

DESIGN OPTIONS PAPER

SCALESCRAPERS

DRAFT

Projekt sfinansowany ze środków Unii Europejskiej w ramach Programu na rzecz Badań i
Innowacyjności Horyzont 2020 na podstawie umowy nr 776978



Projekt sfinansowany ze środków Unii Europejskiej w ramach Programu na rzecz Badań i Innowacyjności Horyzont 2020 na podstawie umowy nr 713810

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Chapter 1. Introduction

1.1. Justification for the paper

This document is the result of the project "SCALESCRAPERS – how to support the growth of scale-ups to only sky is the limit" The objective of the project was to develop recommendations for entities responsible for creation of support policies but also for business environment institutions which provides services dedicated to scale-up companies. The implementation of the developed recommendations will contribute to the improvement of the support system and make services more effective..

1.2. The project consortium

Five specialized business environment organizations from Poland, Slovenia and Hungary are involved in the implementation of the project:

Bydgoszcz Regional Development Agency (Partner) – POLAND – is a municipal company and business support organization whose main goals are:

- conducting activities that support the development of entrepreneurship in the region,
- attracting new investments and facilitate the creation of new workplaces.

BRDA cooperates closely with enterprises, research and academic organizations, local and central administration, facilitating contacts between them and helping them to utilize the local economic potential in the best possible way. We also cooperate with companies and business organizations in the area of trainings, workshops as well as promotion and stimulation of entrepreneurial attitude in the region. BRDA keeps also close relationships with all branches of the local market, from which the most important are: programming and ICT services, information processing, automotive industry; tools, molds and plastic products.

Central Transdanubian Regional Innovation Agency (Partner) – HUNGARY – during the past 10 years CTRIA greatly contributed to turning Central Transdanubia into a region of outstanding innovation activities. The overall goal of CTRIA is to develop the network cooperation of regional innovators and stakeholders. According to the basic philosophy the agency's activities are constantly shaped according to the directives from both the demand and supply side of innovation. Through our domestic and international projects we enlarged our expert knowledge and we acquired social capital and provide accessibility to international networks for the region's innovators and small and medium-sized enterprises.

Technology Park of Ljubljana (Partner) – SLOVENIA – is a leading national stakeholder for development of innovative and knowledge based entrepreneurship in Slovenia providing business talents and companies a comprehensive business support, including examination of business

initiatives, business and technology consultancy, as well as the search for business and strategic partners. TPLD community units 300 member companies. Since TPLD acts as an innovation hub, one of its most important roles is to support talents with specialised support services, coaching, and access to funding as well as to act as a bridge between SMEs and big companies which identifies start-ups with a strategic match.

IRP Institute- Venture Factory, University Business Incubator University of Maribor is a private nonprofit institution funded in 2001, which is a carrier of the activities of University of Maribor incubator (Venture factory) based on a long-term agreement with the University of Maribor. The Venture factory is one of the key elements of innovation ecosystem of University of Maribor and responsible for the development of entrepreneurial pillar and transfer of innovations from research institutes into the entrepreneurial environment, as well as for realization of entrepreneurial ideas of students, researchers and other innovative individuals. Venture Factory incubated more than 100 startup companies which created more than 450 new jobs.

Torun Regional Development Agency (Leader) – POLAND – since 1995 has actively supported local enterprises (mainly SMEs) and thus affects the economic development of the Kuyavian and Pomeranian (K&P) region. It was established by regional and local authorities. Currently TRDA is the biggest business support organization in K&P province and one of the strongest agencies in Poland. It cooperates with the Ministry of Development. The agency takes part in various set of events and consultations especially concerning SME support. TRDA is an intermediary body for implementing OP Innovative Economy (ERDF) implemented by Polish Agency for Enterprise Development (government agency).

1.3. Source of project financing

The project was financed from the resources of Horizon 2020 programme within the INNOSUP 5 scheme: peer learning for innovation agencies.

1.4. DOP object and target group

The object of this study are recommendations worked out for decision-makers responsible for the creation of policies to support innovation and specialized business environment organizations .

1.5. Recommendations

The basis to develop recommendations in the field of supporting scale-up companies were on the one hand the results of the taken inventory of currently available services and programmes and results of the survey provided among scale-up companies addressing their needs and issues faced on different stages of development, but also project partners own experience gained when providing different kind of services supporting entrepreneurs and implementing other projects.

1.6. Structure of the paper

The authors of this study intended it to fulfil the role of a guide, and even to serve as an instrument to be used so as to analyze and develop the services provided, primarily, those of pro-innovative nature whose recipients are to be firstly scale-up companies, as well as, to implement new ones.

Chapter 2 contains information on the current state of the scale-up support system in the states and regions of partners origin.

Chapter 3 contains the results of the study carried out in January and February 2018, on a group of 30 deliberately selected companies, 10 each from Poland, Slovenia and Hungary. The survey included areas such as:

- challenges faced by entrepreneurs at particular stages of development,
- characteristic of using external help in coping with these challenges,
- current needs and expectations towards BEI regarding their support.

At the end of this part one will find SWOT analysis of the support system delivered on the basis of results of the inventory survey (Chapter 2) and study carried out on scale-up companies.

Chapter 4 contains recommendations worked out during the project meetings, which are a response to the issues identified in Chapter 3.

Chapter 5 shows the conclusions worked on the basis of in-depth studies and tests of recommendations described in Chapter 4.

Chapter 6 provides final conclusions and describes further steps to be undertaken by project partners and other stakeholders in order to effectively implement the recommendations.

The following are also attached to the document:

- a specification of recommended literature related to the subject of the project
- bibliography
- a detailed description of the Twinning Advance methodology

1.7. Twinning Advanced method and project implementation scheme

Twinnig Advanced (Twinnig +)¹

Twinnig Advanced is an extension of the original IPF twinning method. It is not limited to transferring good practices among agencies, but it provides opportunity to the design and implementation of better practices. The basic idea of Twinnig Advanced is to have innovation support organizations collaboratively address a common innovation support challenge. By using their collective experience

¹ Twinnig Advanced (Twinnig +), s. 2-3, <https://ec.europa.eu/easme/sites/easme-site/files/Paper-Twinnig-advanced-methodology.pdf>

and knowledge, the idea is to develop and test an approach to address the support challenge in a new and better way. The result of the effort is documented in a Design Option Paper that identifies and documents the implementation options, guidelines and implementation alternatives that the partners in the challenge have experienced and would recommend an agency which is interested in implementing the proposed better practice.

Project implementation scheme

The project was divided into 3 main phases:

1. Drawing up the reports presenting the results of inventory of the current state of scale-up support system and study carried out on the group of scale-up companies focusing on their needs

The first step towards achieving the objective of the project was the inventory of scale-up support instruments, used by the project partners and other business environment organizations in their regions. A special template was created for the purpose of this task, which allowed to collect detailed information on the pro-innovation services provided by regional BEIs. The tool facilitated the retrieval of data related to:

- groups of receivers,
- ways of promotion and communication with receivers,
- topics covered by services,
- ways to provide services,
- requirements for staff qualifications,
- necessary technical infrastructure,
- fees,
- efficiency.

Based on the information obtained, the comparative analysis of services in relation to particular aspects was carried out, which became the ground for defining general topics (general issues), representing a starting point for discussion at the meetings of partners (*peer learning*).

The next stage was carrying out the study on the group of 30 scale-up companies. The interview was conducted on the basis of the previously developed scenario (Annex 1). The role of the scenario was not to present to the respondents a standardized list of questions, to which researchers had to get answers, but rather to focus the interview on key thematic areas, important from the point of view of the study objective. First of all, we were interested in the challenges faced by the surveyed enterprises at particular stages of their development, and whether they used help of external entities to overcome them? We also wanted to find out, which entities were chosen? And if none, why?

2. Peer learning

While implementing the project, a total of 3 meetings were held, partners from each country were responsible for the preparation of one meeting.

The project kick-off meeting took place in Maribor (Slovenia) between 5th and 6th December 2017. The subject of the discussion related to the first conclusions, arising from the inventory of instruments and pro-innovation services conducted at that time. The partners also had the opportunity to become familiar with the working methods of the IRP Institute, services provided thereby. The participants of the meeting also took part in the meeting with one of the scale-ups cooperating with IRP - Drugi vid d.o.o. Partners were discussing the issue of scale-up definition which is described in details further in the paper. Also during the meeting partner responsible for the second subtask, that is BRDA, had presented the draft of the interview scenario which was eventually used for gaining information from the scale-ups. One of the conclusions of the meeting was that business environment institutions should take a closer look to their model of developing and providing services. Partners agreed that it could be done with the use of Business Model Canvas method. This idea became eventually the draft recommendation. The decision was made to test this recommendations during the next meeting in Hungary.

The meeting in Hungary took place between 6th and 7th March 2018. Its participants had the opportunity to see the activities of CTRIA at the place the services were provided. During the meeting, general problems indicated in the report summarizing the interviews with the scale-up companies were presented and the results were discussed. Finally the SWOT analysis of the scale-up support system was provided. Several scale-up companies were invited to join partners meeting in order to test the recommendation assuming the use of Business Model Canvas in cooperation with scale-ups. The results of the tests are described in Chapter 5.

The third meeting was organised jointly by Bydgoszcz Regional Development Agency and Torun Regional Development Agency. It was held from 21st to 22nd May 2018. The partners had discussed the final shape of the recommendations which further then were presented to scale-up support system actors from Kuyavia and Pomerania Region. During the meeting attendees talked about different experiences with on the one hand supporting companies (including scale-ups) and on the other hand regarding cooperation conditions with BEIs (scale-ups opinion) Partners also had a chance to meet regional scale-ups (Torqway, Sybilla and TKomp) and visit Bydgoszcz Industrial and Technological Park.

3. Dissemination of DOP and project results

Once the substantial operations completed, the partners started to disseminate DOP, presenting the project results achieved.

1.8. About the scale-up companies

About scale-ups in general

As we can find out in “Startup Europe Partnership – Preliminary insights, Nov 2014” *the past decade has marked a few great European web entrepreneurial success stories, such as Yandex, Skype, ASOS, King Digital, Markit Group, Pokerstars, Spotify, Rightmove, Zalando, Supercell, Vente Privee, Vkontakte, Ulmart, JustEat, YOOX, Qivi, Criteo, Odigeo, Zoopla, Conduit, Wonga, Klarna, Monitise, just to list a few of them.* Still is much more to be done in order to foster the scaleups growth and to *give the European economy a much needed boost.*

European Commission being aware of the potential of startups and scaleups launched in 2016 new action called “Start-up and Scale-up Initiative” aiming to give Europe’s many innovative entrepreneurs opportunity to become world leading companies. In the introduction to the paper EC points that *High-growth firms create many more new jobs compared to other firms.¹ Start-ups scaling up into bigger firms form a large share of these businesses. They increase EU innovation and competitiveness, strengthening the economy. Such “scale-ups” can also provide social benefits, including offering more flexible and modern working arrangements.* Moreover in the opinion of EC start-ups with the potential to grow (*ergo* to become scale-ups) not only are often tech based companies but also combine fast grow, high reliance on innovation of products, processes and financing (that is why scale-ups are also called next wave of innovation), utmost attention to new technological developments and extensive use of innovative business models, and also frequently collaborative platforms.

Also last year during the Digital Assembly in Bratislava Scaleup Manifesto was announced which is a 49-point roadmap for policymakers, business environment institutions, educational entities and of course start-ups and scale-ups. The paper point out several fields which need to be improved in order to foster the development of European scale-ups. It postulate for instance improvement of administration, bigger investments in Europe’s digital infrastructure, powering innovation by wider use of experimental policy tools like sandboxes and many more.

Apart from the fact that scale-ups have been in the eye of EC and state authorities still we cannot base on hard statistical data regarding scale-ups. That is the result of not disseminated system approach. On the one hand there are different programmes or projects supporting start-ups and then scale-ups (like those implemented by TPLJ, IRP or TARR) but at the same time the data are not being gained effectively. At the end even if the projects were successful and scale-ups reached their business goals we do not transfer it on system approach.

Another issue is the influence of entrepreneurs (including scale-ups) on the labour market. In EY’s Global Job Creation Survey (2016) was said that more entrepreneurs than big business had been expected to create jobs. Some 59% of entrepreneurs globally expected to increase their workforce in

the next 12 months. Once only 28% of large corporations planned to do so (EY's Capital Confidence Barometer: April 2016). Considering this it is crucial to establish effective system supporting for scale-ups as those which may significantly contribute to the global growth of labour market and European economy in general.

OECD definition

In general opinion scale-ups are oftenly identified as High Growth Enterprises. These in turn are defined (i.e. by OECD) as companies who has an average annualized return of at least 20% in the past 3 years with at least 10 employees in the beginning of the period.

Years of experiences of cooperating with startups and developing companies proved that following such unflexible definition might cause the situation when some companies which are not startups any more but do not grow fast enough could be deprived of aid and support.

Having in mind above conclusions the project partners suggested to widen the definition and make it more flexible.

According to Organisation for Economic Co-operation and Development scaleups, also defined as High Growth Enterprises

Project definition

Scale-up company

- **register the regular income from selling designed product or sevice**
- **at least 3 staff members are working on the product**
- **opeates on domestic and / or abroad markets**
gained external fundinf for investments

Pic. 1. Project implementation scheme



Źródło: Own paper

Chapter 2. Results of the inventory of the current state of entrepreneurship policies and services provided by Partners and other BEIs

2.1. Background

SMEs play a significant role in achieving the objectives of the Europe 2020 Strategy both by impact on the overall economic growth and by creating new and maintaining existing worksites. In this group we can find start-ups with the potential to become scale-ups.

As we can find out in “Start-up Europe Partnership – Preliminary insights, Nov 2014” the past decade has marked a few great European web entrepreneurial success stories, such as Yandex, Skype, ASOS, King Digital, Markit Group, Pokerstars, Spotify, Rightmove, Zalando, Supercell, Vente Privee, V Kontakte, Ulmart, JustEat, YOOX, Qivi, Criteo, Odigeo, Zoopla, Conduit, Wonga, Klarna, Monitise, just to list a few of them. Still is much more to be done in order to foster the scaleups growth and to give the European economy a much needed boost.

