

Feedback Paper Document South Savo

Jari Karjalainen, Natalia Narits

South-Eastern Finland University of Applied Sciences XAMK, Small Business Center

1. Introduction

This paper has been drawn up in South-Eastern Finland University of Applied Sciences (Xamk), which is one of the RIS3 policy implementer organisations in South Savo. The feedback paper mechanism is a tool for collecting and monitoring feedback from the internal staff of Xamk, SMEs and key stakeholders about the implementation of the RIS3 in the South Savo region. This paper examines the experiences gained during the EmplInno project and the observations made concerning the practices that should be used in the future as tools for implementing strategies. The main objective is to provide feedback from implementing RIS3 to the South Savo Regional Council as “strategy owner”. In addition, some general level recommendations to policy-level operators have been made.

The first Smart Specialisation Strategy of South Savo (RIS3)¹ was conducted for the period 2014-2017. The smart specialization priorities based on the determined, long-term development work carried out in the region. The aim of regional R&D policy was to create centres of expertise of both, national and international significance in the following areas of smart specialization. In addition, the aim was to create user-oriented services, innovations and processes shared by multiple users. RIS3 is crucial for Xamk R&D unit as well, because it is one of the main executors of regional development policy in South Eastern Finland.

The priorities chosen contained identifiable applications that can be commercialized fast. Top areas of innovation were:

- Forest based bio economy
- Clean water and environmental safety technologies
- Smart and functional materials

¹ Smart Specialisation Strategy of South-Savo 2014-2017, South-Savo Regional Council

The focus of the updated smart specialisation for the years 2018 - 2021² will be Wood, Water and Food: especially Forest biomass based new products and production processes, clean water and environmental safety technologies and organic products and food safety innovations. The common denominator for all the top priority areas is digitality.

2. Problems defined and recommendations of solutions

2.1. Description of current problems requiring innovative approaches in the region

The background of the Smart Specialisation Strategies in South Savo is to tackle some fundamental problems. The biggest challenges that threaten the development of the region are small (147,194 inhabitants in 2017) and aging (average age 47,8 years in 2017) population³ and the geographical location, which cause difficult logistical connections.

South Savo is relatively challenging for the development of the business sector as well, for example, there is not a science university in the region and there is a little willingness to invest. In this case, the innovation system - research-development-companies/products chain, does not work as automatically as in the most industrialized regions.

Some challenges concerning implementation of smart specialization strategies

The feedback on the challenges is provided for the strategy owner South Savo Regional Council. It's collected by:

- interviews and surveys about training and development needs
- direct contacts during the events, e.g. Business Breakfasts, Morning coffees, seminars, training programs etc.
- the information concerning the needs of firms which is produced by the business development organisations incl.: Miksei Ltd, South Savo Chamber of Commerce and others
- the support from the policy owner itself – South Savo Regional Council has produced diverse data of development of the region

² RIS3 Research and Innovation Strategy for Smart Specialisation 2018-2021, The Smart Specialisation Strategy of South Savo, South-Savo Regional Council

³ Etelä-Savo ennakoi: <https://esavoennakoi.fi/vaesto>

- a) In the South Savo region up to 95% of businesses are small- and micro enterprises employing less than 10 people⁴, and **there is no great ability to offer incentives for them to participate** in the R&D activities defined in the Smart Specialisation Strategy of the region. From the implementer's point of view it is difficult to motivate companies to participate in execution of the strategy in case if no short term value in money can be seen for their business. This has been long-standing challenge in other regions in Finland as well.⁵
- b) Strategies are implemented by various projects funded mainly by EU-Structural Funding Programs. The ongoing challenge is **how to continue the started development processes** by the strategy owner and other stakeholders in a sustainable way after the projects' end. The innovation system's R&D infrastructure in South Savo is good enough, but number of patents and new export products is still small.
- c) The regional R&D actors, educational institutions, development agencies, municipalities and associations are all relevant implementers, **but from our experience, there has been quite little cooperation between them in the RIS3 implementation so far.**
- d) Internationalisation is one of the RIS3 implementation instruments in South Savo. Kind of a problem is also the **lack of internationalisation strategy on regional policy level** (South Savo Regional Council). This will slow down the level of international co-operation and informal exchange of information at the policy level.

2.2. The lessons learnt during the EmplInno-project realisation

In the EmplInno project, Xamk Small Business Center has tested different ways to meet the implementation problems described in the previous section. Based on that experience, there have been identified the following practices as good tools for implementation. Some of the practices can be helpful in solving of the several of these earlier mentioned challenges.

