BUSINESS **FINLAND**

EVALUATION OF ECOSYSTEM FUNDING INSTRUMENTS AND PARTNERSHIP MODEL

Summary

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TABLE OF CONTENTS

An avenue for renewal concepts, collaboration and R&D investments	3
Important collaboration structures for companies and strategic partners	
Funding for ecosystems & R&D projects	5
Varying results for the four support instruments and potential for the future	5
Realism, critical view of the current state, international viewpoint	7
Current state of play	10
Further streamlining of the instruments and a more active role	.12

THIS EVALUATION
CONCENTRATES ON THE
FUNDING INSTRUMENTS
OF WORLD CLASS ECOSYSTEMS
THAT GENERATE PROSPERITY AND
COMPETITIVENESS TO FINLAND.

Ecosystems provides coordination of combined efforts of companies to address their shared challenges in for instance innovation and internationalisation. A metaphore would be a student association that allows their members to collaborate in studying, build relationships, organise a study trip or voice their concerns to the university.

An avenue for renewal concepts, collaboration and R&D investments

Ecosystems provide a structure for companies to outline strategic goals, collaborate in R&D, innovation and internationalisation projects and activities, interact with academia, address key bottlenecks and act upon shared opportunities. The instruments of Business Finland are a key driving force for the ecosystems in Finland. Each instrument provides different value to the ecosystem development and performance:

- The Growth Engine Capital Loan provides opportunities for radical renewal, as it initiates ecosystems around platform companies. The high-risk-high-reward concepts provide an avenue for developing new business concepts within the economy of Finland.
- The Growth Engine Orchestration Funding supports the development of the ecosystem through funding for a neutral actor that orchestrates the ecosystem. Through the orchestration services the overall functioning of the ecosystems is to be improved, creating value by supporting other effects within the ecosystem, such as R&D collaboration.
- The Leading Company Initiative provides a large financial impuls to business leaders and their ecosystem members to perform R&D. R&D projects are performed in line with an overarching strategy outlined by the Leading Company. Through the instrument (multinational) companies are stimulated to invest in R&D within Finland.

IMPORTANCE TO FINLAND:
TO PROMOTE THE
PROSPERITY OF FINLAND BY
STIMULATING THE EMERGENCE OF
NEW AND INNOVATIVE INITIATIVES
AND BY SUPPORTING THE
INTERNATIONALIZATION OF THE
FINNISH INDUSTRY.

The Partnership Model is aimed at creating synergies between the activities of Business Finland and the Academy of Finland to increase the effectiveness and efficiency of public investments. The instrument is aimed at securing long-term commitments and setting long-term objectives, to work towards long-term benefits for Finland.



Important collaboration structures for companies and strategic partners

The ecosystem instruments overall provide support for important collaboration structures for companies and strategic partners such as knowledge institutions. Within that scope, each instrument plays a different role for companies:

- The Growth Engine Capital Loan provides access to capital for platform companies in their start-up/ scale-up phase. In this phase companies are often in need of capital to invest in their business and business models. Other companies benefit from the company development as they can launch new products/ services through the platform concepts.
- The Growth Engine Orchestration Funding provides funds for supporting services to develop ecosystems and collaboration within the ecosystems. Overall, com-

- panies often lack in coordination and funds for the early development stages and operations of ecosystems.
- The Leading Company Initiative provides companies
 with large R&D subsidies organized in a strategic way
 through a centralized roadmap. The Leading Company,
 often a large multinational, provides members with an
 avenue to collaborately invest in strategic innovation
 activities. The Leading Company itself receives a large
 financial impulse as well, stimulating them to invest
 in R&D activities within Finland.
- The Partnership Model mainly supports the link between companies with academia and their key activities as part the Flagship Programme of the Academy of Finland.

IMPORTANCE FOR THE BUSINESS:

ACROSS THE ECOSYSTEMS,

QUITE A LARGE PRIVATE
INVESTMENT IN R&D IS OBSERVED,
IN THOSE WITH LESS R&D OTHER
RELEVANT ACTIVITIES ARE
PERFORMED, SUCH AS BUILDING
INTERNATIONAL CONNECTIONS FOR
INCREASING EXPORT.

