



IASP

International Association of Science Parks
and Areas of Innovation

I N S P I R I N G S O L U T I O N S
P R O G R A M M E 2 0 1 8

Welcome to the IASP Inspiring Solutions Programme 2018!

VOTE NOW



Now in its fifth year, the IASP Inspiring Solutions Programme is both a knowledge sharing initiative and a way to recognise excellence within the world of science parks and areas of innovation. It offers inspiration to others via the great ideas and solutions put in place by IASP members, as well as giving greater visibility to those shortlisted here.

The IASP Inspiring Solutions Programme received a great response this year, with ideas addressing a huge range of challenges submitted from all over the world. The quality of entries was very high, and as always, the judges had a difficult job drawing up this shortlist from such strong contenders.

On the following pages you can read about the 10 best entries who the expert panel have selected as our finalists: we hope they'll inspire you to innovate and implement new ideas in your organisation.

Don't forget to vote for your three favourite solutions - winners will be announced on stage at our upcoming World Conference in Isfahan, Iran, 2nd - 5th September 2018!

**LEARN, GET INSPIRED,
AND VOTE FOR YOUR FAVOURITES!**

FROM THE FOUR CORNERS OF THE WORLD...



Kaunas, Lithuania



Wroclaw, Poland



Klagenfurt, Austria



Shanghai, China



Porto Alegre, Brazil



Tehran, Iran



Campo Bom, Brazil



Recife, Brazil



Windhoek, Namibia



Cairo, Egypt

FINALISTS AT A GLANCE

A collaborative open innovation program formed by CHJ and China Research & Development Center to share resources, co-incubate and co-invest in high potential growth startups, and establish joint labs for developing innovation capabilities.



The Open Innovation Lab is an open innovation program that brings large corporation's challenges to the awareness of local entrepreneurs and academia, enabling connections that become new products. Uses a proven methodology and offers support during each cycle of innovation.

Feevale Techpark Investor's Group is a partnership between VENTIUR Accelerator and Feevale Techpark which jointly set up a startup acceleration and investment program. It meets the Park's growth objectives and benefits startups, and influences the region's mindset, creating an open environment for innovation.



Empowering R&D and innovation to generate local electronics industry that contributes to economic growth, with an impact on national economy through gathering industry and scientific research.

Entrepreneurship and new product development program EVOLUT 4.0 is focused on developing innovative technology-based business ideas in Industry 4.0. It guides serial entrepreneurs and young startups throughout innovation development process striving to lead them towards successful product commercialization and scale-up sales.



An innovative new management structure for managing an innovation ecosystem based on a distributed organization. Teams are organized as a network of nodes, each with a leader and the mindset to make this work. Promotes autonomy, responsibility, empowerment, transparency and coordination of all team members.

Teaching teachers how to teach - this is the credo of the NAWImix in the Educational Lab of Lakeside Park. STEM fields are trained in innovative ways with collaboration of tenant enterprises in the STP to empower the next generation of entrepreneurs and employees.



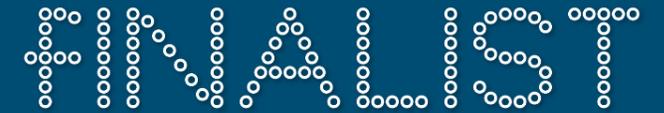
Science and Technology Parks and Areas of innovations could be defined in their network - from the suppliers to customers of the new products and technologies - as a commercialization hub in their city, defining themselves via the Supply Chain Management model.

Mobile Lab promotes mobile applications development by local software developers, through programming hackathons, training, peer-learning events and networking. The initiative grew from an average of 5 members in 2014 to a current 600+ members, of which 38% are women.



'The BIG Science path' is Wroclaw Technology Park's response to the wealth of big science projects currently underway around the world, especially focussing on those nearby, in Europe. Helps bridge any perceived gap between large-scale science projects and innovative SMEs and startups.

THINKUBATION ACCELERATING PROGRAM DRIVEN BY CHJ AND CISCO CRDC



By Shanghai Caohejing Hi-Tech Park,
Shanghai, China

The idea in 50 words

A collaborative open innovation program formed by Caohejing Hi-Tech Park and China Research & Development Center to share resources, co-incubate and co-invest in high potential growth startups, and establish joint labs for developing innovation capabilities. This incubation service has been effective through several model cases, and a sustainable partnership between STP-corporation is maintained.

