

Exploring the In-between Spaces: A Learning Organization Approach to Regional Innovation Ecosystem Development

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Abstract: This article examines regional innovation ecosystem (RIE) development in the context of LAB University of Applied Sciences in South-Eastern Finland. It focuses on a persistent gap between existing knowledge on how to strengthen stakeholder cooperation and the limited actions taken to implement that knowledge. Drawing on findings from more than fifteen previous projects and 14 theme-based interviews with key RIE actors, the study asks: *What prevents productive value creation between stakeholders?* The data were analyzed using grounded theory and presented as a descriptive case study. The results highlight intangible but potentially critical success factors for RIE development, especially trust, dialogue, and the creation of “in-between spaces” that support learning and cooperation. The study suggests that strengthening these conditions may help turn existing knowledge into collective action.

Keywords: Learning organization, Regional innovation ecosystem, Cooperation, Qualitative research

1. Introduction

For Finland, developing companies’ innovation capabilities and renewing innovation ecosystem policies are critical success factors. A solid operational environment is seen as a critical factor for competitiveness that Finland cannot afford to lose (Finnish Government 2023). Universities of Applied Sciences (UASs) play an important role as part of the Finnish innovation ecosystem. They educate a skilled workforce for local companies and other organizations. They also coordinate and implement plenty of regional, national and international research, development, and innovation (RDI) projects. From the perspective of UASs, cooperation with local companies, especially small and medium-sized enterprises (SMEs), is extensive and ongoing.

When the issue is viewed from a different perspective and SME representatives are asked how cooperation with UASs is progressing, the answer differs from the previous one. This article focuses on presenting the situation in Päijänne Tavastia and discussing what is needed to support the development of the regional ecosystem, based on the triple helix principle (Brunnerberg 2023). The article seeks to highlight factors that are intangible and, in many cases, overlooked, although they are probably crucial for fostering the innovation capabilities of SMEs and facilitating regional ecosystem development.

2. Defining Concepts

Regional innovation ecosystems are self-sustaining systems that emerge, evolve, and decline in their own rhythm and cannot easily be controlled from the outside, although their development can be facilitated (Harmaakorpi & Rinkinen 2020). Innovation activities increasingly cross organizational boundaries and take place in the spaces between formal structures, which is why this context is often described as an innovation ecosystem (Huhtamäki 2016). At the ecosystem level, relationships form networks through which information and talent flow in sustained value co-creation (Russell et al. 2015). At the same time, ecosystem development involves wicked problems rather than tame ones: such problems are complex, ambiguous, and difficult for any single actor to solve alone (Raisio 2009; Rittel & Webber 1973). Wicked problems emerge in interaction, or in the lack of it, and they require shared ownership across stakeholders (Raisio 2010; Roberts 2000).

A further challenge is that organizations often rely too heavily on explicit knowledge, even though tacit knowledge is critical for coping with change (Nonaka & Takeuchi 2019). Surfacing tacit knowledge requires trust, because people must be willing to tolerate uncertainty and interpersonal risk (Evans 2020). Trust supports cooperation and community formation (Levine 2023), and it can also emerge through expectations of trustworthy conduct and concern for reputation (Cook et al. 2005). Psychological safety strengthens this process by making it easier to ask questions, listen, and learn together (Edmondson 2019). In turn, knowledge creation depends on interaction rather than control (Nonaka & Takeuchi 1995), whereas excessive pressure may lead to stagnation or innovation fatigue (Rehn 2019). When trust is sufficient, discussion can develop into dialogue (Isaacs 1999; Tsoukas 2009), but this also requires familiarity between participants (Wenger et al. 2002). Investing in such invisible and relational phases can strengthen commitment and cooperation (Beer

2009). Similarly, balancing formal and informal collaborative spaces can create time for reflection and learning (Adibe 2025). From this perspective, experimentalism can be understood not only as policy experimentation but also as a broader form of governance based on iteration, learning, and humble guidance (Sabel & Zeitlin 2012).

These themes connect closely with the learning organization framework developed by Senge (1990, 2006). Its five disciplines are shared vision, personal mastery, mental models, team learning, and systems thinking. Shared vision provides common direction through dialogue and shared practice. Personal mastery refers to an individual commitment to continuous learning. Mental models are the underlying assumptions that shape interpretation and action and therefore need to be made visible. Team learning requires bringing defensive routines to the surface and enabling learning across professional boundaries. Systems thinking, finally, means recognizing patterns, feedback loops, and delays in complex settings so that actors do not react too quickly to problems before the effects of earlier actions can be understood (Senge 1990, 2006).

