

WP T4

ACTION PLAN FOR IMPLEMENTATION INDUSTRY 4.0 MODELS FOR REGIONAL INNOVATION ECOSYSTEM

Output T4.1

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1. INTRODUCTION

The main objective of the ECOS4IN project is the improvement of regional innovation capacity by close transnational cooperation among RIS3 stakeholders on Industry 4.0 implementation. Project ECOS4IN goal is to strengthen the cooperation among RIS3 stakeholders from enterprises, public authorities, educational organizations, and potentially non-governmental organizations at regional, national and transnational level.

The transnational cooperation will be used to identify common challenges for the improvement of innovation ecosystems in regions for Industry 4.0 implementation. It helps to develop a better understanding of links within the ecosystem and concrete needs for actions to set or improve framework conditions of regional innovation systems.

The project started with a detailed analysis of current situation of Industry 4.0 implementation in terms of infrastructure, tools and best practices in Europe. The information collected was processed into a tool “ECOS4IN knowledge base” (WP2). The tool was used in pilot testing by InfoHubs to provide knowledge to the target groups WPT3). The last phase of project represents the development of action plans in all partner regions.

The ecosystem model is described, defining the components and links within the ecosystem. Partners adjusted the general model to the regional condition (WPT4). The final WP of the project represents the development of action plans in all partner regions WPT4. This will ensure the sustainability of project results by providing the relevant material for forthcoming revisions of RIS3 strategies.

Innovativeness of ECOS4IN project lies in:

- a) ECOS4IN covers all quadruple helix of RIS 3, not only parts (schools, firms);
- b) capitalizes the know-how reached in PURE_COSMOS project, IE-system GrowthHubs (active offer of public services);
- c) Active operation of the Hub (direct communication) no passive (web info);
- d) Mapping of the ecosystem in CE; Motivation of regional actors to fill the gaps in regions (education, centers of competence, demonstration units).

Project ECOS4IN implements the bottom-up principle to strengthen innovation capacity of partner regions. The involvement of all actors from triple and quadruple helix into identification of priorities is essential as well as the close cooperation among them with special emphasis on cooperation of stakeholders.

This document represents the Action plan designed for the purpose of project partner ENTER Koprivnica for the Northern Croatia region. The main goal of the Action plan (AP) is to set up clear activities, related to RIS3 design and implementation, with intention to improve skills of the users of AP and its possible partners in design and deployment of RIS3 in Croatia. The AP will set up some basic services of the upcoming upgrade of ENTER services provided on a



regional level. It will be based on some of the commonly used and latest developments for RIS3/S3 design and implementation.

When it comes to Smart Specialization Strategy of Croatia, it is important to state that the Croatian S3 is designed and implemented on a national level (given Croatia's population of 3,88 million, for comparison similar to Malopolska region), regional development and the complexity of National innovation system.

In this AP we will explain the latest state of play regarding the implementation of Croatia's smart specialization strategy 2016 - 2020, design and latest developments for future Smart specialization strategy 2029, instruments designed to impact COVID-19 pandemic and fast economic recovery, and latest development in regional policy, all of which will have significant impact to the deployment of I 4.0. We will try to elaborate and make connections of the proposed AP measures with the future development of the national and regional innovation system and how we can impact their development and implementation, including future S3 2029.

The AP itself consists of two actions. One is well known from the beginning to this new innovation development paradigm called smart specialization (FORAY, D., DAVID, P. A. & HALL, B. 2009. Smart Specialization - The Concept) and is called **Entrepreneurial Discovery Process (EDP)**. We will introduce the EDP process through the activities of ENTER and this AP in order to help the promotion of I4.0 among the stakeholders (as well as to familiarize them with the mechanics of smart specialization development) of our region and get a real-time feedbacks (bottom-up) of their needs, problems, challenges and aspirations.

The second tool is recent development of the process of updating and revising of the existing smart specialization strategies in Europe, and is based on the most recent work of the most profound scientist behind this concept: Prof.Dr.Dominique Foray. The most recent findings on the smart specialization strategies impact will be described in our AP as second action: **Transformational Roadmap and pipeline**.

We believe these two tools/actions well reflect on the constant need to keep the process of smart specialization live and to prepare and keep the most relevant project pipeline that we can use for our work at ENTER. Additionally, the AP will describe in detail all the possibilities for the regional development of Industry 4.0 and tools that are currently available (or will become available in the next five years), and proposal of linking our AP actions with these implementation possibilities.

The AP purpose is twofold:

1. To create a tool that is based on regional discoveries and data that would make impact on strategic planning on national and regional level;
2. to increase the awareness on opportunities that I4.0 can bring to entrepreneurs and other stakeholders in the region. For the sake of the objectives of the AP regarding the ECOS4IN



project, we will provide basic steps and information of how these tools can be used by other partners and other regions.

1.1. SMART SPECIALIZATION IN CROATIA

Smart specialization is a policy approach that complements horizontal innovation policies with vertical and specific policies to facilitate the generation of critical mass in a diversified ecosystem. Smart specialization has been adopted by the policymakers at the EU, national and regional levels as a powerful policy tool for economic transformation. Smart specialization is a policy concept based on the principle of vertical prioritization, which also defines a method to identify desirable areas for innovation policy intervention (Foray and Goenega, 2013).

The success of innovation policy depends on scale, critical mass, and a sufficient engagement of actors. Instead of imitating others or spreading available resources on isolated projects, the countries and regions implementing smart specialization should turn differentiation and specialization into complementary processes, which reinforce each other. At the time of developing the first Smart specialization strategy in Croatia (S3), there were very confusing and redundant processes on the policy level development. At the time of preparing the strategy from 2012 onwards (prior to the EU accession) there were more than 120 different strategic policy documents being in place or being developed for the sake of the preparation of entering European Union that eventually happened on July 1st 2013.

What distinguished the Croatian S3 from other national policy documents was the future access to the European Structural and Investment Funds (ESIF) for research, development and innovation for the S3 was a conditionality. The new Cohesion Policy 2014-2020 Programming Cycle expect, as an “ex-ante” condition for the use of ESIF, that national or regional authorities develop research and innovation strategies aimed at the “smart specialization”. This prerequisite was aimed at more efficient use of structural funds and to increase synergies between EU, national and regional authorities. All the Member States/Regions were called to design Smart Specialization Strategies, based on available resources and attitudes, identifying the competitive advantages and the technological specializations consistent with their potential for innovation and detailing the public and private roadmap for investments in regard to research, technological development and innovation. Rather than following a top down approach, primarily involving public authorities, this new innovation paradigm needed to be bottom-up, collaborative effort of ‘entrepreneurial discovery’ that involves the private sector, the academic community, national/regional/local government, building on each region’s specific strengths and competitive advantages. Having access to ESIF funding does not automatically turn into strategic and effective use (Kleibrink, Larédo, and Philipp, 2017), which was also seen in the Croatian S3 case during the series of mid-term reviews (World Bank, Public Expenditure Review, 2020).

The Smart Specialization Strategy (S3) of the Republic of Croatia 2016-2020 was adopted in March 2016 and was well aligned with the ESIF EU multiannual financial framework 2014-2020 having its biggest impact on the Operational Program for Competitiveness and Cohesion 2014 -



2020 (OPCC 2014 - 2020). During the 2014-2020 programming period, the adoption of the S3 was an ex-ante conditionality for access to funding under RDI priority areas. So the design of the strategy that started in 2012 with first analyses of the national innovation system and reviews of programs designed for science, technology and innovation, resulted in the official adoption three and a half years later. The Croatian S3 was designed as an integrated strategic document for economic transformation based on the following principles:

- targeted policy support and investment into key national priorities in response to societal challenges and needs for knowledge-based development,
- assessment of the strengths, competitive advantages and potential for excellence in R&D,
- instruments aimed at supporting technological and practice-based innovations which will facilitate private sector investment and structural changes in the Croatian economy,
- instruments aimed at enabling synergies and complementarities between public sector R&D, industrial development and human capital development,
- involvement of relevant stakeholders in the development of priority areas and subsequent processes.

Although Croatian S3 was one of the first national S3's accepted by the European Commission services as fulfilled ex-ante conditionality in line with regulatory requirements of ESIF, its impact on the delay of programs and projects soon became apparent and its impact is still to be seen. As for the thematic priority areas (TPA) and sub-thematic priority areas (STPA) of Croatian S3, they are seen in the Table 1. below.