What is innovative about it

First, it is a pioneer open innovation project to form a self-supporting ecosystem. In this AOI, Caohejing Hi-Tech Park (CHJ), Cisco CRDC and SMEs come from heterogeneous backgrounds and expertise in conjunction with neighbouring resources. Secondly, Venture Capital and knowledge are proactively mobilized. Co-sharing of mentorship ensures that entrepreneurship expertise is grasped by SMEs. The mutual priority in following VC investment makes sure that CHJ and Cisco are synchronously exchanged with information. Thirdly, Cisco alumni and CHJ alumni are connected across industries and sectors, bringing in more fast growing ICT, IoT startups. Additionally, building up a standard Cisco joint lab is another innovative contribution to benefit every SME in the area.

Main users

Cisco CRDC is the main user to improve open innovation competitiveness. Participant incubatees who benefit from and contribute to the program such as Tethrnet and Horen are also primary users. Last but not least, CHJ is a big user to bridge the gap between technology corporations and SMEs.



Run by: The initiative is promoted by CHJ innovation center and Cisco CRDC. CHJ provides mentorship, working space and infrastructures. CRDC provides manpower, professional expertise and advanced lab facility. Besides, investment sectors in Cisco mobilized with CHJ Angel Fund and Oriental Foundation to invest high potential SMEs.



Launch date:
1 January 2016



Purpose of the solution

The first purpose is to strengthen long-term competitiveness through external open innovation practice. The traditional CRDC Thinkubation program is an internal innovative practice composed of technology domain communities, university joint research, and ideas for innovation projects. However, the fact that Thinkubation is an internal community sets limits to the scope and strength of innovation. CRDC is still in want of more external resources and sustainable innovation. The second purpose is to integrate and optimize resources. Optimization of business helps ensure that most valuable resources are used to maximum effect. Through cross-sector partnership between a CHJ and CRDC, business functions and advantages are aligned. The third purpose is to create an “incubation-outsourcing model” service for startups and SMEs for increasing profitability and revenues.

Impact

The program has two phases. Phase 1 is the launch of a tailor-made incubation service. SME screening started in early 2016. Among the 40 applicants, 5 SMEs were rated A+ and chosen to be qualified incubatees. They moved into the 3rd floor of CHJ Global Innovation Hub where built-to-suit incubation such as equipment, facility and mentorship are provided. Phase 2 is building up a joint lab and started from mid 2017. A budget over 3 million rmb is setup. The joint lab aims at providing the most up-to-date facility for the communal use of resident programs. We have witnessed positive, sustainable impacts in every phase. The tailor-made incubation effectively helped SMEs increase profitability and revenues. One model case is VC investment and mentorship towards Horen Plastics. In 2017, CHJ's Angel Fund and Oriental Foundation worked with Cisco Investment division for selection of growing SMEs, and Horen Plastics was chosen. Horen Plastics received Cisco's expertise coaching on developing wireless ICT modules. In addition, the “incubation and outsourcing” model innovated a tri-win business case. Tethrnet producing ICT solutions was spun out of CRDC in 2015 then joined the program and moved into the CHJ Global Innovation Hub. Together with CHJ's incubation service and CRDC's support in advanced labs and equipment, Tethrnet grew faster and was able to be the subcontractor of CRDC's outsourcing programs. In return the three parties found a way for Tethrnet to pay back and play to its advantages: when CHJ and other incubatees need ICT services such as cloud computing, Tethrnet became their supplier.

Feevale Techpark Investor's Group



By Feevale Techpark,
Campo Bom, Brazil

The idea in 50 words

Feevale Techpark Investor's Group is a partnership between VENTIUR Accelerator and Feevale Techpark which jointly set up a startup acceleration and investment program. In addition to meeting the Park's growth objectives and benefiting startups, it aims to influence the region's mindset, creating an open environment for innovation.

What is innovative about it

The majority of the traditional incubators in Brazil can help startups with two essential things: infrastructure and knowledge. That's what happened in Feevale's Incubator as it has a great infrastructure of collaborative spaces, rooms and labs, and an excellent team of mentors to help the startups with their business models. The one thing that Feevale's Incubator did not have was resources to invest in their startups, a reality in many other incubators in Brazil. When startups need funding for their business, they usually have to approach investors, government funding or business accelerators. Feevale Techpark's solution to offer funding as well as infrastructure and knowledge to the startups was to partner with an accelerator to build a local investor's group, with the main objective to foster investment culture in the community, and start a virtuous cycle for future business in the region. Feevale Techpark Investors' Group was the first initiative of this kind in Brazil, and it can be adopted specially by the tech parks located where investment opportunities are not abundant. The entire process of prospecting investors in the region, and running the acceleration program inside the techpark was extremely important to bring investors and business people closer to the techpark and the university, and gave a lot of visibility to the techpark companies.

Main users

The main users of the solution are the investors that are part of the Feevale Techpark Investors' Group and the invested startups directly.



