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FACULTY OF INFORMATION TECHNOLOGY, UNIVERSITY OF JYVÄSKYLÄ
KONTTIHYPPY-JY (QLEAP): CONVERIS.JYU.FI/CONVERIS/PORTAL/DETAIL/PROJECT/155943168

Taija Kolehmainen, Anssi Sorvisto, Prof. Tommi Mikkonen, University of Jyväskylä
Gabriella Laatikainen, Senior Scientist, VTT Technical Research Centre of Finland

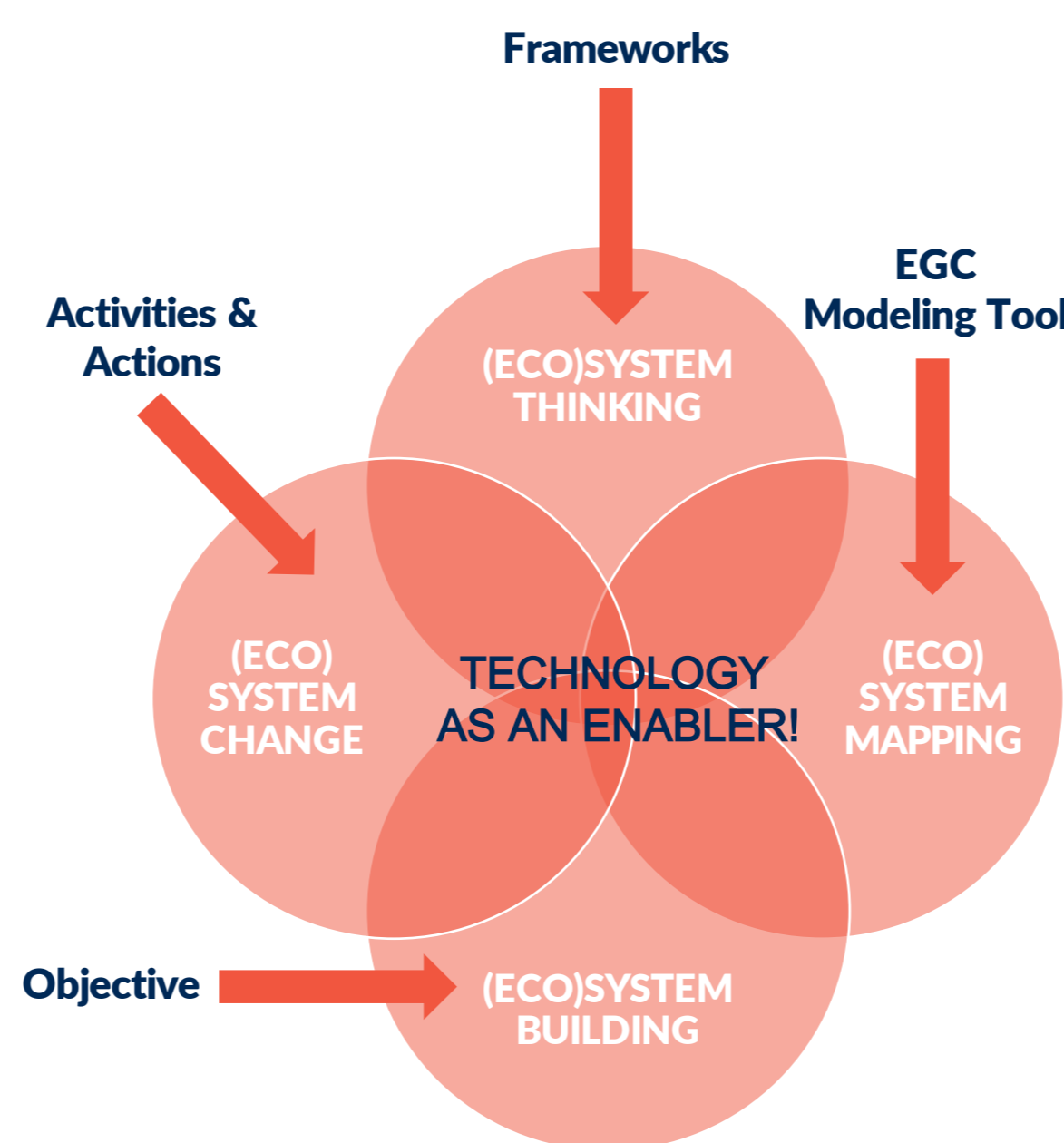
MODELING DIGITAL ECOSYSTEMS AND THEIR GOVERNANCE, QLEAP

HOW? ECOSYSTEM GOVERNANCE COMPASS (EGC) MODELING TOOL

Ecosystem Governance Compass is a domain-specific modeling language that supports practitioners to design effective and consistent governance for ecosystems. The tool offers a visual representation of complex ecosystem components, stakeholders, interactions, and dependencies within the context of governance, business, technological aspects, and the legal and regulatory environment.

