

CHAIN REACTIONS

THEMATIC BRIEF ICT AND ELECTRONICS SECTOR

Networking and boosting the development of new
software ideas in Croatia

&

Innovation development of ICT in Slovakia

MARCH 2022





ABOUT INNOVATION BRIEFS

CHAIN REACTIONS addresses the challenge for industrial regions to increase regional capacity to absorb new knowledge and turn it into competitiveness edge and business value. There is a strong need to help SMEs to overcome capacity shortages for innovation and integration into transnational value chains.

The project aims at empowering regional ecosystems with the knowledge and tools to help businesses overcome those barriers and generate sustained growth through value chain innovation.

CHAIN REACTIONS focuses thereby on modern approaches considering value chains and their complex developments rather than linear technology transfer approaches. The framework of value chain innovation builds on Porter's 5 forces framework (new entrants, substitutes, customers, suppliers and rivalry) and transversal innovation drivers: key enabling technologies, resource efficiency, digital transformation and service innovation.

During the project lifetime CHAIN REACTIONS published about every third month an INNOVATION BRIEF presenting the rationale behind specific innovation drivers and illustrate them with practical examples.

This thematic brief focuses on the pilot activities performed by the project partners in the area of ICT and electronics sector.

Transnational pilot - ICT and electronics

Executive summary

Croatian Chamber of Economy (CCE-ZCC) and Košice IT Valley (KEITVA) saw the opportunity to support innovation and knowledge transfer in local SMEs through the CHAIN REACTIONS project with defined and structured innovation strategies. The need for innovative ideas must not be seen as an isolated problem. That is why CCE-ZCC and KEITVA were thrilled to participate in this project.

Networking and boosting the development of new software ideas in Croatia

The aim of the CCE-ZCC's pilot was to encourage innovation, find new software solutions and business partners, transnational and cross-sectoral cooperation and transfer of knowledge and experience. CCE-ZCC intended to achieve this through the involvement of various stakeholders in meetings, trainings, workshops, hackathon and matchmaking event. Within the pilot, 12 software solutions were developed in the field of advanced manufacturing and energy and environment, and through various events participated a large number of different stakeholders, from regional authorities, scientific and research community, universities, public companies, business support organizations, development agencies, clusters and of course SMEs.

Innovation development of ICT in Slovakia

KEITVA's pilot activities focus on How to bring new innovative perspectives at IT sectors to our region? How to change the current crisis into new possibilities for our area? KEITVA established a Digital autumn platform, so the SMEs and municipality educational institutions can showcase their innovative activities. The goal of the pilot activity is to deepen the dialogue between academia, business, and public sectors and boost the delivery of new business ideas. Due to the pandemic lasting in the past two years and due to the problematic time management of the original pilot idea, KEITVA had to change the pilot action from building the test room for the local hospital to creating the concept of IT segment development in Košice, which in the long term could be more beneficial for the further development of the sector and Kosice region.

CCE-ZCC and KEITVA believe that their pilots provided the participants with new valuable experience, knowledge transfer opportunities, encouraged innovative thinking, and as the ultimate goal contributed to the



development of new products/services and future business cooperation. The satisfaction of working with CHAIN REACTIONS project partners and other involved stakeholders was significant. Related to that, there is hope for continued business cooperation.

Conclusions and lessons learned

Through pilot activities, and in general through the CHAIN REACTIONS project, CCE-ZCC and KEITVA have benefited a lot. Pilots on the one hand have enabled IT actors, who are mostly SMEs, to focus on the research and innovation process, which has led to the development of 12 valuable software solutions, and on the other hand, the establishment of a platform for innovative business models and activities called Digital Autumn. The platform enables SMEs and municipal educational institutions to showcase their innovative activities. In addition, the IT segment development document was created to perform a comprehensive analysis and subsequent design of the concept of development of Košice through the IT sector using the tax policy of the Slovak Republic. These pilots' outputs remain for the future. Also, through workshops and a matchmaking event, contacts were made, which will hopefully result in future business cooperation.

It was realized that the process of fostering innovation is complex and time-consuming, and needs to be worked on constantly.

It is very important to have reliable and professional partners in such projects, which is the case of CHAIN REACTIONS. The cooperation of duo partners in the ICT sector, i.e. CCE-ZCC and KEITVA, was nice example of this. The communication has always been prompt and goal-oriented, all for the purpose of the best possible implementation of the assigned activities. Also, the other project partners involved in pilot activities have always been ready for transnational and cross-sectoral cooperation.

