Entrepreneurial Programmes for Supporting Regional Innovation Strategy:

The South Moravian Innovation Centre: Developing an important technology hub in Europe







General Information

Title	Entrepreneurial Programmes for Supporting Regional Innovation Strat- egy: The South Moravian Innovation Centre (JIC)	
Pitch	Developing an important technology hub in Europe	
Organisation	South Moravian Innovation Centre (JIC)	
Country	Czech Republic	
Author	Dr. Samo Pavlin (University of Ljubljana)	
Nature of interaction	 Collaboration in R&D Commercialisation of R&D results Mobility of staff Academic entrepreneurship Governance 	 Lifelong learning Joint curriculum design and delivery Mobility of students Student entrepreneurship Shared resources
Supporting mechanism	 □ Strategic ☑ Structural □ Operational ☑ Policy 	
Summary	The South Moravian Innovation Centre (JIC) was established in 2003 to support the implementation of the Regional Innovation Strategy. The main aims of JIC are to raise the region's entrepreneurship output and competitiveness whilst supporting innovative businesses. JIC conducts three main activities that are related to UBC: JIC Enter, JIC Starcube and JIC Master. The programmes are for young graduates and teams with innovative ideas who want to set up a business, but also for micro com- panies that want to progress. The primary outputs of the programmes are newly established companies and job vacancies. The success of JIC is based on the so-called voucher scheme, which connects regional com- panies and university research centres. In the last three years, JIC related companies created more than 1,700 jobs. More than 4,700 participants attended their seminars and networking events in 2016. In this way, JIC and South Moravia have become recognised as one of the most im-	

portant technology hubs in Central Europe.



1. BACKGROUND

The South Moravian Innovation Centre, hereinafter JIC, operates mainly in the South Moravian region in the Czech Republic. JIC's main aim is to support innovative businesses, boost the competitiveness of companies and create qualified jobs in the region. The centre was established within the framework of the Regional Innovation Strategy (RIS) of South Moravia and is consequently responsible for the policy's coordination, as well as providing support to entrepreneurs from the region.

The RIS is a fundamental strategic document of the Southern Moravian Region and the statutory city of Brno designed to support competitiveness, innovation and the maximisation of economic benefits gleaned from public investment into research and education. The strategy has provided a basis for bringing together scientists from universities and research centres, the owners of technology companies, local government leaders and active members of the general public. RIS JMK is a common strategy involving the public sector, businesses, sector partners representing the priority sectors of the region, as well as representatives of academic institutions. It establishes the strategic priorities as well as funding concrete projects that share the common objective of making South Moravia one of the leading research and innovation regions in Central Europe.

The first RIS was adopted in 2002. The envisaged system for encouraging university-business cooperation (UBC) was sequentially implemented by different universities in the region: Brno University of Technology in 2002/2003, Masaryk University in 2006, Mendel University in 2012 and the Veterinary University. The system provided guidelines for how to foster entrepreneurship and UBC. Despite encountering some rigidity regarding UBC (which is still present), JIC made the environment in which to found spin-offs and start-up companies, negotiate licensing and foster an entrepreneurial mind-set appear more attractive and more easily obtainable for academics, researchers and students.

2. OBJECTIVES AND MOTIVATIONS

One of the government motives for establishing the JIC was improving on the unsustainability of the previous FDI strategy. Because of this, the national government started to increase its funding of development activities that particularly included UBC, as the latter was found to offer great potential and opportunities to high numbers of students (one-fifth of the region's population). What's more, the imminent membership to the EU meant that planning was initiated regarding the use of EU structural funds for regional development.

JIC, a regional innovation agency located in South Moravia, was founded in 2003 by the South Moravian Region, the City of Brno and four universities. The mission of JIC is to "empower people to create and grow businesses that change the world". JIC services are targeted at

aspiring entrepreneurs in the initial stage of an idea, fast-growing start-ups and also already established companies.

3. STAKEHOLDERS

The groups of stakeholders involved in JIC activities are: the regional government, students and graduates, universities and companies.

The regional government and its enthusiastic representatives started the process of establishing UBC and provided financial support. Currently, it supports the innovation policy (including financial resources) along with the city of Brno. At the beginning, there was little support from businesses for UBC but this trend has changed over the years.

Students and graduates mainly from the funding universities are largely included in the JIC activities through the services provided by the JIC until a few years after graduation.

