

SMART SOLUTIONS FOR SMART PRODUCTS IN CENTRAL EUROPE

**Recommendations to increase
the opportunities for servitization
in manufacturing industries**

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This Policy Paper represents one of the key outcomes of the THINGS+ project and, if well used, can provide a boost to the policies aimed at strengthening many small and medium manufacturing companies and therefore to the competitiveness and economic and social development of various European regions. It is aimed at the Governance of the areas in question, in the hope that this will provide a cue to encourage those innovation projects aimed at a strategic rethink.

The key issue being tackled is how to transform the manufacturer from a mere supplier of a product to a supplier of a product as a service. This is not an easy process, there are many pitfalls (e.g. a lack of knowledge and skills regarding new business models, the risk of considering only the technological component, resistance to change) but also many benefits for those able to master the new business models (i.e. new market share, higher margins, returning customers, etc.) But what makes this paper so valuable and unique? The fact that what is proposed is the synthesis of an extensive pilot action involving over two hundred SME entrepreneurs and managers from 9 European countries and because it has been validated by a certification body that has laid down a new path precisely to ensure that those who managing these transformation projects within the companies have the necessary skills.

During the process of preparing these policy recommendations the entire planet endured the COVID-19 pandemic outbreak, which in few short months has radically changed consumer habits worldwide in the direction of greater personalization. Being able to solve the critical issues of one's customers in advance, to constantly learn from how they use the products, to build the service that is provided and sold to the customer as a replacement for the sale of the product alone in partnership may mean the difference between a company that disappears and one that grows and becomes ever stronger even when having to face the next economic crisis.

For these reasons we are convinced that policy makers today are even more important in the development of effective and up-to-date industrial and innovation policies, including efforts to direct and promote those paths that SMEs are often unable to explore on their own to gain competitiveness on global markets. This document is dedicated to the open-minded stakeholders and decision-makers of the European regions willing to challenge themselves on the topic of how to promote the competitiveness of traditional small industries.

*Fabio Feruglio
Managing Director of Friuli Innovazione*

EXECUTIVE SUMMARY

"Smart Solutions for smart products in Central Europe" is a study based on the transregional cooperation project "THINGS+ - Introducing service innovations to manufacturing companies". It is the outcome of two years' work by a team of international innovation policy experts, brought together to carry out research, steer a multi-level policy dialogue process and draft conclusions and recommendations aimed at suggesting the most efficient ways to **unlock the competitiveness of small manufacturing industries by favouring the servitization** to Central Europe policy makers.

The paper consists of eight chapters. The first two introduce the concept of THINGS+ and describe project's main activities. Chapters I and II focus on the issues relating to the **transformation of traditional companies into regional engines of innovation**, without excessive investments in technological development. It is assumed that the key result of the project implementation will result in the development of a new approach to increase entrepreneurial competencies, which will enable the introduction of service innovations in manufacturing companies, leading to an increase in their market potential.

The proposed solutions evolved from a series of several discussion panels, incorporating the lessons learnt from the experience gained during the pilot activities carried out at the regional level with almost one hundred SMEs, taking into account the views and opinions of the project's target audiences as well as extensive discussions with innovation experts and the joint effort of dozens of stakeholders to define the vision and ways to achieve the project objectives.

The next two **chapters (III-IV)** introduce the concept of servitization and the process of its popularization in Central Europe. They indicate that the demand for high personalization, as well as global competition, have led to a situation where satisfying customer needs by providing only the tangible products is no longer sufficient for companies to survive in a competitive market. The study's authors indicate **that the servitization of goods via an appropriate upskilling of human resources and the exploitation of digital technologies, may be one solution**, bringing greater prosperity for enterprises in a constantly changing market. Chapter III discusses the steps to be undertaken to implement servitization, as well as the conditions supporting this process. Chapter IV is devoted to an analysis of the occurrence and implementation

of servitization in Central Europe on the basis of data collected in 2018-2019 within the framework of the THINGS+ project.

The two following **chapters (V-VI)** present a set of **recommendations to develop up-to-date regional innovation policies that include specific measures enabling product-based servitization**. Recommendations are targeted towards regional policy makers and are designed to suggest a comprehensive action focused on empowering the business environment support organizations (BSOs) and providing concrete answers to the final beneficiaries, namely micro, small and medium-sized companies (SMEs). The authors of the study suggest that regional policy frameworks willing to support SMEs that are implementing servitization processes ought to incorporate a range of tools that can be clustered into **three main areas of scope**: preparatory **digital innovation awareness-raising** initiatives and **vouchers and loans to lower the risk** during the go-to-market phase together with **services development and implementation support measures**. They also emphasize that the form of financial instruments used to stimulate the servitization should take into account criteria such as the size of target enterprises, the type of industry and its stage of development. In Chapter VI the **recommendations are divided into two groups (SMEs and BSOs)** and described. The general policy recommendations are rounded off by a set of potential individual measures and tools for supporting the servitization process, proposed by the authors of the study and based on the outcomes of the policy dialogues with the aim of **offering something feasible, cost-effective and efficient**.

Chapter VII describes two **regional demonstration pilot actions**, which were carried out in the Lodzkie Region (Poland) and the Veneto Region (Italy), both partner organizations in the THINGS+ project. The piloted actions were selected from the proposals developed during the project policy dialogues. Before their implementation, extensive consultations with partners, stakeholders and entrepreneurs were carried out. In addition, a focus is provided on how the topic was addressed in the Italian Autonomous Region of Friuli Venezia Giulia, a THINGS+ associated partner, given that an original effort to include servitization in a legal provision was made and now the topic is being tackled in the programming of cohesion funds for the period 2021-2027.

The final **chapter (VIII)** is a summary of the conclusions emerging from the THINGS+ project developed by an international team of experts. These were prepared on the basis of an analysis of the perception of servitization and the tools available to support this process in Poland and Italy, together with the pilot activities carried out in both countries.

The **Annexes** list the stakeholders actively involved by country together with some tables that recap the facts & figures surrounding the THINGS+ project.

ABOUT THINGS+ PROJECT

I. ABOUT THE THINGS+ PROJECT IDEA

Despite vast investments and the development of innovative technologies, many industries in Central Europe still focus on product manufacturing. However, low-cost competition from non-EU countries, together with gradual commoditisation, further challenge their competitiveness. Thus, it is essential, especially for SME companies, to adapt their skills and successfully overcome rapid changes, by following innovation and technological progress. Servitization of products through adequate human capital and digital investment could be one of the solutions for greater prosperity in an ever-changing market.

I The THINGS+ project aims to enrich the portfolio of companies with additional services able to increase value delivered to customers and improve their position in the market, by strengthening entrepreneurial skills in service innovation management.

The THINGS+ project is focused on the transformation of traditional companies into regional motors of innovation, without undue investments in technology. The key output will be a new approach to improve the skills of these entrepreneurs, thus helping them introduce service innovation into manufacturing companies and increase prosperity in changing markets.

Project core activities

- Creating Service Innovation Methodology (SIM) based on a transnational design: the creation of a coherent, robust, and operational methodology for the improvement of entrepreneurs' skills in the development of product-based services.
- Specialization in Knowledge-Intensive Business Services (KIBS): the objective is to train KIBS staff in the Service Innovation Learning System,

allowing them to introduce it to SME owners, managers, and employees during the workshop cycles offered at a local level.

- Take-up of innovative services in the CE manufacturing industry: SMEs representatives previously trained will be supported in their SIM testing application during their servitization pilot action. One of the goals is to review and improve the SIM application tools through manufacturers' feedback as well as via the experience gained during the testing phase.
- Recommendations for a Central European Service Innovation Inclusive Policy: a coherent and comprehensive set of recommendations aimed at policymakers within the CE regions, to help them develop an innovation policy framework within which servitization projects will be encouraged through specific measures.

The THINGS+ project is implemented by a consortium of ten partners, two regions, and 8 business support organizations (BSOs) located in nine Central European countries and it is co-financed through the Interreg Central Europe Programme.

www.interreg-central.eu/Content.Node/THINGS-.html



WHAT IS THIS POLICY RECOMMENDATION PAPER FOR?

II. WHAT IS THIS POLICY RECOMMENDATION PAPER FOR?

Policy actions should provide effective support for companies to build their competitive advantage on the market.

One of the new global trends providing this advantage is servitization or the transition from Product Systems to Product-Service Systems (PSS). This is why there is a growing need to assess, analyse, and demonstrate the impact innovative services might have on industrial change.

Service innovation is part of smart production transformation and should not be neglected by mainstream innovation support schemes.

The THINGS+ project has been developed with the main scope of preparing a practical methodology for CE innovation facilitators, to assist manufacturers in rapidly implementing their service transformation projects. The lessons learnt from a pilot action involving almost 100 companies in nine countries. Several pieces of desk research and questionnaires collected during the realisation of the 3 years project have provided a wide understanding of the process in question, allowing the consortium members to present a set of bottom-up recommendations for policymakers.

The project is aimed at CE regions, increasing their knowledge with regard to service innovation as a driver of competitiveness while ensuring sustainability and territorial impact, as well as presenting original solutions to the introduction of service innovation in the design of industrial policy strategies and/or in public programmes to increase entrepreneurial skills.

The THINGS+ Policy Recommendation Paper (PRP) is the result of several cycles of policy dialogue, based on evidence from the

reports and pilot actions performed at a regional level, end users' feedback, extensive discussions with experts and a joint effort to define visions and ways to achieve the project goals.

The Paper presented contains new service innovation support schemes, which will assist emerging sectors together with new cross-sectorial themes and proposals to evaluate policy impact.

The strategy designed in the PRP seeks to be the basis for regional and national policymakers in central Europe. In addition, the strategy should result in the development of service innovation programmes and support actions.

European, national and regional policymakers are invited to reflect on how the suggestions listed in this PRP might be integrated into their regulations and implemented on the ground.



III. WHAT IS SERVITIZATION?

Services have increased in their relative importance in the past few years within the industrial sector, particularly from the customers' perspective.

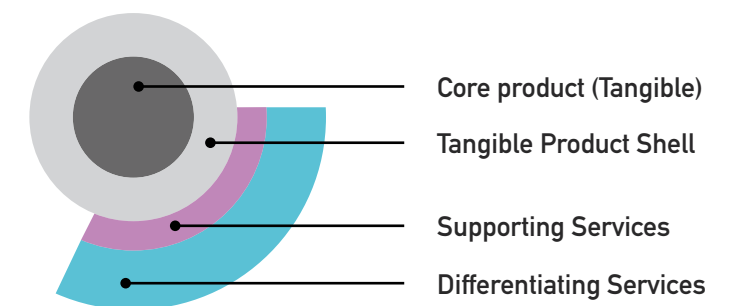
The demand for high customization and global competition has led to a situation in which satisfying customer needs by only providing tangible products is no longer sufficient to guarantee secure sales and the offering of physical goods together with services is required to raise the value the customers receive.

The relationship and interaction with suppliers, dealers and producers are becoming ever more important for customers. Only manufacturers who understand customer needs involving the product can optimize their entire service package using the service approach.

This is why, nowadays, services are increasingly important motors of growth in the economy, and servitization is recognized as one of the economic global trends in which manufacturing firms adopt more and more service components in their offerings.

Servitization can be implemented by adding supportive and differentiating services to the core product (Fig. 1), thus creating competitive advantage (e.g. consulting, customer support agreements, outcome contracts) or most advanced level – product as a service (ex. license, pay per use).