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They increase EU innovation and competitiveness, strengthening the economy. Such "scaleups" can also provide social benefits, including offering more flexible and modern working arrangements. Moreover in the opinion of EC start-ups with the potential to grow (ergo to become scale-ups) not only are often tech based companies but also combine fast grow, high reliance on innovation of products, processes and financing (that is why scale-ups are also called next wave of innovation), utmost attention to new technological developments and extensive use of innovative business models, and also frequently collaborative platforms.

Apart from the fact that scale-ups have been in the eye of EC and state authorities still we cannot base on hard statistical data regarding scale-ups. That is the result of not disseminated system approach. On the one hand there are different programmes or projects supporting start-ups and then scale-ups (like those implemented by TPLJ, IRP or TARR) but at the same time the data are not being gained effectively. At the end even if the projects were successful and scale-ups reached their business goals we do not transfer it on system approach.

Starting from the shortly described perspectives, we have preliminary identified barriers and obstacles noticed in all three regions/countries:

- weak connections among the innovative big companies and the SMEs (Scaleups),
- weak connections between SMEs (Scaleups) and R&D sector,
- underdeveloped measures to promote entrepreneurship and creativity at all levels of education,
- reluctance of young people to establish a business,
- low availability of data regarding scale-ups.

Partners during the project duration will undertake all measures to minimise the influence of the defined obstacles and barriers on the expected impact.

Due to the facts that in Europe we have great potential in our start-ups to become successful scale-ups and that still much needs to be done to create effective system of scale-ups support, SCALESCRAPERS main and specific goals are:

MAIN GOAL

Development through the lifetime of the project basing on the scale-ups analysis and the evaluation of current system tools and instruments, recommendations for improvement of the scale-ups development support system for entrepreneurship policy makers and specialized business environment institutions operating as scale-ups supporters followed by dissemination of gained knowledge and experiences.

Specific goal no 1

Rising the knowledge about current state of entrepreneurship policies including support for scale-ups and services provided by the Partners and other specialized entities (especially accelerators and incubators).

Specific goal no 2

Rising the knowledge about scale-ups needs regarding the external services delivered by the public sector and specialized business environment institutions.

Specific goal no 3

Dissemination of knowledge about the needs of scale-ups and delivered recommendations for modernization of the system supporting scale-ups and services provided

The main objective of the project will be achieved with the use of Twinning Advanced method which is an extension of the original IPF twinning method. It is not limited to transferring good practices among agencies, but it provides opportunity to the design and implementation of better practices. The general idea is to develop and test (provide in depth-study) an approach to address the support challenge in a new and better way. The result of the effort is documented in a Design Option Paper

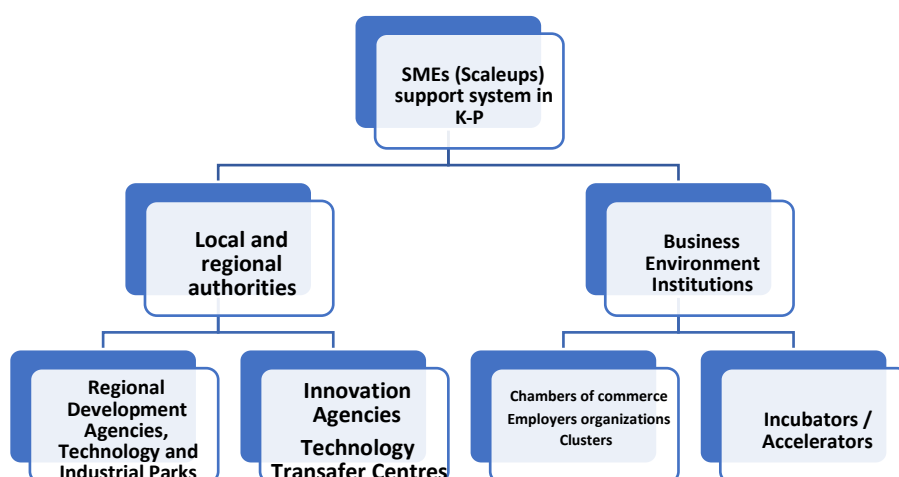
that identifies and documents the implementation options, guidelines and implementation alternatives that the partners in the challenge have experienced and would recommend an agency which is interested in implementing the proposed better practice. This method of peer learning involves participation of equal partners (not as in the classic method of Twinning model teacher – student).

2.2. Poland

Framework conditions

According to the results of analysis in EU countries, USA and Canada HGE are usually small than medium enterprises. The companies are also quite young. Statistics for Poland points out that its economy is like these highly developed. Even though no comparative survey (Polish economy vs. highly developed economies) was provided the conclusion is that the HGE sector is a bit bigger than in other developed EU countries. This might be explained by the fact that Polish economy is still catching up on high developed countries.

ST1 survey was held in October and November 2017. Firstly the business environment institutions supporting scaleups were identified. Thus report includes information gained from entities connected to regional (TRDA, KPIA, RDF²) and local (BRDA, BSC³) but also from organizations who gathers entrepreneurs (i.e. Chamber of Commerce and Industry of Toruń, Kuyavia and Pomerania Employers) and incubators. The survey was provided with the use of dedicated form, interviews. Also data obtained during the Young and Innovative project (INNOSUP 5, 2015-2016) were considered.



Pic. 1. SMEs support system, including Scaleups, in Kuyavia and Pomerania Region (Poland).

² **TRDA** – Torun Regional Development Agency; **KPIA** – Kuyavia and Pomerania Innovation Agency; **RDF** – Regional Development Fund

³ **BRDA** – Bydgoszcz Regional Development Agency; **BSC** – Business Support Center in Torun

Morover possibilities of scaleups support at national level offered by Polish Agency for Enterprise Development and The National Centre for Research and Development were verified.

Policy background

NATIONAL LEVEL

The first look at the most important strategic documents, concerning Poland's economic development, ends with the conclusion, that the subject of scale-up's or high-growth enterprises does not appear in them. However, a closer analysis shows, that although these documents do not explicitly refer to the types of business entities mentioned above, they relate to issues relevant to their development and define the directions and objectives which should facilitate this development.

Focusing on the issue of rising the Polish economy's competitiveness, The National Development Strategy 2020 (NDS), adopted by the Council of Ministers in September 2012, discusses the need to develop export support instruments, including: information and advisory services provided by specialized entities; financial products such as loans, insurance and export guarantees; educational programs that develop the necessary human resources. It also urges "to make changes in the structure of the economy so that the manufacturing sector is dominated by industries that use advanced technologies, use the latest advances in microelectronics, materials engineering, and computing." Such changes are expected to increase the productivity of the economy, as the companies operating in these sectors are not only highly productive but also have a positive impact on other industries. In order to make these changes, the focus should be on R & D support, including commercialization and protection of intellectual property, and the provision of appropriate institutional support in the form of institutions such as: technology transfer centres or science and technology parks. As in the case of export-oriented activities, here too the key elements are: financial support instruments adequate to entrepreneurs' needs and access to well-educated and qualified personnel.

The NDS' assumptions are upheld in the Responsible Development Strategy 2020 (with a perspective up to 2030), adopted in 2016, as an update to the above-mentioned document. When referring to the subject of the development of innovative companies, the authors of the Strategy advocate the need to support internationalization process of those companies, because "for many business ideas in advanced technology, local and even national markets are far too small for the efficient implementation of such ventures and sometimes they don't even exist yet". They also address the need to ensure adequate human capital (pro-innovation and pro-entrepreneurial change in education, the development of an innovation culture), strengthen the legal and institutional environment (e.g. simplification of procedures, fiscal incentives, greater

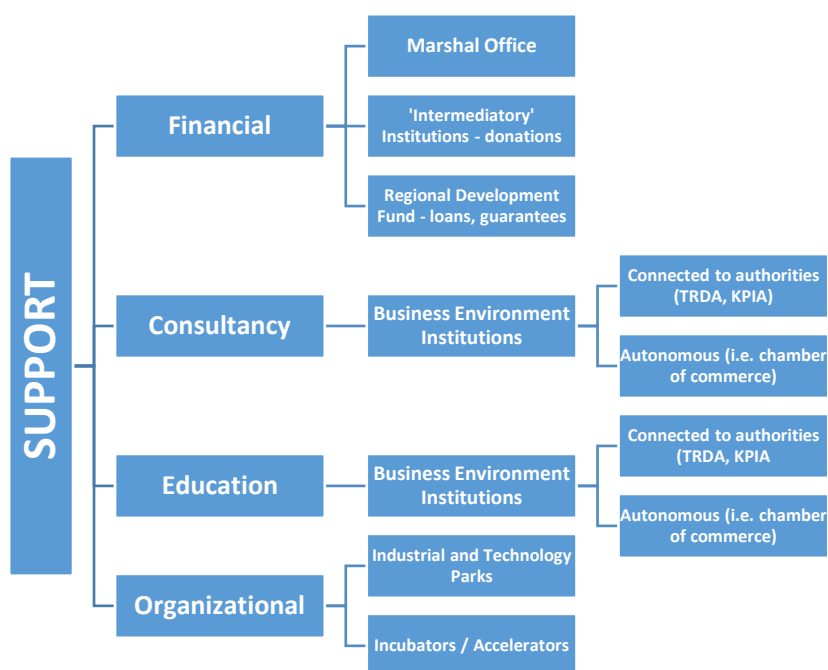
accessibility and efficiency of intellectual property protection system) and stimulate of demand on innovation by the public sector.

KUJAWSKO-POMORSKIE

Regional data obtained during the survey indicates that there is no dedicated to support of scaleups system in Kuyavia and Pomerania Voivodeship.

Still it does not mean that HGEs do not have any instruments supporting their development. All scaleups are invited to use tools and instruments (including services) dedicated to regional SMEs.

Available instruments can be divided according to the type of support (pic 2).



ad 1). Financial support

Main source of the financial support for SMEs, including scaleups, is Regional Operational Programme 2014-2020 (ROP). Wide range of instruments were include in the programme. Some of them are offered as donations others as loans, guarantees etc. (these are managed by RDF)

HGEs can gain offered money either directly from The Marshall Office (regional government) or from entities acting as intermediary institutions (TRDA, KPIA,RDF).

Money from ROP can be spend on development and implementation of innovative solutions (products, services, technologies), R&D actions (including promotion and increasing density of cooperation between business and research sector), trainings and rising the knowledge of employees.

ad 2) Consultancy

Consultancy services are offered by business environment institutions. The range includes from simple informational services on the sources of financing, legal rules etc. to advanced advisory services concerning innovation management (i.e.IMP3rove) and general development (i.e. SCALE, Business Model Canvas / Lean Canvas)

Ad 3) Education

Trainings are also mainly delivered by different types of business environment institutions. In some cases universities and local or regional authorities also engage in this kind of activities.

Ad. 4) Organizational support

This kind of support is provided primarily by technology (industrial) parks, incubators and accelerators. Thanks to EU Funds at the moment incubators are placed in all big cities of the region (Bydgoszcz, Toruń, Włocławek, Grudziądz, Inowrocław). Although incubators support startups they should not be excluded from the scaleup support system.

Supporting and hindering factors of scale-up support

The studies concerning high-growth enterprises, conducted so far in Poland, have shown that HGE have mostly similar developmental problems as other companies and they face the same barriers. Internal developmental barriers include, but are not limited to: lack of management competences, staff problems and lack of vision and/or development strategies. The most common external barriers are: complex and non-transparent law, excessive bureaucracy, difficult access to external financing, the problem of obtaining appropriately qualified employees.

The similarity mentioned above would suggest that high-growth enterprises may as well benefit from the support offered to all businesses. On the other hand, the pace or scale of their development may make such support, though helpful, insufficient or inadequate. In the end it's hard to say, what kind of support HGE need because there are still so few studies and analysis in Poland on this type of entities and the specificity of their functioning on the market has not been clearly formulated so far.

2.3. Slovenia

Framework conditions

The economic situation as well as access to finance in Slovenia has been improving in recent years, and is now on EU average. Access to physical infrastructure is on a relatively high level, while quality and training for entrepreneurial education still scores low in EU. The overall entrepreneurial societal perspective is mediocre; however, majority of entrepreneurs believe entrepreneurship is respected in the country. Slovenia lags behind in entrepreneurial education in schools, but sees great improvements in support from government and access to financial

resource. Slovenian companies are still predominantly financed by personal funds and bank loans. Equity finance market is developing, with the majority investments being sourced from VC funds and crowdfunding. Business angels market is in development as well.

Slovenia offers diversified access to capital for start up companies, comprising several mechanisms from subsidized incentives and credit to equity and VC funds. Most investments in the start-ups of Slovenian founders comes from venture capital funds (71%), followed by the platform for crowdfunding (13%) and government incentives. Most of the funds are collected companies engaged in hardware, web, machine learning and technology blockchain

Slovenian Enterprise Fund (SPS) holds an important role, providing the initial capital for new innovative enterprises, more favourable financing sources for the development of the investment companies (subsidies, guarantees) and the fostering of private investment (equity, venture capital, credit, guarantees).

Other important supportive organizations are SID, Start-up initiative, ABC Accelerator etc.

In addition, there are also incentives for self-employed and resources for the launch of new innovative companies mainly in the form of subsidies. Public incentives for economic growth and internationalization are mainly in the form of refundable funds.

Slovenia has well established start-up ecosystem, with two private and three public supportive programs: ABC Accelerator, Iskratel Start-up, P2, SK75 and SK200.

Slovenia is performing well in attracting foreign investors and is the biggest exporter among EU 28 SMEs SAFE, 2016). The bigger issues are actually in a relatively high proportion of successful start-up companies moving abroad. The challenges that appeared a couple of years ago when certain VC companies and business angels ceased their operation were quickly recovered by new opportunities – with a rise of private and corporate accelerators, providing all necessary infrastructure, knowledge and finances to support start-up companies in faster growth in sales on the global market.

Slovenian SME market is rather challenged with lack of investments for innovative SMEs over the age of five years. For these companies, lean enterprise form would be a good direction- however this model currently does not have public support for funding of these types of products. Another key challenge Slovenia recognized on EU level is to establish a single European market. The main objective is to achieve legislation and regulations of each Member State. To promote cooperation and networking, it is necessary to strengthen the functioning of the joint activities such as virtual platform organizing common workshops. Exchange events and

preparation of comprehensive start-up system infographics to increase awareness of opportunities beyond borders.