The vice-rectors of Brno University Technology and Masaryk University, support the technology-oriented strategy of the universities and are aware of the value to the region of working in partnership with the JIC, they play a valuable role in implementing UBC. Despite being independent of the government, meetings are held four times a year with companies focusing on the implementation of the RIS.

Many R&D centres of foreign companies are required by their headquarters to cooperate with universities and the local innovation environment, such as JIC. There are also start-up companies which use the centre's services.





Implementation

4. INPUTS

The most important input of JIC is its human resource department – people in the team who are able to consult the companies and the ecosystem as a whole. JIC has about 50 employees. The JIC programme related to supporting entrepreneurial activities is provided by four team leaders with about 20 supporting staff who coordinate around 100 external experts. These experts are people with entrepreneurship experience or are those operating in a specific area (like marketing or sales) who are invited to participate in the JIC's activities according to specific needs. In addition to this, there are 10–15 people in the financial department, five people in the marketing team, consultants, IT specialists, economists, and supporting staff. However, JIC has no researchers as its main goal is providing regional infrastructure.

The JIC's estimated annual budget is $\notin 3m$. The funding is provided by the regional government ($\notin 1m$), by the city of Brno ($\notin 0.5m$) and by the four universities and EU funds – mostly Horizon 2020 and similar programmes ($\notin 0.5m$). One-third of the income ($\notin 1m$) is market-based (rents and other means).

JIC owns four buildings that occupy approximately 12,000 square metres, including offices, meeting rooms, 20–30 laboratories dedicated to life sciences and two subsidiary companies. If required, JIC can also use the premises of the universities and/or companies.

5. ACTIVITIES

JIC runs four incubators which are home to more than 75 technology SMEs, most of whom maintain strong collaborative links to local research teams. JIC also supports the industry-academia interactions through customised national and international match-making activities. JIC is also responsible for the preparation and management of the Regional Innovation Strategy and smart specialization strategy (S3) of the region of South Moravia (RIS JMK). JIC has been entrusted with responsibility for management of this strategy on behalf of the City of Brno and the South Moravia Region.

JIC carries out three activities related to entrepreneurship which focus on strategy, business and management: JIC Enter, JIC Starcube and JIC Master. Product-related issues are typically managed by the teams themselves. Another important activity enhancing UBC is the so-called 'voucher scheme', which was transferred from JIC to another governmental organisation operating on national level in 2015. JIC also runs the Platinn programme, intended for established companies. However, this scheme is not directly related to cooperation with students, graduates and universities.

The JIC Enter programme is aimed at people, individuals and teams with innovative ideas who want to start up their own business. There are no differences in the approach depending on the number of founders – individuals or teams. They all receive the same service, with the content of the consultations and workshops remaining almost the same. The main goals of

the programme are: testing the potential of entrepreneurial ideas, developing first steps in the implementation of business plans and developing business skills through seminars, workshops and consultations with mentors. The idea of the programme is to kickstart the business idea; showing the participants how to negotiate their initial concept, even if they do not succeed in furthering the business process.

Participants who wish to join the JIC Enter programme have to work on innovative technological business in the region. Applicants should provide a business plan with a specified idea; that is, they must state what type of project or product they are working on, for whom they are doing it, who their customer is and what their competitive advantage will be. Typical candidates are people with technological knowledge who are able to implement their ideas. All participants need to contribute a set amount of funding (around €55 per month) to pay for the services of the consultants and mentors, educational workshops, space in the co-working area and other services.

The programme accepts around 20 applicants a year and lasts for six months. Within this time, participants need to fulfil the plan of activities that is created at the beginning in cooperation with consultants. Every two weeks they have consultations where they talk through the business process starting from the basics, for instance: acquiring knowledge of the market, the customers, etc. Every two weeks, there are also seminars or workshops intended for beginner entrepreneurs with different topics of concentration: finances, marketing, law etc. This is followed by work on the product itself and introductions into its marketing. The estimated time for programme activities is 18 hours of consultations, 18 hours of workshops and 10-20 hours of networking events. Outside of the programme, entrepreneurs succeed in spending anything from a few hours a week on their ideas, to incorporating their creation into a full-time job.

place in a co-working space and a certain budget to consult with external experts if so required (for example, lawyers, text advisers, accountants, copywriters and marketing specialists).

The JIC Starcube programme started in 2010 and is an accelerator for start-ups and technology-oriented teams with a stronger focus on intensive development of their business ideas, often from the field of information technology. The programme offers intense three-month programmes aimed at eight to12 teams with an average of three members per team per year. The programme's principles are based on starting up a company, initiating entrepreneurship processes and planning short-term development.

