



THE ROLE OF INSTITUTIONS IN SUPPORTING STARTUP COMPANIES

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Abstract

State support and its institutions play a very important role in the process of establishing the start-up companies and their further development and operation. The government should strive to recognize innovative startups and help them to grow. This way, active influence on the development and strengthening of economic activity in the country. High growth is mostly generated by innovative entrepreneurs who find and realize new business opportunities. The objective of this paper is to highlight the most important institutions with their support models that help the creating startup ecosystem, its existence, and to benefit the economy as a whole.

Key words: *startup, entrepreneurship, innovation, institutions*

1. INTRODUCTION

The importance of the establishment and development of startup companies is increasing from year to year, which can be seen on the basis of a large number of relevant institutions in countries that are dealing with this issue. Reliance on this kind of economic development is becoming increasingly important engine of this process. Some of accepted definitions of startup are: "A startup is a human institution designed to deliver a new product or service under conditions of extreme uncertainty" [1]. „A startup is an entrepreneurial venture which is typically a newly emerged, fast-growing business that aims to meet a marketplace need by developing or offering an innovative product, process or service" [2]. A startup is a "temporary organization designed to search for a repeatable and scalable business model" [3]. The new startup venture assumes that the lone entrepreneur takes a calculated risk to bring something new into the world [4]. Usually startup is small business in high technology „garage businesses" often with a very simple structure. Large corporation and startups are very different organizations. „The gap between the corporate and startup ways of working poses real challenges to getting both sides together. Corporations are hard to approach for startups, cultural differences often lead to

misunderstandings, and different organizational clock speeds take their toll along the way"[5]. Startups are a very important part of all economies, so governments seek to support innovative startups through different supporting programs and help them grow in the right way. This kind of support mainly goes through a network of institutions, whose important task is to assist startups in all their stages of operation. Supports by laws, policies and regulations are essential for this complex process. We can say that entrepreneurship and startups policies play a key role in the economic and social development of a nation.

Policy makers need to recognize an opportunities for development and creating sustainable system of startups. Given that, startups are a very fragile and young business subjects, level of caution should be very high. Facilitating business is one of the main objectives to be achieved for the companies. This process should involve all relevant subjects that will lead to its successful establishment and functioning. Startups needs help in several areas, especially around the entry and positioning their products and services on the market. However, it's important to be very systematic about choice of support for startups, because some institutions support the ongoing growth of startup business, but some provide little to no value. But there is definitely value to be gained to get the right

support from relevant institutions, and it's something every startup founder should be considering. It can lead to new relationships and connections, financial and expert support, partnerships, business ideas and developing of business model, etc.

2. THE SPECIFIC IMPACT OF INSTITUTIONS ON THE STARTUPS

In general, institutions have a strong impact on the growth and development of new business. "Institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction"[6]. Three important features of institutions are apparent in this definition: (1) that they are "humanly devised," which contrasts with other potential fundamental causes, like geographic factors, which are outside human control; (2) that they are "the rules of the game" setting "constraints" on human behavior; (3) that their major effect will be through incentives [6]. The major role of institutions in a society is to reduce uncertainty by establishing a stable (but not necessarily efficient) structure to human interaction. „The overall stability of an institutional framework makes complex exchange possible across both time and space“ [7]. Specifically, higher certainty means that the costs of contracting and of protecting property are lowered, which in turn means that more startup projects will be undertaken. As Bjørnskov and Foss (2013) argued, higher certainty and incentives for productive behaviors are particularly strongly influenced by the extent to which private property rights are protected, including dimensions such as generality (i.e., equals are treated equally), transparency and accountability in public decision making, and, importantly, an expectation that property rights are effectively enforced [8]. An important influence on this segment, has a quality of regulations and the judicial system, and that is one of the major reasons why the startups fail, especially in developing countries where this system are usually very brittle and insufficiently justified. In Europe, each country is trying to establish own startup ecosystem, respecting the rules that apply in the EU as a unified community. Experience shows that the mapping of the institutional system of other countries, are not the right way to developing startup ecosystem, due to the specific rules that each country has. The uniqueness and flexibility of the startup ecosystem-based prerequisites for its functionality and efficiency.