Due to the COVID-19 pandemic, the time frame of the pilot activities has been changed and previously scheduled events were postponed on several occasions. Based on unforeseen situations and the associated several delays, it has been realized that it is important to be flexible and to adapt to the new conditions.

When it comes to sustainability, project partners' collaboration will not stop here. CCE-ZCC and KEITVA together with RDA Pilsen agreed to implement innovative activities after the formal completion of the project.

Activities to be carried out in the next few years:

- Trainings and seminars to encourage women in IT at the transnational level in Croatia, Slovakia and the Czech Republic;
- A series of networking events to help developed the transnational and cross-sectoral relationships between Slovakia, Croatia and the Czech Republic;
- Extension of virtual democentre, a web based platform for sharing the good practice examples of solutions for advanced manufacturing, developed by the RDA. Croatian and Slovak IT companies will be invited to share their innovative software solutions on the platform with the aim to enrich its content.

As a conclusion, a few CHAIN REACTIONS impacts are listed below:

- Project dissemination and its activities;
- Cooperation with stakeholders operating in ICT on national and international level;
- Involvement of regional authorities in project activities, especially through IGA;
- Networking of different stakeholders through meetings, trainings, workshops, hackathon and matchmaking event;
- Stronger connection with the scientific community through cooperation on project activities;
- Informing companies and other stakeholders regarding the funding opportunities for innovation in Croatia and Slovakia;
- Raising awareness - the importance of the ICT sector and further digitization of members and other stakeholders, encouraging the women in the ITC sector, and similar activities



Transnational pilot - ICT and electronics sector - Croatian Chamber of Economy - Zadar County Chamber, Croatia

Executive summary

CCE-ZCC is primarily oriented to the needs of its members, who are mostly SMEs. The Chamber is a link between the private sector, i.e. its members and other stakeholders that directly or indirectly affect the economy. Therefore, in pilot activities CCE-ZCC was focused on SMEs, and through cooperation with other stakeholders sought to encourage transnational and cross-sectoral cooperation. Encouraging innovation was seen as a challenge, and finding software solutions and achieving transnational and cross-sectoral cooperation as an opportunity. There were two steps to achieve this, and that was the organization of the *Hackathon* and *Matchmaking event*. However, before holding those two events, meetings, trainings and workshops with various stakeholders were organized to discuss innovations in the ICT sector and to prepare for the two main activities.

Hackathon was organized to motivate ICT sector actors to propose the best solutions for problems that companies from the project partner regions are facing. The key question was “*What are the issues of advanced manufacturing and energy & environment sector that our ICT sector can positively influence?*”

As for the *Matchmaking event*, it was organized to achieve business cooperation between the Croatian ICT sector and the companies of project partners operating in the field of advanced manufacturing and energy and environment, as well as Croatian companies from those sectors. By participating in *Matchmaking*, the authors of innovative solutions from the *Hackathon* and all others who wanted to commercialize their projects were able to find potential business partners. It was held online via the b2match platform.

Prior to the *Matchmaking event*, a *Transnational Workshop* was organized that served to establish transnational and cross-sectoral cooperation, transfer of knowledge and presenting examples of good practice. It was attended by the ICT actors from Croatia and Košice Region, and stakeholders operating in advanced manufacturing from the Pilsen Region.

Activities implemented

CCE-ZCC intended to involve SMEs and other relevant stakeholders in its pilot activities in the best possible way, in order to encourage an innovative process that would lead to the development of new IT products / services on the one hand and transnational cooperation on the other. For this reason, at the beginning of the pilot's development, meetings and workshops were held with various stakeholders, focused on encouraging innovation and transnational cooperation. The highlight of the pilot activities were *Hackathon* and *Matchmaking event*, and CCE-ZCC together with project partners KEITVA and RDA managed to organize an additional event in the form of a *Transnational Workshop* that served to network stakeholders from Croatia, Slovakia and the Czech Republic.

From the beginning of the work on the pilot, CCE-ZCC first contacted the IGA members and presented to them how it intended to carry out this activity.