The selection process includes the F6S application – a smart start-up community system with an overview of all accelerators that apply for the programme answering 20 questions: what the project is about, who the people are in the team, what they want to achieve during the programme, what they think they can be helped with, etc.

Unlike the Enter programme, which is individualised, the Starcube programme operates in cohorts. Participants are supported by other people who are solving the same issues and helping each other. Another difference between the programmes lies in the higher intensity that Starcube requires. Both programmes are concluded with a demo day on which the teams present their start-ups in front of an audience of 200 to 250 people, including industry experts, investors, journalists and other stakeholders. Starcube also consists of a so-called trial demo day which is intended to show progress. The cost of the programme is a 2% share in the company. This (future) share is taken by JIC's subsidiary – JIC Ventures. When entering the programme, the participants are offered financial assistance: up to €1,800 for development, prototyping and product testing. Up to two members of each team also can have their living costs covered every month. If the participants are not from Brno, they can also get their travel costs reimbursed.

The JIC Master programme is designed for innovative technology companies that have been in existence for less than three years and have ambitions to become important regional, national or international market players. The participants are usually the founders, or people who make important decisions within a company. The programme's structure is similar to JIC Enter and includes around nine to twelve companies per year in 3-month programmes. JIC Master is based on individual consultations which occur every two weeks for two hours. Participants have to work on a product-based or scalable business and should hold global ambitions. The participating companies (represented mostly by their founders or C level management) work on their own business.

This programme helps companies to set up appropriate strategies, identify weak points of their businesses and build solid foundations for foreign expansion. Participants are offered consulting services in the fields of business processes, team work and team management, business models, financial management and international strategy. In addition, they are advised on tax, legal and marketing issues, public relations and promotion, and the protection of intellectual property.

JIC Voucher has been a successful JIC programme that was transferred to national level in 2015. JIC Voucher was "a tool by which the city of Brno and the JIC supported cooperation between companies in South Moravia and research organisations. With the help of one-off grants up. to the amount of around €3,700 it dissolved the boundaries between the corporate and the academic environments and increased the competitiveness of the whole region". The programme started in 2008, five years after JIC was established. The biggest incentive for setting it up from the point of view of the RIS was to target the lack of connections and cooperation between entrepreneurs and universities/research centres. The second incentive was to profit from vast financial investments made in that period in new research infrastructure in Brno, also due to the EU structural funds.

Before applying for a voucher, companies had to obtain a knowledge offer from a knowledge provider (university) in order to establish a link. The vouchers were initially financed by the city of Brno: (for around €300,000 in total). Within the first period, all companies in the country were able to apply for vouchers. The scheme was slightly modified over the years. The first modification allowed for companies only, instead of private individuals, to apply for the programme. The second modification demanded 25% of co-financing, thereby ensuring that pro-

jects all had serious intentions. Another modification enabled South Moravian SMEs to cooperate with anyone in the world; after a few years of the voucher system being in operation the research centres had already established their connections with Czech companies. Around 40 vouchers were issued per year and at the end the company had to report about the services that were delivered through this scheme.

6. OUTPUTS

The key outputs of JIC Enter, JIC Starcube and JIC Master programmes are newly established companies with numerous job vacancies. In the last three years, companies that were supported by JIC have created more than 1,700 jobs. More than 4,700 participants attended their seminars and networking events in 2016.

Over 13 years, JIC has accelerated more than 200 innovative companies and it has supported collaboration between researchers and companies worth almost €1.8m. Since 2010, JIC has been involved in the creation of more than 30 start-up companies which received a total investment of over €4.4m.

The main outcome of the JIC Enter programme is the provision of knowledge on how to do business, how to be an entrepreneur and how to attract the first paying customer.

In the JIC Starcube programme the chief outputs are a paying customer and the Net Promoter Score. This is a management tool that can be used to gauge customer satisfaction. The only question asked is whether the customer (in this case a start-up/entrepreneur) would suggest the programmes to their peers. In the long term, it is important to have market potential, achieve certain revenue levels and expand to foreign markets, etc. Since its beginning, JIC Starcube has already accelerated 63 projects, of which 46 companies have been fully established.

One of the biggest companies incubated is a search engine for low-cost air tickets called Kiwi.com. The company was established in 2012 within the Starcube programme, employs around 900 people and has been valued at approximately €400m. The company is based in the region, creates many jobs and the employee average salary is three times higher than the average salary in the region.