Table 1. S3 Thematic and sub-thematic priority areas

Smart Specialization Strategy of Croatia 2016-2020	
TPA	STPA
Health and Quality of Life	Pharmaceuticals, biopharmaceuticals, medical equipment and devices
	Health services and new methods of preventive medicine and diagnostics
	Nutrition
Energy and Sustainable Environment	Energy technologies, systems and equipment
	Environment friendly technologies, equipment and advanced materials
Transport and Mobility	Added value manufacturing of road and rail vehicles parts and systems
	Environment friendly transport solutions
	Intelligent transport systems and logistics



Security	Cyber security
	Defense dual-use
	Mine action program
Food and Bioeconomy	Sustainable food production and processing
	Sustainable wood production and processing

Source: https://s3platform-legacy.jrc.ec.europa.eu/documents/20182/222782/strategy_EN.pdf/e0e7a3d7-a3b9-4240-a651-a3f6bfaaf10e (Annex 3. Pg.221)

Since its adoption, Croatian S3 was primarily used as a policy framework for supporting ESIF absorption in RDI. Given the fact that Croatia is heavily dependent on ESIF as a financial support for any public investments, the Croatian S3 is at the center of the National innovation System of Croatia with around 1 billion EUR dedicated to its implementation mechanisms. As most of the related projects are still in implementation, their achievements in terms of outputs and outcomes and overall impact still needs to be observed and analyzed. Preliminary evidence indicates that, despite some improvements, Croatia is still lagging in terms of competitiveness and innovation performance which will need to be reflected and carefully redesigned in the revision of S3 for future period.

When it comes to supporting activities relevant to the scope of I4.0, Croatian S3 supported the implementation of many industry project in the private sector, with emphasis on collaborative RDI projects and industrial commercialization.

The most distinguished and financially most significant programs under the S3 were:

1. Increasing the development of new products and services that result from research and development activities,
2. Support for development of centers of competence - CEKOM. What makes these two programs relevant to the I4.0 are incredibly high number of projects and activities related to the development, implementation and deployment of ICT technologies in production and commercialization of products and services.

The two programs combined were worth more than 380 million EUR (330 million EUR planned in 2013, 380 million EUR implemented by 2021) that financed about 270 projects (source of data: Ministry of Regional Development and EU funds). Out of these 270 projects, about 80% of them has ICT related project activities or results. Additionally, three additional programs were dedicated to the digitalization of SMEs, that accounted for additional 62 million EUR of support to 1.600 projects giving the digitalization a substantial boost in financing.

The results of these programs can be easily observed and compared with the other countries since Croatia has outstanding (over average) results in DESI (2020) when it comes to integration of digital technologies in companies, online sales and human capital. This information as well as a two-digit increase of the Croatian ICT sector for the past five years, increased the

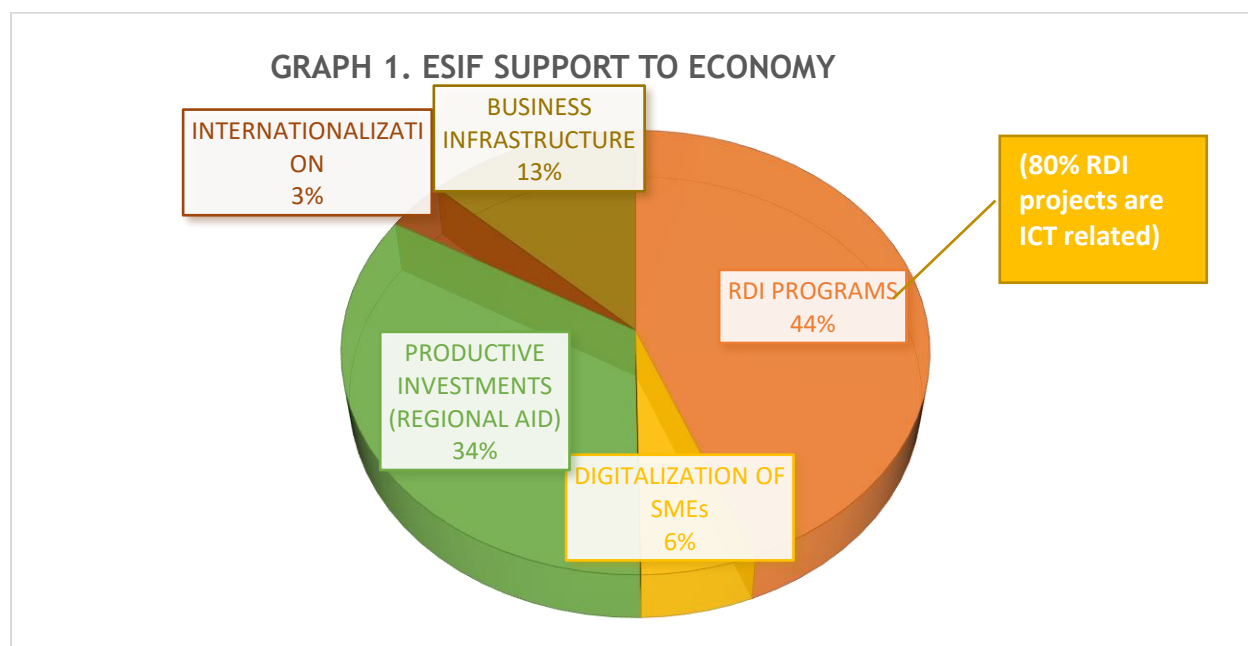
awareness of the policy makers and allowed the topics of ICT, digitalization and I4.0 to come under the spotlight.

Table 2. Most significant programs related to digitalization

Name of the program	Projects supported	EUR (grant)
Regional ICT - Increase of competitiveness of SMEs through deployment of ICT technologies	228	13.700.000,00 €
WWW vouchers for SMEs	427	3.600.000,00 €
Increase of competitiveness of SMES through deployment of ICT technologies - phase II	957	45.250.000,00 €
Increasing the development of new products and services that result from research and development activities	261	320.000.000,00 €
Support for development of centers of competence - CEKOM	9	60.000.000,00 €
TOTAL		442.550.000,00 €

Source: Author's own interpretation based on: https://strukturnifondovi.hr/wp-content/uploads/2021/06/Copy-of-Popis-operacija-OPKK-2014-2020_31052021.xlsx

Graph 1. Percentage of projects related to digitalization in overall OPCC support to economy



Source: Author's own interpretation based on: https://strukturnifondovi.hr/wp-content/uploads/2021/06/Copy-of-Popis-operacija-OPKK-2014-2020_31052021.xlsx



1.2. RECENT STATE OF PLAY – GREEN AND DIGITAL TRANSFORMATION

Since the high impact of the pandemic of COVID-19 on global economy, the European Union designed specific actions in order to tackle this situation of high economic uncertainty (Next Generation EU) and prepare the European continent for green and digital transition toward zero emission society (Fit for 55). Several elements of these global EU actions, alongside their implementing tools, will also impact the design and implementation of ECOS4IN AP of ENTER. These changes are affecting the overall public policies and investments and therefore influence largely on how the future smart specialization will be designed. Three important elements (relevant to our AP) are having an overall impact of how Croatia is being steered when it comes to public investments and the design of S3:

1. Given the fact the pandemic of COVID-19 is having significant impact on economy, the Government of Croatia designed a National Recovery and Resilience Plan (NRRP) through which it would invest about 6.2 billion EUR to remedy negative impacts of the pandemic, and to contribute (among other objectives) to the green and digital transition of the economy and the society as a whole;
2. There are significant changes in the statistical representation of the NUTS II regions of Croatia that are valid from January 1st 2022. The new Regional Aid Map is now in force and will have a significant impact on regional aid and public investment distribution in Croatia;
3. New Smart specialization strategy of Croatia 2022 - 2029 is being developed through coordination of the National Innovation Council of Croatia, Ministry of Science and Education and Ministry of Economy and Sustainable Development. There are now official announcements that there will be a new thematic priority area of S3 called Digital and Creative society, which will help ICT sector do more focused RDI on new products and services rather than as “supporting department” to the existing areas of economy.

We will try to benefit from these elements in our AP and use them for the advantage of our current and potential users.

1.3. NATIONAL RECOVERY AND RESILIENCE PLAN AND ITS POTENTIAL IMPACT ON DIGITALIZATION AND INDUSTRY 4.0

The NRRP in 2021 and 2022 became a main focus of many stakeholders of Croatian society as a whole (all unions, the parliament, entrepreneurs, people in general) since its main purpose is to allow fast reforms of the overall policy framework in which our society lives and operates, with the overall common goal of transitioning toward green and digital Europe in the upcoming years.