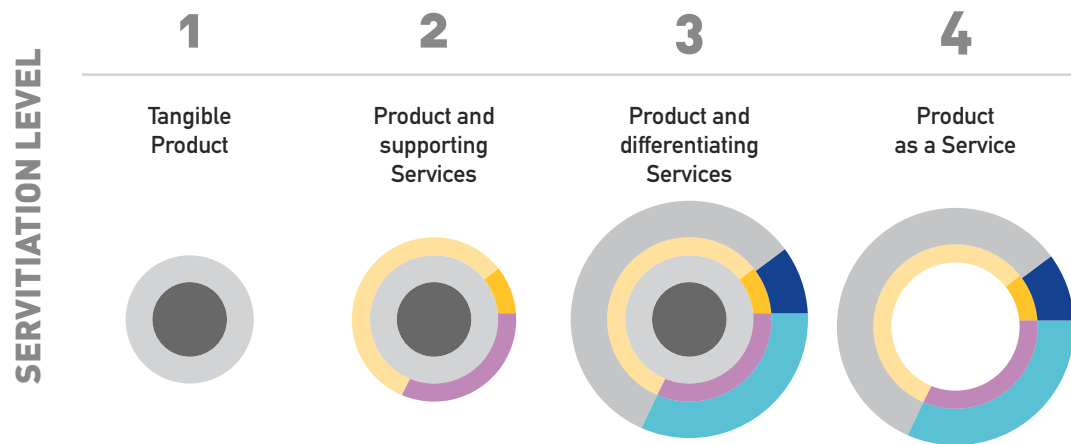
Figure 1.
Differentiating
services



WHAT IS SERVITIZATION?

Thus, the services added to the physical products, should be aimed at solving the customers' problems and improving quality, as well as the customers' interest in the manufacturing companies' offer (Fig. 2).

Figure 2.
Extended
product
concept



Different levels of servitization have been identified (Fig. 2), starting from the traditional manufacturer of a tangible product, with support services offered simultaneously with products (ex. financial, repair and maintenance services). The implementation of services can also be done successively to ensure an observation of the customers' response, together with a constant adaptation of service innovations.

Servitization should be also considered as a business model, changing, as it does, a firm's approach from a product-oriented to service-centric one, in which services play a role of growth engine for the companies concerned (fig. 2).

The servitization pyramid presented below shows the sequence of service areas in manufacturing activity. The first level is understood as the basic services (Fig. 3), where product provision dominates. The second and third levels are perceived as intermediate services and the fourth as advanced.

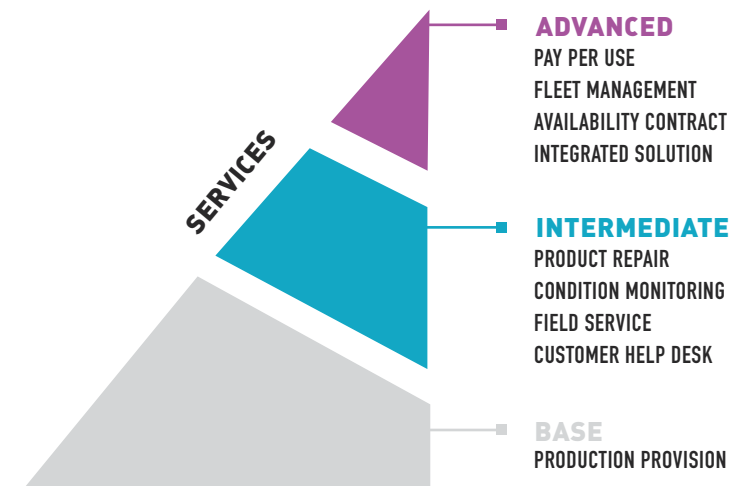
For the purpose of the Policy Recommendation Paper servitization can be defined in two ways:

- from the point of view of company management, servitization is a strategy of creating value-added activities for production

companies by developing services to technological, logistic, administrative, organizational and marketing processes or even replacing a product with a service.

- from the perspective of regional development, policy servitization is the development strategy of manufacturing firms' in the creation of a new offer by adding services to their technological, logistic, administrative, organizational and marketing processes.

Figure 3.
The servitization
pyramid



What is important is that servitization contributes to the transformation of traditional industries, but it also shapes emerging ones and thus why it should be recognized as a strategic and integrated manner by national and regional authorities.

Servitization of products through adequate human resources and digital investment may prove to be one of the solutions for greater prosperity in an ever-changing market.

The market potential for servitization looks very promising but the challenge of transferring the idea to manufacturing sectors requires significant efforts from the companies involved.

At various stages of the process, a range of activities can be implemented by the company to increase the added value of the products offered, from pre-production activities such as research and development, design and new

technologies to new products and services at the post-production stage.

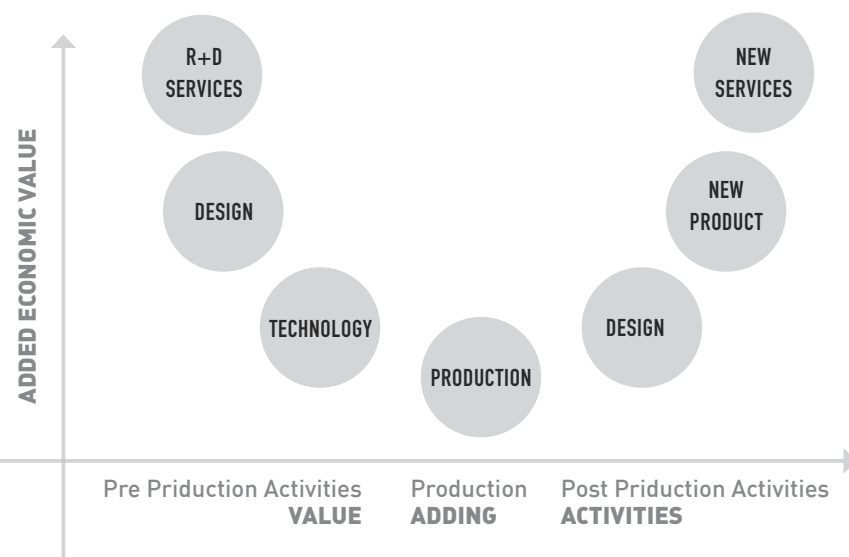
The fundamental questions to be answered while shaping an effective model of the servitization process are: "What lies at the base of the servitization?", "What resources and sources determine it?" and "Which tools can be employed to help entrepreneurs in the development of services?"

The servitization and development of service innovation are determined by:

- knowledge, new technology, and new product diffusion,
- the intensity of competition,
- new regulations on environmental protection and the labour force in manufacturing companies,
- the increase in the complementation of products and services
- the internationalization of markets and demand,
- the rise in individual needs.

To gain a competitive advantage based on innovative services, companies should be aware of the aforementioned determinants and investments awaiting them in technology and service developments. To make these investments, and transform a production company by adding a service package, most entities require external support, such as European Union programmes, at both the national and regional level.

Figure 4.
Conceptual
servitization
process



THE CAMBRIDGE SERVICE ALLIANCE, A BEST PRACTICE

The Cambridge Service Alliance is a partnership between businesses and universities founded by BAE Systems, IBM and the University of Cambridge's Institute for Manufacturing and Judge Business School.

By consulting panels of practitioners and academic experts, Alliance identified technologies that are believed to be the most important for servitization. The top five technologies selected by both CEMs and academics were:

- Predictive analytics to predict specific failure modes.
- Remote communications to adjust/fix products remotely.
- Consumption monitoring to create customer-specific service offerings.
- Pushing information to employees or customers via mobile platforms.
- Mobile platforms to access the ERP system remotely for maintenance techniques, product details, etc.

The Alliance also identified drivers motivating the adoption of the technologies indicated. The five key drivers from the industrial perspective of the CEMs were:

- Generating new revenue streams.
- Improving maintenance efficiency and effectiveness.
- Improving product performance.
- Increasing data gathering (volume, quality, data types, etc.).
- Increasing/improving access to information.

cambridgeservicealliance.eng.cam.ac.uk

IV. THE CHALLENGES OF SERVITIZATION IN CENTRAL EUROPE

What did we learn from manufacturers?

During the period 2018-2019, in the frame of THINGS+ activities, more than 200 people, including business consultants, entrepreneurs, managers and employees were taught the principles of service innovation and almost hundred pilot projects in manufacturing firms have been realized.

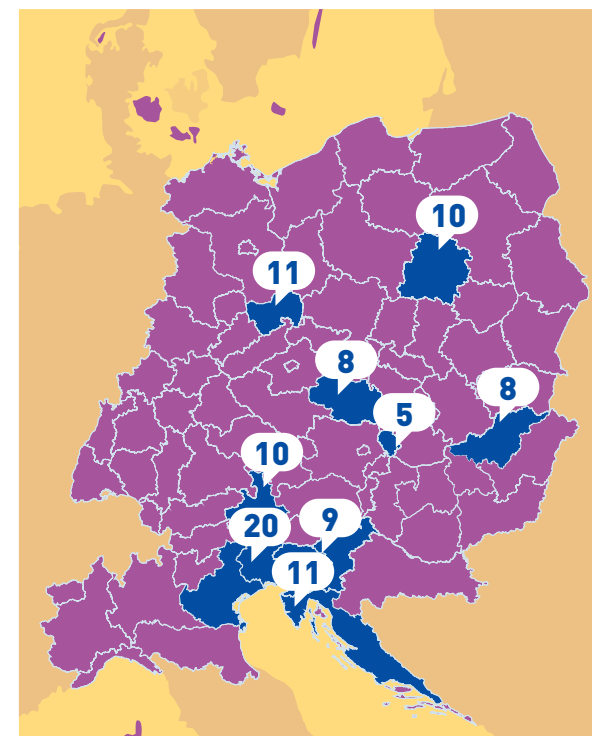
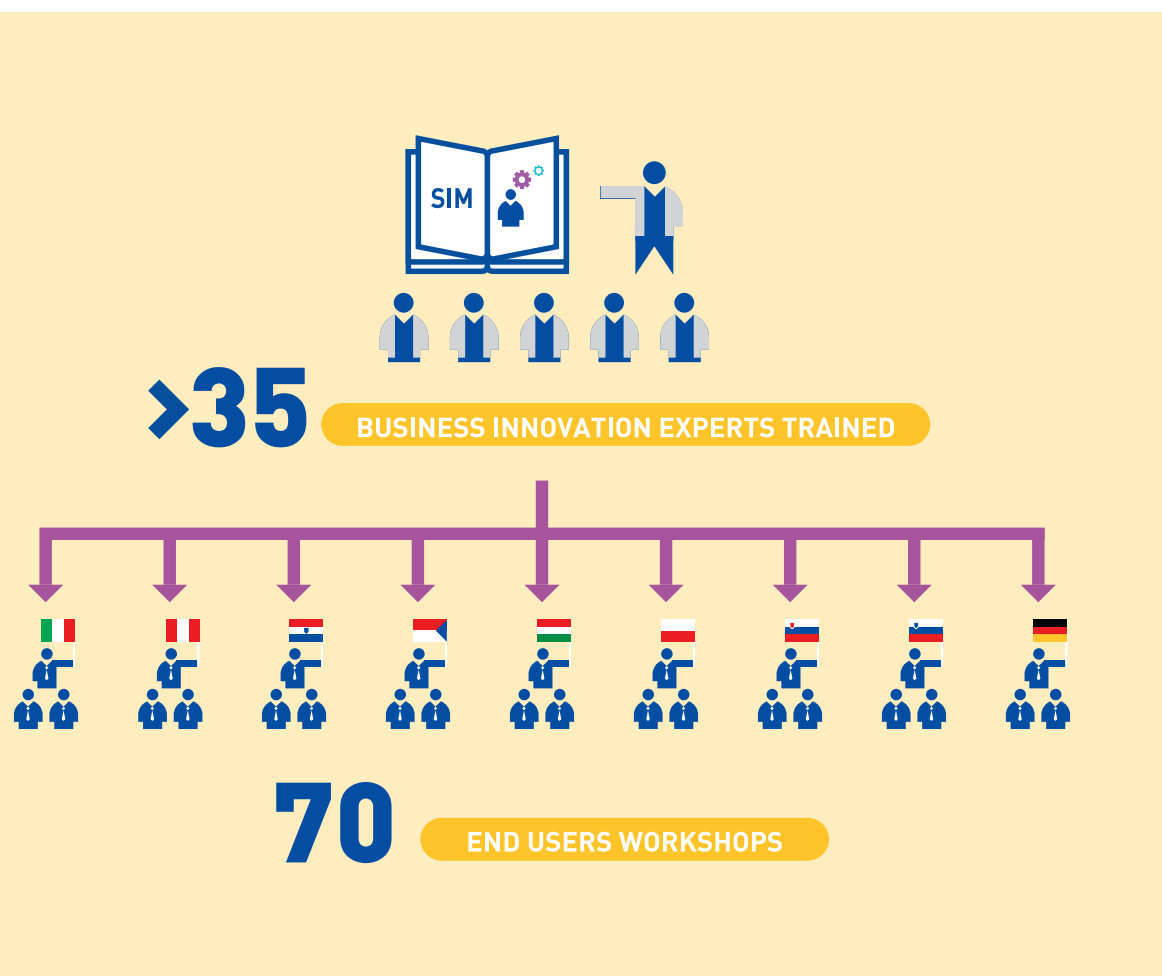