Funding for ecosystems & R&D projects

With regard to the instruments, Business Finland is most importantly fulfilling the role of funder. Across the different instruments this concern loans for the Capital Loan and subsidies for the other funding instruments. Business Finland also assesses many project proposals for R&D projects, either through their separate R&D instruments or through the earmarked funds for ecosystem members of the Leading Company Initiative.

Next to the role as funder, Business Finland provides the ecosystems with non-financial support (sparring partner, account management, monitoring, etc.). Overall, this role has been limited due to a lack of capacity and in some cases limited knowledge of the business area. Business Finland has not signaled strong support or given constructive feedback to the ecosystems.

Varying results for the four support instruments and potential for the future

 The Growth Engine - Capital Loan: The supported platform companies are often in their start-up/ scale-up stage of development, their capacity to also address the challenges of ecosystem development & member performance is very limited. Many of these concepts are high-risk-high-reward, meaning many will not be successful, but a success can have a large impact. As such, at portfolio level no ecosystem effect were found. The platform companies are not always able to effectively use the funds, partly due to their size, but mainly as there is (perceived) unclarity about when investments are relevant for the ecosystem (and not only for the company). There is a potential for conflict of interest between the use of the funds for ecosystem development and business development. The debt created by the Capital Loan also makes it harder for these companies to attract further private capital.

ROLE OF BUSINESS FINLAND:
THE PUBLIC FUNDING
PROVIDED CLEARLY HAS
A STRONG IMPACT ON PRIVATE
ACTIVITIES.
THE MANY ECOSYSTEMS, PUSTNESS.

IN MANY ECOSYSTEMS, BUSINESS FINLAND DID NOT PROVIDE STRONG STRATEGIC SUPPORT.

• The Growth Engine - Orchestration Funding: The central management of the ecosystem creates clear governance that benefits the ecosystem, the neutral position of the orchestrator makes sure the ecosystem works for the benefit of all members. The activities of the orchestrators (networking, etc.) are quite distant from the high-level goals set by the instrument, including R&D and innovation results, as well as business results such as export. Orchestrators often perform well on some, but not all, of these aspects.



- have a strong sense of direction due to the driving role of the Leading Companies and the roadmap that sets out the vision. This helps to improve the long-term perspective and direction of R&D funding. The role of the Leading Companies is however quite dominant, creating limited transparency regarding and commitment for future collaboration with members. With limited incentives to spend efforts on ecosystem development, this leads to mixed results. The R&D investments are strongly supported and connections are built at project level. Overall, the ecosystems are very project-driven, coupled with the pressure of the na-
- tional 4% R&D investment target, creates some concerns with regards to oversaturation and haste as well as a lack of cohesion and synergy between projects.
- The Partnership Model: The potential of the Partnership Model is quite large, but in practice no real alignment has been achieved between the Leading Company Initiative and the Flagship programme. There are plenty of opportunities to align existing ecosystems and flagships that work on similar topics. Deeper alignment will require a shared vision on increasing the utilization of R&D between Business Finland and the Academy of Finland.

RESULTS AND IMPACTS:
OVERALL, THE ECOSYSTEMS
CAN ADD CLEAR VALUE TO
THE ECONOMY AND SOCIETY OF
FINLAND. THE FINANCIAL MEANS ARE
SUFFICIENT TO REALIZE THIS AND
THE INSTRUMENTS COLLECTIVELY
PROVIDE A GOOD BASIS TO SUPPORT
THE KEY FUNCTIONS OF ECOSYSTEMS.

Realism, critical view of the current state, international viewpoint

Input additionality: effects of resources provided through the ecosystem instruments.

A key aspect of input additionality is the potential of the ecosystems. While this is inherently difficult to analyze, especially this early in the development of the ecosystems, there are some core aspects that indicate that the potential of the supported ecosystem is high. Compared to the overall economy, the ecosystems clearly include the higher performing companies active in Finland. Small and upcoming companies participate strongly in the ecosystems, yet the positioning, role and support for these companies requires more attention. Further improving the interaction between academics and companies, for instance through the Partnership Model, can further strengthen the influx of new knowledge and ideas that can lead to industrial transformations.

