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**The Role of National Entrepreneurial Ecosystems on
the StartUps' Establishment and Growth in an Economic
Crisis Era: The Case of Greece**

Plenary session

STPs and AOs: valorisation of investments

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The Role of National Entrepreneurial Ecosystems on the StartUps' Establishment and Growth in an Economic Crisis Era: The Case of Greece

Executive Summary

The financial development model pursued in Greece during the contemporary economic crisis era that started in late 2009 is not a viable approach, resulting in GDP reduction by 30%, debt to GDP ratio of 177% and unemployment rate amongst young people of 51%. Therefore, startup entrepreneurship could be a feasible approach to tackle national economic crisis; however, the existing body of literature focusing on startup ecosystems and the development of entrepreneurship is rather limited. To that end, the present study aims at recording the evolution of startup companies in Greece, in order to identify the hampering issues encountered in the national startup ecosystem. Our research indicates an increasing startup establishment rate in Greece during the recession period, while the 40 participated startups reported an investment break-even point at 26.59 months. We envisage that our research assists stakeholders towards the realization of the critical role of startups at a national level.

Keywords: Startups; Entrepreneurial ecosystem; Financial crisis; Greece.

1. Introduction

Startup ecosystems have a central role in nurturing an entrepreneurial culture and supporting the development of a nationwide dynamic business capacity that could support relative small and geographical isolated economies during crisis eras¹. To that end, startup entrepreneurship may be regarded as an important catalyst to develop sustainable business landscapes², able to promote export-driven value creation, encourage national economic prospects and foster societal welfare³. In this vein, the recent financial crisis elevated the issue of startups to the forefront of the global research agenda triggering a series of studies investigating the impact of financial crisis on the growth performance of small and young firms⁴. Nevertheless, the corresponding research results are rather controversial.

On the one hand, Friedman⁵ argues that stable economic environments are conducive to entrepreneurship, thus indicating that active policy responses for fostering startup entrepreneurship and re-establishing national financial stability and growth are necessary. Following the “Friedman view”, a number of studies confirm that small and young firms show a relative better growth performance in crisis times⁶. On the contrary, for more than hundred years Schumpeter⁷ is associated with the idea that during financial crisis periods a large number of entrepreneurs promote disruptive innovations to respond to the disequilibria emerging from instability periods; however, Schumpeter acknowledges that small and young businesses might suffer more in a crisis due to their fragility in terms of size, capital and reputation. To this effect, the “Schumpeter view” motivated a significant number of research efforts concluding that small businesses are more vulnerable within a crisis era⁸. Additionally, few studies identify the size of a young firm as a major vulnerability indicator to economic crisis ramifications⁹.

During the last six years, Greece presents an unsustainable economic development model worldwide. The Greek economy has experienced an unprecedented collapse after 2009, resulting in: (i) a reduction of national GDP by almost 30% (the highest recorded decline among all European countries in a peacetime period), (ii) a debt to GDP ratio of 177.1%, (iii) an unemployment rate of 26.6%, and (iv) an unemployment rate amongst under 25 years old young people of more than 50%^{10,11}. Nevertheless, the existing body of literature on the Greek entrepreneurial ecosystem that could support national economy is rather limited. Therefore, our paper contributes to the empirical literature on relative startups' performance in periods of crisis in Greek, a country whose national economy enters the seventh consecutive year of recession. Remarkably, we provide an exhaustive list of all the tangible and intangible structural elements that comprise the Greek entrepreneurial startup ecosystem.

¹ Paradkar, A., Knight, J. and Hansen, P., 2015. Innovation in start-ups: Ideas filling the void or ideas devoid of resources and capabilities? *Technovation*, 41-42, pp.1-10.

² Bürer, M.J. and Wüstenhagen, R., 2008. Cleantech venture investors and energy policy risk: an exploratory analysis of regulatory risk management strategies. In: R. Wüstenhagen, J. Hamschmidt, S. Sharma and M. Starik (Eds.), *Sustainable Innovation and Entrepreneurship*, Edward Elgar Publishing (2008), pp.290-309.