Examples of good practice in Slovenia are a cross regional model – Start:Up initiative Slovenia and Slovenian Enterprise Fund, which upgraded the start-up training with funding. It is a showcase on cooperation among regional actors as well as matching between investors and start-ups under the umbrella of acceleration programme.

Related national /regional policy

Governmental policies for SMEs have been improved in Slovenia in the past few years, as well as access to finance. Improvements have been implemented to more active equity market and increased cross boarder equity investment. In addition, based on SBA research, Slovenia has made a great progress in access to finance in obtaining credit, and access to alternative sources of finance, especially for innovative enterprises. The government made significant efforts since 2008 to support entrepreneurship and improve access to finance for all stakeholders. There have been various measures, such as guarantees for bank loans with subsidized interest rates by the Slovenian Enterprise Fund (SEF) and the possibility of access to direct loans provided by SID Bank (Slovenian Export and Development Bank). Willingness of banks to give loans also improved, as well as access to public financial support, including guarantees for credits. One of the major objectives in relation to access to finance, including improving consumption of EU funds. With that measurement government wants to ensure favourable funding for SMEs, particularly in less developed regions, as well as support start-ups through grants, seed capital and micro-credit.

Slovenian regulative system is challenged by lack of entrepreneurial culture and values, lack of initiative, intolerance to entrepreneurial failure and reluctance to take a risk and to globalization (45,71%), outdated educational system (28,57 %), complex bureaucratization and absence of legislation on crowdfunding, tech transfer and spin off creation.

The procedure for the establishment of enterprise is quite easy. In the field of legislation Slovenia is good in tax reliefs for R&D, but a lot still needs to be done in the field of legislation; Crowdfunding and crypto currencies, technology transfer and spin-off creation and in the field of tax regulation supporting business creation. One of the main barriers in Slovenian start-up scene is still access to finance, however great progress has been made in recent years. The willingness of banks to lending money in the last few years has greatly enhanced. But, there is still a lot to do on the availability of credit financing for small businesses, so it is necessary to

enable greater access to alternative funding (i.e. crowdfunding), which is particularly important for innovative SMEs with high growth.

Slovenia has several national and regional institutions as policy makers and created key output documents: GEM Slovenia, Program for stimulating the internationalisation of companies for the period 2010-2014, Programmes coordinated by SPIRIT (Public Agency of the Republic of Slovenia for the Promotion of Entrepreneurship, Innovation, Development, Investment and Tourism), Start:up Slovenia Initiative.

- SPIRIT Slovenia- Public Agency for Entrepreneurship, Internationalisation, Foreign Investments and Technology has the mission to be an active player in the business environment and ensure competitiveness and promotion of Slovenian Economy. The agency is providing funds for promoting innovation and marketing of innovative products.
- The Ministry of Economic Development and Technology Slovenia is a key institution in RS, focused in initiatives and development in internal market, trade policy, entrepreneurship, regional development, trade policy and wood furniture industry, with the main aim to promote tech development, entrepreneurship and support SMEs with equity and debt financing.
- The Slovene Enterprise Fund is improving access to financial resources for SMEs and offering financial support to SMEs in forms of loans, guarantees, VC etc.
- Chamber of Commerce and Industry of Slovenia (CCIS), as a non profit and non governmental organization, represents the interest of its members and is Slovenia's most influential association .It assist companies with mediations & licensing, permits and other essential document, organises networking events etc.

Supporting factors:

- Talent pool: High proportion of graduates from natural science; relatively high levels of educated young people
- Entrepreneurship is generally respectful, however still not enough young talented people decide to pursue this career
- Easiness of establishing an enterprise
- Collaboration: cooperation of large companies with start-up companies
- Networking: active social start-up community (competitions, events, thematic media)

- Geo location of Slovenia: good strategic position, accessibility and connections
- Investments in R&D are growing, access to debt finance (SAA)
- Availability of supportive institutions: accelerators, incubators and co-working space (ABC accelerator, TP LJ, Tovarna Podjemov, LUI incubator, Poligon etc)

Hindering factors:

- Based on majority of national experts, Slovenia still lags behind in cultural and social norms supporting entrepreneurial activity and is below EU average in education and training for entrepreneurship, creation of the national corporate strategy, optimization of the regulatory environment, in improving technology transfer, R&D practices, access to finance and in promotion of entrepreneurship and networking.
- Policy and legislation: long bureaucratic procedures, disadvantageous tax legislation (high level of share, no relief for reinvestment of profit)
- Educational system needs to be improved and updated, natural science & tech studies need to be more encouraged
- Struggling with demographic crisis and high tech exports and brain drain
- Regardless of significant commitment of the government and the measures undertaken by SPS and SID Bank, access to finance remains one of the main challenges for SME in Slovenia, thus:
- Access to finance - Scale Up companies are often challenged by lack of sufficient financial support especially with resources from banks, often not interested in financing expansion stage. Slovenia supports SMEs via private and public institutions and programmes, however rather focused in supporting start-up companies (e.g. P2 tender, SK200, micro loans and other private investors – business angels, VC funds); Small market/risk capital scene & Lack of interest from foreign investors
- Fiscal issues/ tax system is not adopted to scaleups needs
- No revenue from the sale of innovations, licenses, patents
- Fear of failure to start a company
- Lack of promotion about access to finance
- Access to talent as well as lack of adequate leadership skills internally, lack of time for education and networking
- Lack of understanding of start-up / scale-up companies needs by the national institutions

2.4. Hungary

Framework conditions

Hungary is at the stage of recognising the increasing importance of innovative SMEs (with special attention to start-ups) for its economy. These SMEs with their new approaches can develop the economic effectiveness and create more versatile economic system. The number of SMEs in Hungary is high compared to the number of companies, however this high number not automatically reflects the innovative SMEs as well. For helping the development of innovative SMEs (especially in the start-up and scaleup phase) there is need for some new approaches regarding the social and regulatory framework.

When looking at the start-up ecosystem fundraising and administrative burdens (especially taxes) seem the main challenges for the success and growth of start-ups in Hungary. The current legal system with minor changes is suitable to treat new forms of financing, although there is a great need that the authorities communicate guidance for the special types of companies.

Nowadays accessing equity is quite easy in Hungary, there are several programmes and abundance of resources, and more and more companies think about getting equity. However the main challenge is in using that wisely. There is a need of management skills and the need for experts helping innovative SMEs, which points towards the need of sustainable acceleration programmes with solid management and experience.

The missing management skills (including language and sales skills barriers) also limit the ability of development over the start-up phase for SMEs, which is also backed by the scarce international connection of inland investors. This is however being under change as the Hungarian start-up and scaleup community has an ever-increasing track record and as business angels gain more importance. This lack of international connection can be also improved by the acceleration programmes.

All in all, we can see development need in two things: administration and taxation system regarding innovative SMEs and the improvement of management skills of them.

Data, surveys and interviews show there is an ever increasing role of acceleration and equity financing on the Hungarian market which due to the abundance of equity financing and state resources and the growing business angels scene. However these services and resources are mostly based in Budapest and acceleration services only recently appeared in other regions, mainly due to state incentives.

To get a whole picture, the framework conditions can be characterized by different needs as follows:

- There is a need for development resources and there is an urge to invest however it seems that the two parties don't have enough information, they know each other well or at all. Information flow must be improved. This is a keystone of a successful start-up and scaleup model that stakeholders have relevant information about each other. New ways of communication have to be considered specially to reach non-Budapest based SMEs.
- There is a need for developing management skills of the target SMEs. It is a constant claim of investors that SMEs lack these skills. There is a great need to educate founders about the importance of specialised skills in their company and the worth of expertise and that they do not have to do everything all alone.
- Parallel to the above there is a need for professional CEO skills, the knowledge how to carry out administrative tasks, which is not necessarily the founders' duty.
- Finally, there is a need to develop the ecosystem at a basic level, that is, to develop the environment for innovative thinking. This does not mean that all the companies have to make the breakthrough of the decade, but they have to obtain that approach for their everyday operation.

Policy background

Hungary has no special and coherent approach in regulation towards innovative SMEs, especially for start-ups and scaleups. The legislation system and policy favours the SMEs in some administrative and taxation procedures. However in the last couple of years there is a special attention towards innovative SMEs (tax reduction for R&D activity and for investors, Research Fund).

Basically the terms of responsibilities and rights can be agreed in the current legal framework based on Civil Code but the taxation system is not prepared for these kind of financing so the administration seems frightening.

For the purpose of financing start-ups and scaleups, some alternative forms of financing would be useful that include flexibility and risk bearing, these are:

- crowdfunding
- equity combined acceleration means (smart money)
- quasi equity (eg. convertible loan)

We can say that the current legal framework, including making contracts and operation could be applied to the financing methods mentioned above if there was a coherent regulation, or we can say some “users manual” (the Hungarian Tax Office often publishes special guides to given topic, eg. Airbnb letting) that applies the regulations to the new ways of financing.

From the perspective of company creation, operation and winding up there is one weak point that is often stated by the experts, the missing “second chance policy”. Currently when a company has to be wind up because it cannot pay all its duties then the CEO cannot be in the management of other companies for years. This practice is not in line with the start-up lifecycle where an idea is tried, and if proved to be wrong the company is ceased, often leaving behind some debt. Sectoral strategies state that these rigorous rules should be eased, at least for special lifecycle stages, or when malign action is not the case.

As a conclusion we can state that the current legal system and policy background with minor changes is suitable to treat new forms of financing and professional support, although there is a great need that the authorities communicate guidance for the special types of companies.

Supporting and hindering factors

Concerning the main challenge limiting the success and growth of start-ups and the further development of scaleups in Hungary the European Start-up Monitor’s Hungarian country report claims that most of pre-revenue start-ups and scaleups consider fundraising as their greatest challenge. According to the 2016 SBA Fact Sheet on Hungary administrative burden, especially as regards taxes, is still a considerable challenge. Beyond that SMEs participation in fair public procurement competitions have to be improved, use of regulatory impact assessments has to be broadened, consultations with SME stakeholders must be made more effective and transparent, insolvency procedures have to be strengthened, loan financing shall be more accessible and innovation capacity and activity of SMEs have to be increased.

Strong points:

- Traditionally supportive rules for SMEs that can use innovative SMEs as well.
- From the side of regulation there is no special attention paid to the start-ups and scaleups in Hungary. Although there are central programmes for supporting them (grants, incubation programmes, equity programmes) but these types as financing products are not different from other grants, equity financing or loans.

Weak points:

- No coherent approach towards acceleration, innovative SMEs or start-ups, only amendments of regulations.
- SMEs in service industry can hardly track their value as accounting system and evaluation is mainly based on fixed assets.
- Missing “second chance” policy
- There is enough available equity type financing resource on the market (some argue it might be abundant relative to the potential number of projects). However it must be noted that its majority is from state resources. This is partly since 35% of 2014-2020 economic development ERFA resources is dedicated to financial instruments, besides the state dedicates resources to equity instruments from domestic sources as well.
- Lack of professional (knowledge development related) support
- The big equity programmes do not have the capacity to take daily care of these companies and the target companies often lack the sufficient sales, marketing, strategic planning or CEO capacity. They can make a coherent business plan to get the equity but when it comes to the daily challenges, when the neat plans have to be adjusted and modified while keeping the final goal, then it is often a breaking point for them. So the barriers are not at getting the money but at spending it properly. The most mentioned shortcomings are the following:
 - Insufficient sales skills. On the one hand there is a missing positive culture in the society that sales activity is useful, it is rather perceived as a useless agency thing and companies often think that a good product sells itself. On the other hand, although the companies realise the importance of the right sales actions they don't know properly the target market at and finally they use wrong sales means. This is often the case when accessing foreign markets
 - The problem of the poorly elaborated marketing strategies and actions is strongly linked to the above mentioned sales problem. It is not valued as much as for example the engineering development stages.
 - The founders are often not good CEOs and they often do not realise this. Most founders put all their ideas and efforts to build the company but they do not recognise their barriers and hardly can let some decisions out of their hands. Simultaneously there is a lack of professional CEOs at the market, who could join a company in the growth to make the daily chores of a company while the founders could deal with product development.

A further phenomenon is the caution of allowing external actors in the company's decision making or management, which is inherent to a visible share of CEOs in Hungary. This is observed both in cases when the company's financial management is completely lawful but is much more often in cases when business is partly "grey".

2.5. Summary

Summary of the current state of entrepreneurship policies including support for scale-ups and services provided by the Partners and other specialized entities		
Hungary	Slovenia	Poland
Mixture of state and semi-state funds	Policy is lagging a bit behind	Traditional way of policies
Missing skills	Wide range of funds and initiatives (well established ecosystem)	IM services with no differences
Regulatory framework	Small market issue	Integrated to Ops
2 types of regions	Entrepreneur skills	Lack of dedicated initiatives
	Networking	

Chapter 3. Results of research on scale-up needs provided within the SCALESCRAPERS project

3.1. Research methodology and theoretical issues

The study was carried out in January and February 2018, on a group of 30 deliberately selected companies, 10 each from Poland, Slovenia and Hungary. A personal interview survey, conducted with a person directly involved in the creation or management of a given entity, was used as a research tool. It was crucial that the respondent should be well-oriented in the functioning of the enterprise, from its inception to the present day. Thus, they usually were founders / co-founders or owners / presidents of companies.

The interview was conducted on the basis of the previously developed scenario (Annex 1). The role of the scenario was not to present to the respondents a standardized list of questions, to which researchers had to get answers, but rather to focus the interview on key thematic areas, important from the point of view of the study objective. First of all, we were interested in the challenges faced by the surveyed enterprises at particular stages of their development, and whether they used help of external entities to overcome them? We also wanted to find out, which entities were chosen? And if none, why?

In order to avoid artificial fitting companies in a top-down framework, we agreed that respondents themselves should define and characterize the development phases important for their companies. Thanks to this, each interview, despite a similar structure, reflected the individual history of the company's development and the obstacles it had to overcome.

One of the most important methodological issues in the study was the operationalization of the concept of scale-up, and thus the answer to the question, what companies do we want to investigate? For various reasons it was not a simple or an obvious task. Mainly, because it is difficult to find the definition of scale-up that is unequivocal, widely recognized, and at the same time easy to apply in practice. Scale-ups have recently become a popular subject and it is very easy to find articles and various publications about them on the Internet. It is much harder, however, to find those whose authors explain exactly what they mean by writing "scale-up".