The potential for the development of the ecosystem is strongly tied to the role of the leading actors in the

ecosystems. While each of the instruments have very different leading actors, it is clear that strong leadership is required for the ecosystems to excel. The capacity to lead is clearly too low in the Capital Loan ecosystems. For the Orchestration Funding the leadership is organizationally strong and neutral, while weaker on the business strategy side. The leadership in the Leading Company Initiative is organizationally strong although not neutral. In the context of long-term ecosystem development, capacity building remains an area of concern.

The public funding provided clearly has a strong impact on private activities. The Capital Loan is used to work towards success of high-risk-high-reward platform concepts, although the design of this instrument is not fitting for start-up companies. In case of the Orchestration Funding, network activities are organized, projects are set up and information is shared. For the Leading Company Initiative ecosystems strong private investments in R&D are undoubtedly present. The size of the funding does

however raise some concerns regarding the focus on realizing R&D projects rather than on those projects with the best prospects and best fit with other activities.

While the individual instruments have their challenges, collectively the instruments include the aspects needed to support ecosystems: leadership, orchestration, strategy, (radical) renewal, coherence, R&D investments, room for collective dialogue, etc.

Behavioral additionality: change in the behavior & processes of companies/ecosystems.

The role of the leading organization is key in setting the tone for the ecosystem. Overall, the evaluation shows that ecosystems with clear leadership and a clear strategy have better performance. Ecosystems that are still exploring their key business strategy struggle the most with aligning ecosystem activities, activating ecosystem members and reaching results. In some cases, the leadership can also

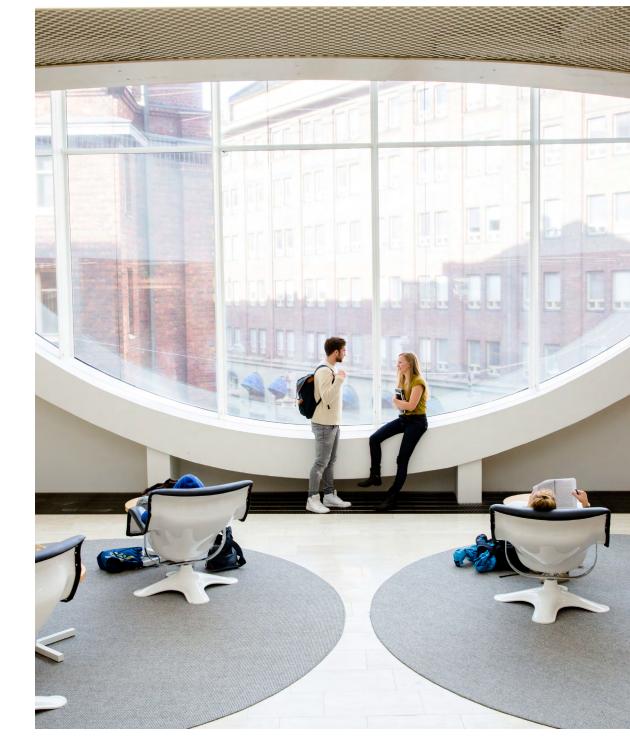
be quite dominant. This can push things forwards, but can also lead to a lack of commitment of members. In many ecosystems, the role and responsibilities of the central actor remain unclear to the ecosystem members. At the same time, the (often many) objectives (KPIs) of the instruments can be a source for unclarities.

Across the ecosystems, quite a large private investment in R&D is observed, in those with less R&D other relevant activities are performed, such as building international connections for increasing export. The R&D activities performed often are more research than development oriented. The knowledge exchange between companies is therefore more fundamental, moving closer to the market (shared product/service development) remains challenging.

The steps towards long-term ecosystem development were less clear. Overall, ecosystems need a lot of time and shared commitment in order to build towards self-sustainable ecosystems. Many ecosystems in the portfolio, especially the Leading Company Initiative, have a temporary nature according to interviewees.