³ Bocken, N.M.P., 2005. Sustainable venture capital - catalyst for sustainable start-up success? *Journal of Cleaner Production*, 108(Part A), pp.647-658.

⁴ Bartz, W. and Winkler, A., 2016. Flexible or fragile? The growth performance of small and young businesses during the global financial crisis – Evidence from Germany. *Journal of Business Venturing*, 31(2), pp.196-215.

⁵ Friedman, M., 1968. The role of monetary policy. *American Economic Review*, 58, pp. 1-17.

⁶ Moscarini, G. and Postel-Vinay, F., 2012. The contribution of large and small employers to job creation in times of high and low unemployment. *American Economic Review*, 102(6), pp.2509-2539.

⁷ Schumpeter, J., 1934. *The theory of economic development*. Cambridge, United States: Harvard University Press.

⁸ Kolasa, M., Rubaszek, M. and Taglioni, D., 2010. Firms in the great global recession: the role of foreign ownership and financial dependence. *Emerging Marketing Review*, 11, pp.341-357.

⁹ Fort, T.C., Haltiwanger, R., Jarmin, S. and Miranda, J., 2013. How firms respond to business cycles: the role of firm age and firm size. *IMF Economic Review*, 61(3), pp.520-559.

¹⁰ Greek Statistical Authority, 2015. Hellas in numbers [in Greek] Available at: <http://www.statistics.gr/documents/20181/300673/GreeceInFigures_2015Q3_GR.pdf/e0897735-44e7-4d40-aff-79f14317f7e2> [Accessed: 16 March 2016].

¹¹ Greek Statistical Authority, 2015. Labor force survey [in Greek] Available at: <<http://www.statistics.gr/documents/20181/839b30a4-4812-4846-8d86-8c19ca61d2d3>> [Accessed: 16 March 2016].

The rest of the paper is organized as follows. Section 2 briefly reviews valid startups' definitions and presents the major elements that characterize niche entrepreneurial ecosystems. Following, Section 3 justifies the selection of Greece as the study research unit and clarifies methodological issues related to the present empirical work. Section 4 presents and discusses the results of our research. Finally, we sum-up with conclusions in Section 5.

2. Background

In this Section we approach startups from a theoretical lens, hence identifying valid definitions in the business literature, while further discussing the predominant characteristics of a startup company. Following, we clarify the role of entrepreneurial startup ecosystems within a global context, while we present the tangible and intangible structural elements that define them.

2.1 Startup definitions

The term "startup company" or "startup" is used to describe any new business venture; nonetheless, every new business cannot be characterized as a startup. Figure 1 summarizes the most valid definitions about a startup company, as retrieved from the business literature¹².

¹² Robehmed, N. (2013). What Is A Startup? Available at: <<http://www.forbes.com/sites/natalierobehmed/2013/12/16/what-is-a-startup/> - 272496274c63> [Accessed: 16 March 2016].

**Startup
Definitions**

"A startup is a company working to solve a problem where the solution is not obvious and success is not guaranteed"

Neil Blumenthal, co-founder and co-CEO of Warby Parker

"Startup is a state of mind. It's when people join your company and are still making the explicit decision to forgo stability in exchange for the promise of tremendous growth and the excitement of making immediate impact"

Adora Cheung, co-founder and CEO of Homejoy

"A startup is a company designed to grow fast. Being newly founded does not in itself make a company a startup. Nor is it necessary for a startup to work on technology, or take venture funding, or have some sort of "exit". The only essential thing is growth. Everything else we associate with startups follows from growth ... A company five years old can still be a startup. Ten [years old] would start to be a stretch"

Paul Graham, Y Combinator accelerator head

"A company stops being a startup when people don't feel as though what they are doing has impact. I don't think the tipping point is a certain number of people, but an atmosphere that people individually and collectively can't will the company to success"

Russell D'Souza, co-founder of ticket search engine SeatGeek

Figure 1. Valid, corporate intuitive, definitions about a startup company.