Figure 5.
SMEs Pilot Project

Figure 6.
Capacity building



Lessons learnt from end-users about the potential of service innovation corroborate the project's initial assumption regarding the interest that small manufacturers and traditional companies might also have in pursuing this type of innovation to overcome global competition.

What is fundamental is to lead the company's top management to a mindset shift, because the servitization process may have a huge impact on the company business model. Indeed, to deploy its full potential, servitization requires the revolutionizing of the existing product-centric business model via a long process of strategic and organizational adjustment.

Companies in the testbed claimed they were unable to find the proper full support to develop their servitization projects, in either terms of competencies or financial assistance. The latter is not absent, but the lack of dedicated measures (service innovation might be funded by existing schemes but if not combined with product innovation, it is unlikely to reach the evaluation threshold) penalizes the service innovation projects. The former – adequate know-how on successful service innovation patterns in small and medium-sized traditional industries – is scarce, and mainly involves academic knowledge (the research side), while manufacturers did appreciate the hands-on approach offered during the THINGS+ experimental initiative by BSOs involved in the innovation side of things.

Central Europe - shared regional challenges and goals

The analysis of the state-of-the-art on existing/predicted service innovation support schemes in central Europe countries (Italy, Germany, Austria, Slovenia, Croatia, Hungary, Czech Republic, Slovakia, Poland) suggests that - in the programming period 2014-2020 - service innovation was not specifically addressed by innovation measures anywhere at a national or regional level using ERDF funds nor by any other internal source.

In general, there is no specialized support aimed at service innovation or servitization initiatives in the CE regions. Servitization is included in the standard approach to "innovation of product, service and business models programs" but the service development specificities in current CE innovation policy settings are not directly addressed by public support initiatives.

Nonetheless, it is known that the level of servitization increased steadily between 2000 and 2014 in all EU28 Member States, with a trend that parallels the various national economic development levels. The impact of servitization is also clearly positive for SMEs in terms of new employment, turnover and profit margin according to a study produced for the EASME agency in 2018

(<https://op.europa.eu/en/publication-detail/-/publication/0d1ed8aa-8649-11e8-ac6a-01aa75ed71a1/language-en>)

On the basis of the THINGS+ project activities a number of challenges and goals have been identified as common to the whole area:

- to outline and develop the potential for service innovation within the local companies and support firms' digital transformation
- to enrich the portfolio of companies with additional services that can increase value delivered to customers
- to improve the position of SMEs in the market by strengthening entrepreneurial skills in service innovation management and, finally,
- to transform traditional manufacturing industry into regional motors for innovation, with no excessive technology investments.

The role of regional government support is to keep up with global trends in the economy and motivate local manufacturing companies to develop innovation (including service innovation). This is why regional government support programmes should be aimed at raising companies' awareness, promoting the latest global trends (e.g. servitization, Industry 4.0) to maintain or improve any competitive advantage enjoyed by local companies.

The most important element for designing appropriate support programmes to boost service innovation into micro and SMEs is taking into consideration the size constraints of the companies that will be the final recipients of the help and choosing the most suitable scheme wisely, including the amount and form of any support in the form of repayable (i.e. loans) or non-repayable assistance (e.g. grants).

The specific areas of improvement of innovation policies to seize servitization opportunities of utmost importance in all the regions involved in the THINGS+ project have been identified as follows.

To increase the competences of local firms and prepare them to implement service innovation

A lack of competences, lack of qualified human resources and lack of knowledge (including at a managerial level) of how to run an innovation process, (especially poorly-known servitization processes in which the business model has to be changed) is one of the main problems faced by many companies. To eliminate these barriers, regional governments should set up programmes devoted to raising the skill-sets of employees at all levels, both operational and management, in manufacturing companies.

To initiate pre-commercial activities involving researchers & entrepreneurs

The triple helix model, connecting government authorities, universities and enterprises, is an effective model for implementing innovation within regions. All three partners should cooperate and transfer knowledge and technology with each other. Such cooperation will increase the capacity for innovation and competitiveness of local companies in the market and thus the region's competitiveness over time. Actions taken by the authorities should, therefore, initiate and animate cooperative opportunities between the science and business sectors, support the implementation of research and development projects, and encourage the involvement of researchers as advisers within manufacturing companies.

SERVICES EXECUTIVE EDUCATION PROGRAMME, A BEST PRACTICE

The training programme for managers and senior executives involves all aspects of the design and delivery of services. The programme increases the knowledge and skills of workers and prepares them to develop service innovation in production companies.

The programme implemented by IfM Education and Consultancy Services Limited (UK) is aimed at answering the question of how to design the shift to services.

The course gives new insights into:

- How companies design and re-design services and service offerings
- How to prototype a service
- How tools such as emotion mapping, process mapping, business model innovation and blue-printing play a role in service design
- How to manage the transition and the service journey
- Topics include:
- New thinking for service design
- Understanding the ecosystem – expanding your strategic horizons
- Defining the business model – focusing on your customers' needs
- Planning your service strategy journey
- Innovating the value delivery system – aligning resources and partners
- Service emotion – identifying and managing the customer's 'emotion journey'
- The role of big data – optimizing service delivery and designing better solutions

The course introduces the concept of 'service design thinking' through a series of tools and exercises, which support participants and their organisation in shifting to services.

During the course, participants are given the opportunity to design a new service and/or enhance one of their organisation's existing services.

www.ifm.eng.cam.ac.uk/ifmecs/ifm-ecs-courses/shift-to-services/

Introducing innovative services in production companies, including those undergoing restructuring

The regional authorities, being the distributors of funds from Operational Programs, influence the selection of priorities, goals, and the allocation of the resources coming from the EU via the structural funds.

The regional Operational Programs could prove great tools to support manufacturing companies in the process of servitization. Importantly, they can also be a concrete means of supporting manufacturing companies during crises (such as those related to COVID-19) and restructuring, giving them the chance to change their business model through servitization, re-entering the market while benefitting from special measures aimed at ensuring the quality and success of servitization projects.

To increase the number of start-ups and encourage production companies to cooperate with them

A fairly common phenomenon is the transfer of certain types of services from manufacturing enterprises to specialized service companies in order to rationalize production costs (outsourcing, offshoring). But, for this to happen, manufacturing companies must also have business partners – start-ups.

In the trend of servitization, the services implemented in manufacturing enterprises are innovative, and therefore risky, which is why cooperation with start-ups implementing innovative projects is a desirable solution for them.

The role of local authorities is to encourage the creation of companies, including those at increased risk, i.e. start-ups. Business Support Organizations, including science and technology parks, technology incubators, development agencies, and innovation centres are also appropriate actors to achieve this goal. Offering specialized support, the innovation intermediaries are able to secure consulting and training services, as well as access to infrastructure, both for start-ups and manufacturing companies seeking to change the model and interested in implementing service innovations and common projects.

Helping innovative firms to gain international clients

Production companies implementing new product-based services that want to compete in global markets must be visible and prepared to enter foreign markets.

Regional authorities can promote their entrepreneurs on websites in foreign languages, by organizing fairs and cooperating with embassies, providing consulting and training services regarding the specifics of foreign markets - all with a focus on selling advanced features of services.

Through innovation intermediaries, public institutions can provide adequate support to SMEs in preparing strategies for entering the target market with new product-service offerings.



A COHERENT SERVITIZATION SUPPORT STRATEGY FOR SMEs

V. A COHERENT SERVITIZATION SUPPORT STRATEGY FOR SMEs

A regional policy framework willing to be supportive of SMEs that are implementing servitization processes ought to incorporate a range of tools that can be clustered into three main areas of scope:

A. Preparatory digital innovation awareness-raising initiatives

The competitiveness in service innovation is strongly linked to competitiveness in digital technologies and the certainty that every SME can draw great benefits from digital transformation.

Digital transformation is itself pervasive and fundamental for the development of new product- integrated services (smart products), from the early stage of the process through to the market implementation phase, covering cooperation with other firms in different industries. The enterprises could rely on existing or new digital innovation support programmes in order to better understand how to develop and implement new product-based services. For instance, Digital Innovation Hubs which support entrepreneurs in their efforts to achieve digital transformation could adapt their action plans to this end, offering specific seminars, tutorials or other resources that are freely accessible to companies.

B. Vouchers and loans to lower risk during the go-to-market phase

Additional tools for the servitization of SMEs are those which directly assist with the development and market implementation of services, once the idea is clearly defined and the company management is ready to give it a try. These tools should seek to lower the risk in the service development go-to-market phase and put the correct emphasis on the early stages of services testing. The development and implementation of servitization tools should also include the wide use of innovation vouchers and loans. Finally, vouchers and loans should play a key role in the regional policy and among the tools supporting servitization and its adoption by enterprises in the rollout phase, after the prototyping and beta tests in the marketplace.

C. Services development and implementation support measures

In the entire process, the support of KIBS offered by Business Support Organizations (BSOs) and innovation intermediaries in general, is essential to help SMEs in approaching servitization. BSOs can help with SMEs' servitization skills development and collaboration with the regional actors under the new service implementation and regional policy adoption. Adequate BSO support should help SMEs in pursuing servitization opportunities by granting the proper time-efficiency and the identification of the correct supporting tools available in the region in a tailor-made approach, i.e. taking into consideration company size, maturity, internal HR capabilities and management's willingness to change.

The development of services and financial tools should be shaped not only according to SMEs' needs but also taking into consideration other criteria such as size, branch, and stage of development of the company. The tools should be accessible according to the assessment of the potential market for the services, their early-stage testing and cooperation with other industries.