Output additionality: the results that are realized due to the ecosystem instruments.

Output additionality is too early to judge for the Leading Company Initiative, although the high investments in R&D can be perceived as good prospects for the future. Also the Growth Engines need more time to reach results as many only exist for 2-4 years versus a horizon of 10 years of support. For the Capital Loan not many results are expected at portfolio level due to the high-risk-high-reward nature of the platform companies. In case of success the results can however be very large. For the Orchestration Funding the results will be mixed across the different ecosystems given the large differences between them. Overall, the orchestration activities are quite distant from business effects, as orchestration activities support the preconditions for business activities that in turn need to lead to effects. Nevertheless, across the ecosystems we find positive quantitative effects regarding export and export intensity. While not all ecosystems have focused on R&D projects,



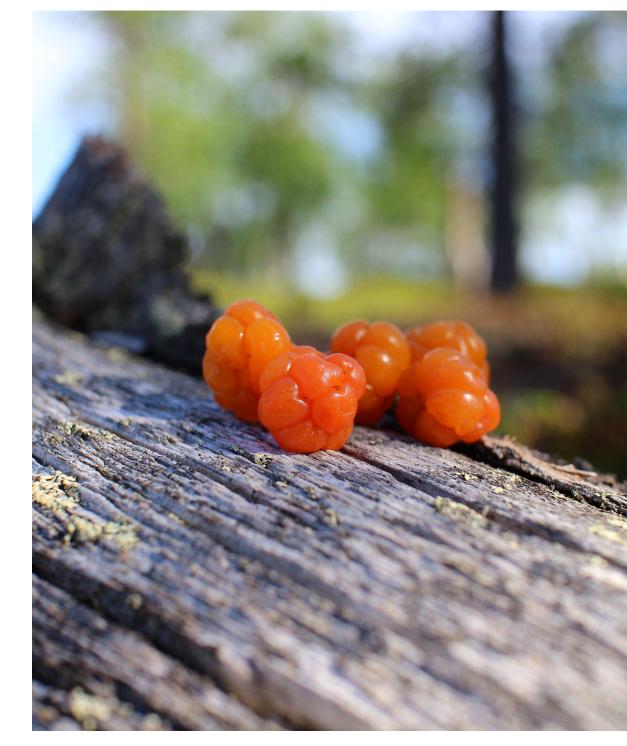
these export results can also hardly be an effect of R&D activities given short timeframe to translate R&D results into exportable products/services.

Socio-economic impact: impacts on economic growth, sustainability, and competitiveness.

For the contribution to competitiveness and growth the instruments provide a strong R&D impulse, with the Leading Company Initiative as largest contributor. Besides the R&D impulse, it is unclear how much space there is within the instrument to support other types of activities. Ecosystems should be able to address a wider range of aspects (more than R&D) to work towards competitiveness and growth as they provide a platform for members to collectively address key opportunities and challenges across a wide range of topics – also beyond R&D.

In terms of R&D, the efforts of the Leading Company Initiative can be cutting edge, however, in large part the roadmap follows the development paths of established businesses. For radical renewal, business concepts and innovations that challenge established businesses, there is limited support in the current instruments. The Capital Loan does focus on such concepts, but does not function well in terms of ecosystem development and is only aimed at high-risk-high-reward platform companies. At the same time, through the strong positioning of knowledge institutes knowledge does flow into the ecosystems, which can be improved by more boldly putting the Partnership Model into practice.

Overall, the ecosystems can add clear value to the economy and society of Finland. The financial means are sufficient and the instruments collectively provide a good basis to support the key functions of ecosystems.



Current state of play

The instruments provide value to the objectives of Business Finland, while still having their individual challenges. Collectively the instruments include the aspects needed to support ecosystems and there are clear insights on how the instruments can be further improved. Overall, supporting ecosystems requires a long-term approach. At this stage the Growth Engine instruments supported ecosystems for about 2-4 years, while the Leading Company Initiative and the Partnership Model have just been introduced. This shows that the time for results to materialize has been limited. Evaluation findings should be used to further refine the approach, while long-term commitment of public support towards the ecosystems should be maintained. Interaction with the key stakeholders within the ecosystems should be nurtured as within the dialogue Business Finland can continuously learn more about the realities of managing and collaborating within ecosystems and about the role and impact of the instruments.



