 statistics software.

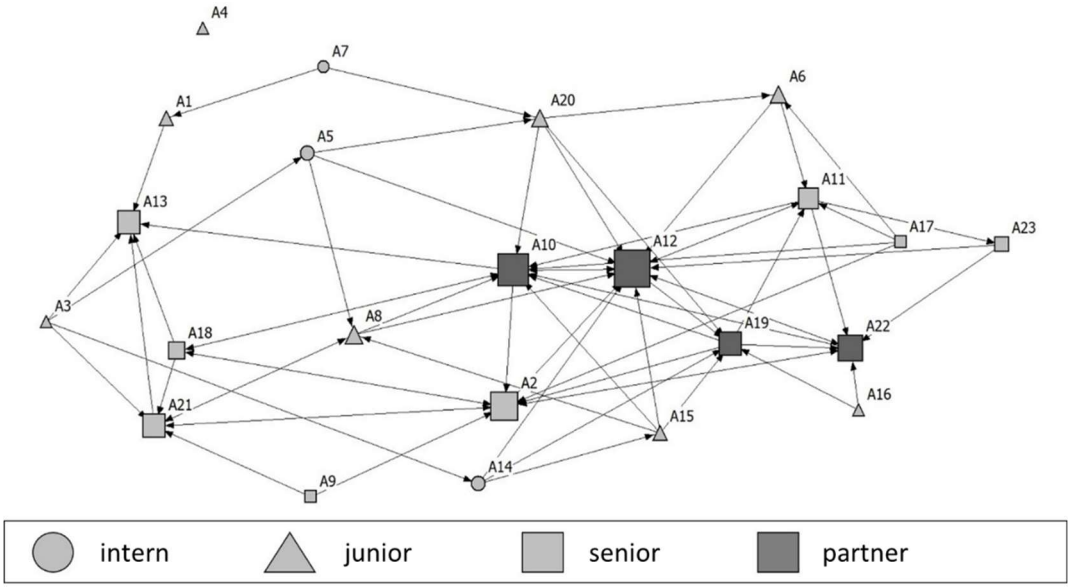
3. FINDINGS

The advice-seeking network of the examined organization includes actors (interns, junior and senior consultants, and managing partners) and relationships among them. *Figure 1* shows the graph mapping of the network. Shape and color of nodes sign position in the formal hierarchy, while arrowheads indicate the direction of the relationship (two-headed arrows mean mutual choices of respondents). Node size refers to in-degree centrality values: the more incoming ties a node has, the larger it is on the figure.

Figure 1 shows that apart from one actor (A4) all other employees ask for or provide knowledge to at least two different people. The network center and periphery are visibly separated. Senior

consultants and managing partners are generally more popular, with multiple incoming requests for knowledge, while most interns and juniors occupy a less dominant position in the network. A9 and A17 actors are exceptions, as despite being senior consultants, nobody chose them as sources of work-related information or knowledge. It seems that interns managed to get integrated into the knowledge network: two out of three ask for and also provide knowledge to others.

Figure 1 Advice-seeking network in the examined organization (Source: own design)



I examined the influence of three independent variables (sympathy, trust, and perceived competence) on advice-seeking relationship formation, the dependent variable in my regression model. The dependent variable in a binary logistic regression model can take two values; in this case 1 if the relationship exists and 0 if it does not. The resulting model has significant explanatory power (χ^2=141,580; p=0,000; Nagelkerke R^2=0,453). The Hosmer-Lemeshow test result is not significant (p=0,454) which means that my model fits measured data. *Table 2* summarizes the influence and significance of the independent variables included in the model.

Table 2 Variables included in the statistical model (Source: own design)

Variables included in the binary logistic regression model						
	B	S.E.	Wald	df	Sig.	Exp(B)
Sympathy	-1,039	0,527	3,887	1	0,049	0,354
Trust	3,242	0,462	49,179	1	0,000	25,581
Perceived competence	2,452	0,353	48,332	1	0,000	11,615
Constant	-3,240	0,253	163,418	1	0,000	0,039

As reported in my results, it seems that sympathy (p=0,049), interpersonal trust (p=0,000), and perceived competence (p=0,000) all affect the formation of advice-seeking relationships. While trust and perceived competence increase the probability of tie formation in the advice seeking network, it seems that sympathy, strangely, reduces it. (The direction of influence on probability can be deduced from the negative or positive signs before B values and Exp(B) values smaller

or higher than 1. As stated in *Table 2*, trust makes the probability of requests for work-related knowledge almost 26 times higher and perceived competence nearly 12 times higher.

4. CONCLUSIONS

In this paper, I examined the relational conditions of advice-seeking and knowledge-sharing, organizational phenomena that have increasing importance for the competitiveness of knowledge-intensive companies. I assumed that knowledge flows through interpersonal relationships among members of the organization. I also presumed that knowledge is, in part, generated by the recombination of various knowledge elements during employee interactions. Thus, in this paper, I argued for the usefulness of a network perspective in the analysis of knowledge management processes.

In my empirical research, I wished to explore the influence of different interpersonal relationships on advice-seeking behavior. My findings suggest that in the examined organization, it is mostly interpersonal trust and perceived competence that increase the probability of advice-seeking tie formation. Sympathy, on the other hand, seems to somewhat reduce the likelihood of asking for knowledge. The reason behind this might be the way we explored sympathy relationships. In the questionnaire, respondents were asked to list four people at most whom they like to meet outside the workplace. This question is frequently asked and validated in organizational network research. However, it seems to result in a selection of colleagues whom they feel close to themselves (i.e., they are fun, open, and easy to spend time with) but to whom they would not turn for professional knowledge. A pleasant company might not be the wisest, after all.

Generalizability of my findings is limited as I examined only one knowledge network, and organizational characteristics (e.g., size, industry, and level of fluctuation) probably influenced the outcome that might be different in another setting. When realized, knowledge-sharing changes trust and perception of expertise among actors, according to the dynamic model of Borgatti & Cross (2003). Hence, longitudinal research with a dynamic approach might be a reasonable continuation of this research. The exploration of other, non-relational, conditions of knowledge-sharing (e.g., personality traits, organizational context, or leadership styles) also seems to be fruitful. The goal of this paper was twofold. First, to bring attention to the usefulness of network perspective in the research on knowledge sharing. Second, to advise management practitioners to reinforce trust among their employees and increase the visibility of their expertise in order to boost advice-seeking and knowledge-sharing behavior.

ACKNOWLEDGMENTS

I am grateful to Ms. Nikolett Báder, B.A. student of Corvinus University of Budapest, for her contribution to data collection in this research.

FUNDING

This study was supported by the ÚNKP-19-3-I New National Excellence Program of the Ministry of Technology and Innovation.

Innovációs és Technológiai Minisztérium

Új Nemzeti Kiválóság Program

Nemzeti Kutatási, Fejlesztési és Innovációs Hivatal

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