Probably the most common definition of a scale-up is that it is the development phase following the start-up. Referring to the classic Steve Blank's definition of start-up, a company is considered to be a scale-up, when it has developed a repeatable and scalable business model and is implementing it. And although this definition is close to our understanding of the term and it is well reflecting the specificity of the target group of enterprises on which the

"Scalescrapers" project is focused, it has one significant weakness in the context of this study. It sounds good in theory, but in practice, when you need to identify a specific company with its help, it turns out to be problematic. Why? Because one can state with certainty that a given business model is repeatable and scalable only after practical verification of this assumption, that means only after the company has passed through the scale-up phase or is at least in an advanced stage of its implementation⁴. We, however, wanted to study enterprises, which are at the beginning of this phase, that is, those that have the potential to become scale-ups or, at most, take the first steps on the path of high growth resulting from the model business that, at the moment, seems to meet the conditions of repeatability and scalability. The problem is, how to identify such a company?

Speaking of high growth, it is common practice to define scale-ups as so-called High Growth Enterprises (HGE), which was defined in the document "Eurostat - OECD Manual on Business Demography Statistics" as: "All enterprises with average annualised growth greater than 20% per annum, over a three year period (...). Growth can be measured by the number of employees or by turnover". We can often meet with such equation when someone tries to statistically describe and analyze scalable enterprises. Such procedure seems to be understandable: the criteria defining the HGE are precise and unequivocal. They also allow to extract statistical data of such enterprises from general databases concerning economic entities without major problems. Unfortunately, it is impossible to say the same when it comes to scale-ups, understood as the effect of the evolution of start-ups⁵.

Considering the assumptions and goals of the "Scalescrapers" project, as well as the target group on which we want to focus, the "start-up approach" seems to be much more adequate than the "HGE approach". That is because HGE often include prosperous enterprises with a traditional origin and business model (e.g. production companies), which do not have much in common with classically understood start-ups.

Apart from purely theoretical considerations, a geopolitical context also plays an important role in the operationalization of the concept of "scale-up", and thus in the selection of the

⁴ By the way, it is worth remembering that no business model, no matter how polished and detailed, is worked out once and for all. Solutions successfully used today, tomorrow turn out to be outdated and ineffective. So it seems that for a company that wants to develop effectively, the start-up phase never really ends, since maintaining the attributes of repeatability and scalability requires continuous changes, corrections and improvements to the model.

⁵ Therefore, when writing about scale-ups, one must always remember to specify which group of enterprises he or she has in mind to avoid unjustified generalizations.

target group of our research. In comparison with Western European countries, Slovenia, Hungary and Poland, which in the past belonged to the Eastern Bloc, began the construction of free-market national economies only after its break-up. One of the many consequences of this fact, is that the start-up ecosystems in these countries are much less developed than in the Western countries. This in turn translates directly into the situation regarding scale-ups, because the start-up ecosystems are the foundation on which scale-ups can be created and developed. Therefore, in order to remain as close to the "start-up approach" as possible, and at the same time taking into account the economic specificity of our countries, we decided to set four criteria that will determine the minimum boundary conditions for the examined SMEs.

First of all, the company should have regular income. By that we also mean, it should offer a fully developed product or a service on a market. Secondly, the number of people working in the company had to increase in the last 3 years and currently has to be at least 3. Thirdly, the company's sales market had to increase in the last 3 years. And fourthly, some (any) kind of external investment had to be made in the company in the last three years. That includes any external cash flow, i.e. from venture capital, external company or even European Funds. We have established that the surveyed enterprises must meet at least 3 of these criteria.

3.2. Characteristics of the sample

Of the 30 companies selected for research, 23 met all the criteria listed above. The remaining 7 didn't meet one criterion, of which six cases (4 from Slovenia, 2 from Poland) concerned the lack of external investments, and one (from Poland) concerned the lack of employment growth. The oldest surveyed company was founded in 1996, the youngest – In 2016. The quantitative distribution of companies in terms of the founding year is presented in the chart below.

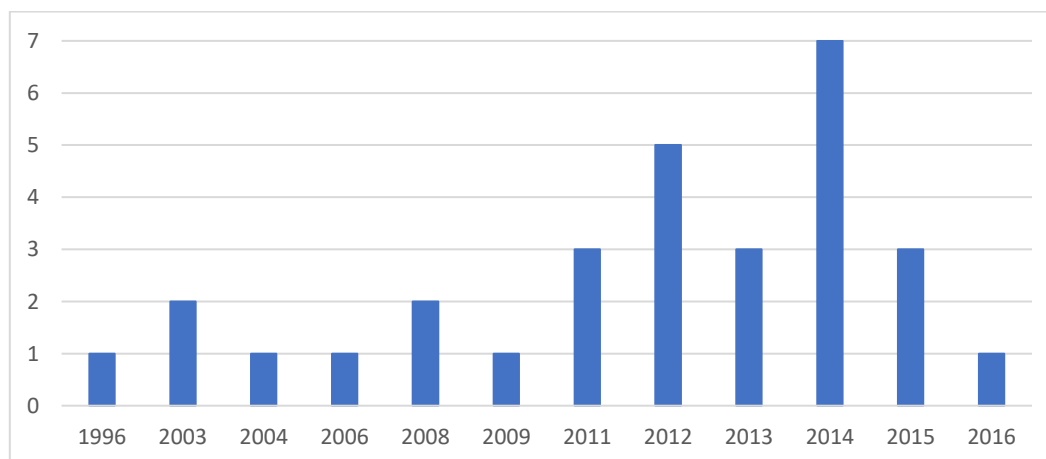


Chart 1

As the graph shows, the vast majority of the surveyed enterprises (22) was established after 2010. 22 of the surveyed enterprises operate in the broadly understood IT / ICT industry – from companies providing comprehensive solutions in the field of software and hardware, through marketing agencies, to specialized IT service providers supporting such sectors as health, sports, finances, astronomy, or traffic management systems. Three entities are involved in the production of sports equipment, and single entities operate in the following sectors: health, law, R&D, biotechnology, food and art.

3.3. Past development challenges and ways to overcome them

As it was already mentioned in the methodological chapter, at the initial stage of the interview each of the respondents was asked to define the development phases of their company, from the moment it was created (or even before that, if they considered this to be significant) to the present day. Then the respondent was asked to indicate the main development challenges faced by the company in each of the previously defined phases. In total, 30 entrepreneurs indicated 100 development phases, and hence, as many groups or individual challenges. 30 indications regarding the current situation in the surveyed companies will be discussed in the further part of the report. First, let's take a look at the other 70 indications relating to the history of companies.

The most common challenge in the initial stages of company development was to recognize the market and find its own place on it. This was indicated by 12 respondents. One third of the respondents mentioned improvement of the offered products and lack of competence. The latter referred primarily to issues directly related to running a business (for example, lack of marketing and / or sales skills, lack of knowledge in the field of commercial law), but also to more advanced issues related to the products / services offered, especially at later stages of their development. Other challenges that the entrepreneurs frequently mentioned were:

- problems in finding the right employees,
- developing / changing a business model,
- obtaining external financing,
- issues related to the protection of intellectual rights (IPR),
- winning customers' trust at the initial stage of activity.

All responses given are shown in the graph below.

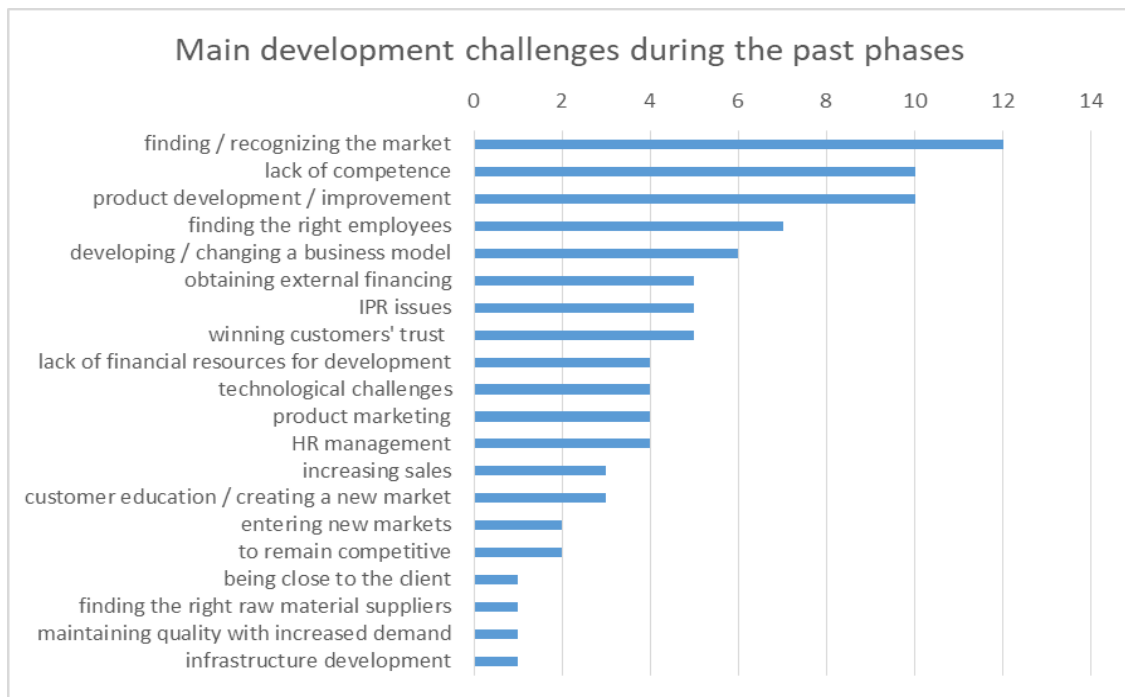


Chart 2

The next chart shows how often the surveyed entrepreneurs used external help in overcoming the above-mentioned challenges.

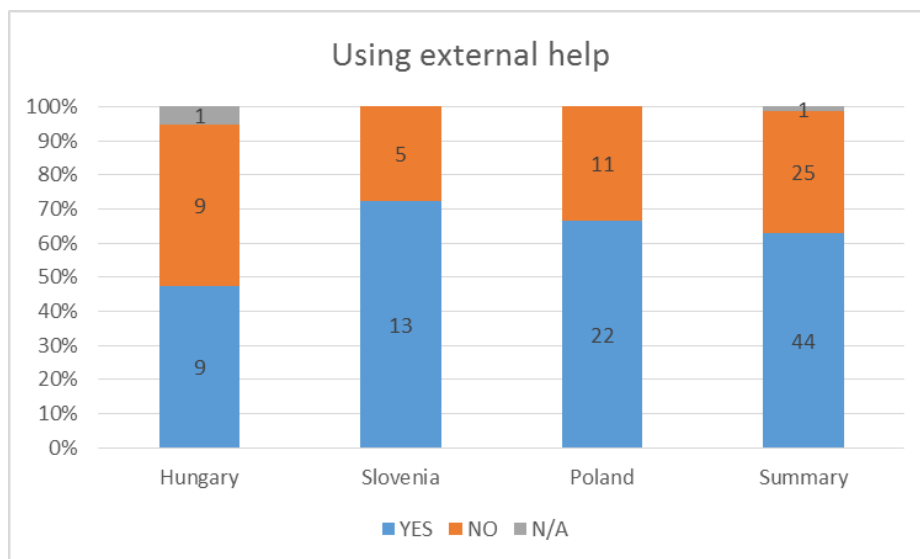


Chart 3

As the chart shows, in over 60% of cases (44 indications), entrepreneurs have benefited from the support of external entities. Most often, respondents from Slovenia (13 out of 18 indications), least often respondents from Hungary (9 out of 19 indications). Among the reasons for not using the help of external institutions, two answers prevailed:

- conviction that there is no need for such support / a sense of self-sufficiency (13 indications)⁶,
- conviction that there are no institutions that could support the company in a given matter at a given time (9 indications).

When entrepreneurs decided to get help from external entities, they were mostly Business Environment Institutions (BEI) (10 indications), external experts / advisors or consulting companies (9 indications) and industry specialists (8 indications). From other indicated entities, more than once were also mentioned various types of financing institutions (5 indications) and universities / scientific institutions (4 indications).

3.4. Current development challenges and ways to overcome them

Analyzing the respondents' indications regarding the current development challenges of their enterprises, we see that they differ significantly from the indications presented in chart 2. Part of categories such as "finding / recognizing the market" or "winning customers' trust", for obvious reasons, disappeared from the list. Others have changed their meaning: instead of "lack of competence" we have "acquiring new / deepening existing competences". Also completely new challenges appeared, such as "expanding sales markets" or "R&D development". A detailed summary of all answers is presented in the chart below.

⁶ As a curiosity, it can be stated that the respondents from Hungary gave this reason every time they explained why they did not use external help. Not once in this group there was an answer about the lack of an institution adequate to their needs.



Chart 4

Comparison of the percentage of responses in individual categories for both periods (current and past) also shows a few clear changes in the list of challenges.