Visual models promote stakeholder alignment on ecosystem structure and collaboration, facilitating detailed and accurate communication and decision-making. The models provide a systematic and structured foundation for developing a comprehensive framework in a leaner approach.

The prototype is implemented on the MetaEdit+ platform for domain-specific modeling.



USE CASE VAADIN: OPEN-SOURCE PLATFORM ECOSYSTEM

In this case study, we explore the challenges and strategies for maintaining viability and sustainability within the Vaadin open-source platform ecosystem. The study concentrates on how the ecosystem can sustainably renew itself while facilitating participant influence over the community. The focus will be on four key themes: 1) leveraging the ecosystem community involvement, 2) improving internal communication, 3) balancing the sustainability of the product offerings, and 4) exploring scaling opportunities. The research highlights the significance of providing access to resources, promoting engagement and

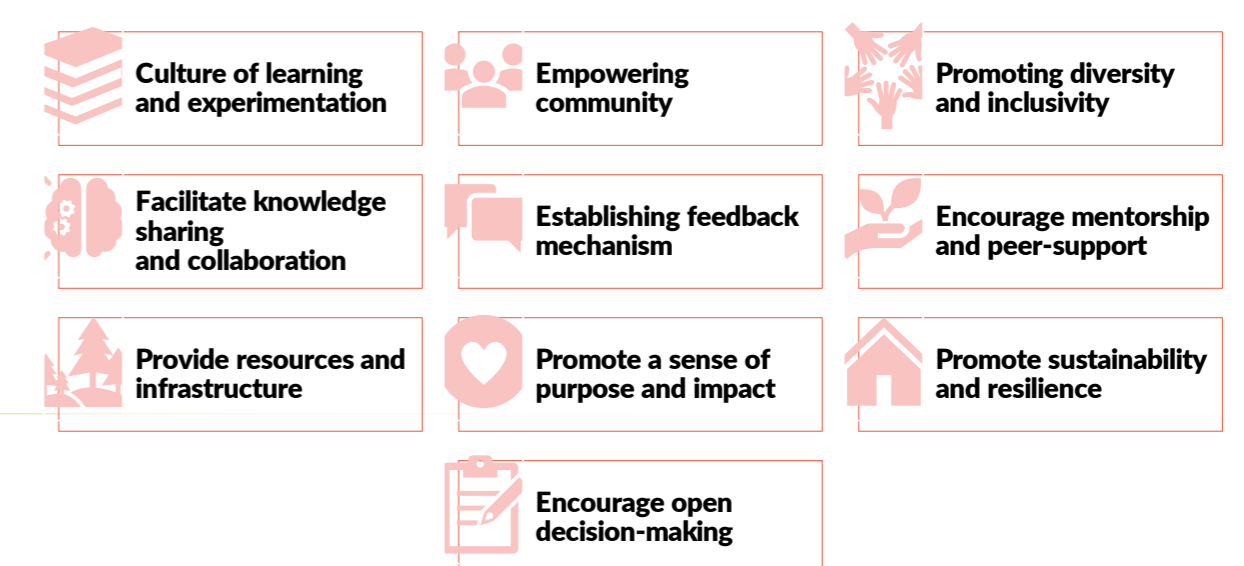
contributions, encouraging knowledge sharing and collaboration, and developing effective feedback mechanisms.

RQ: How can viability and sustainability be maintained while supporting renewal of an open-source platform ecosystem?

USE CASE SW4E: INNOVATION ECOSYSTEM

This study examines the strategic management of the SW4E (Software Engineering Ecosystem), an innovation ecosystem in its formative phase. The software engineering industry is facing significant challenges due to the rapid evolution of technology, changing customer needs, and intense competition. The study will concentrate on three key themes: 1) generating business value through innovation, 2) developing dynamic, collaboration and innovation capabilities, and 3) ensuring robust leadership and stakeholder engagement. The study highlights the need for enhancing resilience through the development of an interoperable, collaborative and dynamic ecosystem with aligned structures, practices and culture. The ecosystem must be able to adapt to external pressures and devise novel strategies for sustaining long-term innovation and partnership.

RQ: How can collaborative efforts be directed and focused while managing the complexities inherent to the formation phase of an innovation ecosystem?