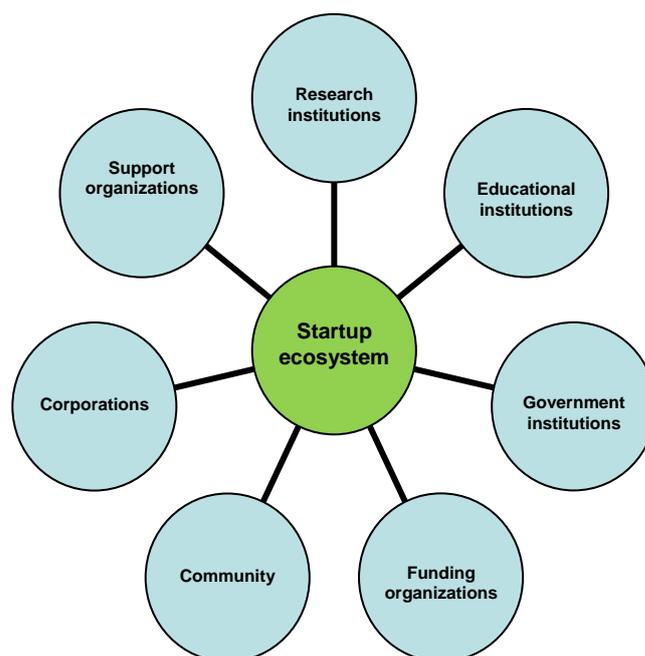
It is important to take into account the fact that the startups are very unpredictable entities, which are mainly oriented to research business opportunities. The role of the institutions is very important and should help startups to become a permanent organization with a predictable business model. The relevant institutions create a various programs with the goal to startup turns into functional entity. These programs require a high level of commitment, appropriate expertise and sufficient funds for their implementation. The programs must support tailored to the needs for each entrepreneur and the current stage of development of

his new venture. The support that the founders of startups received from relevant institutions greatly affect the raising of certainty and success of their enterprise. In terms of modern business, risk reduction leads to greater interest from potential investors and partners, which is crucial for further development of startups and strengthening market position, through further improvement of products or services, and the acquisition of new customers.

3. TYPES OF INSTITUTIONS IN THE STARTUP ECOSYSTEM

A startup ecosystem is formed by people, startups in their various stages and various types of organizations in a location (physical and/or virtual), interacting as a system to create new startup companies [9]. Different organizations are involved in specific parts of startup development stages and they contribute to the functioning and maintenance of the whole process. Their synergy results to stability in terms of the regulatory system and the support that is necessary for new business. Parts of the startup ecosystem are presented in the picture below (Chart 1):

Chart 1. The important institutions which are the part of the startup ecosystem [10]



This model provides different models of collaborations and connections in operating startup business, so that makes strong relationship between this institutions. Their symbiosis allow successful incubation of new startup and transforming that startup into efficient business, through support in the meeting the challenges and their adequate solving.

3.1. The role of research and educational institutions in the startup ecosystem

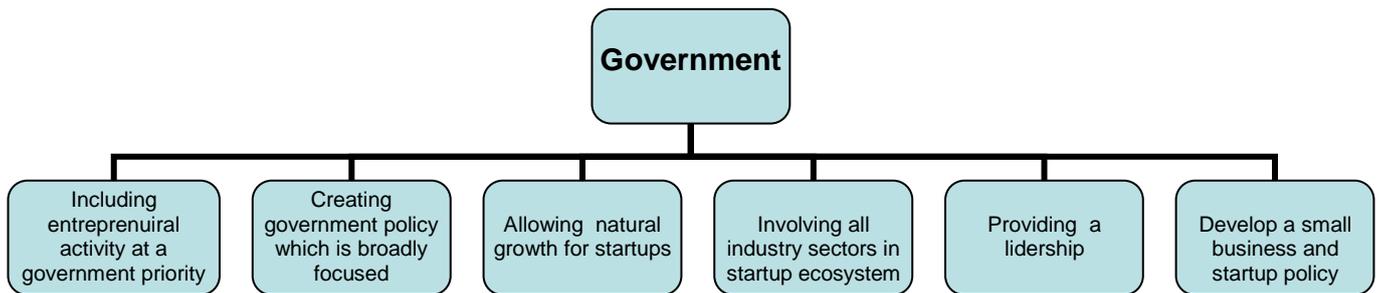
Research and educational organizations have a huge impact on startups, especially in the early stages of development. This is source some of the best relevant practice and literature review, and helps a new companies grow. Experts from different institutions such as: universities, faculties, institutes could provide a functioning and efficient platforms for startups operating. Most often, this type of platform is based on the establishment of spin of companies and creating a business environment for them. According to Stankiewicz “the notion of spin-off companies implies a form of knowledge and technology transfer from academic or other public research organization to the commercial market [11]. This kind of companies are the core of academic entrepreneurship and provide creating and managing companies by the students and employees of scientific institutions and research centers [12]. Institutions which involved in higher education and researching, represents a critical factor in innovation and human capital development and plays a central role in the success and sustainability of the knowledge economy [13]. These educational and research institutions must showcase their ability to