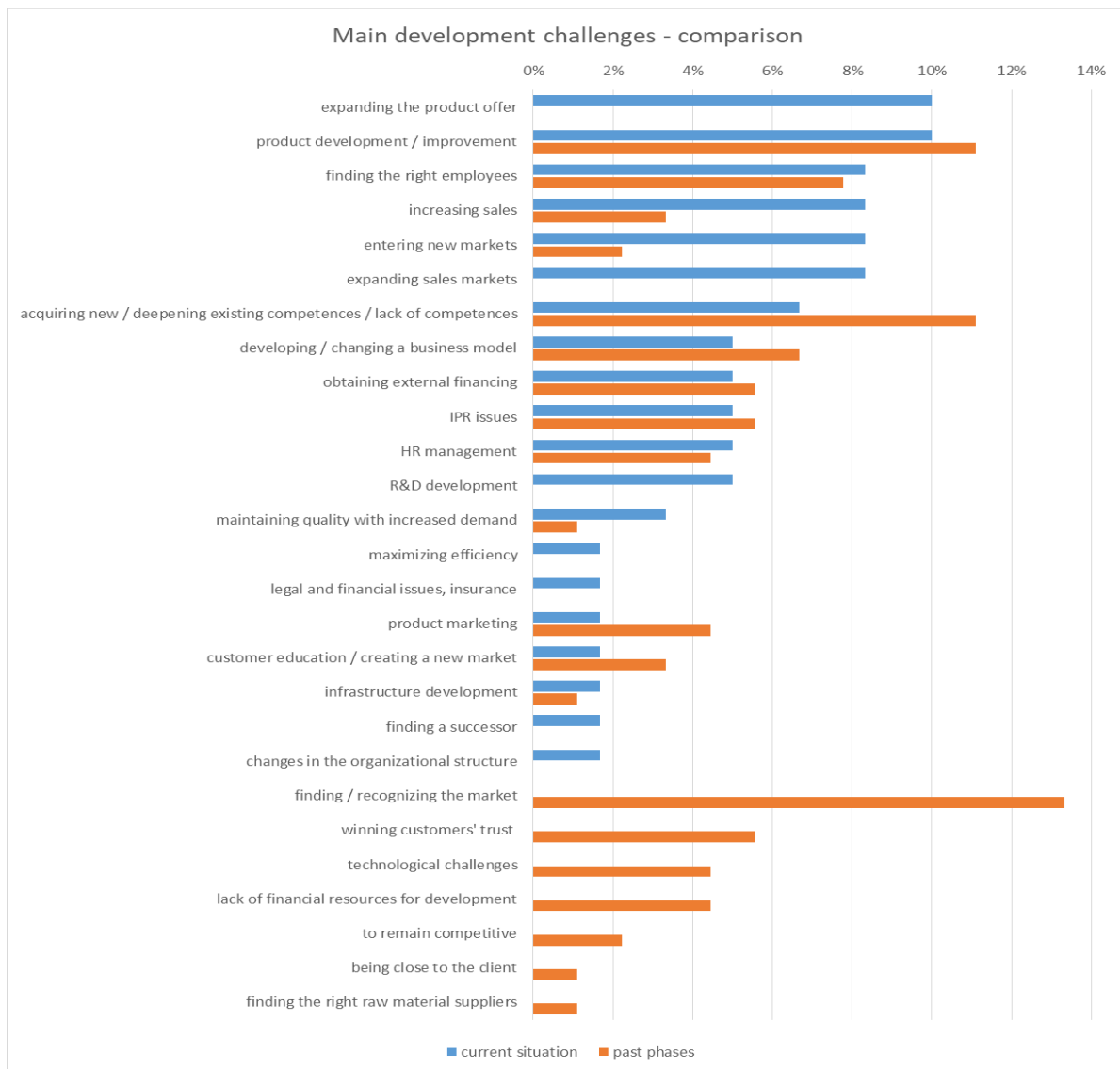


Chart 5

First of all, there is a significant increase and concentration of indications regarding increasing sales and expanding sales markets (increasing sales, expanding sales markets, entering new markets, expanding the product offer). The issue of getting involved in R&D works is also becoming important. Lack of competence is currently a less pressing issue. However, this is still a challenge for respondents, the more so that it is currently most often related to specialized areas of knowledge.

When it comes to the tendency of the respondents to use the help of external institutions, there are no significant differences.

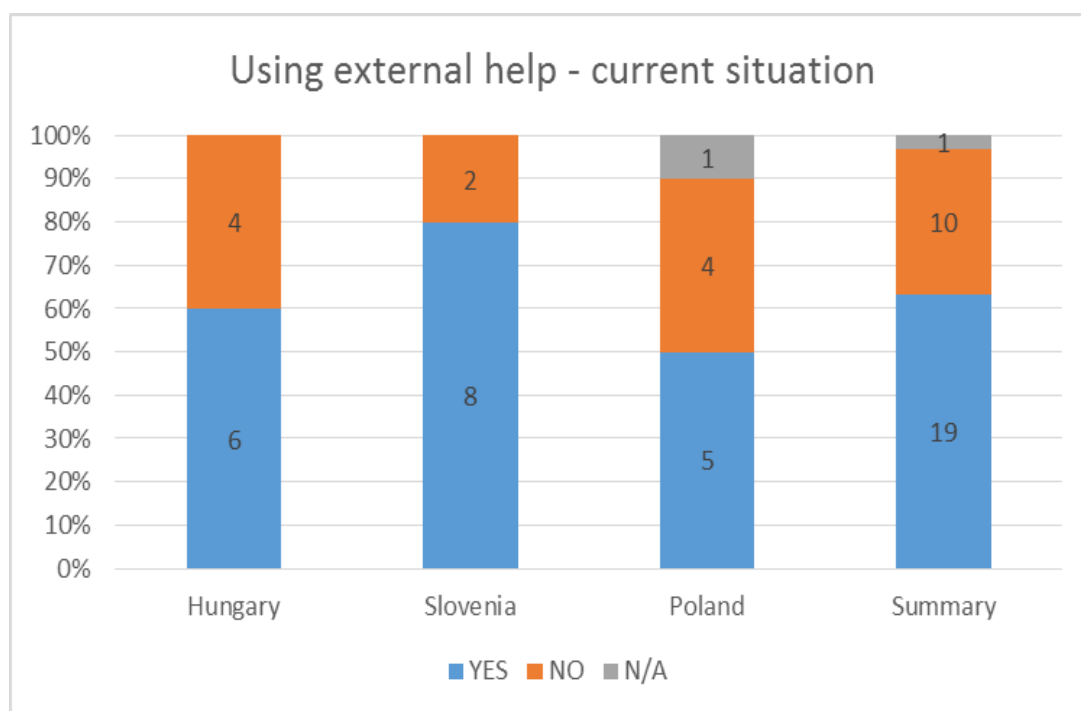


Chart 6

Over 60% of respondents benefit (or want to do so) from the help of external entities in the current development phase. The reasons for not using such assistance have also remained unchanged. Six indications related to the self-sufficiency of the company, three – to the lack of adequate institutions that could provide the assistance needed.

Entrepreneurs who use or plan to use assistance most often indicate cooperation with BEI (8 indications), external experts / consulting companies (5 indications), mentors (3 indications) or they use / intend to use European Funds (4 indications). The role of BEI in the case of the surveyed entities mainly concerned networking with various types of institutions, providing mentors and general strategic consulting in the field of running a business.

3.5. Respondents' expectations regarding support from BEI and public sector

The last element of the survey was a question about entrepreneurs' general expectations towards BEI and public sector and the support they could provide to their companies at the current stage of development. The most common answers were:

- internationalization support (9 indications) – both direct, e.g. in the field of promotion, participation in fairs, entering foreign markets, and indirect, for example legal advice,
- networking (9 indications) – both in the area of building a sales network, as well as exchanging experience or creating a cooperation network,

- general organizational support (6 indications) – increasing the company's efficiency through consulting and assistance in such areas as taxes, finances, sales, marketing, law, hiring employees, etc.
- product development support (5 indications) – assistance in implementation of or involvement in specific works and processes aimed at improving offered goods and services (including, for example, prototyping),
- mentoring (4 indications) – finding / providing a mentor who, based on his own business experience, will help the company to develop properly.

The table below presents all the answers, broken down by country. The most common responses in each country are marked with the colour.

PL	SLO	HU	SUM	Expectations regarding support
5	-	4	9	internationalization
3	2	4	9	networking
1	5	-	6	general organizational support / increasing the company's efficiency
-	-	5	5	product development support
-	3	1	4	mentoring
1	-	2	3	expanding sales markets
2	-	1	3	IPR issues
2	1	-	3	investment support (both capital entries and financial instruments)
-	-	2	2	various research and market analyses
1	-	1	2	development of competences in the company
2	-	-	2	establishment of a more entrepreneur-friendly law
-	-	1	1	crowdfunding support
-	-	1	1	incubation
-	-	1	1	technological support
-	-	1	1	marketing support
-	-	1	1	providing knowledge in the field of R&D
-	1	-	1	less bureaucracy at the state administration level
-	1	-	1	stopping the outflow of workers abroad
-	1	-	1	keeping clients
1	-	-	1	more efficient evaluation of EU projects
1	-	-	1	support in the process of creating a business model
1	-	-	1	the state as an active economic entity, supporting domestic entrepreneurs (e.g. by enabling the testing of the first versions of the product)
1	-	-	1	greater cooperation between science and business
1	-	-	1	creation of strong domestic investors

Table 1

Looking at the table, you can easily see differences in the responses of entrepreneurs from particular countries. Hungarians, for example, were most focused on supporting specific, often specialized areas of their companies' activities. They were also the only ones who indicated the need to support the development of their products (5 out of 10 indications). Also, only they expected help in the form of specialized market analyzes. Slovenians did not expect any support for internationalization at all. However, it was very important for them to receive support and advise on general aspects of doing business (organizational support and mentoring). Internationalization support and networking were the most important for Poles. More often than others, they also pointed to general system issues (friendly law, better evaluation of EU projects, the state as an active economic entity, greater cooperation between science and business, creation of strong domestic investors).

3.6 SWOT

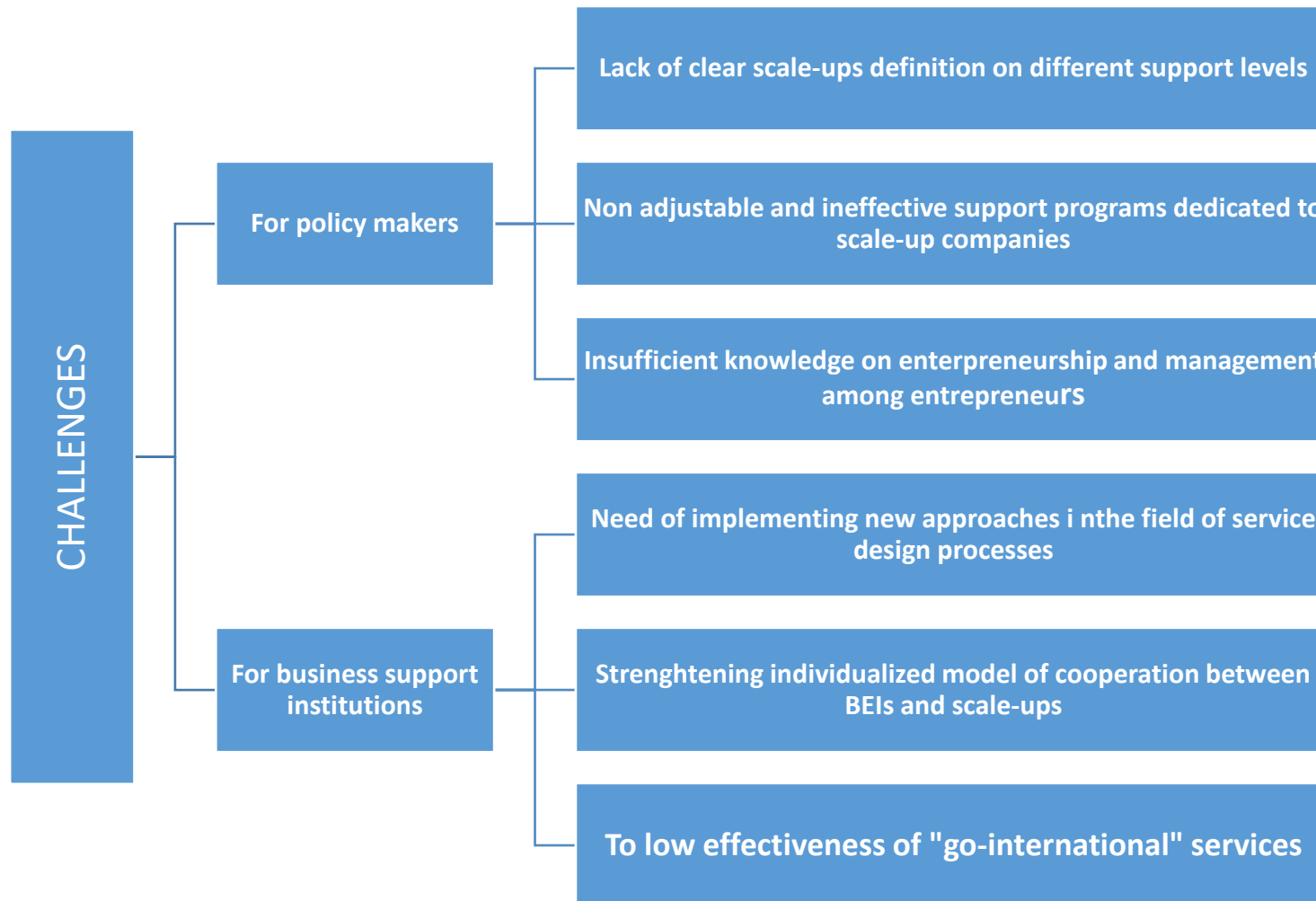
After providing the inventory of currently offered by scale-up support system tools and services followed by study carried out on the group of scale-ups project partners prepared SWOT analysis. It became basis for wording problems which eventually were transformed into recommendations.

As presented below SWOT input was divided by partners' countries. This allowed to compare national and regional systems and range of services in details. What is more thanks to this approach it was much easier to define most important common problems.