According to the aforementioned definitions, most businesses cease to be characterized as startups after 3 years of operations. The latter time threshold usually coincides with other factors/events:

- Acquisition from larger enterprise.
- More than one office space.
- Increased revenue.
- More than 80 employees.
- More than 5 people on management board.
- Founders who have sold their personal share capital.

Overall, the fundamental characteristic of a startup company is the ability to grow in a very rapid manner, exceeding any limiting spatial factors. This essential property differentiates startups from any other small businesses. In addition, startups quite often adapt existing technologies in order to solve realistic problems. Nevertheless, a startup company is not by default technology-oriented¹³.

¹³ Robehmed, N. (2013). What Is A Startup? Available at:
<http://www.forbes.com/sites/natalierobehmed/2013/12/16/what-is-a-startup/-272496274c63> [Accessed: 16 March 2016].

2.2 Entrepreneurial startup ecosystems and characteristics

Startups can foster economic growth and welfare through the “glocalization” effect, i.e. valorisation and revitalisation of local entrepreneurship through exploiting global business opportunities in order to create added value at a regional setting¹⁴. Figure 2 presents the top 20 startup ecosystems based on specific structural elements including: performance, funding, market reach, talent, and startup experience.

	Ranking	Performance	Funding	Market Reach	Talent	Startup Exp.	Growth Index
Silicon Valley	1	1	1	4	1	1	2.1
New York City	2	▲ 3	2	2	9	4	1.8
Los Angeles	3	▲	4	4	10	5	1.8
Boston	4	▲ 2	3	7	12	7	2.7
Tel Aviv	5	▼ 3	6	5	3	6	2.9
London	6	▲ 1	5	10	7	13	3.3
Chicago	7	▲ 3	8	12	11	14	2.8
Seattle	8	▼ 4	12	11	4	3	2.1
Berlin	9	▲ 6	7	8	8	8	10
Singapore	10	▲ 7	11	9	20	9	1.9
Paris	11	▲	13	13	16	15	1.3
Sao Paulo	12	▲ 1	9	7	19	19	3.5
Moscow	13	▲ 1	17	15	2	20	1.0
Austin	14	NEW	16	14	5	2	1.9
Bangalore	15	▲ 4	10	6	20	12	4.9
Sydney	16	▼ 4	20	16	6	10	1.1
Toronto	17	▼ 9	14	18	15	18	1.3
Vancouver	18	▼ 9	18	19	14	11	1.2
Amsterdam	19	NEW	15	20	18	16	3.0
Montreal	20	NEW	19	17	16	17	1.5

Figure 2. Ranking of national startup ecosystems¹⁵.

Startup ecosystems are identified based on particular characteristics of economic nature. Through applying the competence bloc theory¹⁶, in our research we identify the following six (6) structural elements that define an entrepreneurial startup ecosystem:

- i. Customers - Customers are a vital economic-related structural element for a startup ecosystem, particularly during the early stage of a new venture development. Customers' prominent role is not limited to financial benefits, but rather relates to market exposure that facilitates well-received constructive feedback, hence fostering the development of a niche customer base.
- ii. Innovators - Innovators refer to individuals or organizations that provide entrepreneurs the possibility to exploit both existing and novel technologies in order to create added value and harness market potential, as in the case of open innovation paradigm¹⁷.

¹⁴ Porto, M.D. and Belmonte, I.A., 2014. From local to global: Visual strategies of glocalisation in digital storytelling. *Language & Communication*, 39, pp.14-23.

¹⁵ Herrmann, B.L., Gauthier, J.F., Holtschke, D., Berman, R. and Marmer, M., 2015. *The Global Startup Ecosystem Ranking 2015*. San Francisco, United States: Compass.

¹⁶ Eliasson, G. and Eliasson, A., 1996. The biotechnical competence bloc. *Revue d'Economie Industrielle*, 78, pp.7-26.

¹⁷ Chesbrough, H.W., 2003. *Open innovation: The new imperative for creating and profiting from technology*. Boston, United States: Harvard Business Press.