Impact

The call for startups interested in investment was open nationwide. There were 200 subscription. From those, 25 were selected for the first phase: a two weekend training by the accelerator with the investors participation. After this first phase, 12 startups were selected to make the final pitch. From these 12, investors selected 5 startups. Each startup received from US\$ 50-75k in exchange for 5-10% of equity. Together with the investment, the companies went through a 6 months acceleration program. After these 6 months all startups pivot from their initial business plan, 23 new people were hired to work in these startups, 6 new brands were created among the startups, and +250 contracts were closed with new clients and 2 startups initiated the internationalization process. As well as these figures, feedback from startups and investors was extremely positive.

Purpose of the solution

The main purpose is to create a culture of startup investment within our community. Vale dos Sinos is a region in Brazil where the economy is very traditional, built mainly around the shoe industry and metal-mechanic industry. The goal is to build awareness about new technology business, shortening the gap between the traditional investor and the tech startup world, and giving them the opportunity to venture in new business models. Investors who have never invested in startups have the opportunity to try this new investment model while within a group, having an Accelerator managing the portfolio. Investors and entrepreneurs can learn with each other throughout the process, fostering new business and promoting the development of the entire community. This proximity allows startups to learn from experience, and traditional investors to learn the flexible business model and agile methods.

 **Launch date:**
06 January 2017



Run by: Ventiur, the accelerator that does the administration of the investor's group funding and that runs the mentoring and acceleration program, and by Feevale Techpark, articulating the relationship with investor, the startups and the community and offering the infrastructure to run the program.

By Kaunas Science and Technology Park,
Kaunas, Lithuania

The idea in 50 words

Entrepreneurship and new product development program EVOLUT 4.0 is focused on developing innovative technology-based business ideas in Industry 4.0 based on unique set of selected international methodologies. It guides serial entrepreneurs and young start-ups throughout innovation development process striving to lead them towards successful product commercialization and scale-up sales.

What is innovative about it

The program shifted a focus from incubating businesses at an early development stage and is designed for companies in various stages of product development and commercialization process, including post-launch management. Internationally validated methodologies were selected to be applied for each stage. Moreover, a great focus was put on introducing a sales acceleration part in the program to support companies in scaling-up the sales of a product. The program is also a great asset to the consultants who are provided with the framework, tools and templates aimed at asking entrepreneur the right questions in any stage in innovation development and commercialization process, and ensuring the unified business development consultation throughout the pre-incubation, incubation and post-incubation process. Finally, EVOLUT 4.0 is aimed at supporting entrepreneurs responding to 4th industrial revolution and those providing disruptive digital solutions.

Main users

Innovative technology-based companies in various development stages, start-ups and entrepreneurs that develop their technologies in the Industry 4.0.



Run by: Kaunas Science and Technology Park is fully responsible for EVOLUT 4.0 having its copyright. Partner organizations are selected to support the implementation of a program and provide with necessary expertise



Launch date:
9 January 2017



Impact

The program is designed to support 100 in-house companies and positively affect their survival rate. Within these 100 companies currently operating in the Park investments in R&D activities account for 4,9% which is 3,5 times EU average, meaning that there are plenty ongoing R&D projects and new products which are being developed. EVOLUT 4.0 helps all those companies continuously and successfully innovate, since it provides knowledge for acceleration of sales. The program offers the methodology for innovative improvement. This leads to better innovation management in future projects that entrepreneur will develop ensuring that in case of failure the entrepreneur will start a new setting based in the Park and will be more advanced in dealing with products development and its introduction to the market. With EVOLUT 4.0 we have provided a blueprint for success to help entrepreneurs secure their company's position as a leading digital enterprise in tomorrow's complex industrial ecosystems.

Purpose of the solution

The purpose is threefold: first, to provide a comprehensive support to technology-intensive companies and young start-ups in business and new products development throughout the innovation and commercialization process; second, to transfer the knowledge to entrepreneurs who are constantly developing solutions enabling them to adapt themselves to the market needs; third, to provide support to future oriented entrepreneurs responding to industrial transfer towards digitalization and digital ecosystem. The success in developing a unique technological solution responding to the market needs is only one side of a coin, since it is equally important to successfully improve its sales to enable company's continuous innovation. Therefore it is important to underline that the program is focused not only on business development until commercialization, but also on scaling-up the sales of existing products which are already launched to the market and thus supports not only young start-ups but also more matured innovative companies. EVOLUT 4.0 includes business development consultations, targeted training sessions and seminars on relevant topics, identified problems or according to the development stage of a product, mentorship from successful companies operating in the similar sector or having relevant experience.