The NRRP is designed by the government officials and was criticized by majority of stakeholders (including parliament) for lack of transparency and involvement of broader audience being affected by the document. The government justified the lack of transparency by the lack of time for broader public consultations since the European Commission imposed very short



deadlines. The NRRP reflects the objectives set up in the EU Regulation 2021/241 of 12 February 2021 establishing the Recovery and Resilience Facility. This Facility was set up to promote the Union's economic, social and territorial cohesion by improving the resilience, crisis preparedness, adjustment capacity and growth potential of the Member States, by mitigating the social and economic impact of that crisis, in particular on women, by contributing to the implementation of the European Pillar of Social Rights, by supporting the green transition, by contributing to the achievement of the Union's 2030 climate targets and by complying with the objective of EU climate neutrality by 2050 and of the digital transition. In this document, Croatia devoted significant policy efforts towards digitalization, with 20,4 % of NRRP funds designated towards digitalization.

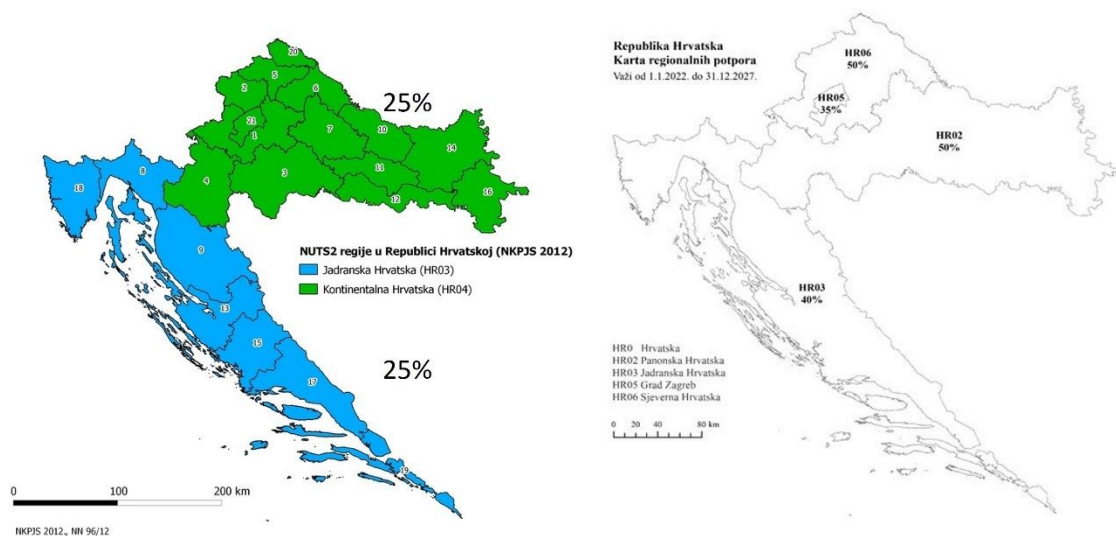
There is a clearly stated focus on the digital transformation of Croatia's economy and society in NRRP, with various measures to support the digitalization of public administration and provision of online public services. The NRRP plans EUR 287 million for the digitalization of the judiciary system, interoperability of the government's IT systems, deployment of the Digital Identity Card, introduction of smart working arrangements and creation of a one-stop-shop for all public administration online services. Investments in fixed and wireless digital connectivity and complementary reforms are also included to facilitate investment in digital infrastructures in remote rural areas that are lagging in terms of high-speed connectivity services. The NRRP has committed to provide EUR 126 million in funding for rural connectivity and ICT infrastructure. Adding to the robustness of this commitment, EUR 84 million will go to e-learning and digital teaching tools. While institutional investments seem front and center, the NRRP also proposes a novel policy mix to facilitate commercial digitalization and boost a growing IT sector. Some of these policy solutions include supporting the development of a national legal and strategic framework for digitalization and AI, introducing functional digital innovation hubs, as well as digital adoption and digital vouchers for firms, smart working, higher education, tourism, agriculture, labor market, healthcare and digital investments in building renovation initiative. This totals in approximately 1.2 billion EUR of potential investments that need to be implemented by mid 2026.

Given the fact that the overall process of new ESIF program Implementation is still being negotiated between the EC and Croatian authorities, the NRRP is currently seen as the only available significant source of financing projects and programs related to I4.0 and RDI. The NRRP also foresaw this situation since many of the proposed reforms and components of the NRRP as the continuation of ESIF funding 2014 -2020 and will also be phased-in the ESIF 2021 - 2027 operational programs once they will be set up (hopefully by the end of 2022). The NRRP measures related to enterprises will be the main focus on how we will design the actions in our AP since the future S3 strategy will also use funds of NRRP as a transitional instrument to ESIF funding.

1.4. CHANGES OF REGIONAL AID MAP AND ITS IMPACT

According to the EU Regional Aid Scoreboard for 2021, Croatia has been emphasized as one of the countries which distributes state aid differently from the rest of the EU27. According to the document, Croatia does not provide enough state aid in the objectives where majority on countries account about 70% of expenditures (Regional development, RDI and Environmental protection and energy savings), Croatia spend only about 31%. One of the tools that would allow further regional investments is the new Regional Aid Map with new statistical division. While previous Regional aid map of Croatia allowed only for 25% aid intensity regional investments, new map adds more gradation allowing investments from 35% to 50% (plus 10% for medium-sized enterprises and 20% for small enterprises). Paradoxically, more aid intensity actually means that Croatian regions are lagging behind even more from its peers and EU in general. Given the fact that Croatia did not pay so much attention to regional development before or that recovery did not happen despite substantial amounts of money coming after the accession to the EU, there needs to be more emphasis on regional development and regional needs in general. Along with the planned regional reforms within the NRRP (reduce the number of local units and officials, functional merging of local communities and services, etc.) there is an additional initiative to decentralize the public policies and investments: Integrated territorial operational program of Croatia (ITOP). The ITOP will be another layer of ESIF that would allow more granular, regional approach to the needs of regional stakeholders and its main objective is to allow regions to make an industrial transition toward greener and more sustainable industrial policy. It will also support measures for innovation and I4.0. and reflect the objectives of another national strategic policy document: National Development Strategy 2030.

Picture 1. Regional aid map comparison 2014 -2020 vs. 2022 -



Source: <https://razvoj.gov.hr/vijesti/europska-komisija-odobrila-kartu-regionalnih-potpورا-za-hrvatsku-za-razdoblje-2022-2027/4761>



Higher aid intensities for expenditures in initial investments according to the new regional aid map would also directly involve higher digitalization of industrial processes and implementation of I4. It is essential that our AP takes into consideration project pipeline and additional information from local players in order to be ready for the upcoming programs that would allow regional aid.

SWOT analysis under deliverable D.T2.2.1 for Continental Croatia still apply but its opportunities will somewhat differ because of different regional development level of City of Zagreb compared to other two regions that were previously considered to be one NUTS II region (Northern Croatia and Panonian Croatia). We will base our AP and its tools within newly established Digital Innovation Hub on the NUTS II area of HR06 - Northern Croatia.

1.5. SMART SPECIALIZATION 2022 - 2029 AND I4.0

During the Christmas interview with the Minister of Economy and Sustainable Development, announcement was made that in the new S3 the role of ICT and digitalization of industry will play an equal role when it comes to the priorities of investments in research and technology. Even for the first S3 strategy there was a significant lobbying from the ICT sector that they have much more to offer than just to be support to RDI projects targeted to specific area (like energy, health, agriculture) and that they need to start producing their own research and technology for the sake of the development of digital technologies. This was agreed among the stakeholders that have the most significant impact on the design and implementation of the future S3: National Innovation Council.

As part of the EDP process, several activities were done during the 2021 as the process of design of the new S3 was in place. As a starting point, the World bank provided significant amount of research work under the thematic title “Public Expenditure Review on Science, Technology and Innovation”. Several sets of analyses and documents were developed with involvement of substantial number of stakeholders regarding the different topics related to innovation ecosystem of Croatia and also on the impact, design and recommendations for S3 revision. All the documentation was published on the web-site of the Ministry of Science and Education.

Five Thematic Innovation Councils (TICs) were established as EDP governance structure, mirroring the five TPAs selected in the first S3 2016-2020. The future S3 will rely on the evidence-based research on the ESIF impact on economic development and competitiveness in S3 areas, existing work done as part of the EDP and the lessons learned from the 2016-2020 period. The EDP through the members of TICs was revitalized to refine the definition and scope of S3 priority areas and identify their transformational goal and define a collection of specific interventions that would be needed to achieve the transformational goal. During 2021, a survey was conducted to enable a broad set of stakeholders to participate in the EDP. The survey was distributed to industry stakeholders through TICs, as well as to research and academic institutions. The initial distribution list had around 2,800 recipients, who were encouraged to share the survey with other interested stakeholders. The results of the survey will be used to



better understand the needs and understanding of what their expectations are considering future investments in science and technology.