1. *BioSaimaa – Bioenergy Cluster meetings*

⁴ Etelä-Savo ennakoi: <https://esavoennakoi.fi/yritykset>

⁵ For example, in August 2018 the Parliament discussed how companies could better use EU financial instruments.

In terms of funding, the forest sector is the most important area of Smart Specialisation Strategy in South Savo. BioSaimaa-group is a cluster, which coordinates the RIS process of wood energy in the region. It consists of all the regional players in forestry and bioenergy sector. The task is to increase the use of wood energy in South Savo and enhance the sustainable energy use so that all the actors of the value chain will benefit. The cluster consist of the following actors:

- Miksei Ltd – development center of Mikkeli city (host organization)
- Forest Center (state administrative organization of forestry)
- Lappeenranta University of Technology –Bioenergy research –unit
- South-Eastern Finland University of Applied Sciences –development of forestry, timber harvesting and technology
- South-Eastern Finland University of Applied Sciences, Small Business Center – research and development of entrepreneurship and businesses
- Forest owners` organization –services of forestry and wood sales
- Companies in the field of bioenergy

BioSaimaa group has met twice a year to present the results of projects and to discuss current topics: targets and implementing of the ongoing projects, development of the new projects, sources of the funding and overall, the future needs in the field. This helps in increasing the cooperation between the regional policy implementers, which has been quite low in the South Savo.

E.g. EmplInno RIS3 specialist has also participated in the group's activities and introduced during the last meeting decentralized energy production in the South Savo region. The cluster helps actors to increase cooperation in national and international development projects.

3. Experimental culture and hackathons

So-called experimental culture is a fast and cost-effective way to reform business. A concrete approach to the experimental culture are hackathons, which are 24 hours long competitions for teams of students, researchers and innovative people who possess expertise and knowledge in the field of the programming, graphics design as well as out-of-the-box thinking skills. The competition event hosted by different institutions from the business and public area and aim is to promote the digitalisation solutions in these sectors. The participants work in teams on the real

challenges existing within the hosting institutions in order to develop innovative solutions for them. At the end of the competition the teams of competitors present their ideas and concepts to the jury which selects the most innovative and valuable solution for the host organisation.

During the EmplInno project Xamk organized Environment and Forestry Hackathon in Mikkeli region to solve real life challenges worth solving in the field. The Hackathon was organized in partnership with IBM Watson, MetsäGroup and Finnish Environment Institute –SYKE. The participants of the event were mobilized by advertising in the universities and schools. The winner team designed a digital steering system for the wood procurement to help the harvesting machine in operation, especially, in thinning and energy wood cutting.

The hackathons are the good way in the connecting of the business- and science world and increasing concrete cooperation between companies and educational institutions. The hackathons may be organized regularly, if the funding to arrange them is available.

During the EmplInno project meeting in Mikkeli the Hackathon good practice has been presented to the project partners.

4. Morning coffee –events with funding info

The monitoring of Smart Specialisation Strategy for the South Savo in a midterm evaluation in 2015 revealed needs e.g. in using local expertise more, stepping out from the current competition to new areas of the high profile products and services, creating and maintaining networks as well as flexibility in funding and risk taking.

Regular Morning coffee –events where the RIS3 strategy owner, implementers and business companies exchange experiences, ideas and knowledge with each other have been a good way to increase needed cooperation in practice.

In particular “Funding Info” –Morning coffee –event in Xamk arranged as part of the EmplInno-project together with East and North Finland EU-office focused to R&D personnel of business development organisations, education institutions and SMEs. The event gave a good view on the future financing outlook in EU and relevant financing sources for the projects based on Smart Specialization Strategy of South Savo.

Good Practices coming from EmplInno-RIS3 for organizational coaching tools, R&D transfer and SME Empowerment tools were presented and discussed during the event. Additionally, experiences of Xamk R&D department of sustainable

wellbeing concerning the SP3 Agrifood Platform were presented, e.g.: Department of sustainable wellbeing with the consortium of SP3 Agrifood Platform has been submitted AGRARIUS-project application for Horizon2020 RUR-04-2018-2019 with the TOPIC: Analytical tools and models to support policies related to agriculture and food. The Platform membership has also contributed in the Xamk partnership in Smart Pilot Action boosting interregional cooperation in innovation.