enhance the major scientific and technical competencies required by their students and employees to be competitive in the future in a very advanced environment [14]. It's very important that these institutions provide and support Entrepreneurship educations and incubations, because this is the way to contribute directly to the quality and quantity of new startups, than to more directly influencing on the economic development of the country.

3.2. The role of government in the startup ecosystem

Governments all around the world are interesting for entrepreneurs and startups such as potential solutions to flagging economic growth and increasing employment in their states. The primary goals for governments need to be removing obstacles for funding startups and their growth, especially in areas such as: developing a workable policy, competitive regulation on the market, unfair taxation on small companies, attracting investment capital and help them in the sensitive stages of their development. Some of the main activities of the government within the framework of startup ecosystem are presented on the picture below (Scheme 1):

Scheme 1. The government role in the startup ecosystem



Creating a sustainable environment for startup companies is one of the biggest challenges the government is facing. The mechanisms used for this purpose must be well-designed and applicable to all startups, regardless of which activity they are related to.

The main role of governments should be to facilitate the emergence of dynamic ecosystems by working closely with entrepreneurs, investors, companies, local champions, role models, and other interested players [15].

Some of the key recommendations for government policy of the fostering startup ecosystem are [16]:

1. Make the formation of entrepreneurial activity a government priority – The formulation of effective policy for entrepreneurial ecosystems requires the active involvement of Government Ministers working with senior public servants who act as ‘institutional entrepreneurs’ to shape and empower policies and programs.

2. Ensure that government policy is broadly focused – Policy should be developed that is holistic and encompasses all components of the ecosystem rather than seeking to ‘cherry pick’ areas of special interest.
3. Allow for natural growth not top-down solutions – Build from existing industries that have formed naturally within the region or country rather than seeking to generate new industries from green field sites.
4. Ensure all industry sectors are considered not just high-tech – Encourage growth across all industry sectors including low, mid and high-tech firms.
5. Provide leadership, but delegate responsibility and ownership – Adopt a ‘top-down’ and ‘bottom-up’ approach devolving responsibility to local and regional authorities.
6. Develop policy that addresses the needs of both the business and its management team – Recognize that small business policy is ‘transactional’ while entrepreneurship policy is ‘relational’ in nature.

3.3. The role of funding organizations in the startup ecosystem

The establishment and further development of a startup cannot be imagined without the support of funding organizations. Some of these organizations, which play a crucial role in vitalizing of startups, especially in financial segment are:

Banks - give a loan for startup and create special programs of support which often include mentoring programs. These financial institutions are trying to give as much support as possible to the development of startups, and on the other hand to secure their investments.

Startup incubators and accelerators - The incubation concept seeks an effective means to link technology, capital and know-how in order to leverage entrepreneurial talent, accelerate the development of new companies, and thus speed the exploitation of technology [17].

Clusters - Clusters are geographic concentrations of interconnected companies and institutions in a particular field [18]. In clusters, a balance is reached between cooperation and competition, which becomes evident in the higher productivity of the companies because of their increased access to inputs, information, technology and institutions; or in greater innovation and venture creation. The important role of the cluster is to provide incentives for the entry of new companies or startups [19].