Following the survey, two rounds of workshops were organized to discuss the future areas of S3 and the findings of the PER in STI work regarding the overall innovation system and S3 was presented to the stakeholders. TICs were introduced with the latest developments of S3 policy developments and discussion was made on how to transform the current S3 to better reflect latest needs, capacities and opportunities.

Therefore, we will rely on these best practices through our AP and apply the smart specialization tools (EDP and transformation roadmap) giving them more regional context and more industry 4.0 orientation.

2. ACTION PLAN RATIONALE

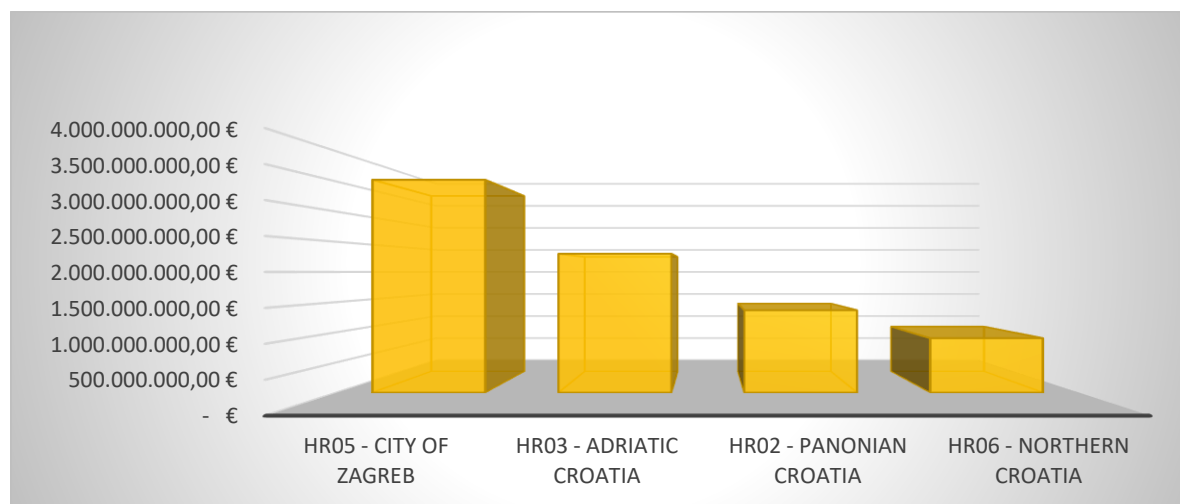
At this chapter will give some regional context and information about the innovation ecosystem of Northern Croatia. Presented information are collected during the project outputs (GAP and SWOT analysis) and also from available public sources. We believe that developing Digital innovation hub ecosystem is important to serve as an intermediary among variety of stakeholders. Digital Innovation HUB or Information HUBs are necessity, especially proven during the pandemic where digital services are on the rise, as providers of all relevant information regarding digital transformation and innovation, transfer of knowledge, access to experts and industry in order to upgrade businesses and achieve competitiveness of SMEs. They are the missing link, the ecosystem drivers.

2.1. FINANCING TOOLS USED FOR DIGITALIZATION AND I4.0

It is sometimes rather challenging to gather and systematically observe the investments in industry 4.0 made by the companies because majority of them are reluctant to give insights into their latest technology upgrades and manufacturing and other (digital) processes. However, for the past 6 years in Croatia, there have been a significant impact of ESI funds on the public and private investments and projects related to Industry 4.0 but also digitalization of companies. This presented information and financial amounts are based on the previous regional aid map and different NUTS II division. The investments involve shown are not only investments of private companies but also public sector, infrastructural projects, etc. We used this information and applied it to the new regional map in order to get an impression about most recent developments of projects in the area we focus on. The overall numbers of ESI funds per county and NUTS II regions show significant disparities when it comes to investments among regions and show that there is a significant need for improvement in the area of Northern Croatia. The chart shows that the overall investments from ESI funds of contracted 8,1 billion EUR (only the amount of ESI funds, not total investments), the Northern Croatia only used about 900 million EUR from ESI funds which puts this region in the last place in Croatia. See Annex II for more information on searching for relevant ESI fund information online.



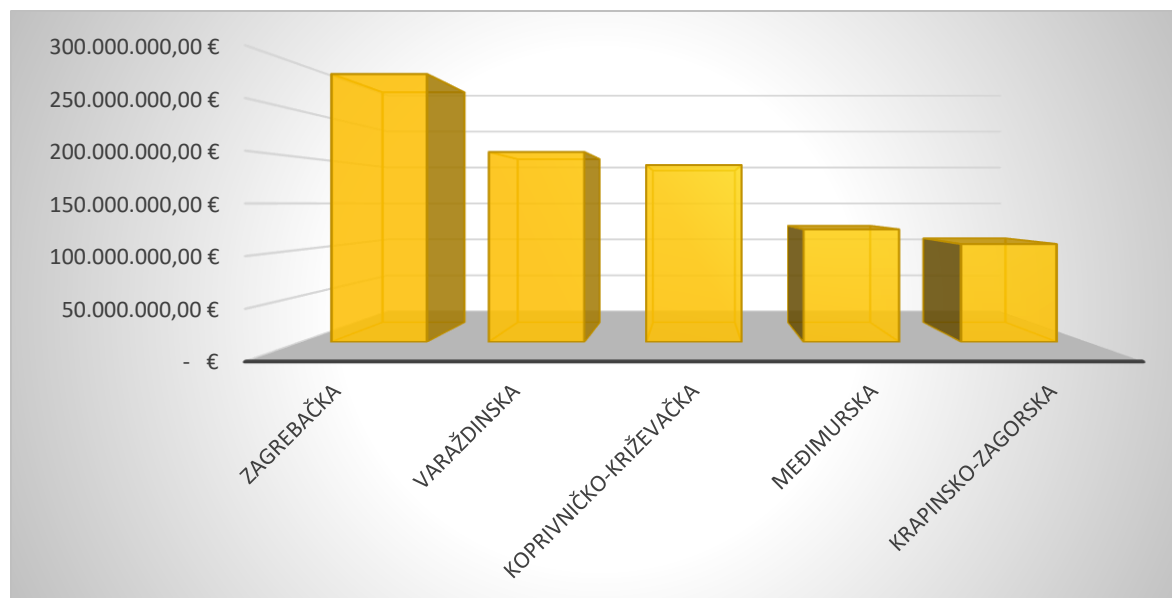
Graph 2. ESIF Funds contracted on NUTS II level.



Source: Author's own interpretation based on: https://strukturnifondovi.hr/wp-content/uploads/2021/06/Copy-of-Popis-operacija-OPKK-2014-2020_31052021.xlsx

When it comes to the counties of the Northern Croatia, the situation here shows again that there are significant areas for improvement for attracting investments but also developing the supporting tools to help companies get into the ESI financing and also create more awareness about the opportunities, especially regarding our scope of work in the AP.

Graph 3. ESIF Funds contracted Northern Croatia



Source: Author's own interpretation based on: https://strukturnifondovi.hr/wp-content/uploads/2021/06/Copy-of-Popis-operacija-OPKK-2014-2020_31052021.xlsx



The information shown in these charts needs to be analyzed in more detail when we talk about the context of I4.0. When it comes to financing private investments, since 2016, several ESIF programs were focused on the manufacturing and digitalization of the companies with some of them being focused on smart specialization (see Table 2.).

2.2. NEW EXPECTATIONS FOR INDUSTRY 4.0 DEVELOPMENT

An anonymous survey about the state of industry 4.0 in manufacturing companies in North Croatia was conducted by company Promocija Plus in 2020. Analysis has been made at sample of 183 companies. The research survey wanted to get some answers about the overall readiness of the companies for Industry 4.0, level of digitalization, processes, barriers for digitalization, willingness to change (digital transformation), etc. There are three barriers to digital transformation that have emerged as the “biggest”:

- a) lack of time to carry out digital transformation (63%)
- b) expensive procurement and maintenance of infrastructure (52%)
- c) too much focus on existing business priorities (50%)

Most companies in the manufacturing industry do not have a developed business digitization strategy and expect that the digital transformation of the company will not have an impact on the total number of jobs. Results also point out that inventories of materials and finished goods are most often managed through a database on a computer server and relatively large share of companies without records of product passage through the production process.

It would be useful for the ecosystem to establish digital information hub where timely and professional information can be obtained, which through our services will assist in providing funding and where SMEs can prepare themselves for digitization processes according to their own needs.

