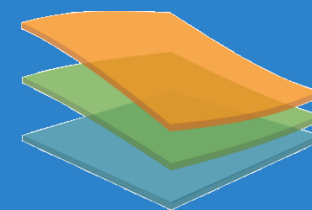


# Balancing Knowledge Protection and Sharing in Networks

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I-KNOW – Workshop Wissen 4.0



**Learning Layers**

Scaling up Technologies for Informal Learning in SME Clusters



# Motivation

- The creation of digital innovations demands inter-organizational collaboration, typically performed in network settings (Yoo et al., 2012).
- In networks, the risk exists that some sharing partners exploit firm specific advantages from others (Hamel, 1991)
- Strategies are needed to balance benefits of engaging in inter-organizational knowledge sharing and knowledge risks threatening their competitive advantage. (Olander, Vanhala, & Hurmelinna-Laukkanen, 2014; Estrada et al., 2016, Loebbecke et al., 2016).
- In networks not all members are known and behaviour is difficult to monitor
  - *knowledge protection measures such as formal contracts, trust, relational governance or monitoring of behaviour are difficult to apply in networks*
  - *This reduces the attractiveness of networks and might lead to lower participation and contribution*

# Research Focus

- Knowledge-based view of the firm an established theoretical perspective (Grant, 1996; Sveiby, 2001)
- Knowledge protection focusses on (a) the prevention of unwanted knowledge spill-overs (Ahmad et al., 2014), (b) the reduction of knowledge visibility (Lee et al., 2007), and (c) knowledge loss (Jennex & Durcikova, 2013).
- Research mainly focused on governance mechanisms in dyadic relationships, i.e. strategic alliances, cooperation's etc. focusing on direct knowledge exchange relationships neglecting third parties mostly (Hernandez, Sanders, & Tuschke, 2015; Pahnke, McDonald, Wang, & Hallen, 2015).
- Results are often not applicable to network settings that have many indirect ties (Pahnke et al., 2015, Hernandez et al., 2015)

# Sample



Network (ID)	# Members	Sector	NACE-Code	# Interviews		
				Round 1	Round 2	Round 3
N1	130	Construction of buildings	F41	1	5	-
N2	30	Construction of buildings	F41	1	5	3
N3	92	Activities of professional membership organisations	S94.1.2	1	4	-
N4	270	Construction	F	1	5	2
N5	1600	Activities of professional membership organisations	S94.1.2	1	5	-

N6	85	Production of electricity	D35.1.1	1	5	-
N7	108	Information and Communication	J	1	4	-
N8	63	Human health activities	Q86	1	5	1
N9	83	Engineering activities and related technical consultancy	M71.1.2	1	3	1
N10	139	Accommodation and food service activities	I	1	3	1



N11	27	Human health activities	Q86	1	4	3
N12	2600+	Human health activities	Q86	1	3	-
N13	41	Human health activities	Q86	1	1	3
N14	50	Human health activities	Q86	1	1	-
N15	538	Human health activities	Q86	1	5	-
N16	150	Human health activities	Q86	1	4	-

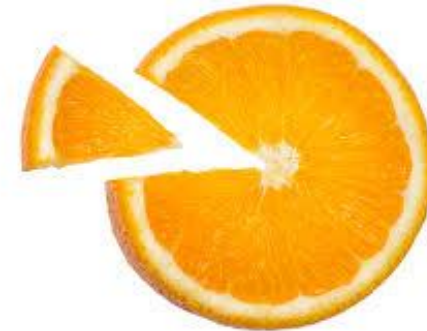


Σ	16	61	14	91
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# Results Overview



Select group with high trust



Share partial aspects of the knowledge base



Select group with low proximities



Exclude topics from knowledge sharing

# Discussion

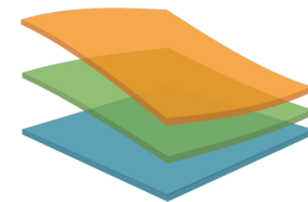
- Trust is discussed in literature as mechanism to mitigate knowledge risks in a group
- Knowledge risks cannot be properly assessed for a group and hence mechanisms need to be applied upfront (as part of selection)
  - Characteristics of a group are assessed in terms of proximity to mitigate knowledge risks
  - Norms and values of a group defining depth and breadth of knowledge sharing as mechanisms to mitigate knowledge risks

***Surprisingly, networks having such knowledge protection measures in place, have a improved participation and more intensive knowledge sharing!***

# Implications

- Our findings contradict the assumption that knowledge sharing substitutes knowledge protection and vice versa.
- Our findings suggest that well defined knowledge boundaries and features supporting the enforcement are beneficial for inter-organizational knowledge sharing.
- Our results demonstrate the value of considering knowledge risks while recommending knowledge sharing groups.
- Our findings suggest that features supporting the assessment of a sharing group are helpful.

Thank you for your attention!



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# Literature

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