Learning Ecosystem in South Karelia: Strengthening Business–University Collaboration

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Abstract: Entrepreneurship ecosystems are increasingly approached as complex, learning-oriented systems where value is created through continuous interaction among multiple actors rather than through isolated support services. Business service ecosystems face growing pressure to operate in a more integrated, customer-oriented, and resource-efficient manner. This article examines the development of a regional entrepreneurship service ecosystem in South Karelia, Finland, focusing on the introduction of a shared AI-guided landing page designed to align business services and improve customer guidance across organizational boundaries. The study applies an explanatory case study approach to explore what kinds of benefits actors within the business service ecosystem including universities, development companies, and other support organizations perceive from the use of a common AI-assisted guidance platform in their daily work. Empirical data were collected through two participatory workshops conducted in early 2026, combining facilitated dialogue, qualitative tasks, and experimentation with an AI-supported simulation environment. The findings suggest that the AI-guided landing page supports ecosystem-level learning by clarifying service boundaries, strengthening mutual trust, and improving the consistency and transparency of customer guidance. Rather than functioning merely as a technological tool, the landing page operates as a shared learning structure that enables co-creation, data-informed development, and more effective orchestration of business services. The article contributes to entrepreneurship ecosystem and service ecosystem research by illustrating how digital and AI-enabled solutions can support the transition from fragmented business services toward integrated, learning-oriented ecosystems.

Keywords: Entrepreneurship ecosystem, Service ecosystem, Systems thinking, Business services, Case study

1. Introduction

Entrepreneurship ecosystems have become a central framework for understanding how entrepreneurship emerges, develops, and sustains itself within specific regional contexts. Rather than focusing on individual entrepreneurs or isolated support instruments, the ecosystem perspective emphasizes the dynamic interaction between multiple actors, institutions, and resources operating as an interdependent system. This shift reflects a growing recognition that entrepreneurial activity is shaped by collective learning, coordination, and co-evolving structures that cannot be effectively addressed through fragmented approaches.

At the same time, business and entrepreneurship support services are undergoing structural change. Traditional, organization-centric service models are increasingly perceived as inadequate for responding to the complex and evolving needs of entrepreneurs. As a result, policy and research have called for a transition from individual business services toward integrated service ecosystems that emphasize customer orientation, collaboration across organizational boundaries, and efficient use of shared resources. In such ecosystems, value is created not by single services but through how services are connected and experienced across the entrepreneurial journey.

In Finland, ecosystem-oriented development has been strongly promoted in the organization of business and innovation services. However, despite growing policy attention, many regional ecosystems continue to face challenges related to overlapping roles, unclear service boundaries, fragmented customer pathways, and limited mechanisms for collective learning. These issues are particularly pronounced in ecosystems involving multiple public and semi-public actors, such as universities, development companies, financiers, and advisory organizations, all serving similar customer groups.

Recent advances in artificial intelligence (AI) provide new opportunities to address these challenges. AI-enabled tools have the potential to support more consistent customer guidance, increase transparency of service offerings, and generate data that can be leveraged for ecosystem-level learning and development. Nonetheless, empirical research on how AI functions as a coordinating and learning mechanism within entrepreneurship service ecosystems remains scarce. Existing studies tend to examine either entrepreneurship ecosystems or AI-enabled services in isolation, leaving their intersection underexplored.

This article addresses this gap through an explanatory case study of the entrepreneurship service ecosystem in South Karelia, Finland. The study focuses on the introduction of a shared AI-guided landing page designed as a common entry point for entrepreneurs and businesses seeking support. The landing page directs users to

relevant services and experts across organizational boundaries and builds on long-term ecosystem development characterized by increasing trust and collaboration among actors.

The research question guiding the study is: What kinds of benefits do the business service ecosystem in South Karelia including universities perceive from the use of an AI-guided landing page in their own work? By examining this development phase, the article contributes to entrepreneurship ecosystem and service ecosystem research by illustrating how AI-enabled digital infrastructures can support ecosystem-level learning, coordination, and customer-oriented service delivery.

2. Ecosystem of Business Services

Research on entrepreneurship ecosystems has evolved in response to the need to understand entrepreneurship as a broader, contextual, and interactive phenomenon that cannot be explained through individual entrepreneurs, companies, or support measures alone. The ecosystem approach leans on systems thinking and emphasizes that the emergence, growth, and sustainability of entrepreneurship are built on the dynamics between various interconnected actors, resources, and institutions in a certain temporal and regional context.

