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Poland: The Role of STPs in Creating Startup Community

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Executive summary

Entrepreneurship is rising in almost every major city and region around the world. Dynamically operating startup communities form an indispensable part of cities all over the world. For several years, startup community has been growing. At this point starts the role of STPs that should serve as the real links between participants of the innovation process, including startup communities.

In this paper the author discusses the role and actual position of technology parks in creating startup community. The author identifies the main problem of effective cooperation which is the lack of a tradition of cooperation between business entities and their environments in order to achieve better development effects. The main objective of this paper is to present exporting the STP concept into cities in the context of start-up community.

In order to achieve this aim, the author grounds the approach on a series of theoretical mechanisms of creating startups communities and provides practical examples, using Poland as an example.

Why startups?

Ecosystems created by young entrepreneurs and amateurs of new technologies contribute not only to establishments of new companies, increase in self-employment or development of innovations, but also constitute one of the best showcases that a modern city can have. For many years Poland has been struggling with the problem of the so-called brain drain, or the emigration of the most talented citizens – those with the potential to create startups and – as a result – to hire talented professionals. To retain these people, the conditions for starting and running a business in Poland must be created at least as favorable as in the other EU countries, which are often favored by young entrepreneurs. Startups are the essence of entrepreneurship, and Poland can be a country that exports patents and innovation, and not just workforce. Successes achieved in such industries as biotechnology or programming demonstrate the unlimited potential of the Polish talent. However, in order to fully utilize this potential, there need to be an ecosystem that supports the generation of innovation in Poland. Young people are increasingly opting for entrepreneurship as their way of life. They start running their own businesses and begin to engage in startups communities. The mechanism is similar when it comes to a little more experienced workers tired of corporations.

Currently, even common knowledge about the development of the startup market allows for a justified statement that a large part of innovation comes from the smallest companies and a large part of new, small entities is set up to implement an innovative business idea. According to Polish Agency of Enterprise Development the results on innovation of the smallest entities are surprising - among them almost 60% declares having conducted innovation activities in the last three years. It may be wondered how accurately the entrepreneurs assess their innovation, and if they do not overestimate it. Microentrepreneurs, when asked about their associations with the term "innovative company", mostly respond: modernity, future, moving with the times (23% indications), new technologies (22.5%), development and improvement of the enterprise (17%). In the case of new products and service and innovative solutions, the indications are lower (less than 10%).

For entrepreneurs, innovation is correctly associated mostly with modernity, future and modern technologies, and this is how they may estimate (slightly overestimating) the innovation of their own companies – as companies well-functioning on the market, creating modern products and having perspectives for the future. However, whether this is sufficient to consider a company being innovative – it depends on whether that company creates or develops something itself. The respondents indicate these issues less often. Such a hypothesis needs to be checked through future research, however, it may be assumed that a microentrepreneur is a specific type of respondent. The entrepreneur may act as "company is me", because due to small resources it requires a strong engagement of the owner in the operation of an enterprise. The owner may thus transfer his/her opinion about themselves – that they are creative/innovative – to their company. However the company does not necessarily has to be considered as such in its reception of in terms of its real actions or effects. This would explain such numerous declarations of micro-entrepreneurs concerning their innovation. It should be remembered that the answers related to a very particular question a out introducing or not introducing innovation within the last three years, which is why the received responses should be reliable at first sight.

Startup communities in Poland

Poland, with a population of 38 million people, is Europe's sixth-largest economy. Situated in the center of Europe, it has easy access to western and eastern corners of the continent, and a currency, the Zloty, that has largely evaded the woes of the Eurozone financial crisis. In 2009, while the EU economy shrank 4.5 percent, Poland's grew by 1.6 percent. Its GDP is projected to have grown 16 percent between 2009 and the

end of last year.

Poland's startup scene, like its economy, is booming. Fueled by high levels of innovation, low costs and a strong talent pool, the country stands poised to become one of Europe's digital strength. But below the headlines, there is a competition between three cities, Warsaw Poznan and Krakow. They all want to become home to the country's next generation a startup hub. What is interesting, just a few years ago there was very little in Poland connected with startup community. At present, we observe communities come together around incubators and accelerators.

