

The role of formal and informal networks for university-industry interaction



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A PhD project aimed at giving insight in the effect and differences between formal and informal networks in a variety of forms of university-industry interaction

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Context

This PhD is part of the Networks&people workpackage within the RUNIN project, which focuses on the Role of Universities in Innovation and Regional Development.

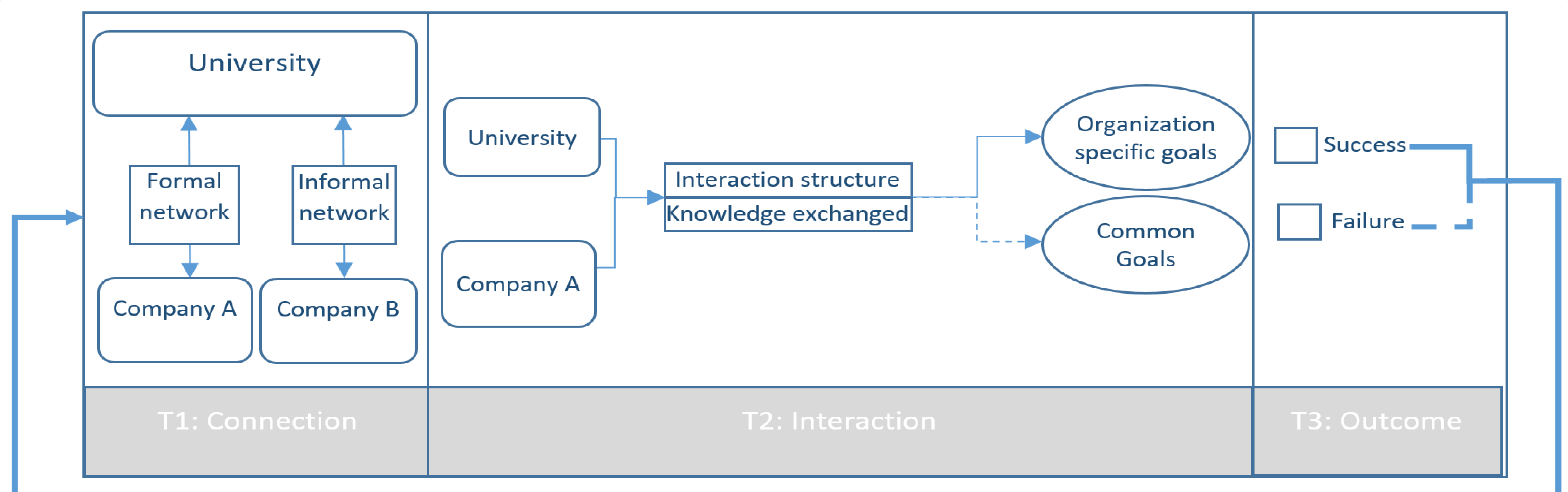
The literature documents a wide array of ways in which universities can play a role in regional development, ranging from traditional forms like the education of highly skilled graduates for the local labor market to direct interaction with the local industry by engaging in joint projects and networks.

The aim of this project is to demystify the role of formal and informal networks in the university-industry interaction process by focusing on the connection, interaction and the outcome phases in the university-industry interaction process.

The university-industry interaction process

- Connection
 - ⇒ Formal vs informal network
- Interaction
 - ⇒ Structure: Formalized vs informal, innovation project vs joint patenting etc.
 - ⇒ Knowledge exchanged: Codified vs tacit, generic vs specific
 - ⇒ Goals: Differences in organization specific goals vs shared goals
- Outcome
 - ⇒ Perception of success
 - ⇒ Influence of success on future collaborations

By addressing both the separate phases and the relation between them, this PhD project will contribute to an increased understanding of the university-industry interaction process.



Relevance

Understanding the role of networks in the university-industry interaction process can, next to filling a gap in the literature, be relevant for the different stakeholders. By increasing the current understanding of the role of networks, it will point policymakers to elements in the university/industry interaction process that can be improved. On the other hand, companies and universities can benefit from a better understanding by e.g. being aware of differences in goals and possibilities to find common goals or by finding the right match between the different phases.

Methods

This project will use a mixed method approach. Qualitative methods will be used to give insight in the context and causalities of the interaction. Possible methods that can be employed are:

- ⇒ Interviews with stakeholders from companies and universities
- ⇒ Case studies of specific companies, universities or university-industry interactions

Quantitative methods will allow for finding generalizable answers to the current questions. There is a wide variety of potential quantitative methods and data sources available:

- ⇒ Danish Register data
- ⇒ Data of European, national or university innovation projects
- ⇒ Bibliographic data
- ⇒ Patent data
- ⇒ Social network survey

Paper ideas

- University-industry cooperation: owned by employees? Transferability of networks in the context of leaving employees
 - ⇒ Previous research indicates that individual employees play a main role in the university-industry relationships. Therefore the interaction can be affected when an employee leaves the company.
 - ⇒ Hypothesis: Employees are likely to take their cooperation initiatives with them to a new company, or to start a new one.
- The process of international university-industry interaction
 - ⇒ Risk for lock-in for inward looking peripheral regions that specialize in a few sectors. Connections to actors outside the region can bring new knowledge to the region. The relations local companies maintain within foreign universities can be an important in this context.
 - ⇒ Questions: In which way do local companies connect and interact with foreign universities? What are their goals? What is the outcome for the actors involved and the region?
- The role of the university in formal innovation projects
 - ⇒ Receiving public funding for innovation projects requires often the participation of a university. The rationale behind this is that the involvement of a university would stimulate knowledge diffusion within and outside the project. However, the role a university takes, and how they interact with the companies within the project, remains unclear.
 - ⇒ What role do universities fulfil within the projects? How do they connect and interact?

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