The AP will add a significant tool in this context of providing companies information funding opportunities and become part of our ecosystem. The two actions we will use in our hub are well known practices in regional (smart specialization) policy development and can be universally transferred to other regions. To understand on how to put our plan in action, it is essential to do some homework on what is and will be available concerning financial opportunities for I4.0 development and what companies would be interested in these opportunities. Later on, we will describe of how important it is to have onboard some companies that are considered to be the “champions” of I4.0 and digital transformation. This document, in the time of writing, does not cover all the possible opportunities but only those available by the NRRP (the ESIF for the period 2021 - 2027 are still being negotiated between EU services and Croatia) but it gives a good opportunity about a good places to start.

National Recovery and Resilience Program (NRRP) will provide support for investments in innovation and digitalization through its component Resilient, Green and Digital Economy. Increasing investment in innovation will increase the productivity, competitiveness and



diversification of the Croatian economy, and facilitate the digital transition of the economy by supporting companies in the application of digital solutions and upgrading digital capabilities. The estimated value of investments from the NRRP in the part related to innovation and development and application of new (digital) technologies is 128 million EUR. The Ministry of Economy and Sustainable Development will also encourage the digital transformation of the economy through the support of the European Digital Innovation Centers (EDIH), but also by direct support to projects of companies for the development and application of digital technologies and digitalization of business processes. A wide range of planned measures consists of financial instruments and grants that will enable companies not only to invest in the necessary IT equipment and e-commerce solutions, but also in know-how by co-financing advisory services and developing strategies for introducing new, digital technology solutions in various business segments, up-skill by strengthening the competencies of entrepreneurs for smart specialization and industrial transition. Cooperation with digital innovation hubs will also be encouraged to transfer knowledge about available solutions and technologies. Ministry of Economy and Sustainable Development is also establishing the European Center for Innovation, Advanced Technologies and Skills Development (ECINTV), which will contribute to the dissemination of knowledge and skills needed for industrial transition through a number of activities that include the organization of B2B and B2G events.

Planned investments through NRRP are:

- **Investment in management capacities of small and medium enterprises** (allocation: 4.000.000 EUR). The goal of the investment is to support the recovery and resilience of Croatian small and medium enterprises by providing customized business improvement plans (i.e. action plans) and phased advisory support. SMEs that achieve the key stages identified in the action plan, and thus demonstrate commitment, will be given access to training for groups of participants, focused on the advisory support of technical experts and individual business mentoring and teaching. The business improvement plan can, among other things, provide a customized direction for the digital transformation of supported SMEs. The investment will cover the costs of advisory fees and training provided to SMEs.
- **Grants for start-ups** (allocation: 18.600.000 EUR) - The aim of the investment is to award grants and support for investment readiness to start-ups for projects whose maturity is outside the concept phase, but which are not yet ready for the market i.e. Technology Readiness Level (TRL) 5 to 8. This includes upgrading, designing, performing verification, market validation, testing, pilot line development, intellectual property protection and external services aimed at developing of innovative ideas (product, process, service, etc.), as well as training on risk mitigation and risk assessment.
- **Strengthening the acceleration activity** (allocation: 8.000.000 EUR) - The investment includes support for acceleration for a period of four years in order to establish an acceleration program in Croatia. The acceleration program will provide mentoring, investment readiness support and access to investor networks for groups of up to 20 start-ups over a period of at



least 3 months. Investment readiness support may include access to mentoring and advising business leaders and entrepreneurs, advising on business and product development strategies, access to technology experts, intellectual property experts, technology suppliers, access to potential clients, guidance on initial investment activities and the like.

- **Commercialization of innovations** (allocation: 50.000.000 EUR) - The aim of the investment is to encourage the commercialization of innovation projects for mature projects that are close to entering the market; increase the export of innovative products, services or technologies to SMEs by supporting the creation of sales and distribution channels in foreign markets; increase the innovative capacity of SMEs.
- **Vouchers for digitalization** (allocation: 10.000.000 EUR) - The purpose of digitalization vouchers is to strengthen the capacity of SMEs to implement digitalization and start the process of digital transformation. It will be possible to use the Vouchers for the implementation of specialized training, digital marketing and other services. The digitization voucher program includes several types of vouchers, i.e. categories of services, depending on the needs of SMEs: Voucher for digital skills improvement, Voucher for digital transformation, Voucher for digital marketing, Voucher for cyber resilience, Voucher for development or application of complex digital products and services.
- **Grants for digitalization** (allocation: 27.500.000 EUR) - Grants for business digitalization provide financial resources for the implementation of digital solutions based on a detailed research of digitalization needs. Research can be funded through vouchers for a digital transformation strategy or from other sources. This grant provides funding for investments in digital tools and equipment to introduce new or significantly improved production processes, service delivery methods or organizational practices.
- **Support for digital innovation centers** (allocation: 7.500.000) - The aim of the investment is to define a framework for the establishment and monitoring of DIHs in Croatia and to ensure co-financing of EDIHs that will be successful at the European Commission call Digital Europe 2021-2027. In this way, the implementation of EDIH's activities aimed at providing services to SMEs and other users in the field of artificial high-performance computing, cyber security, and other technologies.



3. DESCRIPTION OF ACTIVITIES

Name of Activity	Description	Timeline/ duration	Financial resources	Responsible stakeholder
Action 1. EDP	The Entrepreneurial Discovery Process (EDP) will be continuously operated by the DIH ENTER and will allow stakeholder involvement in an attempt to discover capacities and increase the awareness of the digital transformation and Industry 4.0, its advantages and challenges.	6-9 months	5.000 EUR	ENTER Koprivnica
Action 2. Transformational roadmap + pipeline	A transformational roadmap is a collection of mutually reinforcing and complementary interventions that enables the achievement of the transformational goal: to improve the overall ecosystem and increase the number of stakeholders that would benefit and use I4.0; to be aware of the existing capacities and those that need to be developed, and to manage and operate on the project pipeline that will be periodically collected through questionnaire and EDP.	Continuously (twice/year)	5.000 EUR/year	ENTER Koprivnica

New Smart specialization of Croatia (S3 2029) is under preparation. There is some publicly available information regarding specific changes regarding the revision of the Smart specialization Strategy 2016 - 2020 and announcements were made that the new S3 will have new priority area for Digitalization (according to the Croatian Chamber of Economy the new priority area would be called Digital and Creative Society). We will therefore use the opportunity and processes designed for S3 development, apply it on more regional level and concentrate on the topic of I.4.0. The essentials of the actions we will use is to gather granulated, specific, regional information that can be used as inputs for the future S3. Additionally, the actions would allow knowledge exchange, learning possibilities, collaboration on a project, research, technological and company level, and common framework for digital transformation. It is important to say that these actions are already progressing on a national level through the work of National Innovation council and the ministries, but our approach will be more regional and directed toward preparation for I.4.0.

The deliverables we plan to achieve (stakeholder database, questionnaire, project ideas, digital transformation readiness, transformational goals, knowledge exchange, workshops, etc) will

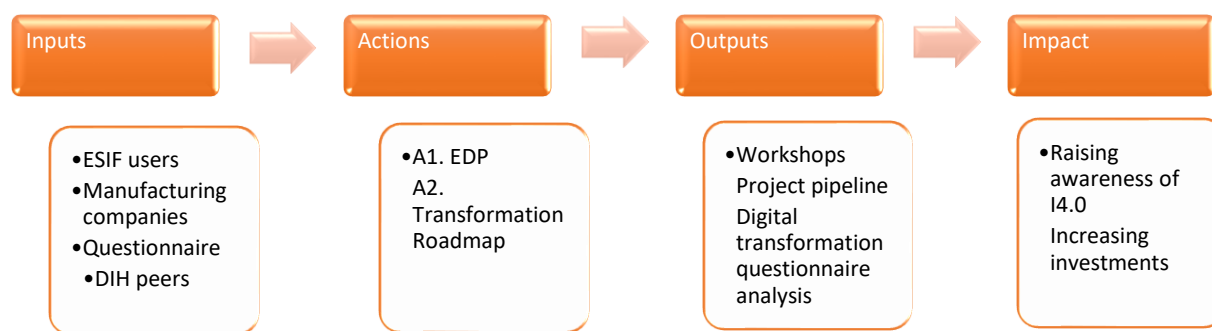


contribute mostly to the design of this new, digital priority area of S3 that will become part of the new S3 2029.

The risk that our actions would be obsolete or not adequately prepared for the revision and establishment of the new S3 is small since the same processes are being in place on national level (with much wider scope and audience). We will use the AP to generate specific regional knowledge and capacity building. Our actions would allow us to communicate our interests in the future S3 design and implementation tools. Additional goal that we would like to accomplish is to animate stakeholders of innovation ecosystem in Northern Croatia, especially SMEs, to be more successful in getting financing for their digital transformation from ESIF funds and NRRP (see graphs 2. and 3.).