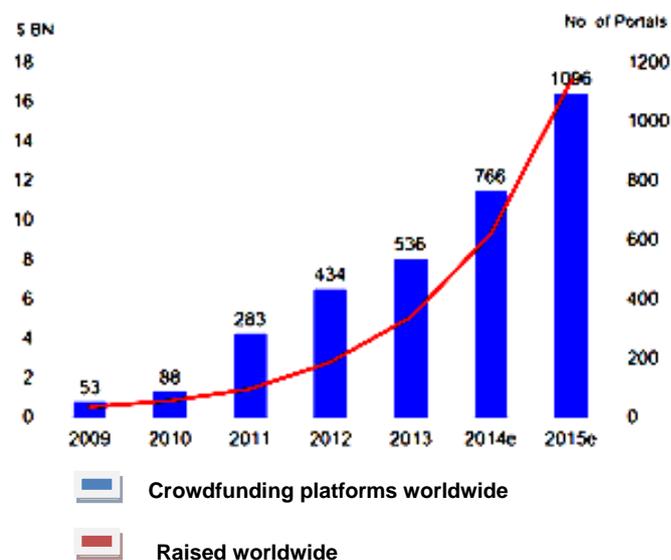
Angel investors - are high net-worth, non-institutional, private equity investors who have the desire and sufficiently high net worth to enable them to invest part of their assets in high risk, high-return entrepreneurial ventures in return for a share of voting, income and ultimately, capital gain [20]. Angels normally invest in early stage ventures where the founding team has exhausted their personal savings and sources of funding from family and friends [20]. These ventures are not sufficiently developed to stand on their own, or sufficiently attractive to gain venture capital funding [20].

Venture capital funds - Venture capital (VC) is an equity investment aimed at supporting the pre-launch, launch and early stage development phases of a business [21]. Although it is commonly assumed to be the main source of seed and early stage financing, in fact the majority of venture capital firms intervene at a later stage [21]. The venture funds are the kind of investment funds that manage the money of investors who seek private equity in startups with predicted a high and strong growth potential.

Crowdfunding - is the process of asking the general public for donations that provide startup capital for new ventures [22]. This concept includes using a small amounts of capital from a large number of individuals or organizations to finance some new startup. Forms of crowd funding are: donation crowdfunding, reward crowdfunding, crowdfunded lending, equity

crowdfunding. Every of these models have different form of return and motivation of the funder.

Chart 2. Global crowdfunding market (Raised Funds/No. Of platforms) [23]



The analysis, forecast for the global crowdfunding market show the growth of 26, 87% for the period 2016 - 2017. In the above diagram, it is seen that the growth of the number of crowdfunding platforms in the last two years observed is about 43 %.

Some of the most famous crowdfunding platforms are: Kickstarter, Indiegogo, GoFundMe, Crowd Supply, Crowdfunder, etc.

3.4. The role of community in the startup ecosystem

The startup communities provide the support and incubations that foster leading companies and drive the innovation for a bring future. These communities involved a lot of different people and many non-entrepreneurs, so it's important to get leading support in every stage of development, and usually the crucial role in that process takes an entrepreneur.

3.5. The role of corporations and other support organizations in the startup ecosystem

The integration of corporations in the startup ecosystem is rational necessity, which requests a high level of cooperation and it's supported by a number of public organizations, movements and accelerators. Large corporations could provide mentoring the creation of solutions, supplying technology, financial support, expert assistance, building distribution channels for the startups, etc. The observation is that startup ecosystem could not exist without policy makers, investors, the integration of academic institutions and partners, who are able to provide the necessary capacity and expansion opportunities.

4. THE SUPPORT PROGRAMS OF EU FOR STARTUPS AND SMEs

One of the main goals of the Common European Policy is the strengthening support for entrepreneurs and innovations in the all spheres of operation. This is the way how the creators of European policy influence on the development strategies. The main institutions headed by the European Commission, recognize the importance of creating quality programs for entrepreneurs support, especially in the area of SMEs

which represent around 99 % of all business in the EU, and they have created around 85 % of new jobs. Programs have a goal to: create a business friendly environment, promotes entrepreneurship, improves access to a new market and internationalisation, facilitates access to finance, supports SMEs competitiveness and innovation, provides key supports network and informations for startups and developed business, etc. The most useful programs are those made by EASME (Executive Agency for SMEs).