By Lakeside Science & Technology Park,
Klagenfurt, Austria

The idea in 50 words

Teaching teachers how to teach - this is the credo of the NAWImix in the Educational Lab of Lakeside Park. STEM fields are trained in innovative ways with collaboration of tenant enterprises in the STP to empower the next generation of entrepreneurs and employees

What is innovative about it

STPs are valuable catalysts of the quadruple helix (industry - government - university - society), and LSTP serves as a platform in the knowledge triangle (enterprises - research - education). Given this social responsibility of an STP, the NAWImix setup is both metaphorically as well as physically "innovation" itself: the morphology inherits all stakeholders from the regional education sector, research and business partners developing new forms of education for the surrounding society, empowering visitors to discover, research and innovate. Enabling all parts of the quadruple helix to not only reside, but coherently develop new forms of education and training is crucial for the success of LSTP

Main users

From the hour of birth twelve years ago the five childcare services have been crucial for the success of LSTP. With NAWImix we are able to fill the gap between these early ages until university and to invite people of all ages, from pupils, high school kids to students, teachers and professors as well as young entrepreneurs and enterprises.



Run by: NAWImix is run by the University of Teacher Education Carinthia and the Carinthian Regional Education Board



Launch date:
04 January 2017



Impact

As one module in the set up of the Educational lab, NAWImix has already educated and trained 150 teachers in experimental natural sciences education in the first year, who are themselves teaching 800 pupils in total. Right after the setup of NAWImix many enterprises have understood the potential of collaborating with education institutions. Developed technologies can be tested directly by a young generation in education surroundings, and they can also express interest and even shape future skills of workforces way ahead. The company priorIT has worked together with NAWImix from the first day in the park testing their application of digital literature being read out in multiple different languages. This project also contributes to the competitiveness of the region and the structural requalification of the location as well as benefiting knowledge-transfer in the areas of education and training. In respect to digitization, IoT and automated production this project alters the importance of human resources in STEM fields and boosts the region's qualitative development massively.

Purpose of the solution

Fostering innovation and creativity, science parks are at the forefront of bringing together enterprises research and education. The focus on education especially on STEM fields has often been neglected among the responsibilities of STPs, however it is of crucial importance when it comes to future entrepreneurs and workforces. Lakeside has tackled this issue with the setup of NAWImix, another innovative module in the educational lab. The University of Teacher Education Carinthia in collaboration with the Carinthian Regional Education Board has moved its faculty of STEM training and education to the STP. This enriches the existing training of future teachers in innovative didactic teaching STEM fields in hands-on methods with the collaboration of STP resident companies. Also mature teachers are invited to visit NAWImix with their classes to be trained by the innovative staff and test and develop methodologies.

By Namibia University of Science and Technology,
Windhoek , Namibia

The idea in 50 words

Mobile Lab promotes mobile applications development by local software developers, through programming hackathons, training, peer-learning events and networking. The initiative grew from an average of 5 members in 2014 to a current 600+ members, of which 38% are women.

What is innovative about it

The Mobile Lab is community-oriented, with operations run by youth members who are mostly current and former software development students. 90% of the events at the Mobile Lab are currently externally funded and 40% self-sustainable. The initiative used to attract only 5% to 15% of women in 2013-2014, but it is now comprised of 38% women members. We have also collaborated with two national banks to develop a local cashless taxi payment system and an online crowd funding platform for local entrepreneurs, which are all currently being finalized by their respective bank institutions before being publicly implemented. Marketing of the Mobile Lab events are done via social media, and are always attended beyond current space capacity.

Main users

Software programmers working on mobile app Projects Tech entrepreneurs developing their business ideas into mobile apps - Academic staff members who want to engage their students in real world programming - Industry and individuals interested in digitalizing solutions.



Launch date:
March 2014



Run by: The Mobile Lab is fully owned by the Namibian University of Science & Technology, and currently has one permanent staff member who coordinates the activities by working with the youth members of the NBII Developer Circle. The youth members voluntarily offer training and facilitate hackathons at the Mobile Lab.



Purpose of the solution

To engage software programmers, tech entrepreneurs, academia, industry and individuals who are interested in digitalizing solutions to local societal challenges. The Lab uses the theory of co-creation and its activities are split along the weekly calendar, to accommodate various target interest groups. Through our hackathons, the lab has developed over 120 mobile application prototypes, 95% of them implemented by individual developers for whom the Mobile Lab provides a platform to develop their ideas. In addition, the lab has created an initiative known as Developer Circle, which consists of ±600 members that help each other in projects, learning activities and information sharing. These members work on a voluntarily basis, by offering software development training to local youths on a train-the-trainer basis, with the aim of capacitating more youths across the country on mobile applications development skills. These events are hosted in partnership with local and international partners, and sponsors. Some of the projects we are currently running include the Open Data and Big Data (with Facebook), or Gender-based Violence initiative (with Namibian Women in Computing). The Mobile Lab also contributes to national technology ecosystem by assisting local institutions and the Government to host programming hackathons as well as national ICT summits.