- iii. Entrepreneurs - Entrepreneurs are the cornerstone of a successful startup ecosystem as they comprehend and are able to successfully commercialize innovation.
- iv. Venture capital - Venture capital is particularly critical, as it allows for the exploitation of investment opportunities in both technological and human resources levels, thus enabling the implementation of a startup's business plan.
- v. "Exodus" to market - The "exodus" to markets supports the rapid industrialization and growth of profitable businesses, while further encourages venture capital investments. "Exodus" to markets, either in the form of initial public offering or through merger and acquisition mechanisms, is particularly valuable for the expansive development of startups.
- vi. Industry - Industry provides the platform for the spatial expansion of a startup's operations that could lead to global success¹⁸.

2.2.1 Tangible structural elements

Tangible structural elements support the implementation of a startup's business plan¹⁹ and enhance their radical innovation capacity building²⁰. Figure 3 summarizes the three (3) major tangible structural elements of a startup ecosystem along with the related sub-elements identified as part of our present research.

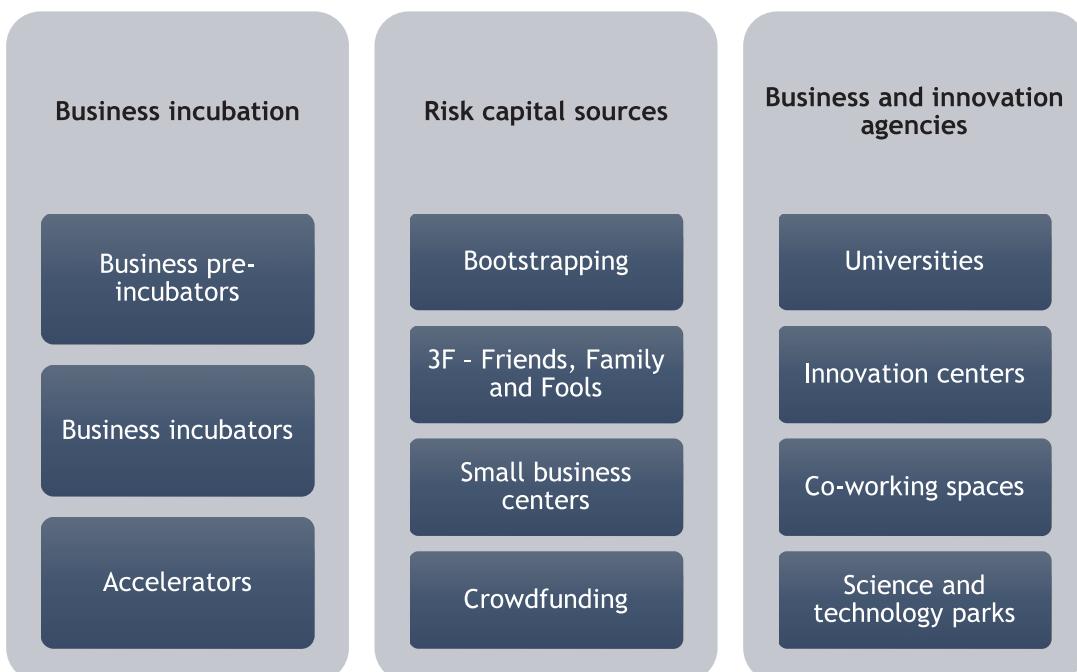


Figure 3. Tangible structural elements of a startup ecosystem.

2.2.2 Intangible structural elements

Strategic management literature emphasizes on the crucial role of intangible elements as determinants of startups' competitiveness²¹. Indicatively, few authors claim that intangible assets are more important than tangible assets in the first stages of a new business venture²². Furthermore,

¹⁸ Sipola, S., Mainela, T. and Puhakka, V., 2013. Understanding and uncovering startup ecosystem structures. In: *The First International Entrepreneurship Research Exemplar Conference, Entrepreneurial Ecosystems and the Diffusion of Startups*, Catania, Italy.

¹⁹ Vargo, S.L. and Lusch, R.F., 2004. Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(1), pp.1-17.