The main outputs of the innovation vouchers were joint projects between companies and the universities' research centres.

One of the essential criteria for applying for JIC programmes and support has been the availability of knowledge providers. Most companies are directly from Brno and partially from South Moravia, therefore geographical proximity is an important determinant of the JIC operations. Regarding the size of the companies, almost half have been micro companies (one to ten employees), and a small share have been large companies.

Around 80% of the participants of the three programmes are males due to technical orientation in the collaborative sectors, with their ages ranging from 25 to 35 years old. However, in the last few years many initiatives have been established to attract women to study IT and other technical sciences. Success is usually determined by the technical background of the participants, who generally have work experience, a good work ethic and also a financial background.

7. IMPACTS

The main impact of the JIC programmes is supporting the implementation of the RIS of South Moravia (based on UBC), supporting entrepreneurship and encouraging an entrepreneurial mind-set. JIC programmes have a long-term impact on the community and the UBC ecosystem within the region. Particularly, the voucher system has enabled the JIC to target around 1,000 SMEs interested in the RIS and the potential of universities. In this way, JIC and South Moravia are recognised as one of the most important technology hubs of Central Europe. The innovation vouchers have also helped establish the brand of JIC and links to different regions. Regarding the social factor, all JIC programmes have raised awareness of UBC possibilities among companies, students and researchers.

Support & Influencing factors

8. SUPPORTING MECHANISMS

The main supporting mechanisms come in the form of financial investments and strategic documents from the regional government, the city of Brno and the four universities of the region. Some grants are also provided by other resources, for example the Ministry of Industry or the European Commission. The primary policy document defining the JIC operations is the RIS, firstly adopted in 2002. An important role in establishing UBC within the strategy was played by the deputy regional governor responsible for regional development, who also introduced the innovation strategy for the region and was able to convince the regional government and universities from the region to establish JIC.

Since then, it has been renewed several times, most recently in 2014 with validity until 2020. The last one is also formalised according to the EU rules and thus also acts as a Smart Specialisation Strategy. The strategy includes a vision, a mission, strategy goals, specific goals and projects which define UBC. It also defines vouchers, CTTs and the programme of the JIC, including its financing and operational activities.

In addition, JIC has its own strategy which is reviewed annually. There is a system of objectives matrix which every team needs to fulfil according to the performance indicators (for example, number of companies, success of companies). JIC also has its own competence model with targets for personal development. The model is discussed with supervisors and the human resources department on a quarterly basis to set annual and quarterly goals and training mechanisms to achieve these goals.

9. BARRIERS AND DRIVERS

The main driver of the UBC is the JIC team, which is capable of creating networks with their partners across the region. Together with the internal team, there are external experts for setting up UBC partnerships. A related driver is the good, trusting relationship between a client and the consultant or team that is working with them. JIC provides guidelines for the teams to see what they need to do, but the choice regarding implementation is still theirs. The guidelines within the programmes of JIC are mainly from the field of business strategy, company finance, sales, business models, marketing, founders and management relationships, team management, new employees and investors relationships. Even if they do not succeed with a particular idea, it is important that they go through the learning process.

The biggest barrier is the rigid system of managing universities in the Czech Republic. The law on the governance of universities is the same as it was in the early 1990s: it provides more power to traditional academics than rectors and deans, thereby leading to weak university management. The education system does not provide enough encouragement for creativeness and broader educational aspects through interdisciplinary practice, which would also enhance the understanding of societal needs, provide a broader knowledge and a more entrepreneurial approach.

Due to the lack of entrepreneurial education in the Czech Republic, the participants often do not know what to expect when they are included in the programmes. It can also be the case that there is a commendable product with great potential but the team is unable to realise it and sell it successfully.

10. FUTURE CHALLENGES

The biggest challenge for the JIC's future development is the low quality of the university entrepreneurial education that can cause skill shortages when implementing the programmes. An entrepreneurial mind-set should also be encouraged among secondary school students. JIC should improve its communication with the wider public and promote an entrepreneurial attitude. JIC is launching a new service in 2017 to tackle this specific issue – education in entrepreneurship for secondary schools and university students as well as providing this education for founders of university spin-offs.

Some changes are envisaged for the programmes. One of them is a focus on cohorts rather than individual work with teams. In the Starcube programme, there will be a stronger focus on early-stage start-ups.