Impact

Technology and innovation are new fields in Namibia, and therefore an increase in the average participation from 5 participants to more than 65 participants per event is quite a positive milestone. The Mobile Lab offers unique capacity building to local software developers to refresh and improve on what they have learned during their programming studies. NBII provide start-up mentorship to the tech-preneurs that implement their business ideas through the Mobile Lab. This is done to prevent early failure of Namibian start-ups which is reported by Bank of Namibia as 80%. The Mobile Lab has also contributed to local, continental and international mobile applications development ecosystem by collaborating with similar institutions in many different countries. Global tech giants have also collaborated by providing infrastructure support, skills, and knowledge transfer. Furthermore, Mobile Lab services are extended to local institutions that require assistance in organizing and hosting of programming hackathons.

By Porto Digital,
Recife, Brazil

The idea in 50 words

The Open Innovation Lab is an open innovation program that brings challenges from large Corporation to the awareness of local entrepreneurs and academia, enabling connections that become new products. It makes use of a proven methodology and offers support during each cycle of innovation.

What is innovative about it

Porto Digital is a coordinated initiative between market, government and academia that resulted in one of the main innovation environments in Brazil. However, it faces two complementary challenges: a significant number of startups, despite their expertise and capabilities, often address low priority or non-existent problems, leading to the discontinuation of their solution through lack of demand. On the other hand, there are companies from around the world facing complex challenges to which solutions cannot be easily found in the market. To tackle this problem, Porto Digital has developed an open innovation programme (OIL) with a proven methodology and a dedicated team focused on bringing large corporation's challenges to the awareness of local entrepreneurs and academia, enabling connections that become solutions and products.

Main users

The main users are startups, established tech companies, academia, experts, innovators and research institutes in the ecosystem of Porto Digital, as well as large corporations, who respond to developing innovative and competitive business solutions that fall beyond their capabilities due to the increasing complexity of technology and business.



Run by: Porto Digital OIL Team is the main responsible for running the program, although it can collaborate with other STP and institutions to run binational or even multinational open innovation programs. For the purpose of the OIL Program, Porto Digital has physical structures to carry out events and a dedicated team of innovation managers, legal and accounting body to support the participants during each cycle.



Purpose of the solution

With the increasing complexity of technology and business, the development of innovative and competitive business solutions fall beyond the capabilities of a single company. An open innovation approach, drawing on a broader external network of knowledge and technology, enables a faster and more fruitful process of generating solutions for mission-critical business challenges and for developing new innovative products for companies. An essential feature of this approach is to combine the resources of larger companies and the knowledge, flexibility and creativity of a diverse cohort of small innovative startups. It works as follows: First, Brazilian companies interested in participating in the programme will pose business challenges. These challenges will be presented to Brazilian and British startups. After that, there is a co-ideation process where all parties will discuss these challenges and come up with possible solutions. If both parties agree on proceeding to developing a prototype, they work together to complete that prototype within 15 days. If the prototype shows potential for development, they might pursue a Minimum Viable Product within the next three months. If the product is understood to be viable, they will proceed to commercially exploring the opportunity. Porto Digital supports all participants throughout the whole process, from articulating stakeholders to term sheet agreements and project sprints reviews

Impact

With 3 OIL programs concluded with 3 different companies, the OIL Program has had 10 startups collaborating in the ideation phase, which led to 3 non-functional prototypes and 2 MVPs, further developed into 2 brand new products. The revenue for the new products is US\$5.3M in 2017. The OIL program expects to generate new businesses of around US\$30M+ in the next 5 years. The program has also brought large companies closer to the technology park ecosystem, increasing the understanding of how the various actors can create new opportunities in a collaborative way and minimize existing barriers by understanding the methodology and the terms of the collaboration, greatly contributing to local socio-economic development.



Launch date:
7 April 2016

TRANSFORM SCIENTIFIC RESEARCH OUTPUTS TO INDUSTRIAL PROTOTYPES



By Science and Technology Park for Electronics Research and Industry (STPERI),
Cairo, Egypt

The idea in 50 words

The aim of the solution is empowering R&D and innovation to generate a local electronics industry that contributes to economic growth; to transfer technology through partnership with international research institutes, universities and science parks; to transfer & exchange communication services and information technology through partnership with private sector, and make an impact on national economy through gathering between industry and scientific research.