University-industry cooperation (UIC) is an essential part of ecosystem development. An extensive study on the drivers and barriers of UIC (Rossoni et al. 2023) found that the same themes often act as either drivers or barriers in UIC, depending on how well they are managed. Collaboration is hindered when universities and companies differ in goals, time horizons, incentives, communication styles, and expectations, and when trust is weak, bureaucracy is high, funding is limited, and intellectual property issues remain unclear. At the same time, collaboration is enabled when partners build trust, communicate openly, clarify shared goals and roles, use intermediaries effectively, and receive supportive policy, funding, or tax incentives.

In this sense, drivers and barriers are not separate categories but opposite ends of the same relational and organizational conditions. Weak communication becomes a barrier, while a shared language becomes a driver; lack of trust blocks cooperation, while sustained personal relationships and mutual learning strengthen it. Short-term, fragmented interactions make collaboration fragile, while starting with smaller projects and gradually building longer-term partnerships helps cooperation mature. This suggests that successful collaboration depends less on isolated technical solutions and more on creating the right relational, organizational, and policy conditions for joint work.

To summarize, RIE development seems to benefit from greater attention to less visible but highly consequential relational, dialogical, and learning-oriented factors.

3. Data Collection and Data Analysis

For this article, three different data sources were available. During autumn 2025, a project called SMART Cooperation was carried out, and during that period a lot of data (16 interviews, a questionnaire with 78 respondents, 3 workshops, and 4 dialogue sessions) was collected. The data was analyzed, and the results were documented. Those results served as the first data source for the article.

The second data source was the results of previous projects related to regional ecosystem development or higher education institution–industry cooperation carried out by LAB and other stakeholder groups. These data were acquired through web pages and publicly available reports.

The third data source was a set of theme-based interviews with people working in key positions related to RIE development. Half of the interviewees were C-level executives (CEO, COO, ...), and the other half were managers and specialists working on RIE development. All interviewees were asked about intangible value creation in several ways. A total of 14 interviews (IR11–IR17 and IR21–IR27) were conducted during March 2026. The interviews lasted from 45 to 65 minutes. These rich qualitative data serve as a source for several articles.

A preliminary research question for the study was: *“What prevents productive value creation between stakeholders?”*

The interview data was analyzed following the guidelines of grounded theory (Corbin & Strauss 2008; Flick 2009), in which open, axial, and selective coding phases follow one another. In practice, the open and axial coding phases were partly conducted in parallel because the interviews, transcription analysis, and drafting of the results were also carried out in parallel. Data triangulation (Denzin 2009) was utilized through the use of three different data sources. Researcher triangulation was also utilized by discussing the data with a colleague working on similar research questions.

4. Results of the Study

This chapter presents the results of the study, including observations from both past projects and the interview round. These topics are presented in the following subchapters.

4.1 Results from the Previous Projects

During 2025, a project called SMART Cooperation was carried out by LAB, and the author was the project manager of the project. The objective of the project was to explore companies' needs and recognized barriers to RDI actions. Experimentation (workshops) and background discussions with representatives of regional stakeholders served as implementation methods. In parallel, the results of previous projects carried out by LAB and other stakeholders in the Päijänne Tavastia region were studied.

Results from the SMART Cooperation project showed a need for development in several areas. A common language for discussions about RDI between university representatives and company representatives was lacking. It was also felt that there was not enough trust between stakeholders, and this had prevented cooperation from growing and deepening. Although there is quite a lot of cooperation, many university employees have stated that they are not sure whether they are permitted to start building cooperation with companies.

Results from other previous projects can be summarized into three categories. First, plenty of cooperation and service models have been developed in recent years, but none of them has been widely implemented or piloted after the projects ended. Second, many results suggest that communication between stakeholders must be improved, and building trust was seen as an enabler of this. Third, many companies seem to lack long-term development plans, a strategy, and a budget for their RDI work, and this has been recognized as one of the key inhibitors to increasing RDI activities in companies. To summarize, a lot of suggestions about what should be done were found in the results. At the same time, not many actions seemed to follow those suggestions.