According to a widely accepted view, an entrepreneurship ecosystem can be defined as a regional entity where entrepreneurs, organizations, institutions, and support structures interact, enabling the birth, development, and growth of new companies. Stam (2015) structures the entrepreneurship ecosystem specifically as a system producing entrepreneurship, where the existence of individual elements is not central, but their functional compatibility and interaction are. Spigel (2017) complements this view by emphasizing the importance of cultural, social, and material factors: the entrepreneurship ecosystem is simultaneously built on values, norms, networks, and concrete resources such as financing, expertise, and infrastructure.

Common to these definitions is the view of the ecosystem as a dynamic and relational entity, which differs from traditional entrepreneurship support models or linear innovation systems. An entrepreneurship ecosystem cannot be controlled by a single actor, nor can it be mechanically built from top to bottom, but it is shaped in continuous interaction between actors.

The aim is to find the best and most efficient solution to customer needs through the ecosystem, but it may not necessarily be advisable to solve the wish list. It is important to note and recognize that customer needs are not the same as customer wishes. (Keränen. 2026.)

Krista Keränen (Visit Factory) emphasizes in her speech that at the beginning of ecosystem work, it is important to define the key actors of the ecosystem and a map for the customers. The fact that there are many actors or services crosswise does not matter, but customers need to be able to navigate in the network of services. (Keränen. 2026.)

The Prime Minister's Office has already published a report in 2017 recommending an ecosystem-like way of working, especially in the organization of business services. The report describes innovation ecosystems as dense and interdependent networks where new ideas are refined into products and services in continuous interaction between different actors. In Finland, especially the forest, digital, health, and cleantech ecosystems show that the country has already developed well-functioning structures where expertise accumulates in multidisciplinary cooperation and enables agile response to changing innovation challenges. (Kaihovaara & co. 2017.)

The report emphasizes the role of the public sector in enabling these learning ecosystems. It must strengthen ecosystem thinking and renewal capacity, as ecosystems cannot be managed hierarchically, but they must be supported by creating favorable conditions for cooperation, information exchange, and common development paths. This need is particularly evident in the development of business services. The report emphasizes that business services are no longer enough, but they must transform into ecosystem services that focus on strengthening the entire network instead of helping individual companies. Ecosystem business services act as cooperation platforms that support long-term interaction, openness, and information sharing, and help build a common future direction and strategic priorities. In this way, they support the internal dynamics of ecosystems and strengthen a learning, constantly self-renewing innovation environment. (Kaihovaara & co. 2017.)

However, ecosystems do not run or emerge without management. In the ecosystem, there are always participants, anchor actors, and a group of locomotives. For the system not to tilt to meet the needs of just one actor, the locomotive, the so-called ecosystem leader, should consist of several actors and share tasks and responsibilities whenever possible. In the ecosystem, the division of tasks also matters. It is perfectly acceptable and sensible to do some things in parallel and others together. The ecosystem-like way of working does not mean that others do the things that we do not want or can do, but that the customer's need is recognized

together and we strive to respond to it in the best possible way and with the best possible resource. (Keränen. 2026.)

In addition, the government report emphasizes that business services should support the common learning of ecosystems and enable cross-regional cooperation and multi-actor development entities. (Kaihovaara & co. 2017.) Ongoing structural reforms, such as the growth agreement model of the Ministry of Economic Affairs and Employment and vitality centers, can be seen as an opportunity to review the entire business service system so that it better serves the needs of ecosystems and strengthens Finland's ability to build learning, internationally competitive innovation environments.

Research literature emphasizes that entrepreneurship ecosystems are evolving and lifecycle-like systems. Isenberg's (2011) early framework highlighted key areas such as finance, politics, culture, and support organizations, but later research has deepened our understanding of how these elements are interconnected over time. The lifecycle model presented by Cantner et al. (2021) describes birth, growth, and possible decline of ecosystems as a process in which different resources and actor roles are emphasized at different stages of development.

Cao and Shi (2020), on the other hand, examine the construction of ecosystems through three overlapping logics: resource logistics, interaction logistics, and governance logistics. This perspective emphasizes that the functionality of the ecosystem is not based solely on the availability of resources, but especially on how actors are able to share information, build trust, and reconcile different interests.