Table 1. Highlights of EASME support programs for SMEs and startups [24]

EASME SUPPORT PROGRAMS FOR SMEs AND STARTUPS		
Name of the program	Purpose:	Duration
HORIZON 2020's SME INSTRUMENTS	For highly innovative SMEs with global ambitions	Program for 2016 - 2017
COSME	For the competitiveness of Enterprises and small and medium –sized Enterprises	2014 - 2020
YOUR EUROPE BUSINESS	EU portal designed to help SMEs do business cross-border and take advantage of the European single market	From 2010 -
HORIZON 2020' SME INNOVATION ASSOCIATE	A new program will support 90 SMEs hire a researcher to bring their brilliant idea to life.	2016 – 2017
ENTERPRISE EUROPE NETWORK	Enterprise Europe Networks helps small and medium-sized enterprises (SMEs) make the most of business opportunities in the EU and beyond.	From 2008 -
FAST TRACK TO INNOVATION (FTI) PILOT	The FTI pilot is the only fully-bottom-up measure in Horizon 2020 promoting close-to-the-market innovation activities that is open to all types of participants. FTI aims to reduce the time from idea to market and to increase the participation in Horizon 2020 of industry, SMEs and first-time industry applicants.	From 2015 -
HORIZON 2020 INNOSUP	Horizon 2020 INNOSUP calls for proposals and tenders are elements of a broader action to the develop the ecosystem of innovation support to SMEs in Europe.	Program for 2016 – 2017
INTELLECTUAL PROPERTY	IP Helpdesk for supporting SMEs. It provides free-of-charge, first-line advice and information on Intellectual Property (IP).	From 2011 -

5. CONCLUSION

The aim of this paper is to give reviews and clearly show the role of important institutions in the founding and further development of startups individually, and its ecosystem as a whole. The growth of the number of startup companies that are resisting market challenges leads to the strengthening of the economy. The role of government is crucially at defining a framework policy for operate of startups, and allows their transformation in the SMEs. The work of all other institutions which are included in the startup ecosystem is directly conditioned by the measures and laws that the government adopts, and their influence is critical for startup companies to succeed. The support which institutions gave to startup companies are: broad types (such as mentoring and connecting), and financial and functional types (for example: business model assistance, incubation, etc.) [25]. Under the influence of all rapid changes and the organizations themselves are changing very quickly and adapting to the present moment. This process of changing is very important for the both sides; institutions and startups. This leads to even more significant inclusion of all important subjects in the startup ecosystem, especially funding organizations such as: incubators and accelerators, clusters, venture capital funds, angel investors, etc. Creating a wide range of support programs leads to high growth and development rate of startups. Current EU programs for support startups and SMEs have been designed and envisaged to cover the development of this area by 2020. The common characteristics of these programs are: supporting a local, regional and European startup ecosystems, to improve ecosystem visibility, encouraging investments, ease of setting-up business, business growth and acceleration, etc. On the basis of shown material, we conclude that the role of institutions in support of startups will be increasingly significant and higher. It is very important to see in which direction further support programs will be created, how their implementation will be carried out and which institutions they will entrust. It is quite certain that these programs will involve a huge number of institutions, not only key European institutions, but also institutions with local and regional character.