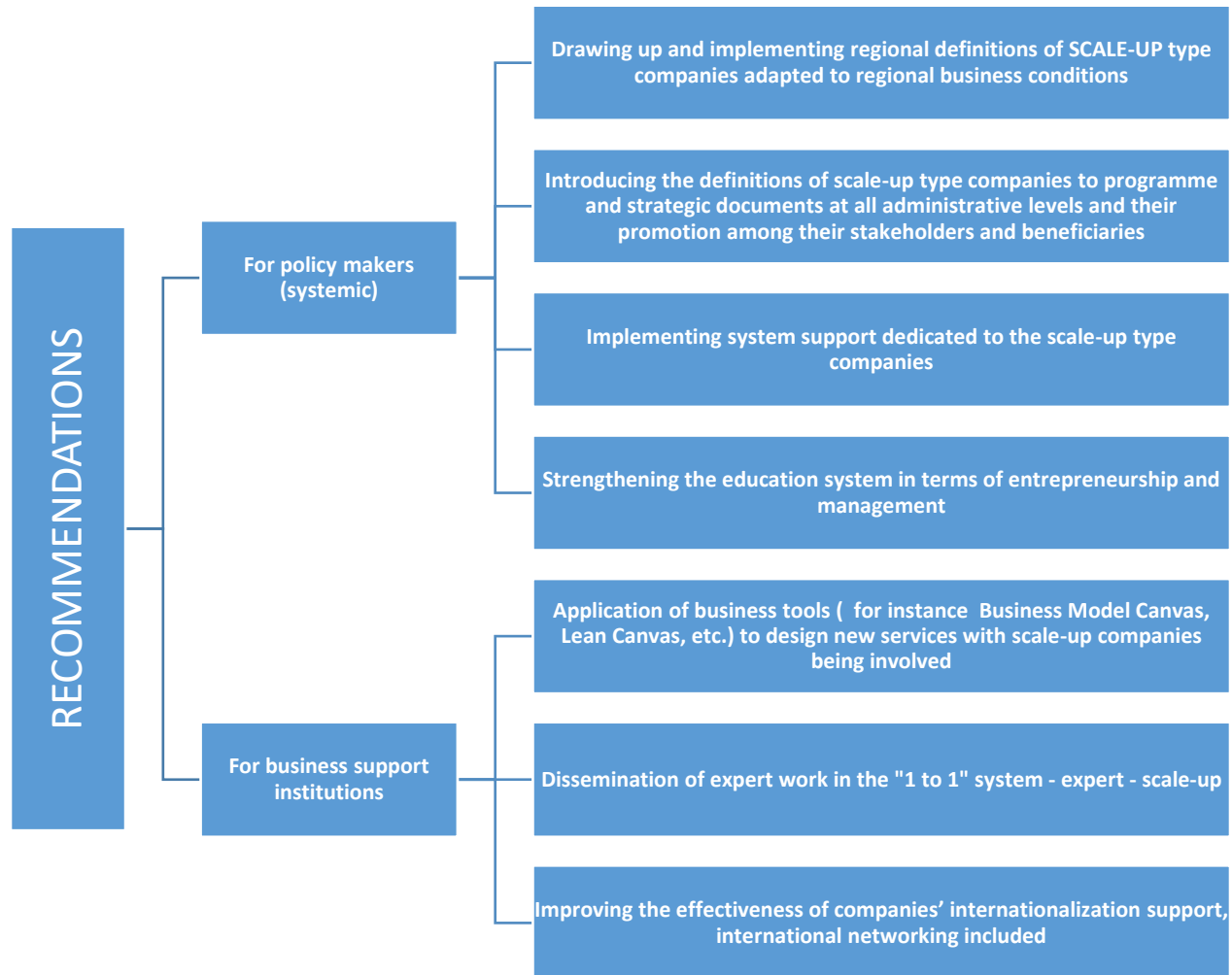
SCALESCRAPERS – SWOT	
STRENGTHS	WEAKNESSES
<p>Hungary: Crazy ideas - openminded companies and BEIs; Wide range of private funds; Developed hubs for startups Good flagship initiatives</p> <p>Slovenia: Existing ecosystem for entrepreneurship Big companies cooperate with small (via accelerators, private funds, open innovation) Financial possibilities Active Startup online community – promotion of good practices → that creates good climate for further development Startups develop their own R&D competences and teams</p> <p>Poland: Good network of business environment institutions</p>	<p>Hungary: Incubation – only money lack of services General lack of knowledge about scale-ups needs and expectations No mentoring services No specific knowledge</p> <p>Slovenia: Long procedures (especially risky for investors) Unstable support system Education system do not follow the specific needs Underdeveloped specialized services supporting development– high prices on the free market Weak linkages between academic sector and entrepreneurs</p> <p>Poland: Lack of constant cooperation between business environment institutions Weak startup ecosystem</p>
OPPORTUNITIES	THREATS
<p>Hungary: Export pressure Eu market&funds Market needs Good practices of partners</p> <p>Slovenia: Development of fablabs The education system is changing</p> <p>Poland: Western countries experiences Strong emphasis on internationalisation Funds for new services</p>	<p>Hungary: No scaleup ecosystem Missing internal policy integration Brain drain effect – best go abroad (entrepreneurs, HR) The gaps in education system</p> <p>Slovenia: Unfair tax law (high labour costs) Too slow changes in education system High labour costs</p> <p>Poland: Lack of scale-up policy Top-down decision making policy Mental barriers → resistance to growth Too many definitions (unclear situation) Unflexible approach</p>

Chapter 4. Recommendations

4.1. CHALLENGES



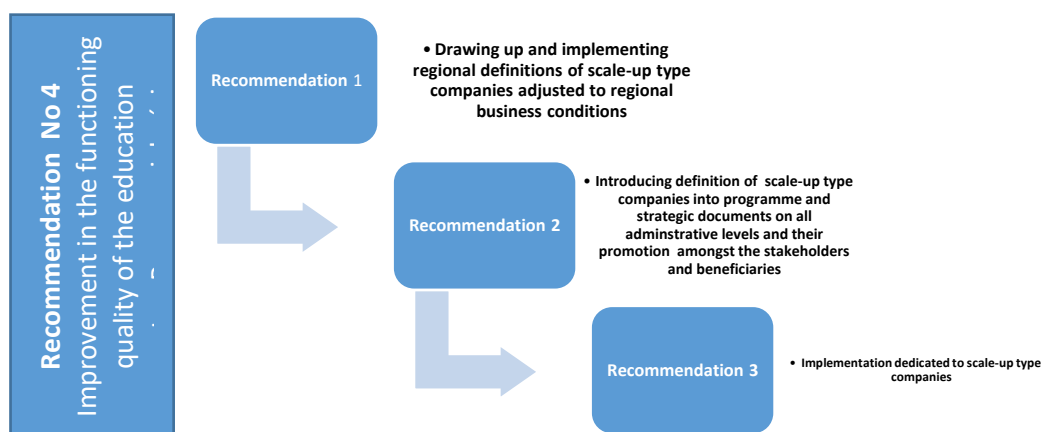
4.2. RECOMMEDATIONS



4.2.1. Systemic recommendations

The first group will be constituted by the so-called system recommendations referring to the innovation system of various levels in general. Such a division was decided upon as the support for the development of scale-up type companies depends on the one hand on the quality of functioning and competences of the entities with which they get in direct contact (for instance innovation agencies), and on the other hand it depends, to a large degree, on the functioning effectiveness of the entire system.

Suggested recommendations 1 - 3 below are of cascading nature. This means that the justification for the implementation of a subsequent recommendation will depend on the implementation of the higher-level recommendations. System recommendation No. 4 which refers to an increase in the efficiency of the education system in the scope of preparation for enterprise management is horizontal.



4.2.2 RECOMMENDATION 1 Drawing up and implementing regional definitions of SCALE-UP type companies adapted to regional business conditions

The recommendation is a response to the issue of the definition of scale-up companies not being adjusted to the regional realities.

Objective: Adjusting formal requirements imposed on developing companies that apply for support at the regional level which is dedicated to scale-ups to the realities of regional economies.

Justification: There are differences in the dynamics of economic development not only in the European Union, but even in the scale of individual states. A good example of such a situation is Poland, in which the difference of the real GDP *per capita* between the weakest and the strongest regions was over two times (2011 - Podkarpackie Province < PLN 30 000, Masovian Province > PLN 60 000). This phenomenon is all the more noticeable when we compare individual states, and in particular those that joined the EU before 2004 to those adhering after 2004. The different rate of economic growth will also result in other possibilities, the pace of development of companies included. For this reason, it seems

reasonable to derogate from the only definition suggested by the OECD and adapt it to the realities, corresponding to individual regions or states.

Suggested solution:

Regional and national definitions of scale-up companies shall have a common core, for instance; assume the company shall document a specific level of employment growth and/or revenues within a certain period of time. Other elements could be introduced into the definition at the same time, such as the number of commercialized products, external financing being acquired, e.t.c. At the same time, the individual elements of the definition shall be quantifiable and ultimately comparable.

The definitions shall be drawn up based on a thorough dissection of the SME sector data in individual regions. Such reports are regularly made as commissioned by regional and national authorities as well as European institutions. Relevant values of ratios shall be selected based on the analysis so as to ensure that a company could be defined as a scale-up in the regional terms.

[4.2.3 RECOMMENDATION 2](#) Introducing the definitions of scale-up type companies to programme and strategic documents at all administrative levels and their promotion among their stakeholders and beneficiaries.

The recommendation is a response to the failure to have unambiguous references to scale-up companies in programme and strategic documents at various administrative levels (national, regional and local).

Objective: To improve the access to external system support of scale-up companies.

Justification: The definition of scale-ups being introduced into programme and strategic documents is a subsequent step after drawing up regional definitions, to more effective support for enterprises included in this group.

Suggested solution: The work on the next budget of the European Union for 2021-2026, just beginning, shall be undoubtedly a convenient circumstance to introduce a definition of scale-ups into programme and strategic documents. This shall take place both at the national level but firstly, at the Community level, as this will contribute to the definition being implemented at the levels of state and regional documents. The subject related to scale-up companies shall be widely discussed by working groups and by entire bodies composed of decision-makers responsible for drawing up a new framework for the further functioning of the EU.

4.2.4 RECOMMENDATION 3: Implementing system support dedicated to the scale-up type companies

The recommendation constitutes a response to the issue of the lacking or insufficient support to companies that strive to achieve the scale-up phase.

Objective: Filling in the gap in the support system for the companies that have exited the startup phase and are in the growth phase.

Justification: This is the third step on the way to improve the efficiency of the support system for a scale-up company. As results from the research on the development needs of scale-up companies or those that have the potential to achieve such a stage of development which was carried out within the project, they are characterized by particular needs not reflected in the assistance suggested currently by the system. Presently, the system is constructed in such a way as to support the startups very strongly. This is a correct assumption, but we shall bear in mind the necessity to support companies at the stage of transition from the startup phase to the scale-up phase.

Suggested solution: One of the ways of dedicated grant support for scale-up companies would be to organize calls for proposals with schemes dedicated to such enterprises. They would assume the exclusion of a certain amount from the total allocation provided for the competition for the scale-ups to dispose of. Another option would be to assign additional points to scale-up companies when assessing applications.

In the case of refundable financing in form of loans or other instruments (for instance loan guaranties), scale-up companies could be offered preferential interest rates, of course, in line with general principles.

4.2.5. Recommendation 4. Strengthening the education system in terms of entrepreneurship and management

The recommendation constitutes a response to the issue of education system low efficiency, which brings about difficulties in effective management of the enterprise, which in turn has an impact on the reduction of their potential for growth and innovation.

Objective: To increase the level of entrepreneurs' general knowledge in terms of entrepreneurship and management, in particular of project management by an increase in the quality and efficiency of the education system.

Justification: The survey conducted among companies and the results of the SWOT analysis indicate that the actions in terms of entrepreneurship and management education undertaken within the framework of the innovation support system are a weak link in the chain of factors which affect the companies' effective development. In consequence, business owners perfectly prepared for the technological development of their products, have a difficulty in the management processes, which affects the general slowdown in their enterprise growth.

Suggested solution:

4.2.6 Summary of system recommendations

The above recommendations indicate the guidance for the improvement related to innovation support system actions focused on scale-up type companies. Recommendations 1-3 assume the use of practices common in the system, but referring to other types of entities. Definitions of small and medium-sized enterprises, startups or clusters entered into the programmes have been successfully functioning in the system for many years. Companies support instruments are also adapted to them.

The recommendation, regarding educational actions, as indicated at the beginning, is horizontal in terms of the entire enterprise sector. Management processes, whether on an enterprise-wide basis or in relation to specific projects, notwithstanding the type of enterprise (SMEs, startups, etc.) have many common features. That is why, any increase in the quality of education related to companies involved in the SCALESCRAPERS project will be beneficial for the entire SME sector.

4.3 For Business Environment Institutions

4.3.1 Application of business tools (for instance Business Model Canvas, Lean Canvas, etc.) to design new services with scale-up companies being involved

The recommendation is a response to the need to apply innovative business tools in the actions of business environment institutions (in relation to this sector) and the justified need to involve companies into designing of services and products offered by BEI.

Objective: To broaden the spectrum of methods used to design new services and to increase the level of beneficiaries being involved in the process of their generation.

Justification: Notwithstanding the fact that business environment institutions operate in the non-governmental organizations sector and quite often are non-profit organizations, they still remain business entities that require the use of appropriate management and development

tools. Management and development processes in business environment institutions take place in a way similar to analogous processes in enterprises and require a similar approach, involving the application of appropriate business tools, among other things, business modelling. Practical knowledge of processes and business tools, serving to implement them not only increase the probability of more dynamic development, but also make it easier to understand and satisfy the needs of enterprises to which services are provided. This seems to be of particular importance for a special needs group, to which scale-up companies are undoubtedly included, to get an effective response to the reported issues.

The understanding of the client seems to be of key importance to create appropriate forms of support. Practical knowledge tested on their own organization along with skills affect obviously the ability to read the demands. However, nothing can replace the direct contact with the client to include them in the process of designing the products and services whose beneficiary they are to be ultimately. That is why it is so important to invite entrepreneurs to cooperate already at the stage of services designing, and not only at the stage of testing solutions at a given stage of their development.

Suggested solution: There is a whole range of tools that can be applied to both enterprises as well as business environment institutions to innovative activities and everyday operations. Entities successful on the market use various business support tools tailored to their demand. Among them, the following can be mentioned:

- marketing tools (for instance Ansoff matrix, portfolio analysis, product life cycle analysis),
- financial tools (DCF, NPV, sensitivity analysis),
- engineering tools (QFD method, FMEA analysis, Taguchi method).

While discussing this issue, the increasingly popular business modelling tools shall not be overlooked, which on the one hand serve to plan the development of innovative⁷ products and services, but also to verify the effectiveness of the hitherto actions either of the company or of business environment institutions.

It was on this recent group of tools that it was decided to focus because of the uncomplicated methodology of their use and the ability to test it quickly as a key element of the recommendation.

⁷ The scale of this innovativeness may be varied: at the level of the company, region, state, the world

Two of currently popular modelling tools attract particular attention: Business Model Canvas (BMC) and Lean Canvas (LC). Both tools are similar to each other (LC was developed based on BMC), although they emphasize slightly different aspects in the processes of designing and verifying the effectiveness of undertaken actions. The first of them can be used both to design new products and services, as well as to verify the effectiveness of current model of business environment institutions or enterprise functioning. LC, in turn, is a methodology of work on completely new ideas for a given entity deeply rooted in the start-up sector.

Key partners (BMC)	Key actions (BMC)	Value suggestions (BMC and LC)	Relations with clients (BMC)	Clients (LC,BMC), in case of LC additionally so-called early market
	Solution (LC)		Unfair prevalence (BMC)	
Problems and current solutions (LC)	Key resources (BMC)		Channels (BMC, LC)	
	Key ratios (LC)			
Costs structure (BMC, LC)		Revenue streams (BMC, LC)		

Business modelling with the use of the above methods also makes it possible to incorporate easily partners into the process of the current state analyzing, as well as designing new products and services.