The policy recommendations collected in this paper and presented in the following chapter, **have been divided according to the target groups** to which they are addressed, namely:

- **micro, small and medium-sized enterprises** and in particular traditional manufacturers from every industry (MSMEs)



- **regional innovation ecosystem actors** offering Knowledge Intensive Business Services (KIBS), like clusters, science parks, incubators, development agencies, chambers of commerce and any business support organization and innovation intermediary working with SMEs.

The addressees of the policy recommendations are all regional/national policymakers responsible for the development and updating of industrial and innovation policies and the related implementation measures - from the top decision-making level down to the operational level of public officers in charge of the design and management of programmes, calls and tenders.

In this paper, it was assumed that a range of support measures, mainly related to capacity building or financial support, could be offered at a regional level to cover any step in the servitization route followed by a company.

Ideally, different opportunities offered by different innovation ecosystem actors, will be at disposal of manufacturing entrepreneurs, and these will be free to apply only for those more in line with their own project.

The scheme of a coherent servitization support strategy articulated in 5 steps is presented next.

Figure 7.
The effect sequence in
implementing servitization
inclusive innovation policies



01 The first recommended step is to review and update regional innovation policies to include servitization as a strategic innovation category and align the measures supporting the process of introducing digital and other innovative product-service combinations to Regional Smart Specialization Strategies.

02 03 The second step has to do with the capacity building of innovation enablers and the business community, including ownership, top level management and the workforce. An up-to-date training offer at a local level to fill the gap Involving required skills for servitization should be included in the ESF plans or become part of any regional and national initiative for Industry 4.0 and digitalisation.

04 All efforts should be concentrated on the implementation of tools stimulating servitization according to directions specified in regional policies through calls supporting SME service innovation projects and subsequently **05** the further implementation of activities, from prototyping through to the commercialization of the integrated product-service offer.

RECOM MENDA TIONS

VI. RECOMMENDATIONS

The servitization process can be challenging, especially for micro, small and medium-sized enterprises (MSMEs). In order to ensure territorial impact, innovation policies should properly address the main barriers that hinder SMEs' endeavours in offering product-service offerings. Below a list of recommendations, targeting two main groups – MSMEs and BSOs – are proposed to central European policy makers.

Recommendations are rounded off with a list of potential concrete tools and measures that are meant to let both beneficiaries and stakeholders collect evidence-based information on the positive impact of service innovation.

Specific proposals for tools, measurements and indicators are included in Table 1, where the adequate financial size of each measure has also been considered for each recommendation (R1, R2, Rn). Several tools among those - jointly co-designed by the

THINGS+ partners together with their stakeholders - are listed as a potential action to concretely update innovation support schemes to exploit the potential of servitization for CE SMEs.

Policy recommendations targeting SMEs

R1.1 Increasing entrepreneurs' awareness with regard to the benefits of servitization by implementing information programmes presenting good practices in various industries

The dissemination of new solutions, especially among companies from the SME sector, is important, due to the fact they usually have limited opportunities to obtain information on new trends and innovations being implemented.

R1.2 Stimulating research teams to develop innovative solutions on the border between production and services

Without the involvement of scientists, the processes of servitization will be much slower and will be mainly replicative in character. To overcome such situations and increase the level of benefits for enterprises, and provide the expected level of competitiveness, cooperation with the research sector is needed.

R1.3 Pushing manufacturers in the leading industries of each region towards implementing service innovation.

Regional Smart Specialization Strategies (RIS3) constitute the development base of regions. Therefore, it is advisable to support the industries that are particularly important for regions by making it easier for companies to implement new solutions in the field of servitization.

R1.4 Increasing the export potential of products through their servitization, using regional programmes focused on this area of enterprise activity.

In the era of globalization, companies are constantly looking for opportunities to increase the competitiveness of their products. For manufacturing companies, the implementation of servitization processes is not only an opportunity for the company's development in the domestic market but also creates the opportunity to enter foreign ones too.

R1.5 Organizing the logistic support for enterprises entering new development paths through BSOs' consulting and infrastructure support.

Companies, specially micro and small ones, do not usually have their own infrastructure or laboratories to conduct tests, work on prototypes and conduct sometimes even simple research and invent new solutions. The use of BSO potentials can be a significant facilitation in the processes of servitization.

Policy recommendations targeting BSOs

R2.1 BSO capacity building for a new KIBS focussing on servitization/smart products

New Knowledge Intensive Business Services devoted to the service innovation support also require new competencies among BSO staff, to secure the high - quality services provided to entrepreneurs.

R2.2 Supporting BSOs in creating and developing a network of contacts to provide better quality services to enterprises.

The involvement in supporting servitization processes can bring significant added value to companies' engagement in implementing new services if BSOs take advantage of their wide network of contacts and cooperative links with other entities in the marketplace.

R2.3 Engaging BSOs in the creation and monitoring of Regional Operational Programmes.

For a better understanding of market changes as well as insights into the directions of development of enterprises and their needs, BSOs should take an active part in the creation and monitoring process of Regional Operational Programmes and procedures. This is why BSOs should have their representatives on Monitoring Committees and participate in the regional debates concerning the allocation of EU finances.

implemented alternatively or merged, depending upon local needs and the resources available.

Tools and measures

The following tables are the result of a process of Central European policy stakeholders and innovation intermediaries' joint consultation and co-design. The development process of the regional policy recommendation, the list of tools and measures consisted of various steps, including:

- Analysis of the servitization development stage in CE countries;
- Preparation of a catalogue of good practices to support service innovation (outside the CE programme area);
- Creation of a list of measures for policy recommendations based on partners' knowledge and experience;
- Presentation, consultation, and discussion on the good practices and the policy recommendation draft at the international, national and regional level;
- Gathering feedback as to the scope of the recommendation proposal and testing.

Below, a shortlist of 8 breakthrough measures is provided to put in place a coherent public support strategy for SMEs to develop product-service offerings. Some of the measures exhibit a degree of overlap and could be implemented alternatively or merged, depending upon local needs and the resources available.

Table 1.

List of suggested tools and their relation to the policy recommendations implemented by each tool

TOOL TITLE	RECOMMENDATION/S
Incubation programme to develop product-based services	R1.1, R1.3, R1.4, R1.5
Further incentives to boost service design combined with investment in technology	R1.1, R1.2, R1.3, R1.4, R1.5
Small grants for companies for the implementation of the servitization concepts	R1.1, R1.3, R1.4, R1.5,
Dedicated programme for financing the digitization of manufacturing companies	R1.1, R1.2, R1.3, R1.4, R1.5
Dedicated calls for service innovation launched within the framework of ERDF ROP 2021-2027	R1.1, R1.3, R1.4, R1.5
Revolving fund for pilot servitization projects	R1.1, R1.2, R1.4, R1.5
Service Innovation Academy (SIA) - co-financed training for SME management staff, scientists and BSO experts	R1.1, R2.1, R2.2
Capacity building vouchers for Business Support Organizations	R1.1, R1.5, R2.1, R2.2, R2.3

Each tool is described below using tables structured as follows:

Table 2.
Structure

GOAL	This describes the reason for implementing the action and the desired outcome/ change
DESCRIPTION	This provides a possible scenario including implementation details resulting from consultation with beneficiaries, experts and managing authorities
TARGET	To which group/s the measure is addressed
IMPLEMENTING BODY	States the most effective implementing body (geographic and organizational level)
BUDGET	Estimation of the most appropriate size of financial support or the rough cost of the action for it to be launched and tested properly. Details on the financial instrument suggested and source of funds.
IMPACT MEASURES	This is a collection of possible indicators on which the measure might be able to prove its effectiveness.

When discussing the ideal tools to render regional innovation policies in Central Europe more inclusive with regard to servitization, the cornerstone was to **offer something feasible, cost-effective and efficient**. Its purpose is to motivate regional governments to pick up some of the tools and include them in their current policies with the promise of seeing evidence-based results in the short-term (1 year).



Innovation-supporting measures tailored to servitization projects

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T1. Incubation programme to develop product-based services

GOAL	To increase manufacturers' innovation through the creation of product-related services by supporting the process at the early stages of development (design/ prototyping)
DESCRIPTION	Incubation programme for companies wanting to develop services based on products already being manufactured (including consulting, audit, coaching, mentoring, business plans, MVP). The result may be the creation of spin-offs and spin-outs. The main purpose of introducing this tool is to develop services by supporting companies in the early stages of idea development. Support should be focused on Micro and Small Enterprises that plan to develop their business model to increase the chances of creating a new, effective service. The incubation programme is designed to assist at the first stage, in the assessment of the idea of servitization, training participants how to run a service activity in a production company, provide direct coaching and mentoring to the SME representatives responsible for new services development and market sales. Companies apply for a grant, which they obtain on the basis of innovation, market readiness, team potential and other criteria. In the BSOs dedicated to the implementation, the incubation programme should offer comprehensive but individual incubation support, but at the same time "made to measure" and tailored to their needs, e.g. a feasibility study for companies wanting to assess or analyze the potential of a given project, business model canvas, service design thinking, UX, negotiations and sales processes, as well as internationalization allowing their entry into specific foreign markets. Duration up to 6 months.
TARGET	Micro and Small Enterprises from manufacturing industry - any NACE activity code. The programme may have a regional range as well as a wide geographical range, e.g. covering the whole country or a region of Central Europe.
IMPLEMENTING BODY	Public or private incubators with specific expertise in smart products/digital service-based business models
BUDGET	The minimum budget (grant) per project from €10,000 to a maximum of €20,000 for individual incubation consultancy support and funds without limit for service development. Minimum % of own contribution (co-financing) is 25% for micro firms, 50% for small firms and 75% for medium-sized firms for consultancy.
IMPACT MEASURES	Results indicators: n°. of firms supported n°. of new services introduced to the market % of increased sales value of companies that have implemented services, as a side-effect of previous investments in technology n°. of consultancy and mentoring services delivered

T2. Extra incentives to boost service design combined with investment in technology

GOAL	Maximize the return on technology investment in manufacturing companies using a leverage effect
DESCRIPTION	Special incentives for companies implementing services in addition to production processes are a tool tailored to the needs of production companies interested in implementing a new technology, but dedicated only to those technologies that are closely connected with services. This need arises from the fact that manufacturing companies often invest significant resources in new solutions to improve the production process, but engineers do not take into account investment in services. Additional incentives in the form of investment grants should help manufacturing companies assess the boundary conditions necessary to implement a service innovation, develop ancillary services (for a new technology or products along with a prototype of an innovative service - for companies that want to test or certify new services) and integration inside the processes taking place in the company. Twice a year (pre-defined cut-off dates) SMEs that have the potential and readiness to implement servitization (e.g. that have successfully completed a co-financed tech innovation project) can ask for a grant. The amount of the grant should depend on the size of the technological investment planned to be incurred by the company, e.g. a €500k investment, a grant of 20%. Financial incentives available to entrepreneurs must comply with the provisions on public aid for companies.
TARGET	The special help should be dedicated to firms that plan to integrate new services with new technology or product.
IMPLEMENTING BODY	ERDF regional managing authorities responsible for smarter Europe connected actions
BUDGET	The minimum budget (grant) per project €75,000 – the maximum €100,000 A pre-defined amount of funds could be saved yearly by the ROP ERDF managing authorities
IMPACT MEASURES	Results indicators: n°. of technologies or products developed with new services % decrease in the time needed to reach the BEP of the tech investment

T3. Small grants for companies for the implementation of the servitization concepts