As ecosystem workers, it is good for us to look at our own way of thinking, whether we see ourselves as ecosystem butterflies or bees. While the beautiful butterfly collects all the colors into itself and operates independently, albeit wandering among the flowers, the bee cross-pollinates the pollen of the flowers so that the flowers around it could shine. Both also promote their own goal, but the bee's action also enables others to shine. (Keränen. 2026.)

3. Systems Thinking

In a widely cited literature review, Monat & Gannon (2015) examine systems thinking as a conceptual and theoretical approach, the central premise of which is to understand the behavior of complex systems as wholes instead of individual parts or linear cause-and-effect relationships. The authors show that there is no single established definition for systems thinking, but the research literature shares the view that the operation and recurring phenomena of systems primarily arise from the structures, interaction relationships, and feedback loops of the system. In systems thinking, attention is focused on how structures guide behavior over time, and how locally rational solutions can generate unwanted effects at the system level. (Monat & Gannon, 2015.) Service ecosystems are dynamic, self-organizing, and institutionally guided systems where value is created in the interaction between actors, not as well as services produced by individual organizations. According to systems thinking, attention is focused on feedback loops, mutual dependence of actors, and how rules, norms, and shared meanings (institutional structures) enable or prevent change. (Vink, Koskela-Huotari, Tronvoll, Edvardsson & Wetter-Edman, 2021. Godsiff, Maull, & Davies, 2018.)

In the context of the entrepreneurship service ecosystem, systems thinking provides a framework through which business services, financial instruments, education providers, and public development organizations can be understood as interdependent parts of a larger whole (Monat & Gannon, 2015). In this case, the development of entrepreneurship is not explained by the quality or quantity of individual services, but by how services are linked to each other, what kind of learning and feedback mechanisms are created in the ecosystem (Godsiff, Maull, & Davies, 2018), and what structures support or prevent entrepreneurs' progress at different stages of development. Systems thinking thus helps to shift the focus from individual measures to the structures and dynamics of the ecosystem, which is crucial in developing a sustainable and impactful entrepreneurship service entity.

Developing service ecosystems requires a systemic way of thinking, long-term orchestration, and institutional understanding, not just launching new services or projects. This perspective supports the examination of business services as enablers and learning structures of the ecosystem, not as separate support functions. (Vink & co. 2021)

4. Methodology and Data Collection

The research method of this article is an explanatory case study. The study aims to answer the question of why the case is as it is, or why it has developed in a certain way. The object to be explained describes the relationship between complex real-life events or related methods. (Eriksson & Koistinen, 2014.) The theme analysis method utilizes data triangulation and offers perspectives and analysis on the impact of the construction of the South Karelia entrepreneurship ecosystem. The connection to theory was sought by examining the whole, interpreting and linking phenomena to the theory used. General and recurring phenomena were sought from the material, and their relationships and connections were studied. (Ojasalo, 2018. 110–111.)

The participants of the study were selected from key actors within the regional business service ecosystem. All participants were actively involved in customer-facing activities and represented organizations responsible for delivering advisory and development services to entrepreneurs and businesses. The participants held roles either as team leaders or as members of their immediate teams, ensuring both strategic and operational perspectives were represented. Each participating organization independently selected its representatives for the workshops and the project, which reflects the ecosystem-based nature of the study context and supports the inclusion of actors with relevant expertise and decision-making involvement.

The thematic analysis was conducted by the author following a qualitative, inductive approach inspired by grounded theory. The analysis aimed to identify recurring patterns, themes, and relationships emerging from the workshop data. In addition, the interpretation was guided by a dialogue between empirical findings and the theoretical framework presented in the earlier sections of the paper. This approach enabled the identification of similarities and connections between empirical observations and existing literature, supporting the analytical rigor of the study.

The data of this study was qualitative, and it consisted of group and individual tasks from the workshop work. Experts from a total of four different organizations and five different teams participated in the workshops.

5. Results

During the project, two workshops were carried out (January and February 2026), in which the hopes, fears, and concrete needs of the organizations were mapped out. In addition, an interactive GrowthAI Simulator workshop prototype was used, which was utilized in practice sessions, scenario walkthroughs, and the collection of training data to support the definition work.

