Information and knowledge networks in organizations (ÚNKP-19-3-I-BCE-163)

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The networked nature of knowledge creation

In knowledge-based organizations, knowledge and innovation is created as the result of collaboration, co-thinking, and co-creation (Harzing et al., 1996; Phelps et al., 2012; Vadera et al., 2016).

Advice-seeking

Knowledge sharing

Collaboration

Motives of advice-seeking behavior

Solution: a piece of information or knowledge that helps to resolve a task or answer a question.

Meta-knowledge: information on who knows what and who knows whom.

Legitimacy: the source of expertise legitimate the knowledge itself by their personality (e.g., position, public image).

Confirmation, reassurance, advice-seeking aim to reinforce knowledge and gain self-confidence.

Data sample and methods

Questionnaire (paper-based), 21 respondents

Relational data and evaluations:
- When do you like to meet outside the workplace? (Symmetry)
- When do you turn to if you need to discuss personal problems? (Trust)
- Which of your colleagues stand out with their expertise? (Competence)

When do you turn to for knowledge or advice related to your work (advice-seeking)?

UCINET analysis (network mapping), centrality measures

SPSS 25 analysis (binary logistic regression)

Regression model

Dependent variable: advice-seeking relationships

Independent variables: trust, sympathy, and perceived competence

The resulting model has significant explanatory power (R²=0.432). The Hosmer-Lemeshow test result is not significant (p=0.454) which means that my model fits measured data.

<table>
<thead>
<tr>
<th>Variables included in the binary logistic regression model</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sympathy</td>
<td>-1.039</td>
<td>0.527</td>
<td>3.881</td>
<td>0.049</td>
<td>0.354</td>
</tr>
<tr>
<td>Trust</td>
<td>3.242</td>
<td>0.462</td>
<td>49.179</td>
<td>0.000</td>
<td>25.581</td>
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<tr>
<td>Perceived competence</td>
<td>2.452</td>
<td>0.553</td>
<td>48.323</td>
<td>0.000</td>
<td>11.675</td>
</tr>
<tr>
<td>Constant</td>
<td>-3.240</td>
<td>0.255</td>
<td>163.418</td>
<td>0.000</td>
<td>0.039</td>
</tr>
</tbody>
</table>

Knowledge networks

- Knowledge networks are interconnected systems of actors who aim to share knowledge and generate new knowledge through a combination of knowledge elements (Śkerlavaj, Dimovski, & Dessouza, 2010; Tortorella, Reagans, & Mooney, 2012).
- Networks = actors + relationships + flows
  - Actors: (1) knowledge owners, (2) intermediaries, (3) creators
  - Relationships: (1) tools of recombination, (2) channels, (3) filters
  - Sharing of tacit knowledge
    - Ambient awareness (who knows what and who knows whom)
  - 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).

Research questions

- Which relationships affect advice-seeking in an organizational knowledge network?
  - Do they increase or decrease the probability of advice-seeking?
  - Which actors tend to be in central positions?

Advice-seeking and trust relationships

Regression model

Selected literature


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