5. Good Practices learnt from the project partners

Good practices (GP) for the RIS3 implementation were presented by the project partners during the Emplnno project time. The most potentially interesting for the regional food- and energy clusters, educational institutions, business development organisations and South Savo Chamber of Commerce good practices for testing and possible further implementation can be:

Workshops - Business meet research and Collecting Innovation ideas from SMEs

Concepts of the two workshops organized by the South Denmark European Office (SDEO): Business meet research and Collecting Innovation ideas from SMEs – workshops to strengthen the cooperation between researchers and companies. Prior to the workshops SDEO had collected innovation ideas and challenges from the interested companies.

The Xamk R&D unit and/or the Small Business Center could be the organizer for events like this to intensify cooperation between science and business.

Energetics Fair in Lublin

Energetics Fair is one of the leading events in Poland dedicated to professionals from the energy sector. At the trade Fair both (Polish and foreign) syndicate companies and individual entrepreneurs presented modern facilities, equipment and technologies for the energy industry. The trade Fair brought together international participants representing the following sectors: fuel energy, electrical engineering, mining, construction, metallurgy, automotive.

The Fair in Poland organised in the close cooperation with entities such as associations, chambers, local government institutions, central administration offices, sector media, schools educating in the field of electrical engineering, energetics, electronics as well as universities.

This practice can be recommended for the regularly implementation also in South Savo region, e.g. by the BioSaimaa cluster actors, if the funding will be available.

This can strength the cooperation between the energy sector companies, educational institutions, business supporting institutions and other stakeholders in the implementation regional RIS3, supporting internationalisation incl. further cooperation with Emplnno partners.

Techno-Lunch by Prizztech

Techno-Lunch organized in a restaurant addresses SMEs, start-ups and science representatives. There, they get the opportunity to present their own institutions (focus on SMEs) and to discuss current research projects as well identified research and development needs in a second step.

In South Savo the Xamk R&D unit and/or the Small Business Center could be the organizers for this kind of meetings, focused to different business sectors. It can helps to identify companies' concrete development needs and support their development by the implementing tailored research projects.

Epanet University Network and University Consortium of Seinäjoki

Juha Alarinta, research director of the Epanet University presented during the Emplnno meeting in Seinäjoki a good practice of regional innovation policy instrument "Epanet University Network and University Consortium of Seinäjoki". To strengthen the local academic society based on a close triple helix cooperation between industry, university and governmental entities – a unique university network has been built up in Seinäjoki in 1998 with 12 new professorships and close cooperation with the national University landscape. With more R&D work and a focus on creating links between academics and the regional economy, four fields of research groups (Smart and energy efficient systems; Sustainable food solutions; health and creativity; entrepreneurship and business concepts) support regional competitive economic sectors by conducting advanced research and development work on.

If such a network could get funding In South Savo it should be set up in cooperation with the R&D actors of the region. The network would intensify cooperation, promote research and development and enhance opportunities for internationalization of research, developing and industry. Creating this kind of network is a major investment and it requires careful and exact ex ante evaluation.

2.3 Recommended solutions/ideas improving RIS3

In response to common problems, it is recommended to take into the account the experience and good practices gained with the EmplInno-project when the plans and priorities for RIS3 will be made in the future. By favoring the above practices, it is possible to engage stakeholders (incl. Miksei Mikkeli Ltd, Mikkeli University Consortia, South-Eastern Finland University of Applied Sciences and its Small Business Center, South Savo Vocational College ESEDU, South Savo Chamber of Commerce, The Federation of South Savo Entrepreneurs, Savonlinna Business Services and others) in the more intensive cooperation and improve the continuity of development projects.

The original purpose of the Smart Specialization Strategy is to select a specific business area for development and also to determine when the support will end, maybe 4-5 years after which it will have to act market-driven or failed.⁶ Still the same industries have been developed in South Savo for decades, partly due to the nature of the region.

South Savo is relatively small as well, and there are similar types of RIS3 priorities as in the other regions in Eastern Finland, e.g. in North Savo, incl. bio-economy and food. So that the regions in this sense are not clearly distinguished from each other. Perhaps a more **experimental approach** to strategies (experimental culture) could help to identify new opportunities and help the region to rise again.

One part of experimental culture are organised by the Xamk and Hacklab Mikkeli **hackathons**, where the participating companies have the opportunity to utilize some of developed new ideas in their operations immediately. This operating model adds to the companies interest in developing operations in the RIS3 domains. This supports their business and thus contributes to the vitality of the region.

Hackathons also engages participating young students in the solving of the companies real challenges and thus helps them into further employment in South Savo, which is important because of the poor age structure of the region. Therefore it is worthwhile to use project resources to strengthen the experimental culture and take it into account in the financing policy.