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7. REFERENCES

- [1] Ries, Erik (2014), *Lean startup*, Mate, Belgrade, Serbia.
- [2] What is startup? The Historical background (2017) Available at: <https://www.growly.io/what-is-a-startup-the-historical-background/> (accessed : 21 June 2017)
- [3] Blank, Steve. (2013) "Why the Lean Start-Up Changes Everything." *Harvard Business Review*
- [4] Tidd, J. Bessant, J. (2016), *Managing innovation: Integrating Technological, Market and Organizational Change*, Fifth edition, Wiley, United Kingdom.
- [5] Weiblen T, Chesbrough W.H (2015), *Engaging with Startups to Enhance Corporate Innovations*, California Management Review, Vol 57. No.2.
- [6] Acemoglu, D, Robinson J (2008), *The role of institutions in Growth and development*, The International bank for Reconstruction and development /The world bank, Washington, Paper no.10
- [7] North, D (1990), *Institutions, Institutional Change and Economic Performance*, Cambridge, Cambridge University Press
- [8] Bjørnsnikov, C, Foss, J. Nicolai (2016), *Institutions, Entrepreneurship and economic growth: What to do we know and what to do we still need to know?*, *Academy of management Perspectives*, Vol 30. No 3. 292-315.
- [9] Startup commons, *What is startup ecosystem?* (2017) Available at: <http://www.startupcommons.org/what-is-startup-ecosystem.html> , (accessed: 22 June 2017)
- [10] *Make difference with startup transformation* (2017), Available at: <https://hrtechcon.com/2017/01/09/make-difference-with-startup-transformation/> (accessed: 22 June 2017)
- [11] Stankiewicz, Rikard. (1994), *Spin-off companies from universities*. *SCI Public Policy*; 21 (2): 99-107.
- [12] Korpysa, J. (2014), "Schumpeterian Entrepreneurship in Academic Spin-off Companies in Poland", *Transformations in Business & Economics*, Vol. 13, No 3 (33), pp.42-59
- [13] Dill D. David, Van Vught A. Frans(eds.) (2010) *National Innovation and the Academic Research Enterprise: Public Policy in Global Perspective*. Baltimore: Johns Hopkins University Press. 592 pp. ISBN-13: 978 0 8018 9374 2.
- [14] Raval, D. 2016. Q&A. *What is the Role of Higher Education Institutions in Promoting Entrepreneurship in India?* *Technology Innovation Management Review*, 6(5): 24–26. Available at: <http://timreview.ca/article/988> (accessed: 22 June 2017)
- [15] Laso I, (2016), *New role for governments in the era of ICT startups*, Available at: <https://itu4u.wordpress.com/2016/02/25/new-role-for-governments-in-the-era-of-ict-startups/> (accessed: 22 June 2017)
- [16] Mazzarol T, (2014), *6 ways governments can encourage entrepreneurship*, Australia, Available at: <https://www.weforum.org/agenda/2014/12/6-ways-governments-can-encourage-entrepreneurship/> (accessed: 22 June 2017).
- [17] Grimaldi R, Grandi A, (2005), *Business incubators and new venture creation: an assessment of incubation models*, *Technovation*, Vol. 25, issue 2, pp.111-121.
- [18] Porter, M (1998), "Clusters and the New Economics of Competition", *Harvard Business Review*.
- [19] Suresh J, Ramraj R (2012), *Entrepreneurial Ecosystem: Case Study on the Influence of Environmental Factors on Entrepreneurial Success*, *European Journal of Business and Management* , ISSN 2222-1905 Vol 4, No.16.
- [20] Mc Kaskill T, (2009), "An introduction to the angel investing", *Breathrought Publications*, Melbourne.
- [21] OECD, (2015), *New Approaches to SME and Entrepreneurship Financing: Broadening the Range of Instruments*, Available at: <https://www.oecd.org/cfe/smes/New-Approaches-SME-full-report.pdf> (accessed: 26 June 2017)
- [22] Steinberg S, DeMaria R, (2012). *The crowdfunding bible*, READ.ME, Available at: <http://www.crowdfundingguides.com/The%20Crowdfunding%20Bible.pdf> ,(accessed: 26 June 2017)
- [23] *CrowdFundBeat, Report: Global Crowdfunding market 2016-2020*, Available at: <https://crowdfundbeat.com/2016/02/03/report-global-crowdfunding-market-2016-2020/> (accessed: 26 June 2017)
- [24] *Starteuropeclub*, Available at: <http://startupeuropeclub.eu/eu-funds-and-support/> (accessed: 27 June 2017)
- [25] Motoyama Y, Watkins K.K (2014), *Examining the Connections within the Startup Ecosystem: A Case Study of St. Louis*, *Ewing Marion Kauffman foundation*, Kansas city.