²⁰ Murphy, J. and Gouldson, A., 2000. Environmental policy and industrial innovation: integrating environment and economy through ecological modernization. *Geoforum*, 31(1), pp.33-44.

²¹ Teece, D.J., 2000. Strategies for knowledge assets: the role of the firm structure and industrial context. *Long Range Planning*, 33(1), pp.35-54.

²² Lichtenstein, B.M.B. and Brush, C.G., 2001. How do 'resource bundles' develop and change in new ventures? A dynamic model and longitudinal exploration. *Entrepreneurship: Theory and Practice*, 25(3), pp.37-59.

others find that investing in intangible assets is associated with significant growth potential for startups²³. The identified intangible structural elements of an entrepreneurial startup ecosystem include:

- Entrepreneurship and innovation competitions.
- Startups' related activities and business events.
- Social groups, and business and innovation support organizations.

3. Methodology

In order to study the startups and the relevant ecosystem in Greece during the concurrent economic crisis era, both qualitative and quantitative research was conducted. To that end, a structured questionnaire was developed and was then administered to Greek startup ventures through an online platform. Overall, the primary research was conducted during the period May-August 2015. Our research results were compared to the results provided by the Foundation for Economic and Industrial Research²⁴, and they were further validated.

3.1 The case of Greece

In order for Greece to become financially viable, high growth rates are needed to be realized; rates that traditional economic activities cannot provide at a short-term horizon. Instead, startups are a new business model in Greece, which may contribute decisively to the creation of new, quality jobs and the overall development of the Greek economy²⁵.

During the last years, an active effort to strengthen the national startup ecosystem is observed, characterised by the creation of several business incubation mechanisms (pre-incubators, incubators, accelerators) and co-working spaces. In addition a plethora of entrepreneurship and innovation competitions is organized, while a significant increase in the investors' interest regarding Greek startups is evident. Indicatively, global venture capitals invested about \$50 million in Greek startups in 2013, whereas the Greek startup "BugSense" succeeded a buyout agreement by the American multinational company "Splunk" with a market capitalization of \$ 6.15 billion.

3.2 Questionnaire

To conduct the primary research of our study, a structured questionnaire was designed (in both Greek and English languages) containing forty-three (43) qualitative and quantitative questions which are considered effective in monitoring the development Greek startups during the concurrent financial crisis era²⁶. The study questionnaire is inserted in Table A1 in the Appendix. Indicative requested information includes:

- Incentive for creating the startup.
- Level of educational attainment by founders.
- Level of educational attainment by employees.
- Use of business incubation mechanisms or other support mechanisms of startup companies.
- Sectors in which entrepreneurs encountered problems while creating and developing the startup company.
- Types of funding elaborated.
- Difficulties encountered in finding funding.
- Factors anticipated to affect the performance of the startup in the next 3 years.

²³ Thornhill, S. and Gellatly, G., 2005. Intangible assets and entrepreneurial finance: the role of growth history and growth expectations. *International Entrepreneurship and Management Journal*, 1(2), pp.135-148.

²⁴ IOVE, 2015. Entrepreneurship in Greece. Foundation for Economic & Industrial Research. Available at: <http://iove.gr/research_b.asp> [Accessed: 16 March 2016].

²⁵ Hellenic Startup Association, 2011. Vision [in Greek]. Available at: <http://hellenicstartups.gr/?page_id=1495> [Accessed: 16 March 2016].

²⁶ Roelofsen, J. and Käki, M., 2010. Job creation strategy of STPs: exploring 96% of opportunities versus 4%. In: InnoPraxis, 27th IASP world conference 2010, *Global green growth (3g): Challenges and opportunities for science and technology parks*. Daejeon, South Korea, 24-26 May.