On the other hand, it doesn't mean that everything is so optimistic in the former eastern bloc state: youth unemployment remains an uneasy 25 percent and infrastructure still lags far behind that of its affluent neighbor, Germany. In addition, Poland's business laws, like that of so many former Comecon states, are shrouded in red tape. The least appealing thing is all the formalities and the law: it's not really friendly for either European or American investors to invest in Poland. Berlin is still the undisputed king of startups in central and eastern Europe; there are over 2,500 companies in 'Silicon Allee' that contribute up to 10 percent of the German capital's GDP. But Poland is pushing on, And it may not be long before its three biggest cities attract headline-making investments - even from the US. Despite this, in the past couple of years Poland's entrepreneurs have forged a formidable tech startup community that has begun knocking on the door not just of domestic VCs, but also some of Silicon Valley's. Poland's expanding economy has allowed people to set up their own companies. Young people are getting braver. Before many were scared to start their own business. For example Cracow is home to hundreds of Flash programmers and developers, as well as 300,000 IT graduates. As the country's biggest city (with a population of 1.7m to Cracow's 766,000) Warsaw is a more diverse and metropolitan location. And with quick transport links to Berlin — Europe's startup champ - its community may be smaller but is growing fast. Warsaw's local government has displayed an interest in the budding ecosystem. The same in Poznan - the city is famous for its tradition of entrepreneurship. After its 1000 years of existence, technology firms are appearing to represent the city on the international market, attracting the attention of Polish and foreign investors. Poznan is regarded as the most startup-friendly city in Poland, a city where society is very active, startup events take place almost weekly and young entrepreneurs are integrated and successful. And the startup community is still gaining momentum. This will bring benefits for everyone - both for the City, which will gain recognition of international community related to business and technologies, its citizens - who will be able to use the solutions developed by startups, traditional entrepreneurs, who will be able to implement some innovations in their companies, as well as young people, for whom Poznan will not only be the academic city, but also one with interesting future perspectives. There is also initiative called Startup Poznan under which the City of Poznan, in cooperation with representatives of companies and institutions from Poznan that have been supporting startup communities for years, strive for development of the best possible support programme for young companies operating on the basis of knowledge and new technologies. The aim of the initiative is to promote startups connected with the City, support their development, enable access to essential knowledge, engage local community and develop current ecosystem.

At present a lot of money for entrepreneurship development comes from European Union. There is a program that gives money to investors instead of investing directly, leading to a sudden accumulation of investors (for example technology parks) who had no experience but are able to invest up to \$65,000 per investment. Unfortunately, a lot of the money was invested in safe businesses (primarily e-commerce) where exits didn't happen. The investors weren't looking for big yields but rather likely yields, and in the end, the money didn't flow back into the ecosystem. One of Poznan Science and Technology Park initiative is an example of investing in risky technology startups. The InQbator Seed of PSTP is a recent undertaking intended for those who conduct research in the field of chemistry, biotechnology and have an idea and unique know-how. As

part of the project, it offers a service which makes it possible to receive up as well as capital and help from experts in order to support original and modern undertakings. Concrete examples of recent investments are Genesius (specialised in synthetic biology, which constitutes a combination of molecular biology, genetic engineering and chemistry of nanostructures) and a first spin off from Wroclaw Medical University (licence for the use of patented method of using Cystatin - proteins for future medical treatments.

"Cooperation - it's worth it!"

Although the motto "Cooperation – it's worth it!" seems to sound quite trivial, in fact it hides in it complex concepts and dependencies which are not always unambiguous. It also seems that everyone knows and confirms that it is worth to cooperate, but this knowledge translates into practice to a varying degree.

We shall return to the question of why cooperation is worth it, and especially if it is worth it for entrepreneurs. First of all, thanks to cooperation and participation in various networks, entrepreneurs gain wider access to information. A lot of information is transmitted verbally and provided only to persons regarded as trusted. Of course, cooperation may take more and less formalised form. For example, STPs, incubators and accelerators bring together entrepreneurs and providing them with networking services. For the purposes of this article, it was decided to look at it from two points of view: from the point of view of social capital as well as of network i.e. networking. Cooperation in society is largely a resultant of various forms of social capital, in particular the trust level, flow of information. We can also analyse cooperation of businesses from the perspective of the network theory. Theorists and practitioners of management agree that networks play an important role in setting up and running a business. There are two approaches determining how the effective network should look. Networks can be divided into two categories: homogeneous and heterogeneous¹. The factor characterising this typology is the strength of relationships between network participants, which is a combination of the amount of time spent together, emotional intensity, intimacy and reciprocity². The strength of relationships affects the nature and value of the information provided within the network. Sharing common goals and working together give a chance to build a better environment for startups in Poland.