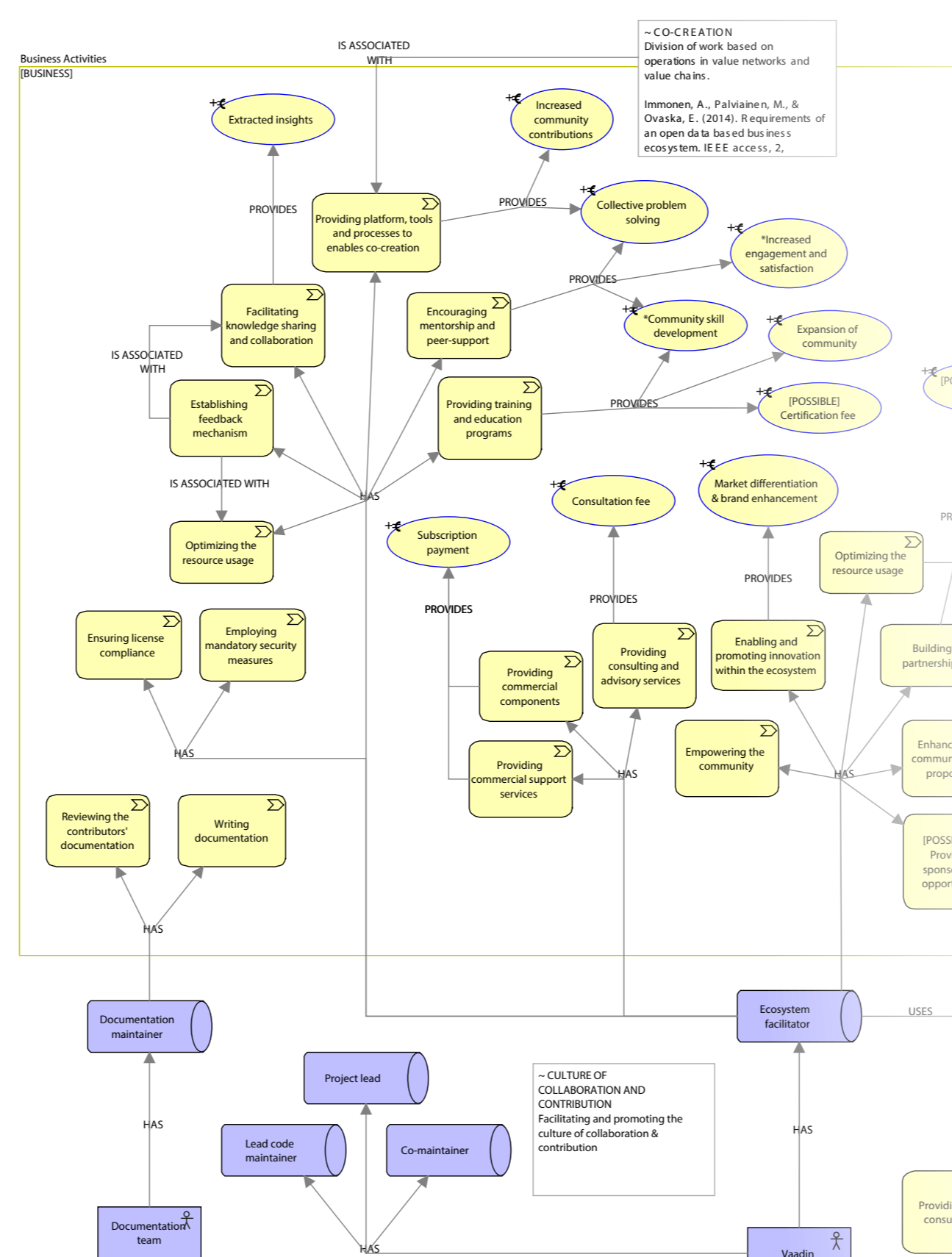
Building the ecosystem's capability to renew itself and explore new ideas

WHY? RAPIDLY CHANGING business environment, intense competition, and technological advancement drive businesses to increasingly seek collaboration in order to share risk in development, access synergistic knowledge and respond quickly to growing competition. In a complex, interdependent environment, organizations must adopt a more holistic, cooperative approach and a dynamic mindset, rather than focusing on controlling their current resources. This involves

- enhancing integrability and standardization,
- open and adaptive resource integration,
- establishing common goals and compatible incentives,
- improving agility and multilateral compatibility,
- fostering partnerships and healthy competition, and
- collaborative value creation through, e.g., innovation.

Ecosystem governance refers to developing, managing, and controlling shared processes, operating models, practices, principles, and rules that enable forming ecosystems. However, designing and developing such a multi-directional, dynamic, complex system is a challenging process. While theoretical models for governing ecosystems exist, less is known about the practical aspects of developing them. This research contributes to existing theories of ecosystems and their governance with empirical evidence.

[On the right] Use case Vaadin, an open-source platform ecosystem, business aspects mapped with the Ecosystem Governance Compass modeling tool. MetaEdit+® software provided by MetaCase.



WHAT? EXPECTED RESULTS

- Ecosystem models: governance, business, technology, legal & regulatory context
- (Publication) Implementing a Domain-Specific Modeling Language for Designing Collaborative Ecosystems and Their Governance, Use Case Vaadin
- (Publication) Designing and Building the Ecosystem Governance in Practice, Case SW4E Ecosystem in Finland
- Industry feedback and practical needs related to designing and operating ecosystems