At the *Value chain analysis workshop* held in June 2020, IGA members were presented with the scope and objectives of the pilot, together with a time frame for implementation. It was agreed to hold frequent communication, as well as trainings and workshops aimed at encouraging innovation in the ICT sector, with an emphasis on cross-sectoral cooperation. The *Hackathon* was scheduled for spring 2021, and the *Matchmaking event* for the fall of the same year. Subsequently this had to be postponed due to the situation with COVID-19.



The Croatian ICT sector was analyzed and the method of attracting companies operating within it was worked on. One of the goals was also to determine the common interests of Croatian IT companies and sectors in which pilot project partners operate - advanced manufacturing and energy and the environment sector. Advanced manufacturing was the focus of the RDA Pilsen from the Czech Republic, and the energy and environment sector was of the STP from Slovenia.

An unexpected situation arose, just as the pilot activities started to heat up. The consequences of the COVID 19 pandemic have spilled over into the ICT sector in Croatia. Through meetings and communication with IT companies it was noticed they are overwhelmed with work, have plenty of new projects to develop, and for this reason, many of them had to cancel their interest in participation in the *Hackathon*. For that reason and through conversations with IGA members, it was agreed that it is complicated to organize a *Hackathon* at a previously scheduled time. Due to that, the organization of it had to be postponed. It was agreed to hold it at the end of the summer of 2021, but for the same reasons it had to be postponed for the second time. In order to attract IT companies to participate in the *Hackathon*, budget modification was requested from the Lead Partner to provide funds for the *Hackathons* winners, which was accepted. It turned out that these funds encouraged a better response to participate in the *Hackathon*. It was subsequently agreed to hold *Hackathon* in November.

Prior to that, in September 2021, the *Industrial Innovation Workshop* was held online. It served to present the CHAIN REACTIONS project, the partnership network, trends and directions of sector development, connecting ICT with other industries and to give examples of good practice. All this was done with the aim of encouraging innovative thinking among participants and their further involvement in pilot activities, especially in the *Hackathon*. The workshop also provided with data that are beneficial in creating transnational industrial innovation roadmap. Over 20 participants attended the workshop, most of them SMEs. Lecturers at the workshop were professors and assistants from the Faculty of Electrical Engineering and Computing of the University of Zagreb and Faculty of Mechanical Engineering and Naval Architecture of the University of Zagreb, the president of the Croatian Competitiveness Cluster of the ICT Industry, as well as representatives of companies operating in the field of IT and advanced manufacturing.

Topics discussed at the workshop:

- the direction in which the ICT sector is developing and how to link it with other sectors;
- building a startUp ecosystem in the era of Industry 4.0 and Croatia's readiness for industrial change, mostly in terms of the development of smart factories;
- connecting computing and neuroscience and cooperation between the private sector (ICT) and the scientific community;
- innovative solutions in industrial automation.

Finally, a discussion followed with the aim of involving the present stakeholders in the pilot activities.

In November 2021, the conditions for organizing a *Hackathon* were finally met. It was organized with the aim of finding software solutions in the field of advanced manufacturing and environmental protection. The event was intended for the IT sector (SMEs, crafts, start-ups, freelancers and students). Due to the COVID 19 pandemic situation, *Hackathon* was organized differently than usual, i.e. the participants had five days, from November 12 to 17 to develop solutions that were presented to the jury at the final event. The final event took place on November 24 in a *hybrid form*, i.e. on spot in the premises of the Zadar County Chamber and online. One of the goals of the *Hackathon* was also to find potential business partners from Croatia, Slovenia, Slovakia or the Czech Republic through the developed solutions.

The solution did not have to be in the final form, but could have been:

- only an elaborated project without a final solution,
- elaborated project with a proposal of a specific technological solution,
- partially elaborated and developed technical solution with a proposal for the final solution

In total, 21 teams applied, which together counted over 50 participants. The solution submitted 12 of them. Some of the participants had to withdraw from the competition for private, business or health reasons.



At the final event, all the solutions developed during the *Hackathon* were presented and the winner was announced. Looking at the organizational form, 10 SMEs and 2 freelancers participated in the final event.