GOAL	Support for entrepreneurs in continuing the development process at other stages (certification, cooperation, internationalization)
DESCRIPTION	This tool covers the distribution of a small grant to SMEs that can be implemented through any BSO in the region in order to finalize the maintenance projects. The grant represents a financial support for the continuation of the development process already underway at subsequent stages, including: • Feasibility study - for companies that wish to assess or analyze the potential of a given project • Preparation and obtaining of a quality certificate for a service that is complementary to the product • Service innovation partnership - for companies interested in collaborating with other manufacturing or service companies to introduce new services to the market • Internationalization - for companies that plan to expand their existing services or new technologies and products along with new services • New trademark - for companies that plan to register a new trademark in order to provide services. Coupons should have different formats, value and purpose, depending on regional policy priorities, innovation strategies and business needs. Tickets / coupons available to entrepreneurs must comply with the provisions on public aid for companies.
TARGET	MSMEs with a servitization concept ready
IMPLEMENTING BODY	Business Support Organizations
BUDGET	Up to €15,000 The programme and vouchers are not for training, coaching and market monitoring.
IMPACT MEASURES	Results indicators: • n°. of partnerships created • n°. of new services introduced to the market • n°. of trademarks registered • n°. of certificates • n°. of feasibility studies

T4. Dedicated program for financing the digitization of manufacturing companies

GOAL	Increasing the digitalization level of SMEs by reshaping their business models with service innovation methodology, capacity building and developing a digital marketing strategy, and implementation of digitalization projects in SMEs
DESCRIPTION	Dedicated programme for financing the digitization of companies. Innovative companies face serious difficulties in obtaining the essential financing to generate further growth and innovation, and to enter new markets. Digital technologies have the potential to strengthen the effective development of innovation and the introduction of new technologies and products to the market, therefore they should be supported by EU funds, especially in times of COVID 19. It is widely believed that digital technologies positively influence the productivity and economic growth of MSMEs. As part of the Regional Programs, dedicated activities and financial instruments should be launched to support the digitization of companies from the SME sector. The activity should include three sets of advisory services with different maximum budget levels: 1. Developing a digitization strategy, adjusting the business model to Service Innovation Methodology 2. Cybersecurity, capacity building, digital marketing strategy 3. Digitization Implementation projects in SMEs – in case of complex projects for manufacturing companies. An indispensable element of the application should be a business concept describing a service innovation aimed at digitization of the enterprise, along with a financial plan. The programmes must comply with the regulations on public aid for companies.
TARGET	Manufacturing MSMEs'
IMPLEMENTING BODY	Digital Innovation Hubs
BUDGET	• Ad.1 maximum budget up to €15,000 • Ad. 2 maximum budget up to €20,000 • Ad.3 maximum budget up to €100,000 (complex projects for manufacturing companies).
IMPACT MEASURES	Results indicators: • n°. of consultancy services • n°. of firms implementing digitalization projects

T5. Dedicated calls for service innovation launched in the frame of ERDF ROP 2021-2027

GOAL	Boosting the untapped potential of service innovation by encouraging manufacturing industry to cooperate with research and BSOs
DESCRIPTION	The regional development priorities should be as follows: • Growth through the development of new innovative services, • Service innovation through regional networks, • Service innovation through partnership. The priority should create growth based on high-quality competences and sustainable development as a result of the implementation of new services by production companies. Servitization should be treated as a strengthening measure and an element of regional development. Companies implementing projects in partnerships should be able to use their intellectual, human and physical resources efficiently and sustainably. Service development partnerships should be able to successfully promote the development of regions and services as a joint effort. The merging of the company, BSO and the research centre will contribute to a more effective implementation of projects through the combination of the partners' potentials, including the special role of the BSO as a link between the company and science. One of the objectives of the implementation of the instrument is the dissemination of servitization knowledge among regional institutions supporting the development of the economy. The selection criteria for partnership projects should focus solely on applications based on the implementation of service innovation in the enterprise or reward servitization with additional points in the application evaluation.
TARGET	Regional partnerships led by manufacturing SMEs, including firms, BSOs and research organizations.
IMPLEMENTING BODY	ERDF ROP 2021-2027 managing authorities
BUDGET	• 50.000€ – 150.000€ • Minimal % of own contribution (co-financing) is 25%
IMPACT MEASURES	Results indicators: • n° of service innovation project proposals submitted • n° of service innovation projects proposals funded • % of ERDF funds dedicated to service innovation over the total budget for companies' innovation projects

T6. Revolving fund for pilot servitization projects

GOAL	To implement servitization strategy by encouraging entrepreneurs to cooperate with other companies
DESCRIPTION	Low interest loans and a programme for companies willing to develop any service innovation. This is an instrument with which it is also possible to indirectly obtain the result of spreading servitization among enterprises in the region by presenting good practices in the form of successfully implemented projects. In principle, it is a fund which actively focuses on providing access to external sources of capital by granting loans, created from the ERDF ROP funds and empowered to specialize in the distribution of financial support from BSOs. Dedicated to production companies from a given region that want to carry out a servitization pilot in cooperation with other companies and institutions. The call for applications will be carried out on the basis of the loan regulations, taking into account the presentation of a project for the implementation of a pilot together with a business plan for the development of the enterprise. Loans should have low interest rates (to cover the fund's operating costs). The proposed payback period is 3-5 years, the grace period is 3-6 months.
TARGET	Companies, individually or in consortia, with a service innovation project and a feasibility study
IMPLEMENTING BODY	BSOs with financial specialization or financial intermediaries
BUDGET	• E.g. >€3,000 up to €50,000 to be payed back into 3 -5 years
IMPACT MEASURES	Results indicators: • Total value of the loans provided • n°. of SMEs awarded • n°. of new services introduced on the market

T7. Service Innovation Academy (SIA) - co-financed training for SME management staff, scientists and BSO experts

GOAL	To introduce the tools and skills required to transform a product-oriented business in modern service development firms, create network and international relations
DESCRIPTION	To introduce the tools and skills required to transform a product-oriented businesses into modern service development companies, creating networks and international relations. A knowledge-based programme designed to introduce the tools and skills required to transform a product-oriented business into a modern service development firm, creating a network and international relations. A Service Innovation Academy - perhaps teaching principles of THINGS+ service innovation methodology - might be considered a design laboratory dedicated to experimentation in the field of smart products design. The goal of such an academy goal is to improve managerial skills by developing and delivering training, as well as creating and developing a regional network of experts to provide better quality services to enterprises. The training courses are intended to: 1. Develop leadership, decision-making, and staffing skills in a dynamic service or support environment. 2. Use and maintain hands-on tools to plan and measure service success. 3. Understand how the firms' service operations link to and contribute to the overall organization. The programme is aimed at the management of SMEs, BSO experts and scientists willing to take on the challenges of developing knowledge and skills in the field of new potential services, servitization strategies and the building of a business model focusing on services supporting products.
TARGET	Managers of MSME, experts of BSO
IMPLEMENTING BODY	ERDF ROP 2021-2027 managing authorities ESF could be used.
BUDGET	• €50.000 € per region per year • 50-70% of co-financing • the maximum % of financing is recommended on 50% of the total cost for BSO and can be increased from 50% up to 70% in the case of managers of micro or small firms.
IMPACT MEASURES	Results indicators: • n°. of training events organized • n°. of people attending the training events • n°. of expert mentorships formed

T8. Capacity building vouchers for Business Support Organizations

GOAL	Strengthening BSOs' capacity in providing assistance to companies in servitization
DESCRIPTION	The purpose of this tool is to ensure the construction and maintenance of the human resources potential of key actors of innovation in regional BSO ecosystems (such as clusters, science parks, incubators, innovation agencies, etc. depending on each regional ecosystem) in order to ensure the quality of the KIBS provided Including in peripheral regions of central Europe. An instrument for BSOs wanting to offer maintenance support programmes to help BSO employees participate in training, internships, postgraduate studies, employee exchanges and any other form of capacity building in the field of smart product business models, servitization techniques, etc. The programme focuses on activities increasing qualifications to ensure high quality of services provided to manufacturing companies. It will also contribute to establishing new contacts and tightening relations between CE institutions / organizations, creating added value in the form of an informal network of service hubs that can effectively support companies in servitization.
TARGET	CE Business Support Organizations
IMPLEMENTING BODY	Regional ESF Operational Programs Managing Authorities or intermediated bodies appointed
BUDGET	>€500 < €2,000 per person per year with a co-financing rate up to 90% of training fees paid by the BSO. Some sort of rotation principle between regional BSOs should be granted. ESF could be used.
IMPACT MEASURES	Results indicators: • n°. of BSOs staff who raised their qualifications • n°. of certifications/diplomas issued in the region/year • n°. of training hours taken in the region/year • n°. of formal/informal cooperation agreements between BSOs

VII. FROM THEORY TO PRACTICE: TWO REGIONAL PILOT CASES

Some

THINGS+ recommendations illustrated above on service innovation schemes have been tested in real policy frameworks by the regions belonging to the consortium (Lodz, Poland and Veneto, Italy), along with the project implementation.

Two local pilot actions took place to demonstrate the effectiveness of the bottom-up approach adopted to define a set of concrete measures could introduce service innovation in the design of industrial policy strategies and in public programmes to increase entrepreneurial skills.

The measures selected for piloting in Lodz and Veneto from those described in Chapter VII were tailored on specific territorial needs and were aimed at improving existing innovation policies by integrating a particular servitization case into running support schemes. The results of the

THINGS+ policy pilot actions will be used in Lodz and Veneto to draw up specific measures for the next EU programming period, based on field evidence (of what worked and what did not). Moreover, the variety of economic and legal frameworks allowed the deduction of some general lessons, applicable to any region.

The Polish case: Lodzkie Region

The Marshall Office of the Lodzkie Region, in Poland, is one of the THINGS+ consortium members. It led the project activities related with the policy discussion on the potential of servitization as a driver of central European economies and related policy support solutions to be adopted by local governments to encourage manufacturers servitization.

Its capital city is Lodz, the country's third-largest city and a former industrial centre with a strong textile industry. Located in the central part of the country, it has a population of almost 680,000, and the current economic development of the region is mainly based on agriculture. In recent years it has become a major hub for the business services sector owing to the availability of highly-skilled workers and the active cooperation between local universities and the business sector.

According to the Development Strategy For The Lodzkie Region 2020, the servitization topic was already included in many respects in the regional innovation priorities. In the chapter on trends and strategic development challenges to 2020, it is noted that "the processes that are already taking place in more economically-developed countries (a decline in the relative conomic importance of agriculture, de-industrialization and servitization), leading to an increase in the role of services in the economy generating the greatest added value, at the expense of industry and agriculture, will intensify. The development of the service sector will not, however, reduce the importance of industry and specialized agriculture in the region. This will be facilitated by technological modernization of key industries and development of smart specializations".

Moreover, in the current draft of the Development Strategy For The Lodzkie Region 2030, there is a provision: "An important conclusion [...] is the validity of the challenges formulated in the Strategy 2020. [...]" .

Recognizing the need to support the entrepreneur sector in increasing competitiveness, as well as appreciating the importance of solutions developed under the **THINGS + project, the Lodzkie Region, acting as a Managing Authority of the Regional Operational Programme for the Lodzkie Region analyzed what kind of action – among those proposed – could be used to measure the interest and readiness of companies towards the topic.**

1.1. Description of the pilot measure implemented

To encourage the servitization of product-based companies it was decided to analyse the results of a tender of an "Innovation Voucher" type.

The main purpose of the support is to intensify SME contacts and business cooperation with scientific units (universities and centres of R&D). Funds under the tender for proposals were intended for the purchase of research services for the development of a new or significantly improved product (product or service, including a new design project) or process (production or delivery method).