The findings of this study remain primarily descriptive, reflecting the exploratory nature of the ongoing development project. At the current stage, the AI-assisted platform is not yet in full operational use, which limits the ability to evaluate its concrete outputs, effectiveness, or long-term learning outcomes. Consequently, the results focus on capturing the perspectives, expectations, and experiences of ecosystem actors as expressed in the workshops, as well as the initial validation of functionalities through the GrowthAI Simulator.

The GrowthAI Simulator functioned as an experimental and conceptual tool within the workshops, enabling participants to test scenarios, explore potential use cases, and contribute to the development of the platform. However, it is important to emphasize that the simulator does not yet represent the final system in real-world operation. Therefore, the results should be interpreted as an intermediate phase of ecosystem development rather than as evidence of the impact of a fully implemented AI solution.

5.1 Workshop 1

During the project, a prototype supporting definition and workshop work, the GrowthAI Simulator, was built. It was not a pre-version of the final product, but an experimental environment created for concepting and functionality assessment. With its help, the following functions were validated: Creation, saving, and management of sessions, AI-generated practice scenarios for experts, Reverse Chatbot function for collecting training data, Profile-based personality guidance (chat personas), Message-specific feedback loop, and multi-model support (Google Gemini, OpenAI GPT, Anthropic Claude). These functions were used throughout the workshop.

In the first workshop, over 35 hopes and 30 fears were collected (Table 1. depicts the core fears and hopes that emerged in the workshop), which representatives of organizations operating in the ecosystem had about the new platform and AI-assisted guidance. The workshop was implemented as a combination of three methods, where fears, hopes, customer groups, and service boundaries were initially collected on post-it notes and grouped thematically, followed by a facilitated discussion on ambiguities in the division of responsibility, rules

of guidance, and data protection policies. Finally, the Reverse Chatbot, which is a training method where the advisor tries the role of a chatbot and learns the guidance logic. The same method is also used in the simulator.

Table 1: Core hopes and fears of the first workshop

	Key Desires	**The most central fears**
workshop 1.	Ease of Use "Easy to use, visually clear" and logical from the first contact	Incorrect Guidance Incorrect directions and service that provides too many or too few options
	Genuine AI Coaching AI should help the entrepreneur to prepare and coach, not just remain a bot	Outdated Information "Correct information, not incorrect": the timeliness of information must be ensured
	Smooth Guidance The customer is directed straight to the right expert without unnecessary intermediaries	Data Security Data security, data leaks, and potential resistance from the IT department
	Up-to-date Information Correct information, functional contacts, and the possibility to utilize already maintained sources	Continuity Maintenance costs, division of responsibility, and the neglect of development later on
	Connections to Other Systems The goal is to connect to Hakosalo customer management and Microsoft Bookings scheduling.	

In the second phase of the first workshop, participants envisioned what an ideal AI-guided landing page could be like and what features it should include. This section was also initially implemented as individual work on post-it notes, and finally, a facilitated discussion on hopes was held together. After the workshop, an external expert processed the notes with the help of AI into four major themes, which were the one-stop principle, i.e., all customers contact in the same way, AI as a sparring partner i.e., the hope that AI would help the entrepreneur to prepare and develop their idea, was strongly repeated, the ecosystem's common way of guiding customers according to the customer's need, and up-to-date information.

5.2 Workshop 2

The second workshop was shorter in duration than the first and focused specifically on testing the platform and defining its boundaries. AI-assisted agents can incur very high costs if usage is very broad. Therefore, this second workshop focused on agreeing on the rules of the game, who can use the platform and how, and how costs are shared. The workshop also discussed the accuracy and maintenance of the platform's information.

The main focus of the workshop was on testing the simulation. Each organization tested the GrowthAI simulator with real customer situations. The tests evaluated the accuracy, tone, and correctness of the information. When everyone gets to participate in the definition, trust in the accuracy of the information and customer guidance improves.

Important topics discussed in the workshop were, who can be coached, what data is used as a knowledge base, when a customer is directed to human negotiation or an appointment is booked, how the platform and its use are measured and developed in the future? The customers' preparation for customer meetings can also be improved with the help of the platform and artificial intelligence.