4.2 Observations from the Interviews

The theme-based interviews included three themes. The first theme discussed RIE development in general: who belongs to it, how it currently operates, identified good practices and areas for improvement in its actions, and "must-win battles" for the future. Instead of discussing visible structures and processes, interviewees were asked to look beneath the surface and consider intangible topics such as communication and trust and evaluate them. The second theme addressed the five disciplines based on Senge (Senge 1990, 2006): shared vision, mental models, personal mastery, team learning, and systems thinking. The interview concluded with a question about how the interviewee would use a magic wand if they could change anything with one swing. Expressions from the interviews are presented in Tables 1, 2, and 3.

Table 1: Expressions related to RIE development in general

Question / Theme	Quotation
Good practices in RIE development.	"People know each other and basic level of trust is present. You can express even an incomplete idea and get feedback to it." – IR14 – "There are no severe bottlenecks in cooperation between organizations. It feels that we are more on the same side of the table." – IR15 –
Places for improvement.	"Public organizations develop service models without strong involvement of companies. Therefore, companies are not enough involved in regional innovation ecosystem... This is quite typical challenge everywhere in Finland." -IR11 – "People sometimes seem to think that others are acting for their own benefit more than they are doing. Though there is trust, there is at the same time some suspicion of who will benefit most... It would be crucial to feel that we are at the same side of the table." – IR15 –
"Must win battles".	"We cannot be jealous to other organizations when they bring solutions to subjects that will help all of us. We should rather find ways how to support them." – IR12 – "To get rid of county, city, or organizational measurement, we should measure our success in innovations at regional level." – IR13 – "Clarifying roles and objectives of support organizations is needed." – IR17 –

Question / Theme	Quotation
Intangible issues.	"It is easy to discuss about strategies, focus areas and processes. It was very good to discuss those intangible topics such as communication and trust, that either foster or hinder our possibilities of success. This viewpoint to discussion was very welcome." -IR15 – "It seems to be forgotten that you cannot force innovation. You can only build and offer fruitful conditions for it to emerge. Innovation and commercialization will take time... .. Others see universities as slow, but usually there is reasons for that." – IR13 –

Table 2: Expressions related to five disciplines of the learning organization

Question / Theme	Quotation
Five disciplines of the learning organization.	Shared vision: "There is a need for careful discussion about shared vision in the region. Regional council is the only stakeholder group that is seriously building the shared vision." – IR12 – "There is some agreement about the vision. However, the previously made reports showed that there is a need for more detailed discussion between regional stakeholders." – IR11 – "It is challenging to find a shared vision, even agree who should participate in setting it." – IR4 – "We have a shared vision, collected by regional council. Does it align with strategies of the key organizations, is a crucial question. For some parts it does and for others maybe not. Though, regional funding is based on that regional strategy." – IR16 – Mental models: "In the region, we are in situation where engine is running hot, gas pedal is at maximum, but there seems to be no movement. Something is missing and it is either missing gear, missing traction or too many constraints that act as a handbrake." – IR16 – "If you consider what we talk, we are doing lots of things together. These talks do not turn so much into actions, and that is one big challenge." – IR17 – "There is much more talk about cooperation than real cooperation actions." – IR26 – Personal mastery: "No, there is not enough will to learn and develop. Secure and conventional actions are emphasized over others... .. It seems that we are lacking courage to build cooperation with companies and therefore we end up developing service models etc. repeatedly." – IR11 – Team learning: "In the meetings there are people who talk because they are used to talk and express their opinions. It seems they are not very interested in listening to other people's opinions. So, we are sometimes quite far from genuine dialogue... .. cooperation would benefit a lot if everyone would be familiarized to dialogue principles" – IR12 – "There is open dialogue where all participants are thinking together. There are also situations where someone enters with strong own opinions, and the objective seems to be to sell the opinion to others." – IR15 – Systems thinking: "I think we have an ability to systems thinking but we do not have enough patience to wait the results of our decisions... .. It may take a year or even more to recognize that some change starts to deliver results, we tend to forget that. ... We are too shortsighted both within single organizations and in cooperation between organizations." – IR11 – "There is some longterm, high-level discussions going on. However, there are also a lot of short-term discussions going on, where objectives of a single organization are easily emphasized. Sometimes strategic future-oriented discussions and current reality with its challenges tend to merge, which makes it challenging... .. If we do not discuss about future, we cannot make good decisions." -IR14 – "We lack systems thinking. It seems that organizations need to have spotlight to themselves, and it hinders possibilities for solving challenges together. Though it would benefit all stakeholders in a longer run, short term benefits for own organization seem to overrule the cooperation." – IR17 –