The call for proposals was implemented under Priority Axis I "Research, development and commercialization of knowledge", Measure I.2 "Investments of enterprises in research and innovation, Sub-measure I.2.2 "R&D projects of enterprises", Project type 2 "Innovation Voucher" was aimed at SMEs planning to implement projects involving the purchase of a research service directly concerning the development of a company's product or technology and the implementation of the results of this service.

The applicant had to have a headquarters or business activity in the Lodzkie Region. The projects were implemented within the administrative boundaries of the Lodzkie Region.

The amount allocated for co-financing projects under this call for proposals was PLN 21,514,000, equal to around €4.85 million.

The Entrepreneurship Assistance Centre (COP) plays the main role of Lodzkie regional financial institution and was the intermediary institution implementing the call on behalf of the Lodzkie Region ERDF ROP Managing Authority.

The call for proposals had three cut-off dates during 2019 as follows:

- 1st round: 28.02.-28.03.2019.
- 2nd round: 29.03.-26.04.2019
- 3rd round: 30.08.-31.10.2019

Interest In the call was, in general, unsatisfactory, with the first call resulting in zero applications, the 2nd in only 10, out of which 7 were co-financed and the 3rd receiving 26 applications, out of which 13 were co-financed.

It should be underlined that the tender under Measure 1.2. of Regional Operational Programme 2014-2020 – was not created for the **THINGS+ project. Regional authorities have limited possibilities to distribute funds (limited financial resources), especially for SMEs.** The only way to support companies was via ROP, hence the attempt to use the existing ROP and adapt it to the implementation of **THINGS+ terms and conditions. It seemed the most appropriate framework would be the Priority Axis I and Measure 1.2 but it transpired that within the framework of the recruitment process the selected projects did not directly assume servitization.**

1.2. Pilot action findings

#Finding 1 – local SMEs low participation in EU-funded opportunities

Manufacturers in the region are not really proactive in taking advantage of participating in EU funded calls. More promotional and informative activities should be implemented in general at various levels to encourage entrepreneurs to use the EU funds available.

#Finding 2 – Poor acknowledgement of the meaning and scope of servitization

Both business sector and local innovation intermediaries demonstrated low or no confidence in the topic of servitization. Any further support measure adopted to promote service innovation should be complemented by a proper information and awareness-raising campaign, including an illustration of good practices of regional companies. A clear definition of servitization should be included in the call's Terms of Reference.

In parallel, the regional innovation and entrepreneurship unit as well as consulting companies which provide advisory services in Lodzkie region and help to prepare any application forms plus Business Support Organizations should be trained and used by the Marshall Office in the process of informing companies about the tender for the "Innovation Voucher" and the possibilities of using it for developing product-based services by the beneficiaries.

#Finding 3 – Top-down positive reinforcement needed

Given the scarce managerial culture regarding the opportunities of service innovation in manufacturing firms, it is recommended that a major effort be made in encouraging companies to tackle this innovation path. Coming calls for proposals willing to promote SME servitization projects should put more emphasis on awarding the funding to companies that have declared such action in the submitted project applications (making the type of action recognizable).

Presumably, specification of some additional points in the substantive assessment, as well as the explicit criteria for establishing and justifying the impact of the project on the process of servitization in the company would force companies to explore the issue of servitization on one hand, and, on the other, encourage the implementation of innovation projects.

The Italian case: Veneto Region

The Region of Veneto, in Italy, has been one of the 10 THINGS+ consortium members. Its Research, Innovation and Energy Department was the office directly involved in the project deployment, supported by the in-house company *Veneto Innovazione*, a BSO that took over the activities related to the pilot action with the enterprises.

The Research, Innovation and Energy Department is the body responsible for the planning, activation and monitoring of regional public initiatives in the fields of research and development in support of companies, business consortia, industrial districts and clusters, as well as innovation and technology transfer, networking and internationalization.

Moreover, it directly administers some ERDF ROP 2014-2020 activities, i.e. those included in the axis 1 of the Programme from where most of the financial resources supporting companies in terms of research and innovation come from. The panel of operational tools available in the current programming period, includes an action aimed at supporting companies acquiring specialized services for business innovation, the total funds for which are around €7 million.

As a result of the participation in THINGS+ activities, a fruitful overlap took place during the project policy dialogues process. Indeed, in Veneto the design of a regional policy pilot action followed the field evidence obtained during the pilot action that involved the business sector.

For the policy demonstration project, the Veneto Region decided to identify an instrument the resources for which could be quickly made available to beneficiaries in response to their market needs, by testing a streamlined intervention to ensure the effectiveness of the action with respect to an innovation development stage not yet covered by other support measures in Veneto.

In fact, the issue of servitization is not unknown and often detected by local SMEs but not always studied thoroughly. It almost falls naturally within the business innovation processes of manufacturing firms, but it does not work in a systematic fashion. Very often servitization is linked only to the concepts of post-purchase assistance or internationalization. This mind-set does not only concern businesses but also the practitioners themselves. This makes the innovative attitude itself less effective and hinders companies' opportunities to gain competitive advantage from product-service offerings or even smart products.

Among the policy recommendations defined by the THINGS+ international partners and stakeholders group it is been addressed R1 and R2 targeting the companies directly, namely

#R1 Increasing the entrepreneurs' awareness about the benefits of servitization by implementing information programmes presenting good practices in various industries

Servitization in Friuli Venezia Giulia Region regulations: a best practice of multi-level dialogue

The Autonomous Region Friuli Venezia Giulia, in Italy, has been involved in the project since its start, being Associate Partner of the coordinator Friuli Innovazione.

The Industry Directorate of the FVG Region has appointed three officers that followed the whole participatory dialogue about servitization, responded to the several questionnaires and gave inputs concerning the local situation and took part physically to the policy dialogues cycles in Lodz and Brno.

Several meetings between Friuli Innovazione and different representative of the Industry Directorate ensured a continuous update of the main policy maker on the project achievements.

This awareness raising effort ended up in **an article on servitization included in a regional draft law**. The article content was quite innovative in the Italian national landscape (DDL 80/2020¹) and **foresaw specific measures to boost manufacturers projects to develop product-service offerings**. In the draft law text servitization is clearly defined as an upcoming significant trend in innovation for manufacturing industry and were identified three different dimensions where the policy maker should provide support, namely:

1. knowledge raising among entrepreneurs about servitization potential strategies;
2. new productive strategies that specifically include servitization/ tailored on smart products;
3. financial support non only in the project start up phase but also when it comes to roll out the new business model.

Unfortunately, the regional draft law 80 was never adopted because of the COVID-19 outbreak.

In late summer 2020 the main contents of the described law article were translated by Friuli Innovazione into **two actions proposals to be included in the ERDF ROP 2021-**

2027 during the bottom-up entrepreneurial discovery process set up by the Region FVG for the new programming period and the update of the S3

In particular, Friuli Innovazione suggested to the ERDF ROP Managing Authority to set up:

- a. a measure - preferably deployed with the use of vouchers and targeting small manufacturers that already had invested in digital technologies – to acquire specialised support services like innovation audits and coaching, finalized to design and implement smart product strategies.
- b. grants to co-fund innovation projects focussing organizational and process innovation to reach the go-to-market phase for smart products relevant for regional smart specialization domains.
- c. is responding to the need of know-how raising (1) and (2) development of new strategies enabling product-service offerings in small manufacturing industries.
b) is responding to the third dimension related with financial support in the go-to-market phase (3).

The results of this continuous and virtuous exchange of information and open dialogue between the legislator, the business support level and the final beneficiaries (i.e. entrepreneurs) is still unknown, but the interest and attention demonstrated by the policy level is encouraging to imagine that **Friuli Venezia Giulia will be one of the first regions in Europe to adopt specific support policies to unlock servitization potential of its manufacturing industry.**

¹ DDL 80 "Disposizioni per lo sviluppo del settore manifatturiero, per la riqualificazione dell'offerta turistica e commerciale e riforma dell'accesso al credito (SviluppoImpresa)", presented by the regional council on January 29, 2020

#R2 Stimulating research teams to develop innovative solutions on the border between production and services

Thus, the idea came about of including the servitization subject within a call for a proposal of the ERDF ROP 2014-2020 to reduce the SME information gap on this specific type of innovation, using a "one-stop-shop" approach to streamlining the bureaucratic and administrative burden and being able to collect evidence within the **THINGS+ project timespan, to be discussed with the central Europe stakeholders panel.**

The measure offered grants to cover up to 40% of companies' expenditures in purchasing specialist services provided by practitioners to implement their innovation projects in one of the three categories: Technological, Strategic or Organizational. The overall budget of submitted projects could vary between €8,000 and €40,000.

1.1. Description of the pilot measure implemented

The policy demonstration was implemented by introducing some new characteristics in an ERDF ROP 2014-2020 running action, i.e. Action

1.1.2 "Support for the purchase of services for technological, strategic, organizational and commercial innovation of enterprises" already launched in 2017. The call for proposals was aimed at supporting regional companies in the purchase of innovation services through vouchers. Although being tried for the first time, it achieved excellent results both in terms of expenditure and in terms of the number of companies financed.

In June 2019 the Veneto Regional Government - Department of Innovation drafted the new call for proposals concerning the action 1.1.2. **The scope of the pilot was to integrate firms' servitization projects within the eligible applications, while also being able to differentiate them too.**

The approach adopted was that of including in the Terms of Reference a clear description of eligible servitization projects under the type of action **A1 > Technological Innovation>> Innovation in the concept phase.**

Indeed, using a high-level procedure (Approval of the proposed modification by the Supervisory Committee of the Regional Operational Program and subsequent acceptance by the European Commission) to be implemented in case of major changes in the features of the call (e.g. types of admissible proposals or the evaluation criteria set), Veneto regional officials adopted a softer approach that was nevertheless able to guarantee qualitatively useful results on time for the Project to investigate:

- the understanding level of regional firms of the servitization as a peculiar type of innovation;

- the interest of regional companies in specific support for their servitization projects;
- the quality of the projects submitted;
- appropriateness of the pilot according to results.

The measure offered vouchers to cover up to 40% of companies' expenditures in purchasing specialist services provided by practitioners to implement their innovation projects in one of the three categories: Technological, Strategic or Organizational. The overall budget of submitted projects could vary between €8,000 and €40,000.

As mentioned above the Research, Innovation and Energy Department decided to include servitization in the list of eligible interventions under Technological Innovation and, more precisely, involving innovation in the concept phase. In particular, the pilot action linked to the call for proposals envisages the support for services aimed at generating new product and service ideas, at exploring technological and design alternatives, and at improving the existing product by adding innovative and/or with higher added value services, before undertaking a concrete and detailed design.

This was the hypothesis to be tested by adopting #R1 ad #R2 since it simultaneously addressed the entrepreneurs' awareness of the topic and the need for pushing servitization, addressing both companies and business innovation consultants as well as innovation agencies.

The call was published with 3 cut-off dates – 2 in 2020 and 1 in 2021.

During the **THINGS+ project lifespan it was only possible to analyse results for the first and second cut-off date.**

Cut-off date	N° of applications under A1	N° of servitization projects under A1	N. of servitization projects under different Actions	N° of approved projects	N° of funded projects
March 2020	23	8	4	12	0
July 2020*	45	16	Under assessment	16	3
February 2021	-	-		-	-

*Assessment in progress

ASAP Service Management Forum

ASAP Service Management Forum is a community for research, training and transfer of solutions within service management. It includes university research centres and dozens of industrial and commercial companies, operating in a variety of sectors such as: Automotive, domestic and professional appliances, consumer electronics, thermotechnics, printing and document management systems, machines and production systems and instrumental goods in general.