Necessary resources and estimated costs to implement recommendations:

The key asset to put into life this recommendation will be human resources with skills in using business modelling tools to work with scale-up companies. Due to the fact that work with the use of BMC or LC requires a direct contact with entrepreneurs, the consultant shall have both appropriate professional qualifications, as well as, relevant personality features and adequate skills.

BMC / LC Consultant	
Professional qualifications	Personal features and skills
Experience in direct contacts with clients	Listening and observing skills
Experience in business negotiations, with enterprises management included	Open questions asking skill
Knowledge on business modelling	Communicating skill also in informal relations
Knowledge of the specificity of scale-up type company group	Workshop working skill, with quick arriving at conclusions and work under time pressure

The basic training that a BMC / LC consultant needs to undergo starts from the amount of around Euro100. If a given entity uses in its daily practice the BMC / LC method and would like to take advantage of on-line toolkits provided by the authors of methodologies, then, the appropriate subscription shall be added to the costs. An annual subscription of the strategyzer.com service, which offers the opportunity to work online with BMC, is currently approx. Euro 250. To practise BMC, it does not require the use of solutions against consideration, as the necessary templates are available free of charge on the Internet.

Recommendations testing:

It is recommended to use both solutions in everyday practice, depending on the needs, however, due to the more universal nature of the Business Model Canvas analysis, it is what has been chosen to test the recommendations.

The justification of the said recommendation was tested at the meeting in Szekesfehervar in Hungary, which was held between 5th and 6th March 2018.

Representatives of local enterprises, which can be classified as scale-up companies took part in the test, as well as, those sent by partners present at the meeting.

List of companies that took part in the test:

1. Locbee Ltd.
2. Enitlab Ltd.
4. Magnet Bank Corporation
5. Konnektor Coworking Office

The test consisted in filling in the BMC table and thus contributed to become familiar with their opinions on:

- suggestions of key values for them,
- channels effective from their point of view to deliver value suggestions and the way to build relationships,
- key partners who, according to entrepreneurs, shall be involved in the process of procuring and delivering value suggestions,
- the most important resources that shall belong to business environment institutions and key actions that shall be undertaken so that the value propositions effectively meet the needs of entrepreneurs,
- cost structure and income streams generated as a result of actions taken by BEI.

The knowledge of the test participants about the BMC tool was differentiated, but it was rather of a theoretical nature.

Participants were divided into three groups. At least one representative, representing the Partner was assigned to each group. The groups worked on subsequent fields. After a given field was filled in, the suggested contents were presented, and were entered into the model, taking into account the results of all groups' work. Working time on individual fields was determined and controlled by the moderator.

Conclusions:

1. Both the methodology of work suggested to entrepreneurs and their involvement in the process of value suggestions generating for the business environment institutions caused great interest.
2. Owing to the exchange of ideas on particular fields, the BEI (Project Partners) representatives gained knowledge on the actual expectations of entrepreneurs, but also on the ways of reaching entrepreneurs and maintaining lasting relationships with them as effective manners of acting. The information on key partners who, in the opinion of entrepreneurs representing scale-up companies, shall be involved in the process of providing services by BEI was also very valuable. Owing to this, it will be possible to build an effective network of partners.

Added value:

In particular, for entrepreneurs who did not know the Business Model Canvas method, added value means the knowledge acquired on an effective and simple tool that facilitates a quick and smooth designing of products and services. One of the Partners in the discussion to summarize the test shared the following story with the others:

When being presented the methodology of work by the moderator, the representatives of the company, showed a rather sceptical approach to the tool itself. The tool seemed rather not clear to them and they were not able to see how it could support the process of designing or verifying the current assumptions of the business model. The workshop being completed, they stated that the BMC modelling methodology is a very interesting tool which they will use in their business, if possible.

4.3.2. Dissemination of expert work in the "1 to 1" system - expert - scale-up

The recommendation is a response to the issue of insufficient intensity of expert service to scale-up companies.

Objective: To improve the quality of substantive support to scale-up companies through the dissemination of dedicated expert and mentoring support provided by business environment institutions and other specialized entities.

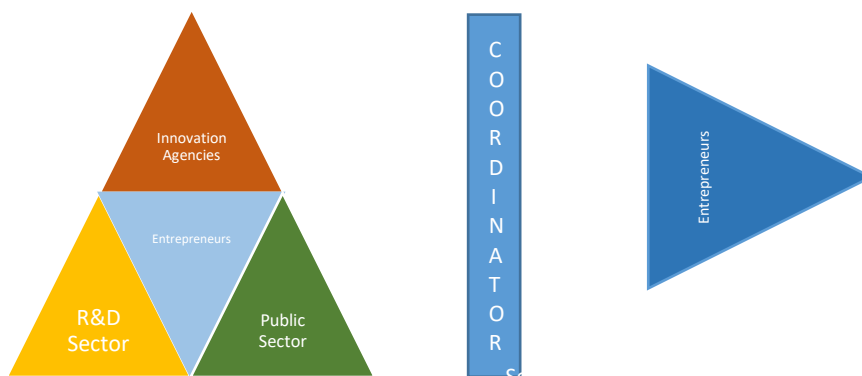
Justification: Among the most frequently cited expectations of scale-up companies, which were indicated in the research carried out within the project (task ST2), there were:

- internationalization support (9 indications), covering also expert support (for instance legal), apart from the issue of financial support,
- networking (9 indications) – to build a sales network, to exchange experience, to make a cooperation network,
- general organizational support (6 indications) – to increase the company’s efficiency through consulting and assistance in such areas as taxes, finances, sales, marketing, law, employing new hires, etc.
- product development support (5 indications) - assistance in executing and/or involvement in specific works and processes aimed at improving the offered goods and services (including, for example, prototyping),
- mentoring (4 indications) – to find/provide a mentor who, based on their own business experience, will assist the company to develop it properly.

Ensuring high-quality support in relation to the above areas, as well as, others that emerged as a result of the research (for instance; assistance in issues related to intellectual property rights), in the opinion of consortium members, requires the provision by the BEI of personalized expert guidance. This does not mean, however, that all competencies needed by the external entrepreneur shall be stored in the resources of the business environment institutions. To provide a scale-up company its dedicated guardian seems a sufficient solution. Their task would consist in trying to understand thoroughly the enterprise’s needs and matching the appropriate support, with the use of the business environment institutions resources or external experts, if needed.

Suggested solution: The suggested solution corresponds with the idea suggested within the “Young and Innovative” project, which assumed the establishment of cooperation coordinators in business environment institutions, who could act at the interface of enterprises (in this case; young entrepreneurs) and innovation support system. The employee of the BEI dedicated to a scale-up company on the one hand would also act as a coordinator of cooperation, advising which services and of which entity shall be used.

Pic. Cooperation model



Source: Design Option Paper – Young and Innovative

Partners of Scalescrapers Project richer owing to new experience would like to make this cooperation model more precise in terms of scale-up type companies by granting it a specific structure presented in the table below.

STEP	DESCRIPTION OF OPERATION	EVALUATION OF TIME
STEP 1: Diagnosing a firm's needs	In-depth one- or two-stage interview - if the company has already had a structured team, divided, for instance task-oriented one, then it could be practicable to make an interview with both the management staff (stage I) and employees (stage II). Such an approach would allow not only to become familiar with the company's needs, but will also provide to the management the information on the views of the personnel on the functioning of the company. Stage II of the study would have to be carried out under appropriate procedures that would ensure an adequate level of anonymity to the employees so that they could freely express themselves on their own needs.	1 day (8h)
	Coming to the company so as to study production processes or services being provided	2-3 days (16-24 h)
	Analysis of the company's documents, financial data included, if possible	1-2 days (8-16 h)
STEP 2: Action plan	As a result of the analyzes carried out, the company would be provided with a document, containing a summary of the data acquired and actions recommended	2-3 days (16-24 h)

	to be taken. Recommendations shall contain not only information on what shall be done (as to merits), but also who can support the company in a given action, if the external assistance were needed.	
STEP 3: Implementing recommendations contained in the action plan	Acceptance of the action plan would mean that an employee of a given business environment institution will be involved in the implementation of all or some recommendations selected by the entrepreneur. Some tasks could be carried out directly by the business environment institution, but when justified also by external experts. However, the BEI employee shall be involved in the whole process in order to acquire new knowledge and broaden their qualifications. The length of the implementation period of this step shall be adapted to the realities, resulting from the action plan. Whenever possible, the implementation shall be cumulative, but at the same time, if necessary, appropriately extended in time.	min. 5 days (min. 40 h)
STEP 4: Sustaining the contact with the firm	Periodical contacts with the company to monitor the current business and support in case new needs occur.	-

Necessary resources and estimated costs of recommendation implementation:

STEP	NECESSARY RESOURCES/QUALIFICATIONS	TIME-COST EVALUATION
STEP 1: Diagnosis of company needs	<p>BEI employee</p> <p><u>Qualifications:</u></p> <ul style="list-style-type: none"> • Experienced at work with clients • Experienced at negotiating with company management staff • Knowledge of enterprises financial documents • General knowledge of the specificity of scale-up type companies <p><u>Skills:</u></p> <ul style="list-style-type: none"> • Listening and observing skills • Open questions asking skills • Cause and effect relationship noticing along with coming to conclusions. 	<p>Costs of BEI employee depend upon rates of a given BEI and those of an expert depend upon the branch specificity</p>
STEP 2: Action plan	<p>BEI employee</p> <p><u>Qualifications as above:</u></p>	
STEP 3: implementation of recommendations included in the action plan	<p>BEI employee (qualifications as above) and an option of external expert (qualifications in compliance with demand).</p> <p>Tools necessary to implement the recommendations depending what is needed.</p>	
STEP 4: Sustaining the contact with the firm	<p>BEI employee (qualifications as above)</p>	

The above model of cooperation

4.3.3. Improving the effectiveness of companies' internationalization support, international networking included.

Objective: To facilitate scale-up companies their international expansion by using the existing support instruments and creating new ones.

Justification: Support for business internationalization was the main area where scale-ups expect support from business environment institutions, specialized innovation agencies included. This is particularly important in smaller states, such as Slovenia, due to insufficient demand from the internal market. However, it shall be borne in mind that in the larger states also, the demand from the external market is limited and over time, particularly in the case of dynamically developing companies, restraining to the domestic market will be a growth limiting factor.

Suggested solution: The main assumption of the business internationalization process is the sale of offered goods and services outside the country of origin. For this purpose, it is necessary to find contractors, willing to take advantage of the suggested offer on the target market. However, the business internationalization must progress in a safe manner, not threatening the company which plans its expansion. For this reason, the company must, on the one hand, learn the legal and formal conditions for entering a given market, on the other hand, it is also necessary to acquire knowledge on socio-cultural conditions.

Scale-up type companies shall be offered services that could prepare them for a safe launching into foreign markets (training, mentoring, expert services). At the same time, scale-ups must be supported in direct contact with potential contractors. In their internal resources, the innovation agencies may not have appropriate competences to provide comprehensive services to scale-up companies. Therefore, each entity of this type shall establish cooperation with entities specializing in supporting internationalization for providing effective services for scale-ups. The Enterprise Europe Network managed by the European Commission may be undoubtedly a partner for BEI in this field. The offices of the network are primarily responsible for the implementation of pro-export actions, but also for supporting and popularizing the innovative approach.

Owing to the cooperation with the Enterprise Europe Network, the innovation agencies, and then scale-ups gain access to:

- specialized training in business internationalization, covering both legal and socio-cultural issues,

- consultancy in the field of intellectual property rights, CE certification, tax obligations in the target states, etc,
- pro-innovative consultancy services that can help in assessing whether the product is ready for sale abroad,
- brokerage events (cooperative exchanges) organized during key trade and exhibition events and at trade missions,
- international cooperation bases in which entrepreneurs can present their own offer or use it to search for potential contractors or suppliers of technologies, products and services.

The innovation agencies shall not be limited to the cooperation with the Enterprise Europe Network. National initiatives (for instance government export agencies) or structures, operating at the level of individual regions (for instance regional development agencies) shall not be omitted, either.

Necessary resources and estimated costs of implementing the recommendation:

If the innovation agency does not have in its own resources the competence to provide services to support internationalization, then, it shall prepare at least one person who would be the beneficiary's (in this case, scale-up companies') intermediary to act with the relevant entity.

In the case, the agency has an internationalization office in the structure, then, the costs of services will coincide with the costs of employees employed at relevant positions.

Chapter 5. Conclusions from the in-depth analysis of recommendations

The fact that Scale Up companies are an important contributors to job creation and contributors to economical growth is increasing importance and awareness among experts, support organisations and policy makers. The contributions Scale Up companies provide is significant, which brings the relevance of supporting these companies for further expansion and growth even more important. However, the focus and emphasis of individual economies is still predominantly focused in creating supportive environment for start up companies, also suggested by Svein Berh, CEO of Nordic Innovation; 'I think it is a paradox that despite of this, the overall focus is still on startups. The real superheroes are the scale-ups.

Below recommendations that emerged from working group meetings and discussions have been reviewed, in-depth studied and critically assessed if these are viable solutions. This short revision contains general comments, based on secondary research online and additional discussions with key experts at Slovenian startup event- PODIM conference.

Recommendation: Development and implementation of regional definitions of SCALE-UP companies adapted to regional economic conditions

ScaleUp companies are enterprises that are expanding and growing, however its definition varies, with still loose definition and criteria of these types of enterprises; *'We define a scaleup as a development-stage business, specific to high-technology markets, that is looking to grow in terms of market access, revenues, and number of employees, adding value by identifying and realizing win-win opportunities for collaboration with established companies.'* (Onetti, 2014).

Perhaps the most common and often cited definition of Scale Ups is referred to OECD (2008), defining Scale Ups as *'an enterprise with average annualized growth (in number of employees or turnover) greater than 20% per annum, over a three year period, with a minimum of 10 employees at the beginning of the growth period'* (OECD, 2008).