KEY OBSERVATIONS

The Growth Engine - Capital Loan: The Capital Loan allows for investment in new strengths for the economy (radical renewal). Investments have the potential for high returns: in case the platform company is a success, returns can be large. At the same time, the platform companies concern high-risk ventures for which many external factors will determine the success. Theoretically combining ecosystem and business development is a winwin. The three somewhat separate objectives (business development, ecosystem development, and ecosystem member performance) are, however, too much to ask from a start-up. As a results effects within the ecosystem are secondary: 1) funding is only aimed at the platform company, 2) the platform company has little control over activities of ecosystem member, and 3) ecosystem members are not involved in the ecosystem strategy.

The Growth Engine - Orchestration Funding: The orchestration Funding creates specific attention for ecosystem development (versus focus on R&D, business,

etc.). The central neutral orchestrator provides clear management and all members have equal access to the ecosystem functionalities. Ecosystems can, however, be orchestrator and KPI driven (export, R&D projects, etc.) instead driven by business needs. At the same time, the link between orchestration activities and these types of results are often somewhat intangible. Nevertheless, some positive econometric positive associations for export, mainly on export intensity were found. The strong focus on R&D and export does not incentivize other ecosystem activities (human capital development, standardization, regulation, etc.). For long term development, the pay-asyou-go service model will be difficult to sustain.

The Leading Company Initiative: Ecosystems have a strategic approach revolving around a clear roadmap, this creates a longer term cycle, a sense of direction and members can rally around a specific 'mission'. Ecosystems have a clear driver with commitment and capabilities. Leading Companies bring in a lot of experience and

stability. The Leading Companies do have a dominant role within the ecosystems, without specific incentives for facilitating the ecosystem and providing equal opportunity. The ecosystems are not very attractive for SMEs, who are looking to develop products and services, but they cannot sell these to the Leading Companies. Overall, the instrument clearly secures R&D investments in Finland. The R&D performed is focused more heavily on the research side of R&D. Closer to the market, companies are less willing to collaborate and share knowledge. The role of universities / knowledge institutions is quite large.

The Partnership Model: The Partnership Model has large potential and there are low hanging fruit opportunities for stronger alignment. So far no real alignment has been realized. A shared vision on increasing utilization R&D between Business Finland and the Academy of Finland seems like an important next step.

FORWARD LOOKING STATEMENT AND RECOMMENDATIONS:
THE EVALUATION GIVES SOME CLEAR INDICATION ON HOW THE INSTRUMENTS CAN BE FURTHER IMPROVED.

Further streamlining of the instruments and a more active role

The evaluation gives some clear indications on how the instruments can be further improved. Recommendations are numerous as they are provided at instrument level and across the instruments. Below a selection of recommendation is presented.

KEY RECOMMENDATIONS

- 1. Business Finland should encourage and demand from the ecosystems to have stronger leadership and set up mutually agreed specific strategic objectives.
- 2. Business Finland should streamline its ecosystem instruments towards a set of key functions within ecosystems (R&D investments, ecosystem development, permanent R&D capabilities and infrastructure, enabling radical renewal).
- **3.** Business Finland should take an active role in outlining & realizing the ecosystem strategies, by being a strategic partner within the ecosystems.
- 4. Capacity building within the ecosystems and Business Finland needs to be made a priority.
- **5.** Growth Engine Capital Loan: Support radical renewal within ecosystems, but separate this from the support for ecosystem development.
- **6.** Growth Engine Orchestration Funding: Specify more clearly the added value of orchestration activities towards overall ecosystem objectives, without undervaluing the value of orchestration.
- 7. Leading Company Initiative: Maintain the strength of generating large private R&D investments while improving transparency for and commitment of ecosystem members.
- **8.** Partnership Model: Prioritize active alignment of the Leading Company Initiative with the Flagship programme of Academy of Finland.

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