All the programmes are constantly looking for possible improvements and changes through collection of data and experience. Currently the three programmes are undergoing a slight renovation in form (e.g. the application and selection process or more flexibility of the programme etc.). As for Starcube the changes will be mainly in:

- Lifecycle of accepted start-ups they will accept start-ups from the problem/solution fit phase (e.g. they already have done market research that proved the interest of the market in their product), until the phase of product/market fit, but they cannot have a paying customer yet.
- Length of the programme vs. the form the first phase (done in the cohort) will only be two months long, the second phase targets only the few best start-ups of the cohort (newly added to the programme) which will be given six-month individual support.

11.CONTEXT

The South Moravian Region is located in the South East of the Czech Republic, bordering Austria and Slovakia. It is the third largest region in the state relative to the number of inhabitants (more than one million). Its capital is the city of Brno, which is also a commercial centre and university city. The most important industrial sector in the region is engineering, followed by electrical engineering, food processing, textile and clothing and the printing industry. However, in recent years the economic profile has changed with the establishment of foreign hightech companies. The region has significant economic potential, especially in the fields of computer technology, telecommunications and software development due to a significant increase of businesses in these areas. The region also has an above-average education level due to a quality higher education system. There are several higher education institutions established in the region, namely the Masaryk University (faculties of Information Science, Law, Economics, Natural Sciences, and other) the Brno Technical University (VUT) (faculties of Electrical Engineering and Computer Science, Mechanical Engineering and other), the Mendel University of Agriculture and Forestry and the University of Veterinary and Pharmaceutical Sciences.

In 2002, the South Moravian Region and the statutory city of Brno introduced the Regional Innovation Strategy (RIS) with the aim, "to create the conditions for competitive, knowledgeintensive business, in particular through investment in raising standards in education and research, improving the image of the South Moravian region and through direct support of entrepreneurial activities"

Furthermore, in 2002 it became obvious for the government that the previous strategy relying on foreign direct investment (FDI) was unsustainable. That year, the first FDI-funded plant left the region and was relocated to Romania, creating 2,000 redundancies contributing towards the region's inactive labour market, already noticeably affected by unemployment.

An important determinant of the JIC programmes is also the current political culture in the region, which fully supports the investments made in R&D and entrepreneurial activities; even during the economic crisis the funding for R&D and innovation were not cut. Due to the strong green movement in the region, JIC programmes do not support companies which are not ecologically or environmentally friendly.

12. KEY SUCCESS FACTORS

The key success factors are the regional political and financial stability along with the successful management team of JIC, which can maintain the vision of the centre over the longer term.

Another key success factor is that JIC has a whole variety of different programmes and services using different services and programmes which assist customers and start-ups. JIC is also able to provide help to start-ups from the very beginning up to the point where there are 200 employees in the company.



Further Information

13. MONITORING AND EVALUATION

Due to the large financial investments made by the regional government, JIC monitors the programme very carefully. JIC needs to provide an annual report to the steering committee of the RIS, which checks that the objectives of the vision, mission and indicators have been met. Each objective has its own matrix. There is also a report on the progress of the strategies of the projects. Regarding the evaluation, there are occasional evaluations of key strategic projects, for example Starcube, and currently a content evaluation of the whole innovation policy from 2003 to 2016 is under operation. The indicators of the RIS include, for example: business' R&D expenditure, number of ERC grants, the share of foreign students operating there, employment level, wages etc.

14. SUSTAINABILITY MEASURES

The programmes have no sustainability measures in place, but the voucher scheme's sustainability has been achieved by transferring the instrument to the national level.

15.TRANSFERABILITY

JIC also tries to inspire other regions across the country to implement their programmes and good practices. The voucher scheme was initially transferred to several Czech regions and eventually to national level, where JIC provided consultations and support regarding its implementation.

16. AWARDS AND RECOGNITION

JIC is a holder of the prestigious BIC accreditation, which is granted by the European Business & Innovation Centre Network (EBN) on behalf of the European Commission. JIC is also a member of Enterprise Europe Network.

JIC Starcube won the national, Promoting the Entrepreneurial Spirit by European Enterprise Promotion Award in 2013. It has been recognised as the number one start-up accelerator in the Czech Republic.

17. LINKS

- JIC website http://www.jic.cz/
- RIS strategy for South Moravia www.risjmk.cz/en/

18. CONTACT PERSON



Mr. Jindrich Weiss, weiss@jic.cz