3.3 Data collection

The participants of our survey were not mandated to provide answers to every survey object and thus disclose any information that startups' entrepreneurs regard as sensitive or confidential. In total, forty (40) questionnaires were retrieved representing a survey response rate of 28.9%. As the questions were not mandatory, statistical analysis results are provided with regard to the total number of answers (n) provided for every question. We found that in Greece currently operate 138 startup companies. Table A2 in the Appendix lists the Greek startups we identified along with a brief description of their business activities. Notably, the majority of startup companies in Greece is not active in the high technology or software application sectors, thus following the global trend. Greek startups rather exploit national unique characteristics and focus on the promotion of traditional Greek cuisine, the Greek culture and history, as well as the tourism. Figure 4 presents the business sector classification of the Greek startups participated in our survey.

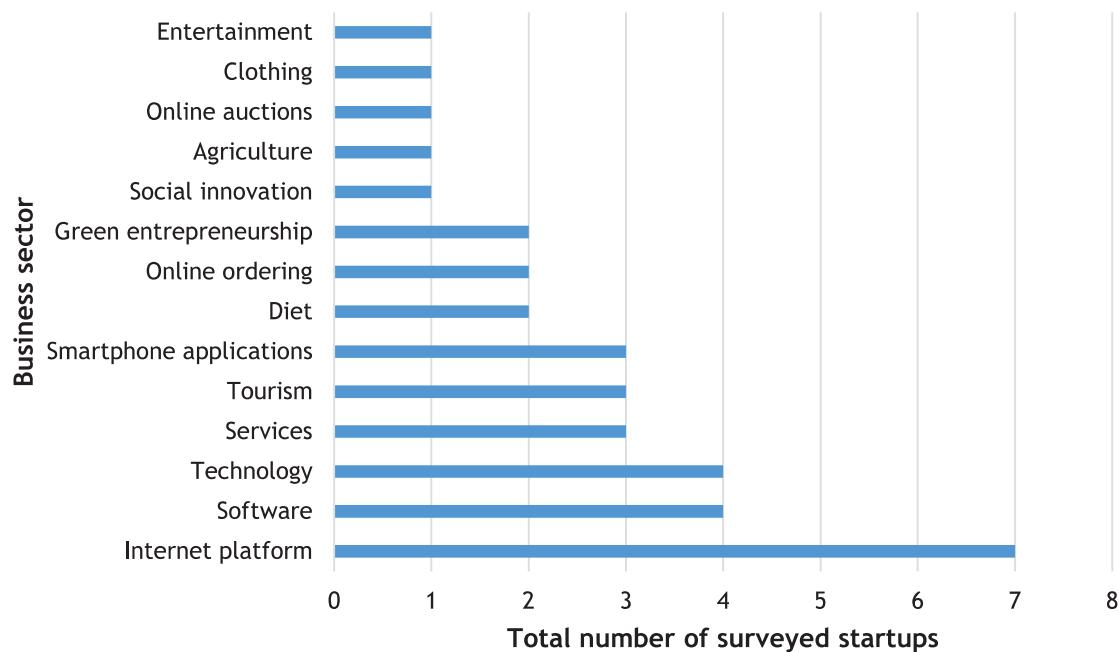


Figure 4. Classification of surveyed Greek startups per business sector (n=35).

4. Results and Discussion

In this Section we briefly present the most interesting results of our research. We first present the exhaustive mapping of all the identified structural elements of the Greek startup ecosystem. Following, we briefly provide the results of our primary research regarding the development of startups in Greece in the modern economic crisis period.

4.1 Structural Elements of the Greek startup ecosystem

4.1.1 Tangible Structural Elements

Greece is characterised by a fairly limited number of business incubation instruments that have been developed in recent years. Table 1 summarizes the corresponding mechanisms currently operating in the Greek entrepreneurial ecosystem for supporting domestic startup companies.

Table 1. Business incubation mechanisms in Greece.