ASAP Service Management Forum was founded in 2003, thanks to a project funded by the Italian Ministry of University and Research. Today ASAP is an interdisciplinary initiative involving numerous researchers from different universities and is a reference point at national and European level in the field of service management, service innovation and servitization. ASAP publishes thematic reports and technical-scientific articles; realises events such as workshops and conferences, promoting networking and cross-sectoral dissemination; it carries out training and technology transfer activities (internship and degree thesis, company training and projects for third parties) through the research centres that operate there. In his 17 years of life, he has more than 200 workshops and 16 national conferences, attended by thousands of business managers.

Over the years, the ASAP Community has developed understanding research and transfer activities on the main thematic areas related to servitisation of manufacturing, such as:

- New service-oriented business models;
- Operations strategy for product-service;
- Integrated development of the product-service offering;
- Plant potential installed;
- Digital service systems and technologies (digital servitisation);
- The role of new technologies and data in the development of service business;
- Study of the impact on processes, systems and organisation of services (resources, roles, new skills).
- Customer centricity
- Logistics management of spare parts

In particular, on these issues, as part of the transfer activities, in the last 5 years only, ASAP has developed:

- + 50 contributions for major online portals and specialist magazines of national relevance
- + 30 scientific articles published in international journals and conference proceedings
- + 20 courses/seminars and training meetings organised one-to-one with companies
- + 15 transfer projects with relevant companies

Contacts

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www.asapsmf.org/

1.2. Pilot action findings

#Finding 1 – First quantitative results on servitization projects presented as part of the call for proposal

The first quantitative results of the regional demonstration pilot action and, in terms of submitted number of servitization projects are substantial. In fact, they have stressed the fact that SMEs have begun to incorporate servitization as a tool for business development.

As for Action 1.1.2, the available data refer to the first two cut-off dates occurring during 2020.

The first time due to submit the applications for support ended on March 20th 2020; out of 311 applications submitted, (23 concerned action A1) of which 93 financed. Within the A1 action, thanks to a qualitative analysis of the projects, 8 projects were assigned to servitization with a total amount of 208.000,00 Euros of eligible expenditure and 83.200,00 Euros of subsidy granted. The complete analysis of Action 1.1.2 highlighted how four additional servitization projects were presented thus bringing the total of projects strictly linked to servitization to 12 with an additional 113.400,00 Euros of eligible expenditure and 4.360,00 Euros of subsidy granted. This means that **among the projects linked to the typology "Innovation in the concept phase" about 44% of the applications directly or indirectly concern servitization**. However, although these 12 projects were positively evaluated, they were not funded due to the achievement of the allocated budget expenditure (1 Meuro).

The second time due to submit the applications for support ended on July 7th, 2020. All the applications submitted were 550 (45 concerned Action A1) of which 100 financed. A qualitative analysis of the projects was carried out here too. Thanks to this analysis, it was possible to assign 16 projects to the servitization category with a total project amount of 480.430,00 Euros and an eligible expenditure of 192.140,00 Euros. Among the 16 admitted applications, three were those financed for a total of 41.480,00 Euros while similar to what happened in the first period, the other 13 were not financed for the achievement of the allocated spending budget (1 Meuro). It should be noted that currently the analysis of the data regarding the different actions of the second period is still in progress; **to date the A1 servitization projects already represent 35%.**

It follows that the idea of servitization as a tool for growth for SMEs begins to have a greater diffusion within the economic sector of Veneto Region.

#Finding 2 Poor acknowledgement of the meaning of servitization and its scope

Few SMEs actually know the literal meaning of the word "servitization". Thus its definition is open to subjective interpretations and misunderstandings. Since this problem has been recognized all along during the

THINGS+ project by all the target groups involved, it is crucial that each policy maker takes a very clear decision on what they consider "service innovation" and accordingly offer specific support to companies.

Since servitization offers a number of opportunities to manufacturers (a strategic alternative to product innovation, a means to deal with commoditization, a method of building unique, loyal customer relationships to mention just a few) it is important to **narrow down the field to the most desirable from a top-down perspective, in accordance with RIS3.**

For instance, a region could have an interest in boosting digital servitization projects to enable product-service offerings that have a clear green impact.

#Finding 3 Scarce recognizability of servitization in the context of innovation

It can be asserted that the theme of servitization in their products/services is not an absolute novelty for companies in the Veneto which, however, apply this type of innovation unconsciously, that is, without a dedicated declination (methodology) but in the scope of wider technological (or even strategic) innovation operations.

Therefore, it can be difficult to decide where to position it. It is a strategic innovation process, because it has a long-term impact on the company business model, but often it goes hand in hand with technological innovation and in particular with digitalization (i.e. digital servitization).

Specific sets of evaluation criteria should be adopted to increase the recognizability of service innovation when set against other types of project to start a consistent analysis of its impact on regional competitiveness.

VIII. CONCLUSIONS

The extensive analysis of the status of the implementation of servitization carried out during the carrying out of the project led to the following conclusions:

1. The concept and strategy of product servitization are poorly recognized both by the public administration responsible for the construction and implementation of support instruments for enterprises, as well as by the companies themselves, especially by SMEs.
2. Governments should implement accurate legislation to facilitate more sustainable solutions in production and consumption - such as servitization, which is consistent with transverse aspects such as sustainable development, the circular economy and recycling. Nowadays, enterprise development support programmes are not directly dedicated to servitization processes, although many of them have built-in possibilities of using vouchers and loans.
3. There are no tools to popularize servitization as a form of increasing market advantage of enterprises. Most materials disseminating support instruments refer quite generally to the implementation of innovative solutions. Enterprises, especially small and medium-sized ones, show significant interest in using a development strategy such as servitization, but they lack sufficiently well-developed competences to carry out these kind of activities on their own.
4. Production companies do not have adequate knowledge regarding the process of servitization and the added value it creates for their business. Like all innovation, servitization involves risk, requires a change in the business model, management, culture, processes, and customer interaction. To minimize the risks, companies require external support, both from Business Support Organizations and directly from the authorities.
5. Servitization is becoming an integral part of manufacturing, and only companies that keep up with this dynamically changing environment

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will be successful. It can be implemented as a sequence of phases with increasing service content evolution not always revolution, which gives the company time to adapt to changes, but always requires investments which is why financial support companies (vouchers, grants, loans).

6. Adding innovative services to production activities, both in the pre- production and post-production phases, allows the company to build and maintain regular customer relationships and focus on its needs. The use of modern technologies and the digital transformation of the company is a strategy that strengthens the company's competitiveness in the market. This seems particularly important in a changing and uncertain environment. Thus, the implementation of activities facilitating the implementation of servitization to manufacturing companies and the development of new services is important in the era of the COVID-19 pandemic, giving them a chance to survive, change the business model, open up to new markets and maintain jobs.
7. In the case of small and medium manufacturers, the servitization strategy and implementation support help to strengthen the value of their brands, their financial statement, and their unique offer. Moreover, they can also increase customer demand on the basis of market trends.
8. Relatively low expenditures related to product servitization with quite widely available support instruments in the field of digitization can represent a remedy for problems faced by enterprises in the era of COVID-19 pandemic.



IX. Bibliography

1. T. Paschou, et al., Digital servitization in manufacturing: a systematic literature review and research agenda, *Industrial Marketing Management*, <https://doi.org/10.1016/j.indmarman.2020.02.012>
2. EASME/COSME/2016/015 - Study on the potential of servitization and other forms of product-service provision for EU SMEs, 2018
3. Business Innovation Observatory, Service and predictive maintenance contracts, January 2016.
4. ESIC European Service Innovation Centre - Service Innovation Policy - A Benchmarking Review, 2015
5. M. Freitag, I. Westphal, Service Innovation Life Cycle in a Manufacturing Ecosystem, Conference Paper, June 2012.
6. T Baines, H. Lightfoot, Lightfoot Made to Serve How manufacturers can compete through servitization and product-service systems, Jon Wiley & Sons, 2013
7. Ch. Raddats, Ch. Kowalkowski, O. Benedettini, J. Burton, H. Gebaue, Servitization: A Contemporary Thematic Review of Four Major Research Streams, *Industrial Marketing Management*, in press.
8. Based on: K. Worwick, "Beyond Industrial Policy: Emerging Issues and New Trends", *OECD Science, Technology and Industry Policy Papers* 2013, No. 2, OECD Publishing. <http://dx.doi.org/10.1787/5k4869clw0xp-en>
9. Expert Panel on Service Innovation in the EU, Report: Meeting the Challenge of Europe 2020/The transformative power of service innovation, February 2011
10. Shih, S (1992), *Empowering Technology – Making Your Life Easier*.

Annex I

List of central Europe stakeholders consulted

Institution name	Country	Stakeholder target Group
Area Science Park	<i>Italy</i>	<i>Higher education and research</i>
ASAP Service Management Forum	<i>Italy</i>	<i>Higher education and research</i>
Association of Small and Medium-Sized Enterprises of the Czech Republic	<i>Czech Republic</i>	<i>Sectoral agency/BSO</i>
ASTER Emilia Romagna	<i>Italy</i>	<i>Sectoral agency</i>
Autonomous Region Friuli Venezia Giulia	<i>Italy</i>	<i>Local/Regional public authority</i>
AWS - Austria Wirtschaftsservice	<i>Austria</i>	<i>National public authority</i>
Borsod-Abaúj-Zemplén County Self-Government	<i>Hungary</i>	<i>Local/Regional public authority</i>
Brno Technical University	<i>Czech Republic</i>	<i>Higher education and research</i>
Business Innovation Center	<i>Poland</i>	<i>Business support organisation</i>
Chamber of Commerce and Industry Slovenia	<i>Slovenia</i>	<i>Business support organisation</i>
City of Brno	<i>Czech Republic</i>	<i>Regional Public authority</i>

Institution name	Country	Stakeholder target Group
City of Rijeka	Croatia	Local/Regional public authority
City of Salzburg	Austria	Local/Regional public authority
Metalmechanic Cluster from Friuli Venezia Giulia - COMET	Italy	Business support organisation
Association of small and medium industries of Friuli Venezia Giulia Region	Italy	Business support organisation
Association of industrial companies from Udine province (Confindustria Udine)	Italy	Business support organisation
Consorzio ZEROCENTO	Italy	Higher education and research
Country of Salzburg	Austria	Local/Regional public authority
Croatian Employers' Association	Croatia	Sectoral agency
CzechInvest	Czech Republic	National public authority
District of Bautzen	Germany	Local/Regional public authority
Ente Friuli nel Mondo	Italy	Business support organisation
Entrepreneur Service Center	Poland	Business support organisation
EU Parliament Croatian MEPs	Croatia	International public authority
European Commission - DG for Internal Market, Industry, Entrepreneurship and SMEs -Unit E4 Business-to-Business Services	Belgium	National public authority
European Future Innovation System Centre	Belgium	Higher education and research
University of Osijek - Faculty of Economy	Croatia	Higher education and research
Foundation for Promotion of Entrepreneurship	Poland	Business support organisation
Future Industry Platform	Poland	Business support organisation
Slovenian Government Office for Development and European Cohesion Policy	Slovenia	National public authority