In the jury were:

- Ivan Lupić, president of the Croatian Competitiveness Cluster of the ICT Industry
- Nedeljko Štefanić, professor at the Faculty of Mechanical Engineering and Naval Architecture of the University of Zagreb and director of Culmena Ltd. which developed the project "100 smart factors"
- Marko Jović, local coordinator of the CHAIN REACTIONS project

The winner of the *Hackathon* is the Kodium Pro team, which developed the *KIES platform (Kodium Intelligent Energy Saver)* and won a prize of HRK 25,000.00 in gross amount. Team members come from small IT firm Kodium Pro d.o.o. from Zagreb. *KIES platform* is a solution that receives any type of sensor data, processes it and gives valuable insight into business, uses an AI module to automatically find anomalies, detect correlated sensors and „learns as it goes“, provides regression analysis for production to predict future needs and provide indicators for business decisions. It can work in a hybrid mode – parts of the data can be collected manually using provided mobile application. *KIES* provides a powerful reporting engine that allows user to analyses data at the precision level he requires. Regression analysis offers a measurable method to track production efficiency of various machines, production lines or companies. The system allows immediate notifications for critical indicators – for example critical temperature or detection of a burst pipe. It is intended for companies that want to control costs and improve efficiency and any company looking to improve insight into their production process. Companies implementing ISO 50001 with the need for a robust and capable reporting engine, municipal companies looking for remote metering solution and ecologically friendly companies wanting to reduce their energy and CO2 footprint can use *KIES* platform.

In addition to finding software solutions, the purpose of pilot activities was to achieve transnational and cross-sectoral cooperation of companies from the regions involved in the pilot, but also other interested stakeholders. That was the goal of the *Matchmaking event*. It was intended for the ICT, advanced manufacturing and energy and environment sector. As the *Matchmaking event* was related to the *Hackathon*, CCE-ZCC had to postpone its holding several times. It was held online via the b2match platform on February 28, 2022 and gathered 44 participants, of which 40 SMEs. In addition, there was a special speaker at the event, Mr. Peter Sczigel, Project Manager of the Due Diligence Helpdesk on EU Sanctions for EU SMEs dealing with Iran, an initiative funded by the European Union. The overall objective of the Helpdesk is to support EU businesses, SMEs that are willing to engage in business transactions with Iran. They saw the event, contacted CCE-ZCC and suggested cooperation. CCE-ZCC asked LP for opinion on their participation and received positive feedback. In this way, the project gained additional promotion and visibility.

Prior to the *Matchmaking event*, also in February 2022, CCE and KEITVA together with RDA organized an online *Transnational workshop* that served to establish transnational and cross-sectoral cooperation, transfer of knowledge and presenting examples of good practice. IGA members and other participants in the pilot activities were invited, such as participants from the *Hackathon*. In total, 16 people attended the event, of which 9 representatives of SMEs. At the first half of the *Transnational workshop* partners focused on presenting the CHAIN REACTIONS project and pilot activities to the present stakeholders. The significant part of the workshop was the presentation of the transnational industrial innovation roadmap for the ICT and electronics sector, which was developed by duo partners, i.e. KEITVA and CCE-ZCC. The main part of the workshop was the presentation of each partner's opportunities for international cooperation.

Few potential activities have been defined:

- Training and seminars to encourage women in ICT at the transnational level in Croatia and Slovakia;
- Series of networking events to help developed the transnational and cross-sectoral relationships between Slovakia, Croatia and the Czech Republic;
- Extension of the virtual democentre, developed by the RDA



Key results

The impact of the pilot activities is reflected in the fact that CCE-ZCC has managed to connect various stakeholders, encourage innovation, promote the development of new software products and services, transfer knowledge and share examples of good practice.

From the perspective of CCE-ZCCs benefits in the implementation of pilot activities, concrete cooperation has been established with representatives of regional policy makers, the scientific community, public companies, business support organizations, clusters and of course SMEs. SMEs have always been the focus of the CCE-ZCC, and in this pilot over 65% of all stakeholders involved were SMEs.

CCE-ZCC have placed the importance of fostering innovation at the top of the list of priorities, along with transnational networking, and through cooperation with project partners and their stakeholders, it has gained valuable experience and contacts that will remain after the completion of the project.

A brochure with all hackathon participants and their solutions is being prepared, and will represent one of the pilot's outputs.

In addition, one of the goals of this pilot is sustainability. Related to this it is expected that pilot activities will yield business cooperation between the pilot participants. In the future, CCE-ZCC will certainly strive to maintain contact and conduct joint activities with its duo partner KEITVA and other project partners involved in pilot activities, namely RDA from Pilsen and STP from Maribor.