Purpose of the solution

To make STPERI the first electronics science park in Egypt in the Electronics industry and one of the unique specialized science parks in Africa and MENA region that addresses the local and regional markets in the ever growing electronics, communication and IT industries.

What is innovative about it

This solution can enhance the performance of STPERI

Main users

The STPERI groups



Run by: The STPERI president and the STPERI groups



Launch date: 26 March 2018



Impact

Its impact has been to transfer and convert knowledge to impact socio - economic development and to create new jobs and add functionality with high quality in new technology sectors. Additionally, it has provided a research base to support innovation and technology development, whether local or international. New technological companies have been created, and new investments identified, and the initiative has filled the gap between innovation / research outputs and market demands.

LIGHT AND FAST INNOVATION ECOSYSTEM



By Tecnopuc Science and Technology Park of PUCRS ,
Porto Alegre, Brazil

The idea in 50 words

We proposed an innovative new management structure for managing an innovation ecosystem based on a distributed organization. Teams are organized as a network of nodes: each node has a leader, and the mindset to make this work includes autonomy, responsibility, empowerment, transparency and coordination of all team members.

What is innovative about it

Over the last few decades, organizations have seen competition emerging from unexpected segments as entry barriers gradually decrease. Facing this scenario is one of the reasons that has led many organizations to establish interaction with innovation ecosystems all over the world, whether to create their business or reinvent it. Global business dynamics have been changing fast. It is critical for the sustainability of innovation ecosystems to be directly connected to the speed of these dynamics.

Main users

Although the implementation of Tecnopuc's distributed organizational structure has focused on the internal reorganization of the 40 employees of the park, the impact involves the entire ecosystem, since it optimizes the interaction of all actors, including established companies, startups, the university, and other institutions.



Run by: The responsibility for the development and management of the model is shared among the 7 nodes that compose Tecnopuc.



Launch date: 1 January 2018



Purpose of the solution

In 2017 Tecnopuc's innovation ecosystem was organized in specialized departments. Supported by the mission of being an ecosystem of innovation and transformation, one question stood out during the review of its strategic plan. Is the consolidated organizational structure, that led Tecnopuc to be a benchmark, adequate to meet the challenges of the coming years? The answer was no. Inspired by the comparison between alpinism and expedition, proposed by Patrick Hollingworth in the book *Light and Fast*, Tecnopuc updated the organizational structure into a distributed model as part of its central strategy. The model joined all the departments related to the ecosystem of innovation in one single structure, organized in nodes. Instead of a formal Directive structure, that would lead and assume final decisions, an Orchestration node was set up to assure the proper communication and sharing between the other 6 nodes: Projects Management, Startups, Laboratory of Creativity (CriaLab), Infrastructure Management, Prospecting and Negotiation, and Social Impact. The graph representing this structure is a web, in which each connection point forms a node with its own responsibilities, all directly connected to each other.

Impact

The methodology used was Design Thinking, conducted with support from Tecnopuc's creativity laboratory Crialab. Over the course of 8 months, data collection and analysis activities were carried out, discussions in large and small groups, aiming at proposing the new structure model. The adoption of a distributed management model has, first of all, established that uncertainty is a source of opportunities, where solutions are not centralized in top management, but instead constantly co-created by the teams. Therefore these teams need a comfortable zone for taking decisions in complex scenarios. The implementation of the model has been accompanied by the creation of a "safety zone" where teams can feel empowered to make decisions. If on one hand the model suggests the reduction of bureaucratic processes, on the other it has substantially increased the demand for communication between peers. The model has demonstrated that the development of trust, respect and good communication are central in the node structure. Results indicate greater satisfaction of partners in the relationship with ecosystem management, as well as more agility and internal and external proximity. Results also indicate a better response time for interactions within the Tecnopuc community, including all the interfaces with companies and researchers at the university.

ENHANCING THE ROLE OF SCIENCE AND TECHNOLOGY PARKS AS THE HUBS FOR COMMERCIALIZATION PROCESS IN TECHNOLOGY MARKET PLACE



By University of Tehran Science and Technology Park,
Tehran, Iran

The idea in 50 words

Science and Technology Parks and Areas of innovations could be defined in their network - from the suppliers to customers of the new products and technologies - as a commercialization hub in their city, defining themselves via the Supply Chain Management model.

What is innovative about it

Science and technology parks foster and support knowledge flows. This happens among science parks and firms, as well as between these firms and external enterprise and companies to improve regional economic growth. Science and technology parks facilitate access for their firms to key factors, such as research & development, innovation, infrastructures, venture capitalists, human capital, technological capital, and social capital. These factors are related to the capacity to adapt to technological, economic, and social changes in markets. Therefore, STPs facilitate interactive relations between universities, researchers, firms and government. Within the SCM model and its strategies, a network is created under the leadership of STPs that empower the commercialization process and develop the effective market place.