The regular BioSaimaa-group discussions has been a functional tool to increase the co-operation between policy implementers on forestry and bioenergy field.

⁶ Foray, D. (2015), Smart Specialisation: Opportunities and Challenges for Regional Innovation Policy, London: Routledge.

Foray, D. & David, P. & Hall, B. (2009), Smart Specialisation – The Concept, Knowledge Economists Policy Brief Nr. 9.

Those kind of **cluster actors' meetings** are additionally a good way to spread research results and information of innovations to companies in that field.

A good example which can be recommended from the EmplInno project, is the practice for the supporting clusters like the annual match-making event of industrial companies in the Satakunta region, where 20-30 companies are invited as 'main contractors' and 500 companies (mainly SME) will join as participants.⁷ The participant companies are suppliers, subcontractors and technology companies operating in various businesses. They are searching for the new customers, business opportunities and networking possibilities in the event.

The development policy in the area of smart specialization in South Savo should give **more support for clustering** and the same approach can be duplicated to other industries as well. In practice, regional development companies Mikkeli Development Miksei Ltd and Savonlinna Business Services are well-connected to companies in the region and have ability to build regional clusters if they are resourced for that by the owners' or by external development funding.

Additionally, using of the full potential of the regional education- and research institutions (Mikkeli University Consortia, South-Eastern Finland University of Applied Sciences and its Small Business Center, South Savo Vocational College ESEDU) in implementing of the RDI activities, supporting and development entrepreneurship. Further **strengthening of the cooperation between industry, education- and research institutions, business support organisations and policy owners** in the South Savo are crucial for the regional development and implementing of the regional RIS3. The good example for the benchmarking can be good practice from "Epanet University Network and University Consortium of Seinäjoki" shared during the EmplInno project.

Effective internal and external **informing about the funding possibilities** in selected strategy areas is crucial and it improves the usage of strategy resources. A lot of companies do not seek EU funding because they can't see immediate benefits and they are not aware of all opportunities. On the other hand, SMEs do not have the skills and resources needed to manage the projects. They are so trimmed by their administrative structure that they do not have people familiar with EU project management. From the point of view of SMEs, the project process has bottlenecks, the solution of which by their own means is difficult.

Good example for the solving this problem are **Funding Info –events** with help of the East and North Finland EU-office in order to get information about relevant financing sources for the RIS3 development projects and the future financing

⁷ EmplInno: Synergy and Empowerment Concept Energy / PP13 Prizztech Ltd.

outlook in EU. They also offer the opportunity to share experiences and inform potential partners of cooperation in terms of the international project activities in different regional R&D organizations and SMEs.

The policy owner should have an **internationalisation strategy** and participate more in the international development co-operation. The good example for this is the EmplInno project partner Regional Council of South Ostrobothnia, e.g.⁸: the main objectives of the South Ostrobothnia's RIS3 is to increase international cooperation by the financing R&D actions by international funding. The increased international project financing and foreign investments as well as smart growth are the key goals.

- The idea has been to triple the transnational co-operation funds that are allowed to South Ostrobothnia
- Analysis on international project funding opportunities was a part of the strategy process.

This example from the Regional Council of South Ostrobothnia recommended for the benchmarking by the South Savo Regional Council and possible adoption to the needs of South Savo region's further RIS3 planning.

In the South Savo Regional Council there is a need for the improvement the internationalisation strategy. The Council has the most comprehensive general view of development situation in the region, therefore it recommended to pay more attention to participation in the international co-operation in order to benefit more effectively from the good practices in the Baltic Sea Region (e.g. EmplInno project and others).

Funding of recommendations

At the moment the smart specialisation strategy of South Savo outlines the key guidelines for innovation activities on which the funding from EU's Structural Funds is focused for the region. During the seven-year programming period 2014-2020, South Savo receives EUR 101,2 million of EU funding, which is about 20% less than in the previous period⁹. EU funding as ERDF, ESF, Horizon 2020 and national financing instruments are the most realistic source of funding in the future as well.

⁸ EmplInno: 9.10.2018 Presentation by Jari Kolehmainen, University of Tampere

⁹ South Savo Regional Council: <https://www.esavo.fi/eu-rahoitus>

The policy owner in South Savo has a double role, it acts as one of the financiers at the same time. Therefore it should reserve the resources also for the creating and executing the internationalization strategy of its own. By gathering continuously international information of the functionality of regional innovation and development systems and using that as a base for decision making the strategy owner would help the permanent progress of regional development in South Savo.