Table 3: Expressions related to using magic wand to change something related to the RIE development

Question / Theme	Quotation
Using magic wand to change something.	"We need to decide roles for different organizations and then operate based on those roles... ..A solid foundation for cooperation also requires that we will get rid of mutual competition." - IR11 – "We need to build a shared vision for the region, and it has to be done together." – IR12 – "Clock rate for universities' actions must become better. Otherwise, I do not see much hope for cooperation to grow. Currently, in most cases it takes too much time to get things moving ahead." – IR24 – "We need a regional organization to lead and coordinate regional innovation ecosystem. All the stakeholders must provide resources for it. – IR13 – "To get every employee to recognize a bigger picture and objectives of cooperation, and act based on it. For example, to explore situation and needs from companies in every encounter with them." – IR15 – "Roles and objectives of regional support organizations should be radically reconsidered and renewed. Political guidance or passions are not relevant when supporting innovation and growth of companies." – IR17 –

4.3 Summary of the Results

A fairly similar process repeated itself in the interviews. The first theme, RIE development in general, served as a warm-up. Topics were viewed from a positive angle, although some areas needing improvement were also identified. The second theme, the five disciplines borrowed from Senge (Senge 1990, 2006), seemed to help interviewees analyze the situation at a more detailed level. At the same time, more topics needing improvement were identified and expressed. During the third theme, using the magic wand to immediately change something, the interviewees' selections shifted more toward intangible topics.

During the interviews, several interviewees became enthusiastic when they realized that the interview focused more on intangible and invisible topics than on strategies, focus areas, and similar issues. Many interviewees also stated that they appreciated the discussion of those topics because they felt it was unusual and should happen more often. It appeared that the disciplines of the learning organization were new to many interviewees and may therefore have opened up a new perspective for observing and discussing the development of the RIE.

The magic wand approach has been used in interviews for a long time. It seems to offer a fruitful way to approach any topic at hand. The most important observation was whether the topics identified for change with a swing of the magic wand could in fact be changed without one. So far, this has usually been the case, and in many instances, interviewees have realized this themselves. This gives both the interviewees and the interviewer new insight into possible solutions to the topics at hand.

5. Summary and Discussion

The findings suggest that the main barrier to productive value creation between stakeholders is not a lack of knowledge about what should be done, but a lack of coordinated action based on that knowledge. Both previous projects and the interview data point to the same challenge: stakeholder cooperation is hindered by insufficient trust, uneven dialogue, unclear roles, and limited follow-through. Productive value creation therefore depends less on generating new ideas than on acting on what is already known.

The results also indicate that the learning organization framework remains a useful lens for interpreting regional innovation ecosystem development. Shared vision, mental models, team learning, personal mastery, and systems thinking help explain why cooperation often remains weaker than stakeholders intend it to be. The findings emphasize that ecosystem development depends not only on strategies, structures, and formal service models, but also on less visible relational conditions such as trust, listening, reflection, shared ownership of problems, and inter-organizational learning at the network level (Lampela 2009).

From a theoretical perspective, the results are in line with Adibe (2025), who studied how collaborative innovation spaces might contribute to ecosystem emergence. She suggests that contributing to ecosystem emergence requires shifting the focus from fixed structures or predefined entities to ongoing interactions, relationships, lived experiences, and meaning-making (Adibe 2025, p. 80).

From a practical perspective, this suggests that RIE development should place greater emphasis on creating the conditions for collective action and collaborative innovation rather than repeatedly producing new plans or support models (Torfing 2016). Instead of focusing primarily on strategic-level development, greater attention should be paid to grassroots cooperation and to how it can be built. Strengthening dialogue, clarifying stakeholder roles, and building trust across organizational boundaries may help actors address wicked problems together. Digital systems and platforms can support this work, but they cannot replace the relational foundation on which effective cooperation depends. This also requires many actors to develop new skills and to act on them in practice.

Ethics declaration: This research did not require ethical approval. All participants gave informed consent prior to participation in interviews.

AI declaration: Microsoft Copilot was used to identify and correct grammatical errors, and to suggest ways to condense and polish the text. MS Teams was used to transcribe the interview data. No AI tools were used during data collection or data analysis.

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