Institution name	Country	Stakeholder target Group
HAMAG-BICRO	Croatia	Sectoral agency
Idea Developer sp. z o.o.	Poland	Business support organisation
Incubator Foundation	Poland	Business support organisation
Institute of Economy	Croatia	Higher education and research
Julius-Maximilians-University	Germany	Higher education and research
KCDM 2.0	Slovenia	Higher education and research
Land Salzburg	Austria	Local/Regional public authority
Lodz Regional Development Agency	Poland	Business support organisation
Lodz Regional Science and Technology Park Ltd	Poland	Higher education and research
Ministry for Digital and Economic Affairs	Austria	National public authority
Ministry for Innovation and Technology	Hungary	National public authority
Ministry for Transport, Innovation and Technology	Austria	National public authority
Ministry of Economy	Slovakia	National public authority
Ministry of Entrepreneurship and Crafts	Croatia	National public authority
National Cluster Association	Czech Republic	Business support organisation
Pilsen Metropolitan Area - Integrated Territorial Investments	Czech Republic	Local/Regional public authority
Polish Agency for Enterprise Development	Poland	Business support organisation
Polish Development Fund	Poland	Business support organisation
Polo tecnologico di Pordenone	Italy	Business support organisation
Poslovni dnevnik	Croatia	media

Primorje-gorski kotar county	Croatia	Local/Regional public authority
Ramboll Management Consulting Oy	Finland	Business support organisation
Region of Emilia-Romagna	Italy	Local/Regional public authority
Region of Lodzkie	Poland	Local/Regional public authority
Region of Veneto	Italy	Local/Regional public authority
South Moravian Innovation Centre	Czech Republic	Regional Public authority
Technology Transfer Center of Lodz - University of Technology Ltd	Poland	Business support organisation
University of Maastricht	Netherland	Higher education and research
University of Pardubice	Czech Republic	Higher education and research
University of Udine	Italy	Higher education and research
WKS Economic Chamber of Salzburg	Austria	Sectoral agency
ZICER	Croatia	Business support organisation

Annex II

THINGS+

facts&figures



1.



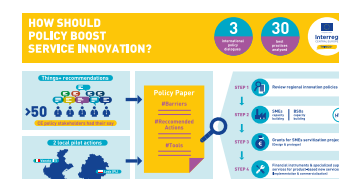
2.



3.



4.



5.

THE THINGS+ PROJECT

Introducing service innovation into product-based manufacturing companies

Project budget

€ 1.889.299

THINGS+ is funded by Interreg Central Europe and aims to create sustainable linkages among innovation actors

Start
01.06.2017

End
31.10.2020



Lead partner

Friuli Innovazione
Research and Technology
Transfer Centre / ITALY

Project partners

ITALY VENETO REGION RESEARCH AND INNOVATION UNIT
AUSTRIA INNOVATION & TECHNOLOGY TRANSFER SALZBURG
CROATIA SCIENCE AND TECHNOLOGY PARK OF THE UNIVERSITY OF RIJEKA
CZECH REPUBLIC BIZGARDEN
HUNGARY BORA 94 BORSOD-ABAÚJ-ZEMPLÉN COUNTY DEVELOPMENT AGENCY
POLAND LODZKIE REGION
SLOVAKIA SLOVAK BUSINESS AGENCY
SLOVENIA TECHNOLOGY PARK LJUBLJANA
GERMANY BAUTZEN INNOVATION CENTRE

Expected results

SIM



Service Innovation
Methodology

+150



Trained entrepreneurs, managers
and business innovation experts

+100

Manufacturing
companies involved

+40

product-based services
created



Policy recommendations
paper

THE THINGS+ SERVICE INNOVATION METHODOLOGY



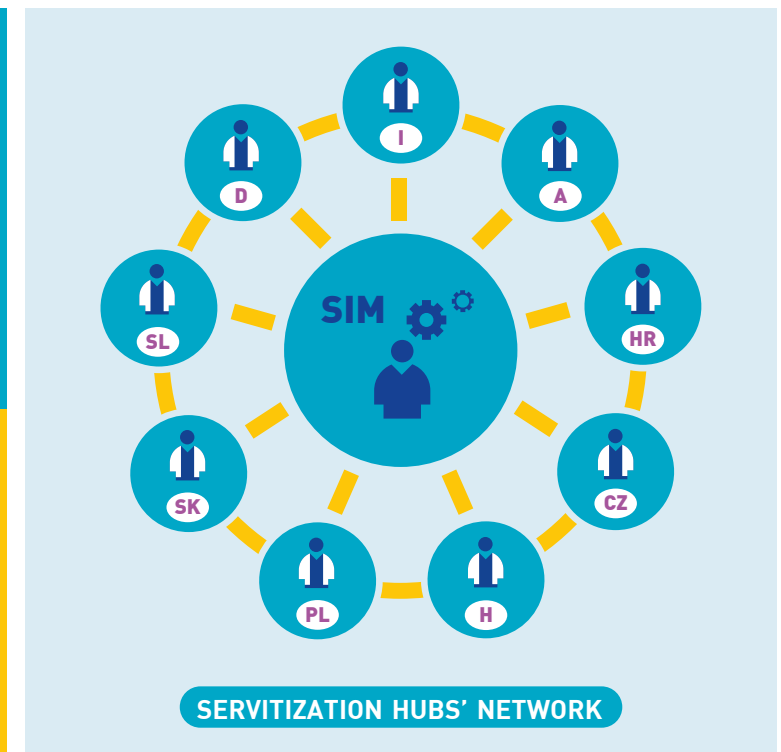
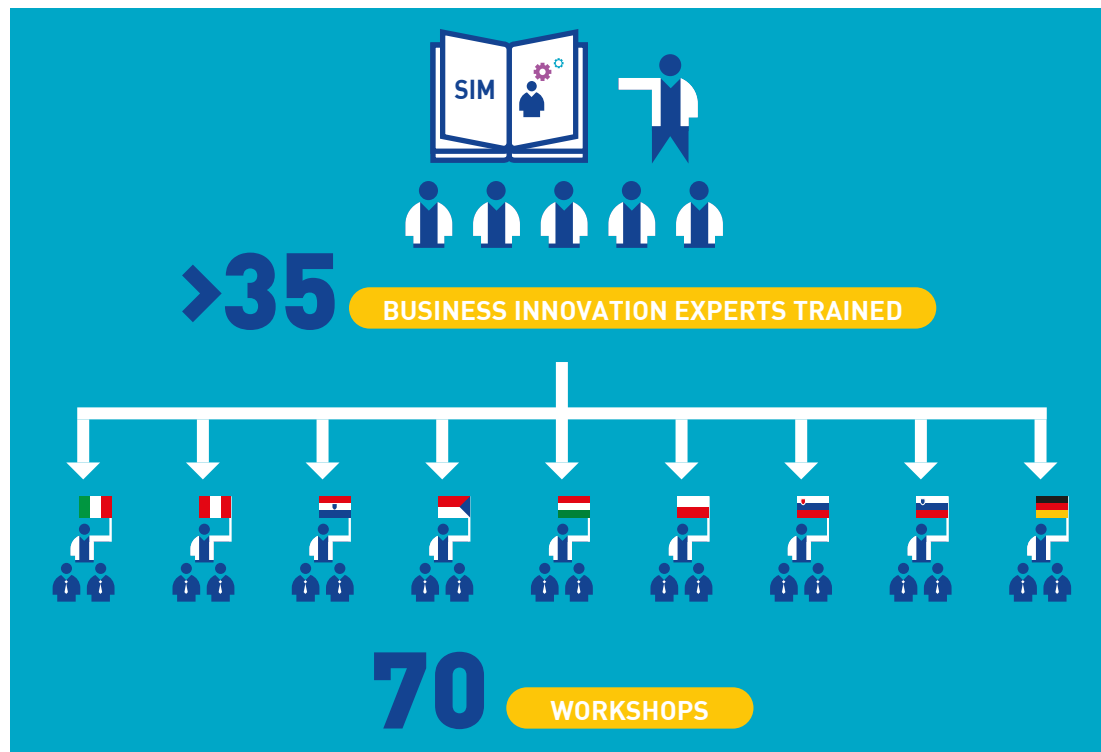
A 5-steps methodology for all central European manufacturing firms



1 free toolkit in 9 languages



THE THINGS+ SKILLSET FOR SERVITIZATION



PILOTING SERVITIZATION IN CENTRAL EUROPE SMALL COMPANIES

128

SMEs
involved

94

new service
concepts



Interreg
CENTRAL EUROPE

THINGS+

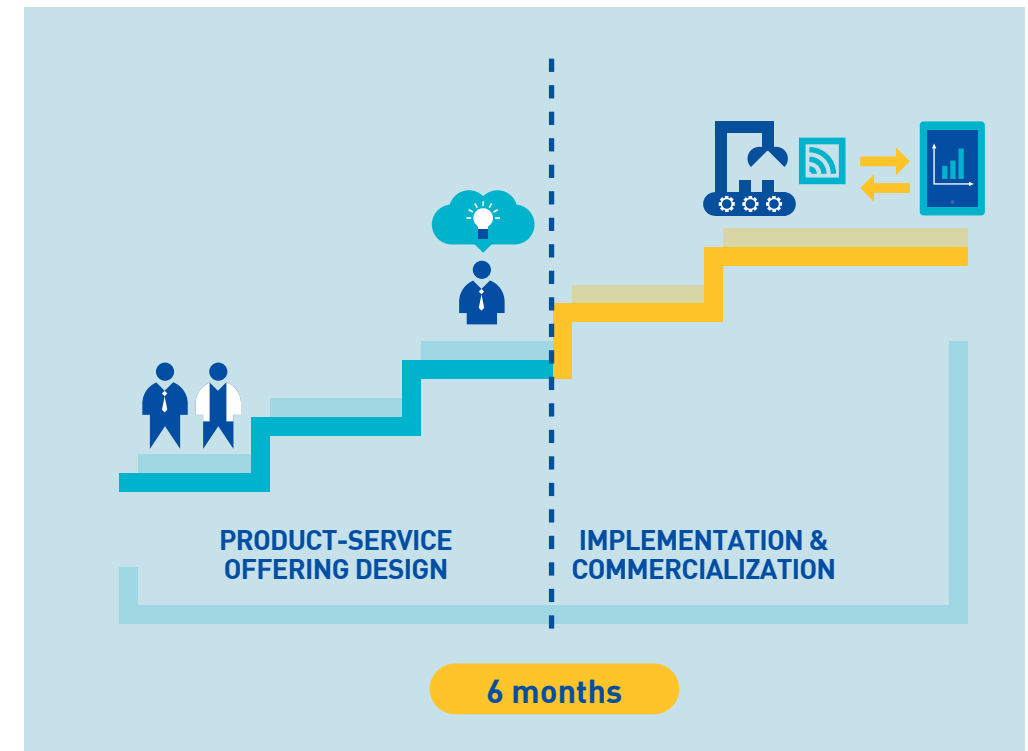
Completed pilot actions per country



Industries represented



Servitization road map



HOW SHOULD POLICY BOOST SERVICE INNOVATION?

3

international
policy
dialogues

30

best
practices
analysed



Interreg
CENTRAL EUROPE

THINGS+

Things+ recommendations

>50



CE policy stakeholders had their say

2 local pilot actions

Veneto (IT)

Lodz (PL)

Policy Paper

#Barriers

#Recommended
Actions

#Tools

STEP 1



Review regional innovation policies

STEP 2



SMEs
capacity
building

BSOs
capacity
building

HBS

STEP 3



Grants for SMEs servitization projects
(Design & prototype)

STEP 4



Financial instruments & specialized support
services for product-based new services
(Implementation & commercialization)



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