Graph 4. Graphical representation of Action Plan



3.1.INPUTS ANALYSIS

Estimated time: 1 month to set up, regular updates during the work of DIH (two updates yearly)

Estimated budget: 150 man hours, no additional costs

Before starting with our two activities, some data mining and research needs to be prepared. It is essential to learn and realize from the start about what capacities, projects, intentions the stakeholders we have and what has been utilized so far. Recent information from national commercial court registry show that in Northern Croatia there are about 2.700 enterprises in manufacturing sector (data for 2020, companies primarily registered as a manufacturing company, with turnover and at least one person employed).

This is our target audience for representing our actions, and some research needs to be done to find out about which companies can use and benefit from our services. Companies need to be filtered furthermore, in order to create a contact list to be used for distribution of information. Aside from contact list, information about the turnover, number of employees and some research about online activities of the companies will also be gathered.

Two main objectives for using this database are:

- 1) to make a communication channel
- 2) to search and pinpoint those companies that can be considered champion of I4.0.

Second direction and source of information (the database that needs to be updated regularly) would be on the ESIF companies list of Northern Croatia, or other public sources grant users from Northern Croatia. This list is important because public information available is well structured and give us some insights in those companies that are willing to invest and have experience in starting new projects. Furthermore, there are specific programs of incentives in



the past 5 to 6 years that give us insight into companies that invested in digitalization of their businesses. On example of information that can be gathered through some internet research is shown below.

Table 3. ESIF investments in Northern Croatia 2016-2021.

County of Northern Croatia	Investment value EUR	Number of investment projects
KOPRIVNIČKO-KRIŽEVAČKA	69.715.165,68 €	138
Business infrastructure	4.888.568,83 €	7
Digitalization	4.153.991,79 €	63
General Business Development	44.128.635,19 €	58
RDI	16.543.969,87 €	10
KRAPINSKO-ZAGORSKA	95.948.160,47 €	178
Business infrastructure	4.428.944,51 €	4
Digitalization	4.726.160,54 €	56
General Business Development	75.960.461,40 €	109
RDI	10.832.594,03 €	9
MEĐIMURSKA	115.643.978,80 €	230
Business infrastructure	9.857.709,43 €	10
Digitalization	3.727.822,95 €	50
General Business Development	81.143.868,58 €	147
RDI	20.914.577,85 €	23
VARAŽDINSKA	107.581.023,32 €	214
Business infrastructure	5.925.249,00 €	5
Digitalization	4.172.874,37 €	64
General Business Development	75.000.397,91 €	124
RDI	21.988.924,58 €	19
Startups	493.577,46 €	2
ZAGREBAČKA	330.332.398,76 €	487
Business infrastructure	38.461.546,79 €	10
Digitalization	8.496.443,75 €	110
General Business Development	181.165.899,30 €	312
RDI	100.722.059,05 €	48
Startups	1.486.449,87 €	7
Total all counties/projects	719.220.727,03 €	1.247

Source: Author's own interpretation based on: https://strukturnifondovi.hr/wp-content/uploads/2021/06/Copy-of-Popis-operacija-OPKK-2014-2020_31052021.xlsx



The information gathered (cutoff 06/2021) shows that not so much of the activities are I4.0 related because digitalization investments account for only 25 million EUR with about 343 projects. This actually shows that the investments were rather small in value (and probably impact on their businesses) and work needs to be done by our AP, both on the inputs side but also actions side, to make things better in our region. Project descriptions, timeline of implementation and expected results are also available online and this information also needs to be thoroughly examined since we need to build up our own pipeline within action 2.

3.2. ACTION 1. ENTREPRENEURIAL DISCOVERY PROCESS

Estimated time: 6 to 9 months

Estimated budget: 5.000 EUR (space, materials), 150 man hours

Entrepreneurial Discovery Process (EDP) is a constant, repeating process, that allows policy document possibility to adapt and change according to latest developments, trends, technologies and needs of the environment and its stakeholders. The EDP serves as central mechanism of stakeholder engagement within the S3. The EDP is an inclusive process of engagement with entrepreneurs, researchers, and experts, which informs policymakers on the opportunities and capacities for research and innovation that exist in selected priority areas. It allows policymakers to offer specific and targeted interventions to advance the transformation in selected S3 priority areas.

The EDP is envisaged as a continuous process, requiring stakeholder engagement and feedback throughout the policy cycle, from selection of priority areas during strategy design, to inputs to policy instruments during implementation, to review and refine priority areas during monitoring and evaluation. Croatia was using the EDP nationwide during the design of the first S3 (the process that lasted from 2013 until beginning of 2016). How Croatia was using the tools of S3 development was constantly scrutinized by the European Commission services since Croatia was a new member of the EU with not so much experience in strategic programming.

During the EDP, several rounds of workshops are common, with stakeholders coming from all spheres of society (triple or quadruple helix). This is the same goal we have in our Action 1. First of all, after gathering and setting up databases of manufacturing companies of Northern Croatia, we will design and set up a first workshop. Given the circumstances of pandemic, an online first session will be primary objective since it is proven to work. The main goal for the first workshop is to try to create a sense of synergy. Instead of concentrating on specific project, company's challenges or problems, we should focus on targeted topics and focus on positive relations (capacities, local benefits, etc), keeping the idea of common purpose for prosperity of the region and the context of I4.0.

It is important that Digital Information Hub stays proactive here because companies would rather reject the notion to change and accept digital transformation. It is also important to allow as much as possible error-free environment - there are no stupid questions, and no taboos. Therefore, there will need to be an exchange of useful and qualitative information from both



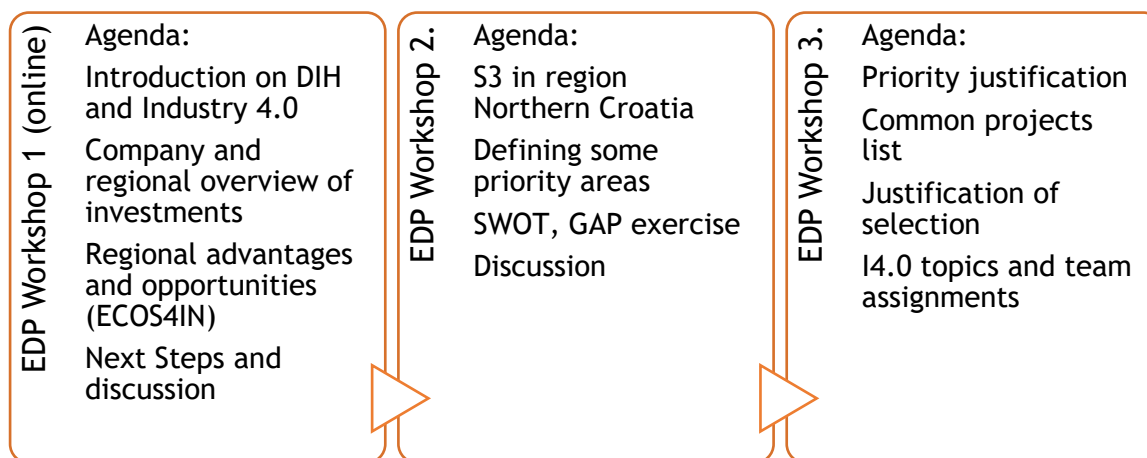
sides. Good idea is to present the ECOS4In project deliverables and perhaps involve online some of the project partners. Information will be provided to the future possibilities for investment financing (such as planned interventions from the NRRP or ESIF), second to learn more about the latest technologies and basics of how I4.0 can improve their business (here the main part would play qualitative information gathered through project partners of ECOS4IN and other DIHs across EU).

Second Workshop needs to be organized not long from the first, but this time more targeted discussion needs to take place in regard I4.0 and stakeholders' ideas of how to proceed.

Here we could set up a discussion based on a test: We want to set up Northern Croatia Smart Specialization Strategy with more regional scope, and we would like the stakeholders to discuss priorities we could set up. Here again the sense of synergy and common goals needs to play an important role. It will also allow people to be more creative, to realize the bottlenecks of the ecosystem, and to understand better the mechanics of the smart specialization. Again, the certain "carrot" needs to be present on the side of the organizer, so we will need to provide additional information about what are the actual possibilities in Croatia (or in EU) regarding potential I4.0 projects. After second workshop, we can then enter into the phase of transformation, or to generate as much projects, programs, ideas that would allow all the stakeholders to build up their capacities and way of thinking and generating ideas that will eventually have all ingredients necessary to be presented as a transformation roadmap agenda (not only good ideas and projects, but also capacities of the region, time, financing opportunities, scientific and technological constraints and challenges need to be taken into consideration).