Main users

Researchers and the students of universities, members of STPs like the experts and management team, resident companies, Inventors and industries and society as the end customers.



Run by: The STPs and AOIs in this solution are in relation with academic, industry, government and society (defined as "Quadruple Helix"), which have a vital role in this network. So STPs and AOIs should be considered as the governmental agents in society in responsible of commercialization centers and technology hubs.



Launch date:
08 January 2018



Purpose of the solution

Universities, research and innovation centers play an important role in society, politics and economy. This begins with creating and developing knowledge, which usually starts from universities and research centers and continues with a practical commercialization approach in establishing and developing firms and industries. This process could be seen as a chain between universities, research & innovation centers in one side and companies and industries in the other side. For connecting the two sides of this chain, an important link is needed to transfer the knowledge and developed technology from research centers to industries. STPs can be this link and create an appropriate environment for companies to work with universities and research & innovation centers. In such a system, we should apply a model to manage this chain and its elements as a whole system to attain its goals. A supply chain is a set of organizations directly linked by one or more upstream and downstream flows of products, services, finances, or information from a source to a customer. Supply Chain Management (SCM) is the integration of all sub-processes that enable the exchange of information and movement of goods and services between suppliers and end customers, including manufacturers, distributors, retailers, research centers, government agencies and service firms or any other enterprise within the extended supply chain.

Impact

Better effectiveness in the commercialization process - Open Innovation could be carried out in this strategy - STPs become special centers for collaborating and trading center between specialists - Facilitating the commercialization process with an integrated viewpoint - A total network under for a better partnership between the members - STPs and AOIs could act as a permanent market for the innovative ideas and technology transfer - STPs and AOI become key part in knowledge & technology base economy - Employ experts in STPs for marketing process in various fields - helping tenants for commercialization - STPs and AOI could be defined in their network as a hub in their areas - This hub plays the leadership role in 2 ways: 1.Push the technology from its suppliers to the market 2.Pulls the technology or product demands from its customers to the related suppliers - Science and Technology Parks playing key role in Entrepreneurship.

By Wroclaw Technology Park,
Wroclaw, Poland

The idea in 50 words

'The BIG Science path' is Wroclaw Technology Park's response to the wealth of big science projects currently underway around the world, especially focussing on those nearby, in Europe. It is designed to help bridge any perceived gap between large-scale science projects and our talented and innovative SMEs and startups.

What is innovative about it

In November 2017, WPT co-hosted a two-day conference in Wroclaw called 'Innovation Europe 2017—Fly Me to Mars'. This successful event attracted high-level representatives from all over the world who came to speak about the opportunities available in Polish industry. And Polish industry had the opportunity to demonstrate their technologies and present their experiences of working with big science projects. The theme 'Fly Me to Mars' referred to the combined elements of big science towards a better understanding of our universe and thus, the belief that we should investigate the idea of colonising other planets. The event also demonstrated the role that start-ups and SMEs play in the fulfilment of these great science objectives. As such, WPT's 'The BIG Science path' programme was launched offering bi-directional contact and accessibility for all concerned. Furthermore, this approach also galvanised a similarly innovative approach in the coordination of Polish International Liaison Officers (ILOs) assigned to big science projects. This coordination has since gone on to form the basis of a substantive redesign of the web portal, www.BIG-science.pl, due for launch in May/June 2018, through which, this idea will be continued, encouraged and promoted.



Run by: The project is run by Department of Commercialization and Development of Wroclaw Technology Park and Polish Industry Liaison Officers Network. Ms Sylwia Wójtowicz - the Director for Commercialization and Development of WPT is also CERN and ITER Polish Industry Liaison Officer company.