In Slovenia, we have approximately 200 enterprises, corresponding this criteria, and find it difficult to design a joint/common or 'fit them all' offer to support these enterprises. BSO organisations play a relevant role in this field, not necessarily having capacity to offer direct investment or expert support, but with awareness, and access to information as well as networks, builds programmes for encouragement of network development. Recent community development by Technology Park Ljubljana Ltd is an example of community building, where Scale Up companies connect and share valuable experience and advice on future business development. This community building programme has been launched only recently, however with positive feedbacks and viable ideas for further support and development. This community building needs a great effort, and is hard to measure its success, but definitely contributes to strengthening business ties.

Common issue is in the definition of Scale Up companies and the synchronised criteria for Scale Up companies.

Therefore it is first and foremost important to establish a set of criteria and create a common definition, at least on a national level, as a basis for efficient identification of Scale Up companies across all regions, research their needs, and design supportive services as well as funding resources, corresponding to the actual need of the company.

For e.g. discussions with key actors of Slovenian ecosystem at PODIM conference in May 2018 (PODIM is one of the largest regional ecosystem conferences, connecting more than 800 brilliant startups, investors and corporos with global leaders and investors), VC capital in Slovenia is relatively available for startup companies (investment up to €200K) or large organisations (€2m onwards), while financial support for scaling up companies lacks its shape and availability. According to Aleš Putsovrh, from ABC Accelerator Slovenia, Slovenia has a well developed ecosystem, especially for startup companies. The issue is in availability of so called 'smart money', investment and resources from Business Angels and VC, resources, predominantly available overseas (Manager, issue May 2018).

First step would therefore be – to create a standardized set of criteria on a national level and promote this nationally. This can be done on a basis of an extensive SME research (qual and quant).

It would also be useful to create a proposal or Manifesto document for policy makers, where Scale Up companies would be better defined, together with market assessment, industry and their needs for future development. Creating a joint definition and a better understanding of fast growing companies environment, would help align or even standardize basic criteria on which Scale Up companies could be efficiently out on national and global maps.

Recommendation: Introduction of definitions of scale-up companies to program and strategic documents at all administrative levels and their promotion level among their promotion among stakeholders and beneficiaries.

As stated in the document, there is an opportunity with the new EU budget 2021-2026, to focus the discussions, actions and research more towards Scale Up companies. It is essential to identify topics, relevant for Scale Up companies, and to include and promote these into future national and international documents, strategies and action plans as to prevent missing the opportunities to develop and implement well needed supportive programmes for fast growing companies.

It is important to increase awareness, as well as notion of needs of these companies, not only to develop programmes and support, but also to include these companies on lists, to develop policies, that will then shape the future possibilities, and to avoid missing future opportunities.

Suggested solution- taking an opportunity of EU budget for the next period, seems a good start and chance to start designing and implementing actions and tools that will help introduce a definition of scale up companies at the national and international level, and to ensure integration of these

companies into EU strategic documents. As stated before, a proposal for Manifesto document could be a good start to kick off concrete actions on a national level. Additionally, active involvement of BSO organisations – as representatives of entrepreneurial ecosystem, would be beneficial to get actual feedback on SME needs. BSO organisations can act as the ‘voice of the enterprises’ and have a direct link to them.

Recommendation: Implementation of system support dedicated to companies of the Scale – Up type

As previously indicated, one of the main issues in lack of support for Scale Up companies is in lack of clarity in definition of ScaleUp companies. Consequently, Scale Up companies are hard to identify and map, hence approach them.

On the other hand, Scale Up companies do not necessarily know where to look for support and help when expanding their services. They are not aware of the institutions, as well as instruments, which would allow them to look for ways to implement actions and propose solutions.

Beside suggested solutions, it would be essential to execute research on a national and international level and identify companies, identify their needs and then design services that would offer efficient support. One of the approaches would be to better engage wider ecosystem in implementation of a system support for Scale Up companies.

According to World Economic Forum, engaging key actors from the entrepreneurship ecosystem can systematically train stakeholder on how to invest and who to support. To illustrate, Manizales Model, developed by Babson College, USA (and also used and taught at Harvard and Babson College), implemented a training for bankers to understand entrepreneurs – and then implement training programmes on how to be bankable, which resulted in new financing opportunities that improve banks’ loan portfolios.

BSO institutions, as intermediary organisations, hence integral part of ecosystem, should take an active part in this process, together with stakeholders, entrepreneurs and other key national institutions.

Suggested solution, to implement calls seems a reasonable starting approach to tackle this issue.

Recommendation: Strengthening the education system in the field of entrepreneurship and management

A lot has been discussed and researched in terms of entrepreneurial and management modules implementation to the school system recently. Most common observation refers to entrepreneurs having technical knowledge and expertise, however lack of commercial- managerial and entrepreneurial skills are emerging from all researches and indicate one of the main weaknesses across different regions.

Research suggest a trend in establishing businesses at the earlier stage, especially among younger population, rather than looking for employment opportunities in the existing companies. The level of

technically educated youngsters is relatively high in EU, however lacking managerial skills. Integration of entrepreneurial modules at earlier stages of education is a directive, supported by EU and is expected to be rapidly implemented in school system through years.

However this transformation is harder to achieve, since changes are needed on a national policy level, to revolutionise educational system.

According to Scaleup Europe Manifesto (2016), EU educational system struggle to prepare youngsters with skills they need to succeed. It has been pinpointed that students should be encouraged to start learning entrepreneurship skills at the young age, as establishing a business will become a narrative in the future. As implementation of changes in educational system at the national level can be challenging, since impacting Policy makers, an establishment of programmes, optional courses could be one of the efficient approaches to improve this gap.

Improvements in entrepreneurial skills development can be implemented with a couple of actions (Scale Up Manifesto, 2016):

- Introduction of (optional) modules in secondary schools
- Encouragement of entrepreneurial exchange programmes, such as Erasmus for Entrepreneurs
- Ongoing learning (for all, entrepreneurs, students and teachers), such as open source learning courses (MOOC, Coursera, etc.)
- Implication and promotion of apprentice and work placement programmes in Scale Up companies
- Competence centres and incentives
- Living/Fab Lab networks which could contribute to sharing practices and competences among regional communities; as such labs are usually supported and promoted by (regional) industry leaders (e.g. from Slovenia: Kolektor, Devesoft) or Academia (e.g. makerlab at UL Faculty of Electrotechnics)

At this point, it is also important to note that simply pressuring on changes in educational national system is not necessarily the best and most efficient approach to make a shift and improvements in skills development. First, it is not easy to change national policies and almost revolutionise school system. And second, according to Deloitte research (2015), a true success of Scale Up companies lies in a right combination of knowledge, practical expertise and ongoing shaping of personal competences and skills entrepreneurs gain through doing business. Inclusion of courses, workshops and networks of companies to share their experience and expertise is an idea that could ensure smooth shift in improving entrepreneurial skills, applicable and needed when leading fast growing SMEs.

Recommendation: The use of business tools (e.g. Business Model Canvas, Lean Canvas etc.) in the process of designing new services with the involvement of scale up companies.

The use of business model approach has been widely used in practice by enterprises, but is not that common in BEI organisations. But BEI organisations also need to start using these models, in order to understand market needs.

At this stage, an active collaboration between enterprises and BEI organisations could help BEI organisations learn from entrepreneurs, to better understand their needs and shape supportive tools for efficient supportive programme. Inclusion of BEI organisations in the process of building a business model, thus at the early stage, helps them to learn and familiarize with the needs and resources of SMEs. Entrepreneurs would have a chance to better learn and understand resources available as well as feedback on future growth possibilities.

The use of business tools- Canvas, as proposed, seems viable solution, as it provides a matrix for nine basic 'building blocks' (customer segments, value proposition, channels, customer relationships, revenue streams, key resources, key activities, key partnerships and cost structure), and enables a systematic approach in building a (sustainable) business model, as a guide in business idea development.

Furthermore, we have witnessed a trend supporting Scaling up companies in servitisation, where tools, as mentioned above, are being rapidly used and implemented to support service development for SMEs.

In everyday practice, it is recommended to use both solutions depending on the needs, however, due to the more universal nature of the Business Model Canvas analysis, it has been chosen for the testing process of recommendations.

Recommendation: Dissemination of expert work in the '1 in 1' system – expert- scaleup

Individual, specialised and expert opinion is a support entrepreneurs for Scale up companies need the most, when thinking about expansion and further development. As oppose to startups, Scale Up entrepreneurs need more specific advice, preferably from an executive who operates in the same field or has faced similar challenges in the past. Support or collaboration is rather Peer to Peer, not mentoring as in earlier stages of company development. The challenge arises on - where to find these experts, and which experts are actually needed.

BSO organisations could have a significant role, mostly by linking entrepreneurs with relevant experts; employees at BSO organisations do not necessarily have to have an industry specific knowledge, but do act as intermediaries between entrepreneurs and valuable experts or to link them to the organisations, offering adequate support.

For instance, World Economic Forum research (2014) demonstrated an example on how to ensure senior executive support for external collaborators. BT/Single Point. BT uses multiple mechanisms to ensure collaboration with SMEs, and created scouting teams in Silicon Valley and Israel, led by Senior

Executive with enough credibility to champion cases. Secondly, BT involves Senior Executives at the very beginning of collaboration process, by organising meetings, etc. This helps Senior Executives to better understand needs of SMEs and their expectations from partnerships.

Recommendation: Improving the effectiveness of internationalisation support for companies, including cross border networking

Lack of support in internationalisation is one of the key issues, often raised by entrepreneurs when planning business growth and expansion. Entrepreneurs lack information and key contact points in countries across border. They need more concrete contacts and access to networks to establish future collaboration and/or investment capital. Need to source direct links and contacts with companies, support organisations or individuals in international environment.

Establishment of specialised innovation agencies, as proposed in the document, is therefore a logical option to encourage and set up efficient networking system to link companies with relevant actors at the international level. These innovation agencies could act as independent organisations, or be a part of BSO organisations (e.g. specialised departments, as key contact points for internationalisation).

Furthermore, the revision of Small Business Act (SBU) (2011), launched by EU, prepared EU Commission to further investigate new forms of cooperation between companies. The idea is to establish a coherent approach an 'inter firm collaboration', between companies internationally, to join forces towards common goals, but without losing independence. Therefore, forming international networks in Clusters or Hubs could also be one of the approaches, to efficiently link companies on the international level, and enable direct communication. One of the advantages of business clusters is a strong network with an easy access to information, and external economies of scale (Porter, 1990).

Even more, other forms of hubs- so called 'impact hubs' started emerging in the past years, and present another for of global, and efficient hubs for a collaboration on a global scale.

For example, *Impacthub.net* is the worlds largest networks of entrepreneurial communities, connecting 5 continents and currently has 17k active members, run by local entrepreneurs and backed by investors and charities. Hubs are shaped in a form of coworking spaces, community centres and business incubators. One of the biggest advantage is in its expansion and global presence. Its business model is based on self-generating community, with the main aim to create opportunities for the global ecosystem development.

Chapter 6. Final conclusions and further steps

One of the goals of „SCALESCRAPERS” was to rise the knowledge level of each 5 Partners through the exchange of experience in the peer learning meetings and remote contacts. The inventory provided at the beginning of the project followed by survey on scale-ups needs allowed the consortium members to look at their own offer and the offer of whole scale-up support system from the new point of view. In-depth studies on developed recommendations and provided tests have additionally enlarged their knowledge concerning the scale-up support system and needs of this particular group of entrepreneurs. It has given the opportunity to find similarities but what is even more important differences. These similarities and contrasts between Partners’ experiences in the field of supporting scale-ups led to the development of above recommendations in final shape.

The next step on the way to improve the scale-up support system in the states and regions of Partners’ origin in the first line but next also in the third parties countries is the dissemination of the project results. Due to this The DOP, as it was assumed at the very beginning, will be disseminated among different institutions which support the innovativeness of young entrepreneurs. However the key issue is to implement the recommendations and not only to disseminate them within the group of stakeholders. Therefore each of five Partners will go to great lengths in order to implement suggested solutions.

It needs to be emphasized that in the field of systemic recommendations the consortium Partners can commit that every needed steps will be undertaken to deliver them to innovation policy makers who are empowered to appeal to the whole innovation system. Another possible action is to promote the recommendations among stakeholders by talking about them during different meetings and other events.

The situation is completely different if we consider the recommendations for specialized business environment institutions. They have been developed through the analysis of services delivered by the consortium Partners and real needs of the scale-ups. Their aim is to improve the quality of Partners’ services. Therefore in the next step after the termination of the project Partners are going to have a try to implement the recommendations and test them on the group of young entrepreneurs.

It needs to be emphasized that all Partners while delivering services for different than pointed in the project audience groups use solutions similar to those which are described in the recommendations.

Torun Regional Development Agency & Bydgoszcz Regional Development Agency

In case of both Partners from Poland selected recommendations already have been integrated or will be integrated. For instance in case of TRDA Lean Canvas methodology has been used to design new way of cooperation with the companies interested in getting support in the field of

internationalization. In case of both organizations one on one expert approach has been provided. Moreover in a couple of months time both entities which are partners of the project co-financed with the funds from regional operational programme will provide financial and expert support for entrepreneurs interested in international expansion.

Further steps will be undertaken in the near future.

Central Transdanubian Innovation Agency

Our newly developed non-profit services are closely related to scaleup and startup companies, with direct integration of Scalescraper results. Namely, the youth exchange, R&D validation and organizational development support is partly built on the Scalescraper's results. Additionally the recommendations are capitalized and started to be used in our Alba Accelerator Mentoring Programme, especially from the side of business planning, financial assistance and policy integration. Finally, the practical tests and survey done help us to offer flexible and tailor-made services for our scaleup customers.

Technology Park of Ljubljana and IRP Institute

Based on the experience and results of interviews with scaleup companies, we have designed a set of products and programs that will provide support to this target group. Existing programs have been updated and upgraded, based on information's received from the scaleup companies, so that key programs such as Go Global Slovenia are more adapted to the scaleups. At the same time, we have designed and launched a new program that will allow companies to access financial resources in the field of block-chain technologies or acquire funds from the ICO. In May, we started with a pilot project within which 10 Slovenian scaleup companies participate. The results from the Scalescrapers project were the basis for the implementation of the aforementioned upgrades and new programs.

Due to the fact that the recommendations are based on the solutions verified by the Partners or other entities their further deployment should end successfully. In the opinion of DOP's authors this is the only way, that is by showing the real effectiveness of recommendations, to rise the probability of effective dissemination and exploitation among other stakeholders.

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