Interesting issue, as well as an important element of activity in the framework of business and innovative activity, is collaboration with the outer environment The smallest companies, similarly to larger entities mostly cooperate with other business partners – i.e. with enterprises from the same capital group or with another company which is not related in terms of capital (which results from other studies, e.g. in the framework of an international Global Entrepreneurship Monitor project, in which Polish Agency do Entrepreneurship Development participates). It concerns both current collaboration and collaboration in the creation of innovation. However, when it comes to plans concerning future collaboration, even though entrepreneurs still mostly intend to collaborate with other companies, they want to start collaboration with higher education institutions (7% cooperates now, 12% intends to) and technology incubators (2% cooperates, 8% intends to) more than nowadays. Less often than nowadays, however, they plan to start collaboration with national and foreign research units. This may indicate that entrepreneurs see the relation between the development of their company and the quality of their human resources even more clearly than in the past³.

^{1.} S.L. Nielsen, K. Kleyver, M. R. Evald, T. Bager, Entrepreneurship in theory and practice, Edward Elgar, 2012

^{2.} M.S. Granovetter (1973), The strength of weak ties, American Journal of Sociology, 78

^{3.} Innovative entrepreneurship in Poland, Polish Agency for Enterprise Development, Warsaw, 2015

^{4.} Brad Feld, Start-up communities- building an Entrepreneurial Ecosystem in Your City, 2013

Start-up ecosystem vs. STPs

Brad Feld4 recognizes leaders and feeders. Entrepreneurial leaders need to be committed to their region for the long term, the community and its leaders must be inclusive, mentorship-driven and be comfortable experimenting and failing fast. Feeders include the government, universities, investors, service providers (e.g. STPs) and large companies. He points out that some of these, government, universities and investors think of themselves as the leaders and Feld's thesis is that we've gotten it wrong for decades. Feld is not a big fan of top-down government driven clusters. He contrasts the disconnect between entrepreneurs and government. According to Feld Entrepreneurs are painfully self-aware but governments are chronically not self-aware. Governments have a top-down command and control hierarchy, while entrepreneurs work in a bottoms-up networked world. Governments tend to focus on macro metrics of economic development policy while entrepreneurs talk about lean, start-ups, people and product. And what is the most interesting fact about start-up communities? They're are usually NOT government sponsored or government funded. It's people helping people, entrepreneurs helping entrepreneurs and companies coming together to respect and support each other. The biggest role that the public sector has to play in the entrepreneurial ecosystem is in setting financial and tax policies that encourage investment and company creation. Supporting startups is not limited to providing them with initial funds for development. In order for an enterprise to survive on the market, professional technology parks, accelerators and incubators for young companies are necessary. They offer much more than just financial support. They convey knowledge on how to implement an idea, how to set up a business activity, how to introduce it to the market and achieve success. What is the role of STPs and incubators then?

The axis of the activities of technology parks and other innovation centres shall consist in creative efforts for changes that will allow Polish startups to develop their full potential. They should support regulatory and market initiatives, for the development of technological entrepreneurship and the development of startup financing infrastructure. They need to invite to cooperation the central administration and the local government administration and other partners from the world of science and business. What's more STPS' support can be personalised by way of maintaining consistent dialogue with groups of entrepreneurs, which will help specify the scope of their needs concerning advisory services and financial support. It is also important to support the development of enterprises within the scope of management quality, innovativeness and internationalisation.

It is important for technology parks to form strong bonds especially with young enterprises in order to advance the creation of smart jobs, promote academic entrepreneurship and a variety of other means. STPs are supposed to give young entrepreneurs the resources and tools they need to build welcoming and supportive entrepreneurial start-up communities where they can start and scale their ventures. STPs act as community catalysts, as a magnet for great entrepreneurial talent for the region, and as teachers and then a pipeline for talent back into the region. On the other side the community's leaders also proactively engage with local stakeholders in government and industry, as well as with supporting institution such as STPs and investors, to form a partnership with a common goal of creation and growth of new companies locally.

In order to strengthen start-up community STPs should support such pillars of an effective start-up ecosystem as innovative culture, mentoring, start-up events, access to finance, access to talents. One of the most popular activities of a regional community are continual events to engage all participants. A strong entrepreneurial community organise events and activities that serve as fruitful ground for meeting the right people. Using Poznan as an example, this entrepreneurial community organise many events for young entrepreneurs who work in productive and relaxing atmosphere, for example:

Hive61

These are monthly meetings dedicated to topics connected with conducting business based on new technologies. The meetings are conducted in English language and the group of lecturers always includes at least one foreign guest.

Startup Sprint

These are 3 day events, during which their participants, under the guidance of mentors, develop business ideas or already initiated business projects connected with the sector which constitutes the leading theme of the event. Startup Sprint is a brand of events, which was created in Poznan, but its editions have also been organised in other cities.