Transnational pilot - ICT and electronics sector - Košice IT Valley, Slovakia

Executive summary

The KEITVA saw the opportunity to support innovation and knowledge transfer in local SMEs through this project with defined and structured innovation strategies. However, the need for innovative ideas must not be seen as an isolated problem. Therefore, KEITVA is very vigilant that all the activities stay active throughout the activities after the project is finalized. The sustainability of the activities is crucial in chain value projects.

The main objectives of the pilot activity of KEITVA are to map the Košice region's ecosystem and create a roadmap that will help to understand different sectors. Extending the dialogue between the scholarly community, business, and public areas is vital. To educate stakeholders from various sectors of the needs of innovation and ICT across the public (academia, health sector) and private sphere and create a platform for regional stakeholders and players to promote their innovative activities.

Košice IT Valley, as a well-known cluster with more than 60 members from the different target groups (SMEs, large companies, Higher education institutions, and regional authority) and IT background, has a broader impact on implementing required instruments. Cluster actively participate in the development of regional entrepreneurship and SME competitiveness. Our members are also regional organizations. For those organizations, we are, amongst many other fields, also an apparatus for innovation knowledge sharing. Companies can share their experience with innovation and possible enhancements throughout the pilot implementations. KEITVA is increasing citizens' knowledge to recognize the innovation potential connected to using IKT and learn methods of creating innovative ideas to bring business and success to the region. KEITVA supports competitive innovation-oriented SMEs and achieves their growth and engagement on a national scale.

Digital Autumn is a platform created by KEITVA to promote innovative business models and activities. It is a platform for SMEs, municipalities, educational institutions, Startups to use and promote their innovative ideas and actions. The other pilot activity is a document - **ICT segment development in Košice**.



The document was created to perform a comprehensive analysis and subsequent design of the concept of development of Košice through the IT sector using the tax policy of the Slovak Republic. The analytical part of the document is expressed by a summary of the basic assumptions that apply to the IT industry.

Activities implemented

Košice IT Valley managed to get in touch with potential partners that could be involved in the pilot activity. Mapping and involving SMEs, large companies, startups, business support organizations, and healthcare providers in the pilot's events were organized to discuss innovation needs in ICT and the possibility of future focus of the region in e-health. The self-government region was identified as a critical partner for further developing the ICT Industry in the events. It enables the creation of the pilot's synergies and future regional specialization. In the Košice region, the ICT sector is quite developed (with hospitals and with the Faculty of Medicine), representing the region's future.

In May 2021, KEITVA focused on innovative solutions across the sectors. Webinar on very current topic "How to implement innovative solutions across the sectors." 17 participants were discussing the topic. The feedback on the webinar was positive. The idea of the meeting was to make the first step to communicate innovative solutions across the sectors and interconnect different sectors. We have defined how ICT impact Healthcare.

ICT impact in Health sectors

- Management systems
- Communication systems
- Computerized decision support systems
- Information systems

June 2021 was a month when employees of KEITVA were educated on the Effectuation workshop. The idea behind it is to gain the knowledge, and then KEITVA can forward the workshop and expertise in the native language for their network and ecosystem. The workshop introduced the partner to a new decision making action that could bring new things into the world. This workshop and exercise can positively influence independent logic and innovation thinking. Alexandra Rudl moderated the workshop.

July was the month KEITVA was able to create a physical meeting with a large number of people. It was important that the SMEs, stakeholders, representatives of the city, and self-governing region were informed about our activities and the Chain Reaction project. There were many presentations, discussions, and interesting, innovative ideas at the event. We acknowledge that the ICT sector is a significant economic driver of the 21st century. It is one of the fastest-growing industries in the world. Slovakia is no exception, where the ICT sector brings job opportunities of a new quality, diversifies the national economic structure, supports export performance, and helps the country build a knowledge-based economy.

The topic of the event: How to bring new innovative perspectives to the IT sector to Košice region and how to change the current crisis into new possibilities for this region.

We experience massive digitisation, automatization, cybersecurity risks. Tools of the future include Intelligent Business, Artificial Intelligence, Machine Learning, Industry 4.0, etc.

Due to the boom in Industry 4.0 and digitalisation, we can discuss the benefits of reducing emissions in the automotive industry and using less harmful techniques.

ICT plays a vital role in reducing energy intensity and increasing energy efficiency.