Launch date: 23 November 2017



Main users

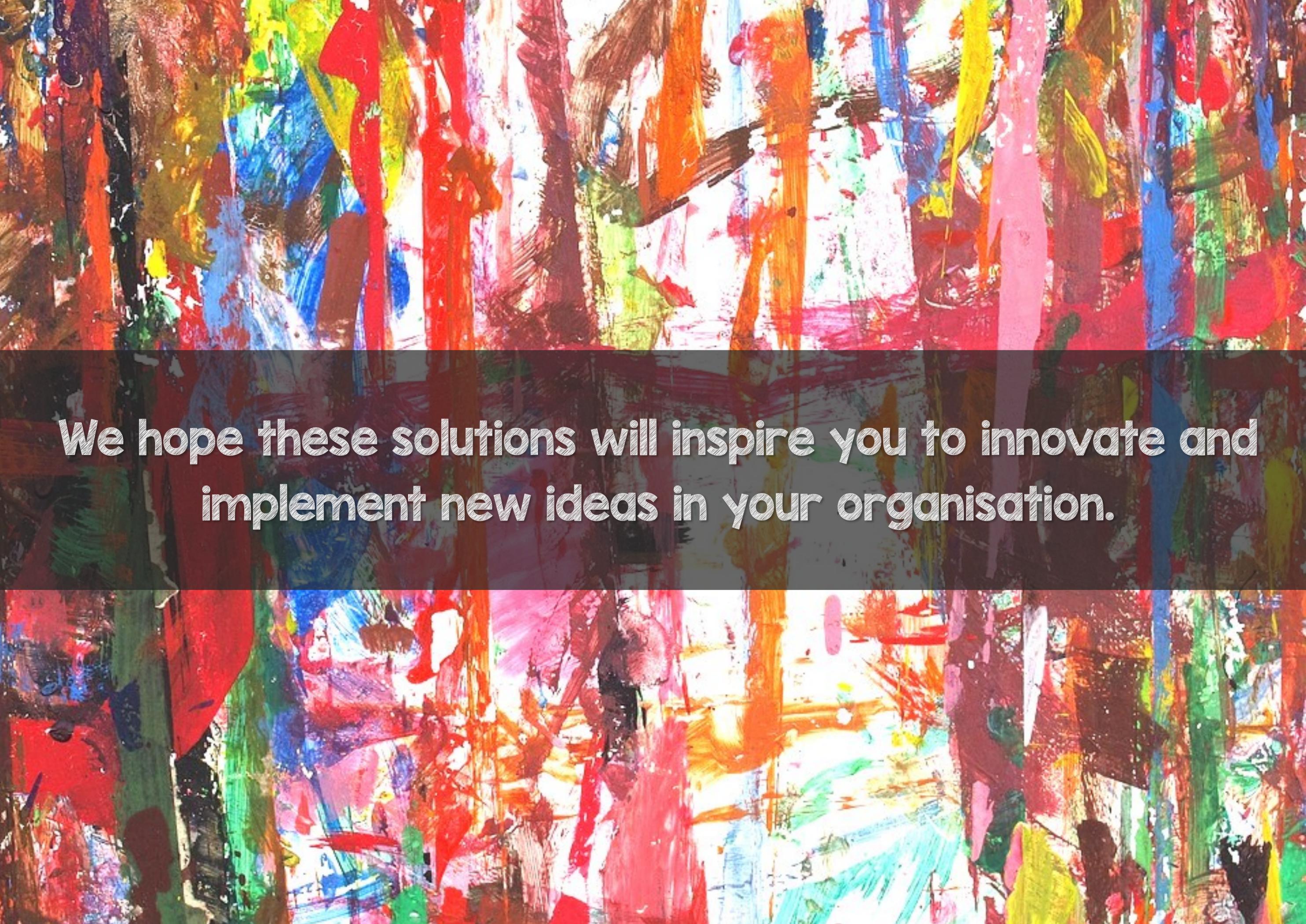
The programme is divided into two distinct parts. Nationally, the programme is designed to attract and inspire Polish industry, with particular focus on SMEs and start-ups, but also including those still in education. The programme aims to bring big science closer to these people with events, activities, workshops, information and advice. Internationally, the programme is designed to demonstrate the talent, ingenuity and creativity that Poland has to offer. It is believed that this will not only encourage enhanced and increased levels of business between big science projects and Poland, but will also help to develop ties with other international companies that may be seeking partnerships with the shared intent of doing business with each other and Big Science.

Purpose of the solution

Like all large, well-known institutions, companies or projects, the perception from the outsiders can be one of inferiority or inaccessibility. "I'm too small to be heard or too insignificant to be considered". WPT realises that this perception is an obstacle to innovation. The purpose of WPT's 'The BIG Science path' programme is, therefore, to meet this perception head-on and change it

Impact

From the perspective of Polish industry and educational institutions, it will help make accessible international science projects. This is an important step in Poland's continued expansion into the international scientific community. The enhanced confidence and tools provided by this programme are expected to help promote the best Poland has to offer. From the perspective of big science, it is intended to help reinforce the credibility and variety of talent available within Poland for assistance with these large-scale projects. It is also perceived to be an excellent spring-board for continued communications and strengthened relations between big science and Polish policy makers. Finally, from the perspective of other international companies looking for opportunities enhanced business opportunities, the appeal is believed to be obvious



We hope these solutions will inspire you to innovate and implement new ideas in your organisation.