Business Mixer

These are cyclical events organised by Academic Enterprise Incubators. The meetings are held in a formula with participation of a special guest, after whose performance, presentations of a few startups are conducted. The event finishes with selection of the best startup.

Poznan Startup Pirates

A few day workshops, during which participants develop their business ideas under the guidance of mentors. The idea of Startup Pirates event originates from Portugal. First Polish edition of this event took place in Poznan.

Poznan Startup Weekend

Startup Weekend is a well-known in the world of startups idea, developed by the Kauffman Foundation. From Friday to Sunday, under the guidance of international team of mentors, participants develop their business ideas.

Startup Poznan Event

The event addressed to people who want to build their businesses based on knowledge and innovative solutions. First edition of the event took place in 2014 and included performances of experts, practical workshops and 24 hour hackathon. The event is conducted by the City of Poznań together with institutions and companies operating in a local startup environment.

Geek Girls Carrots

These are meetings of community of women interested in new technologies, which aim at promotion of women connected with the IT sector. The initiative of the events itself was developed in Warsaw, however Poznan Carrots Community (since it gets called like that) is one of the most active in Poland. Besides from monthly meetings, the organisers also hold a series of gratuitous workshops and engage themselves in events promoting new technologies.

Maker Space Poznan

Its goal is to familiarize wide audience with hardware type projects – drones, robots, 3d printers and many innovative solutions as well as to present profiles of their inventors. First edition of this event attracted over 350 participants.

Pvladies

An initiative which was developed in Poznan and which promotes Python language among women (organises programming courses in this language). Pyladies is a group uniting people from all over the world, whose goal is to promote, educate and increase diversification of Python communities.

Mind Park

Cyclical meetings organised at Poznan Technology Industrial Park, to which known and valued persons from the world of business, new technologies, marketing etc. are invited. The meetings are usually held on Mondays, once a month.

CHI Poznan

These are cyclical, irregular meetings of people connected with User Experience. Association CHI Poland is a Polish division of ACM SIG-CHI, an international interests group focusing on research, designing and solving of interaction problems between a human being and a computer.

DG - Google Developer Group

These are cyclical meetings for amateurs of API Google. The aim of the group is to create communities of persons interested and cooperation with other GDG groups.

Poznań Gov Jam

The workshops are a part of an international event Global Gov Jam, under which, within 48 hours, participants develop solutions for the needs of the public sector using the methodology of design thinking.

Students Roadshow

Students Roadshow is a cycle of lectures at higher education institutions nationwide, organised by a pioneer in the e-commerce sector – Allegro Group. It is a way of sharing practical knowledge.

Business Booster

Businessbooster is a competition which is to aid young entrepreneurs in starting activity better, faster and with bigger self-confidence. The competition is organised by the organisation of European Students of Industrial Engineering and Management – ESTIEM, who combine technological knowledge and management. The finale of the 2014 competition was held in Poznań.

Startup Europe Roadshow

Roadshow enables young students, who want to become entrepreneurs in the IT sector to make use of knowledge, cooperation and mentoring of their friends who have already succeeded. The project Roadshow is a series of 10 workshops, which were held in Poznan, Paris, Berlin, Prague, Athens, London, Madrid, Bucharest, Lisbon and Budapest.

Poznań Game Jam

Poznań Game Jam is a two day hackathon concentrated on creation of HTML5 and JavaScript games. The event takes place at Poznań University of Technology, where also the hackathon within the framework of Global Game Jam takes place.

D-challenge

These are interdisciplinary activities on creative solving of problems with a method of Design Thinking. Under the programme, lectures and workshops were organised for students of three higher education institutions from Poznan, who solved tasks in mixed three people teams. The programme was developed by Poznan Supercomputing and Networking Centre and higher education institutions from Poznań.

Conclusion

Entrepreneurial attitudes of the Polish society are ambiguous. On one hand, we come off quite positively compared to other European countries in terms of our willingness to start up an enterprise in the nearest

years, we also very well assess our knowledge on running an enterprise. Comparing to other European countries, the Polish society is characterised by a very high level of fear of failure. On the other hand, the society lacks the ability to perceive business opportunities. That's why developing startup ecosystems is the key for startups success. Building, attracting, and retaining talent is seen as a critical factor in growing the ecosystem. Undertaking activity within the scope of promoting innovation culture and supporting innovative and creative attitudes among young enterprises is equally significant for creating effective communities and at the same time exporting the STP concept into cities.