The third workshop can be combined with the second, and if there is a possibility to have them onsite instead online would be beneficial to the process. Depending on the number of stakeholders that would be involved, the workshop participants can be divided into groups around certain topics where people would rotate throughout all topics in order to make better sense of all possibilities and challenges the smart specialization carries within. Enough time for discussion needs to be insured, so every workshop could last between three to 6 hours (1 day workshop). In case that workshops generate enough stakeholder interest, the EDP process could be more formalized and structured: quarterly meetings on specific agenda, workgroups of interested parties on specific topic/project, I4.0. area, etc, meeting with peers from other regions that have similar I4.0. interests (other DIHs, enterprise associations, regional hubs, etc.).

Picture 2. Proposal for EDP Workshops



The EDP process is not limited to the following proposed workshops and/or workgroups, it can be upgraded, changed, adapted to the specific needs, available regional capacities, economic developments (positive, negative) and time. It is important that DIH and these actions stay recognized as a tool that allows critical mass of stakeholders to influence and impact on policy making by presenting common goals and projects to the policy makers and to do it continuously therefore allowing certain transformation of policies and policy implementation.

3.3. ACTION 2. TRANSFORMATIONAL ROADMAP + PIPELINE

Estimated time: until transformational goal is achieved (2-4 times per year)

Estimated cost: 5.000 EUR

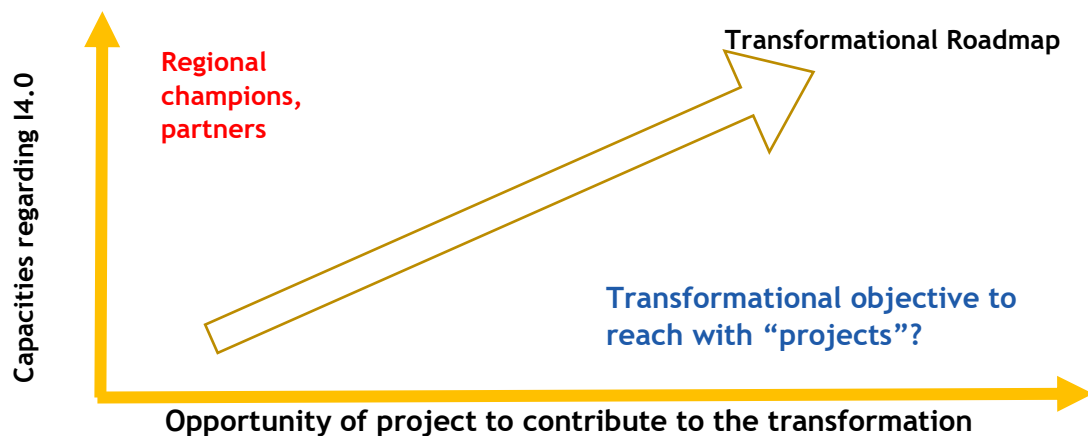
A transformational roadmap is a collection of mutually reinforcing and complementary interventions that enables the achievement of the transformational goal. So far, we have identified that I4.0 is what we will base our services and actions, so the ultimate goal would be to improve the overall ecosystem and increase the number of stakeholders that would benefit and use I4.0. In the center of the ecosystem, DIH as an intermediary will also create its own transformational roadmap based on the inputs, actions and outputs achieved during this project with main intention to be aware of the existing capacities and those that need to be developed.

The Transformational goal of DIH would be to promote I4.0 in the area of Northern Croatia and increase awareness of opportunities for stakeholder on a national and international level. The



process of transformation is perpetual. It is important to have this in mind and therefore all actions, projects, programs need to be observed, challenged, and moved across the transformational roadmap (for example a grid-based system as described below).

Picture 3. Transformational grid

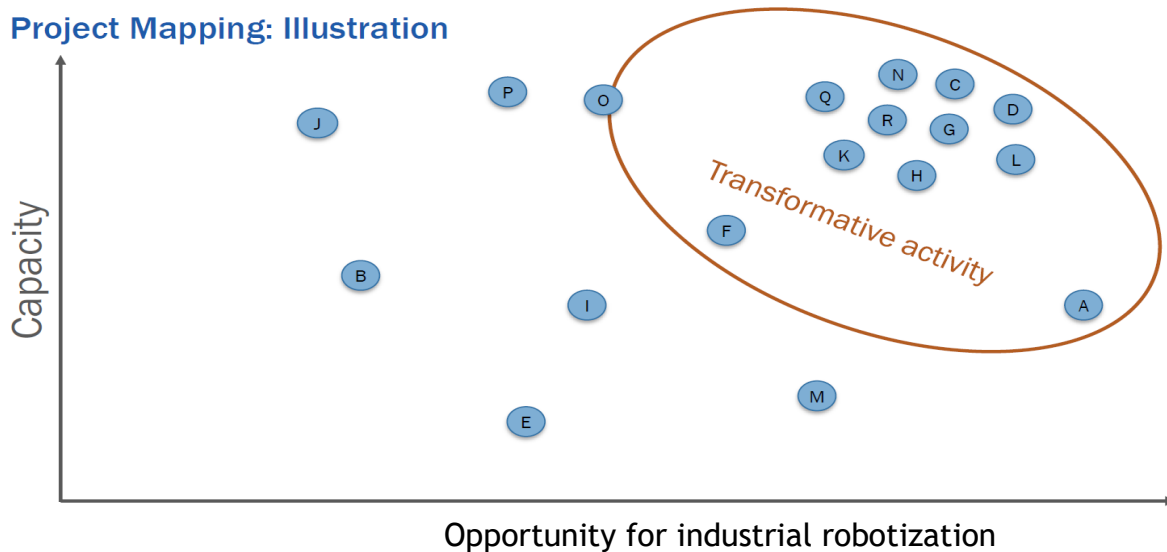


This activity requires project ideas and use of EDP process so good communication and regular flow of information with the stakeholders (academia, business, local government and NGOs) is very important. The involvement of regional champions, companies, academia or government representatives that use I4.0 on a regular basis and are familiar with their benefits to their work, are important in this process, not so much as a good practice examples but to encourage others in the process of change. It is a good idea to start by sharing some of their practices so others would become familiar about the aspects of I4.0.

Second alternative idea for transformational goal can be a digital maturity of the ecosystem stakeholders. If set up as the transformational goal, it could pinpoint very important and severe bottlenecks but also opportunities for future growth.

This action is of course linked with the EDP action, being two pieces of the same smart specialization tool: the EDP is essential for setting up the specialization, while transformational roadmap and pipeline generation is very important during the revision of the smart specialization. Additionally both these actions are applicable to the I4.0 and the intention of ECOS4IN project. Below is an example of how the potential grid of transformational roadmap could look like.

Picture 4. Example of project presentation in the Transformational grid



Once the first transformational roadmap is determined, the DIH needs to look for the opportunities for realization of these projects (through national, regional, international or other sources).

3.4. SUSTAINABILITY

The collected data, the good practices and lessons learned from the implementation of the AP, along with our stakeholder involvement and project pipeline will be presented to the ECOS4IN project partners through regular networking (once per year) meetings or events as a follow up on the pace of development of regional ecosystems for innovation and I4.0 developments and trends. We would propose to have an annual round table event with ECOS4IN project team where we would share experiences and how our action plan was seen through or evolved over the years. We would also suggest a mutual statement, kind of an annual update on the ECOS4IN project activities and spillovers (one or two pages paper online to show that the project activities are sustainable and evolving, what were the obstacles for each year, what challenges, projects arising, transformation going on, etc.). The following statement along with meeting notes can be published on the project web-site.



4. DECLARATION OF INTENT

- a. On behalf of the ENTER Koprivnica d.o.o. undersigned, hereby declares, that this AP designed in the frame of the ECOS4IN project for implementation of I4.0 in Northern Croatia will be considered when regional innovation strategies like RIS3 strategy will be revised in forthcoming years.

14.03.2022.

 **ENTER Koprivnica**
d.o.o.
Koprivnica



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ANNEX I. DRAFT PROPOSAL FOR EDP QUESTIONNAIRE

This questionnaire was produced within the project ECOS4IN, WP T4 and it can be upgraded and updated according to the needs of the project partners. As part of the deliverable Action plan ENTER Koprivnica. Its purpose is to be used as a starting point for communication among stakeholders of Northern Croatia in the Entrepreneurial Discovery Process exercise (EDP) that would allow better understanding of digitalization and application of Industry 4.0 and digital transformation. It is free to be used among project partners. The purpose of the questionnaire is to help the EDP process get on its feet from the start by communicating the topic of I4.0 and digital transformation, and to allow participant to create and work on the transformational roadmap - project and idea pipeline that would help us all going into the same direction, whether being intermediaries of digitalization, companies, academia, local authorities of individuals.