6. Discussion and Conclusions

The entrepreneurial ecosystem has been built in South Karelia for several years and through several projects. The network has gradually begun to transform into an ecosystem-like, collectively learning and acting group, where the customers need guides all activities. However, customer wishes are not the same as needs (Keränen, 2026), and the entrepreneurial ecosystem also emphasizes the needs of customers. It is essential for the entire region that companies in need of help quickly and agilely find partners to develop their operations, thus creating new companies, new investments, and new jobs in the area. From the perspective of the service ecosystem, it

is also essential to examine who will orchestrate the ecosystem in the future, as no ecosystem runs itself, especially in the beginning.

Josina Vink and her partners describe how the development of the ecosystem is seen as a collective and temporal process, where change occurs simultaneously at the micro- (individual services and encounters), meso- (organizational and network operating models), and macro levels (policies, strategies, funding logic). (Vink & co. 2021) This makes the framework particularly relevant for business service ecosystems, where impact is created through the joint action of several actors - development companies, higher education institutions, financiers, and companies.

While the findings provide insight into how ecosystem actors perceive the potential of a shared AI-assisted platform, they also highlight the early-stage nature of the development process. The results suggest that the introduction of the AI-guided landing page acts as a catalyst for dialogue, alignment, and shared understanding among ecosystem actors, rather than as a fully validated technological solution at this stage.

The workshops revealed that the value of the platform is not limited to its technical functionality but is strongly connected to its role as a boundary object facilitating collaboration across organizational interfaces. The process of jointly defining customer pathways, responsibilities, and data-related questions contributes to strengthening trust and clarifying the division of roles within the ecosystem. These findings support the interpretation that the development of the platform simultaneously advances both technological and social dimensions of the ecosystem.

At the same time, the absence of real user data and implemented processes limits the ability to assess measurable outcomes. This underlines the importance of continued research as the platform moves into practical use.

Although the study provides valuable insights into the perceived benefits of a shared AI-assisted platform, some of the conclusions remain indicative rather than empirically validated due to the developmental stage of the project. The findings are based on workshop data and simulation-based experimentation, which capture expectations, assumptions, and early validation rather than fully realized outcomes.

Future research should therefore focus on examining the actual use of the platform in practice, including its effectiveness in guiding customers, its impact on service integration, and its contribution to ecosystem-level learning. Such analysis would enable a more comprehensive evaluation of the role of AI-supported tools in entrepreneurship service ecosystems.

The purpose of this descriptive case study was to describe the current state of one phase of the ecosystem's construction. In the future, it would be interesting to study how companies experience the landing page helping them in their changing situations. A survey is coming up in the summer of 2026 for this.

Trust in the added value produced together is essential for the functioning of the ecosystem. New technology and, in this case, AI-assisted common landing pages play a significant role in deepening mutual trust between actors. AI directs the customer to the expert who knows the matter best, regardless of the organization or other external factors. In addition to mutual trust between actors, this also increases trust towards stakeholders. Now, customer-oriented guidance can be verified with data.

The data that will be obtained from the landing page with the users will also improve the expertise of the ecosystem actors. The needs and situations of customers become more visible, and thus they can be better prepared for. Data collection and utilization improve the construction of the learning and developing nature of the ecosystem.

All actors in the entrepreneurial ecosystem had many hopes and thoughts about the landing page at the beginning of the development work. The work was hoped to be easier, more agile, and the guidance more efficient. There were also many fears, and they appeared very similar regardless of the organization. There were fears about who maintains the information and whether the impartiality of the guidance can be trusted, and whether the landing page will become genuinely learning and competent, or would the development remain just a chatbot. The future will show how hopes and fears will be realized, if at all, but this development work already shows that the ecosystem wants to develop and learn new things to help companies in the South Karelia region grow and internationalize.

This descriptive case study shows the learning nature of the South Karelia entrepreneurial ecosystem and the desire to develop its operations to be more customer-oriented but also more competent. In the future, it will be

interesting to follow how data will be utilized in identifying new needs and how the operating conditions of companies in the region change with the landing page. GrowthAI alone does not perform miracles, but at its best, it frees up advisory resources for growth company cases, which will create new jobs and new expertise in the future.

Ethics Declaration: The study did not require ethical declarations.

AI Declaration: Artificial intelligence (AI) tools called Future Objects and Copilot have been used for checking and editing the language of the study. The AI tools have translated some of the Finnish terms and checked the spelling. Artificial intelligence (AI) tools were used to support the drafting process of this article and to facilitate idea development and academic sparring. The author critically reviewed, edited, and take full responsibility for the final content of the paper.

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