- The development of cloud computing is beneficial for energy sectors by sharing processers and hardware



Because of the long-lasting epidemiologic circumstance, the Slovak Health area discovers many spots where digitisation can improve. During the workshops, the delegates of all areas communicated their perspective on how the health sector could be mechanised more effectively.

Košice IT Valley was one of the accomplices who took part in making a call center for clinics and the health sector for individuals with inquiries concerning the current circumstance. Furthermore, one of KEITVAs partners is responsible for an application GreenPass for Slovakia that is utilised for a vaccination certificate.

Although the conversation was zeroing in chiefly on the current circumstance, there were numerous assessments that, due to ICT contribution in the health sector, are more dependable and proficient.

What part of the health sector was improved by ICT before COVID-19:

- Data storages
- Communication
- Remote consultation
- Diagnosis and treatment
- Cooperation amongst health workers

ICT impact in health sectors:

- Management systems
- Communication systems
- Computerised decision support systems

In August, KEITVAs employees kept educating themselves on Design Thinking which helped in the further workshop, especially with stakeholders and SMEs. The design thinking technique is trendy, especially in start-ups. As participants were informed, 68% of innovation processes are more efficient. Our main challenge was to improve internal communication. One of the activities KEITVA employees did was an Interview. The activity helped participants to find important information, and they stayed open-minded. All these aspects are vital for further business development for creating an innovative action.

September's workshop goal is to share the workshop's outcome held on 1.7.2021, so the partners can create the most relevant roadmap of the ICT sector. Both partners shared their agendas of the workshop and the primary outcome from the Industrial Innovation workshop held in partners' countries in their language.

The main point that was discussed focused on ICT and healthcare and ICT and energy. The duo partners exchanged the findings and were able to do the next step.

The SWOT analysis is a great way to start implementing and start thinking of a new innovative idea.

On the KEITVAs Octobers workshop, they create a SWOT analysis and come up with the activities for the industrial innovation roadmap and agenda so we can share the outcomes of the agenda with the project partner. We created a proposal of joint activities and defined potential partners that will be actively participating in the defined activities.

Four activities were divided into three categories

- Campaign / Transfer of knowledge
- Creating a concept based on data
- Educate

Activities:

- The concept of IT segment development
- IT needs you
- Step by Step
- LAB IT Creativity



KEITVA, with the project partner, shared their ICT SWOT analysis of their region in the November meeting. The next step of the meeting was to define goals and innovative activities that could be organized within the next five years.

We define five goals

- Strengthen the innovation potential of the region by building a qualified workforce and prevent from brain drain
- Transfer of knowledge from abroad when compiling a regional development strategy
- Building an Innovation Ecosystem
- Support of home growth companies
- Technology development and technology transfer, especially in the field of R&D

The action that was defined as innovation actions

- IT segment development
- Slovakia needs you
- Kosice 2025
- Digitalna Komora
- Say yes to Innovation!
- Education on financing possibilities

The online meeting held in February with our two project partners was a great way to connect with other stakeholders from different countries. In the first half of the workshop, partners (KEITVA, CCE-ZCC and RDA) focused on presenting the Chain Reactions project to the stakeholders that were present in the workshop. In addition, each partner presented their pilot activities. The significant part of the workshop was the presentation of the transnational industrial innovation roadmap for the ICT and electronics sector, which was developed by ICT partners (KEITVA and CCE-ZCC). Finally, the main part of the workshop was the presentation of each partner's opportunities for international cooperation.

We defined a few activities such as

- Training and seminars to encourage women in ICT at the trans-national level in Croatia and Slovakia
- Series of networking events to help develop the transnational and cross-sectoral relationships between Slovakia, Croatia and the Czech Republic.

Key results

The impact of the pilot activities on KEITVA is that many of the member SMEs are involved in the activities and are actively searching for them. We found out that the development of the IT segment gives us many answers and possibilities to create innovation activities to help develop the intersectoral, cross-sectoral and transnational value chains. The digital autumn is a platform that puts all the innovation activities in one place. The ICT expert and the broad public can get the information.

For the key results, KEITVA also considers the internal education of stakeholders and employees from the Chain reactions workshop. Furthermore, we believe KEITVA members and internal employees must be informed and aware of specific topics due to our regional influence. Therefore, Košice IT Valleys pilot activities are managed to be long lasting projects that could be used by the ecosystem and can benefit in developing some innovative solutions.