The Questionnaire is structured in the following parts:

1. General information
2. EDP capacities
3. Transformation opportunities
4. Project ideas

In case receiving this questionnaire, you will be given adequate time to fulfill all parts of the questionnaire and afterwards you will receive an invitation to participate in the design of the transformational roadmap and further work on this topic.

1. General information

Sharing information and anonymity

Please click AGREE/DISAGREE with your personal and business information stated in this questionnaire. In case you agree, you contact information will be shared on our web-site and with other stakeholders.

Contact Name and Surname

Name of the Organization/enterprise/academic institution/other

Name of the Department/Division/Section (if applicable)

Mail address

Telephone

Type of organization Please select:

Micro enterprise

Small enterprise



Medium enterprise

Large enterprise

Startup entrepreneur (maximum three years operating on the market)

International corporation

National, regional or local authority

Academia (public)

Research organization (private or public)

NGO

Other (please state)

Primary Activity of your organization:

Manufacturing

Other economic activities

Service

Education

Research

Social services

Public administration

ICT

Other (please state)

Are you involved in Industry 4.0?

Yes (if Yes, please select and explain which of the topics best describe Your involvement)

Robots

Big Data

Simulation

Augmented/virtual reality

Additive manufacturing

Cloud systems



Cybersecurity

IoT

System Integration

No

Which of the following best describes your future interests?

Development of new communication platforms (hardware, software)

Industrial development of Artificial intelligence modules and components

Industrial application of new automated components and robot systems

Solutions for digitalization and work process optimization

Big data analytics

VR/AR platform development and application

Consumer behavior (research and management)

Media content management

Gaming and innovation

Smart cities, smart grids, smart public services

Cloud commerce, cloud platforms

Integrated systems for cybersecurity and management in virtual environment

Logistics and other support processes

Simulations, 3d virtualization models

Robotic Process Automation

New manufacturing processes including additive technologies R&D

Other (please state)

2. EDP capacities

Please state of what you consider to be the biggest regional and region specific strengths and potentials, including from the perspective of your business interest and capacities. Try to look at the bigger picture of the whole innovation ecosystem (of the lack of) where academia, companies, government and NGOS should interact. What are current capacities? How to achieve critical mass to achieve the digital transformation? Please state what you consider to be relevant actors/champions that support and have capacities or have achieved digital transformation?



Strengths and potentials:

Actor/Champion (why do you selected this particular company/entity?):

What does this champion contribute to digital transformation, what activities make him recognized?

3. Transformation opportunities

Please try to state of what you perceive as the best opportunity for Your organization (or if You believe it is an opportunity for general ecosystem) to embrace I4.0. and digital transformation? How would it contribute to your competitiveness? Would it be the right directions or do You see some alternatives? Are there any specific technologies (or the lack of any) that would speed up the process or hinder it? What trends do you perceive for the near future? What regulatory burdens, market developments, or reforms need to be in place in order to achieve it? What capacities are in place and how new capacities You believe can be secured for unobstructed implementation of this transformation?

Please provide short description and how it an be applied to Your organization.

4. Project ideas

Based on the presented financing opportunities of your current business strategy, please provide brief information of possible project development. Try to link the project proposal to the I4.0. topics presented at the beginning of the Questionnaire (1. General Information section on Involvement in Industry 4.0). Try to assign some resources to your idea (people, money, time, existing capacities, what business opportunity is there?):



Step 2. Find MIS code and determine program web-site.

A1	MIS kod projekta					
	MIS kod projekta	Fond	Naziv korisnika	Naziv operacije	Sažetak operacije	Datum početka operacije
1						
2	a	c	d	e	f	
3	KK.01.1.1.01.0001	EFRR	Institut Ruđer Bošković	Potpora vrhunskim istraživanjima Centra izvrsnosti za napredne materijale i senzore	Znanstveni centar izvrsnosti za napredne materijale i senzore (CEMS) utemeljen je na istraživačkim jedinicama koje imaju srodnu ekspertizu u	5.10.2017

The first column in the database represents the MIS project code. This code is made of digits and letters representing the programe code (KK.xx.x.x.xxx) and the last four digits represent the designation of the individual project. Once we know the MIS codes, we can search another web site with these codes: <https://efondovi.mrrfeu.hr/MISCMS> where we can open a designated web-site for each specific program. We will use one example here. If we search for MIS code KK.03.2.1.19, we will open up a designated web-site of the call Increase of competitiveness of SMEs through ICT technologies, Phase II. There we will find detailed information about the program (allocations, description, all the documentation) and the list of

INFORMACIJE O POTPISANIM UGOVORIMA O DODJELI BESPOVRATNIH SREDSTAVA I DODJELJENIM BESPOVRATNIM SREDSTVIMA							
Ugovori o dodjeli bespovratnih sredstava potpisani unutar Poziva na dostavu projektnih prijava „Poboljšanje konkurentnosti i učinkovitosti MSP-a kroz informacijske i komunikacijske tehnologije (IKT) - 2“, Referentna oznaka Poziva: KK.03.2.1.19., Poziv objavljen 15.11.2018. godine							
Potpore su dodijeljene na temelju Programa dodjele potpora male vrijednosti namijenjenih poboljšanju konkurentnosti i učinkovitosti MSP kroz informacijske i komunikacijske tehnologije (IKT) i Izmjena Programa (KLASA: 910-04/18-01/279, URBROJ: 526-08-01-02-02/1-18-5 od 4. srpnja 2018.; KLASA: 910-04/18-01/279, URBROJ: 526-08-01-02-02/1-18-17 od 24. listopada 2018.)							
Potpore su dodijeljene sukladno Uredbi Europske komisije (EU) br. 1407/2013 od 18. prosinca 2013. o primjeni članaka 107. i 108. Ugovora o funkcioniranju Europske unije na potpore male vrijednosti.							
Redni br.	Referentni broj ugovora	Korisnik bespovratnih sredstava	Naziv ugovora	Kratki opis projekta	Ukupni prihvatljivi troškovi (HRK)	Ukupni iznos dodijeljenih bespovratnih sredstava (HRK)	Intenzitet potpore za prihvatljive troškove (%)
1.	KK.03.2.1.19.08 09	ELEKTRO-CECIĆ d.o.o. za graditeljstvo i usluge Zagrebačka cesta 132 A 10000 Zagreb	Ulaganje u IKT rješenja poduzeća ELEKTRO-CECIĆ d.o.o.	Poduzeće se, uz poslove proizvodnje niskonaponskih razvodnih ormara bavi i složenim i tehnički zahtjevnim elektroinstalacijskim radovima jake i slabe struje, instalacijama u prostorima ugroženim eksplozivnom atmosferom te munjovodnim instalacijama na svim vrstama građevina u industriji, turizmu, energetici, prometu, obrazovanju i sl. Analizom poslovanja utvrđeno je nedostatak IKT infrastrukture kako bi poduzeće samostalno izvršilo sve potrebne usluge projektiranja. Projektom će se nabaviti potrebne oprema - standardni i specijalizirani softver i prateća edukacija za zaposlenike čime će biti integrirano više softverskih paketa i hardver primjerenih tehničkih karakteristikama koji će doprinijeti konkurentnosti poduzeća i ubrzanju projektiranja elektroinstalacija.	413.050,00	268.482,50	65,00000000%

signed contracts. Here we will find additional information on project description, allocation, aid intensity, etc.

Step 3. Find more information on the company's web-site. Each enterprise signing contract need to have this information on their web-sites along with procurement information on what



equipment and technologies he procures and uses in the project. This would allow us more granular information about what type of technologies companies would use.

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SAMPLE CONTROL

EU PROJEKTI Početna

Unaprijeđenjem laboratorijskih usluga do povećanja konkurentnosti na tržištu

Tvrtka SAMPLE CONTROL d.o.o. je uspješno provela projekt pod nazivom „Unaprijeđenjem laboratorijskih usluga do povećanja konkurentnosti na tržištu“, referentnog broja KK.03.2.1.19.1036

Cilj projekta je povećanje konkurentnosti poslovanja kroz ulaganje u softverska rješenja koja će značajno doprinijeti optimizaciji poslovnih procesa i integriranju poslovnih funkcija.

Više informacija o projektu:
Ukupna vrijednost projekta - 1.960.993,25 kn
Ukupna vrijednost prihvatljivih troškova - 1.569.594,60 kn
Bespovratna sredstva - 999.988,71 kn