Organization	Pre-incubator	Incubator	Accelerator
Aephoria.net		•	
Athens Center for Entrepreneurship and Innovation			•
Athens Founder Institute			•
Athens Startup Business Incubator - THEA		•	

Organization	Pre-incubator	Incubator	Accelerator
BIC of Attika		•	
BIOS Romantso Creative Hub		•	
Center of Sustainable Entrepreneurship Excelixi S.A.			•
Colab Academy			•
Corallia		•	
COSMOTE StartUp			•
Egg - enter-grow-go		•	•
Endeavor Greece			•
EU-XCEL European Virtual Accelerator			•
Found.ation		•	•
Gate2Start Atlantis Consulting S.A.	•		
IDEA			•
Incubation for Growth - i4G	•	•	
Innovathens			•
Innovation Farm		•	•
InQLab		•	
Iqbility		•	
Kick Athens			•
Metavallon			•
NBG Business Seeds			•
Orange Grove		•	
Patras Science Park		•	
Science and Technology Park of Crete		•	
Science and Technology Park of Epirus		•	
Seed4business	•		
SEV EkinisiLab		•	
Sev4enterprise			•
StageOne			•
StartTech Ventures		•	
Technopolis Thessaloniki		•	
Technopolis Thessaloniki BIC of CERN Technologies		•	
Thermi Link	•		
THERMI S.A.		•	
Thessaloniki Smart up Innovation Hub			•
Thessaloniki Technology Park		•	
Trigger	•		
Venture Garden		•	

In addition, one of the greatest impediments encountered by startups in Greece is the limited accessibility to funding sources. The availability and accessibility to financing schemes is quite problematic, especially due to the prevalent economic uncertainty and investors' reluctance as a result of the financial austerity measures. Table 2 tabulates the risk capital sources available to the Greek startups' ecosystem. Following, Table 3 presents the active business and innovation agencies in Greece that can support startups.

Figure 2. Risk capital sources.

Source	Business angels / Seed investors	Venture capital	Crowdfunding
7L Capital Partners		•	
Alpha Ventures S.A.		•	
Attica Ventures S.A.		•	

Source	Business angels / Seed investors	Venture capital	Crowdfunding
Business Angel Network of the Commercial and Industrial Chamber of Athens	•		
Capital Connect Venture Managers S.A.		•	
Classfund			•
Dianko		•	
Efund.gr			•
Give&Fund			•
Global Finance S.A.		•	
GloCal Venture Capital		•	
Groopio			•
Hellenic Angels	•		
i4g		•	
IBG Management S.A.		•	
Logo Ventures		•	
New Eleven Capital		•	
New Mellon		•	
Odyssey Venture Partners		•	
OpenCircle Greece			•
Openfund		•	
Oxygen Capital Management S.A.		•	
Parthenon Trust S.A.		•	
Piraeus Capital Management S.A.		•	
Piraeus Jeremie Tech Catalyst		•	
Thermi Ventures S.A.		•	
THINK GREEN - Green Business Angels Network	•		
Vectis Capital S.A.		•	
WinnersFund			•

Figure 3. Business and innovation agencies.

Agency	Science and Technology Park	Co-working spaces
Appsterdam Greece		•
Athens Investment Centre		•
Coho		•
CoLab workspace		•
Ecinisi Business Centers		•
Found.ation		•
Impact Hub Athens		•
Lavrion Technological and Cultural Park	•	
Make		•
Openspace		•
Patras Science Park	•	
Regus		•
Science and Technology Park of Attica "Lefkippos"	•	
Science and Technology Park of Crete	•	
Science and Technology Park of Epirus	•	
Stone Soup		•
Technology Park of Thessaly	•	
The cube		•
Thessaloniki Innovation Zone		•
Thessaloniki Technology Park	•	

Agency	Science and Technology Park	Co-working spaces
Tzaferi 16		•
α1-innohub		•
α2-innohub		•
π1-innohub		•

The spatial allocation of the tangible structural elements across Greece is provided in Table 4. The results indicate the considerable existence of startup support mechanisms.

Figure 4. Allocation of tangible structural elements across Greece.

Region/District	Business Incubation Mechanisms	Co-working Spaces	Science and Technology Parks
Attica	25	16	2
Epirus	1	0	1
Thessaly	0	0	1
Thessaloniki	10	3	1
Crete	1	0	1
Xanthi	2	0	0
Patra	2	1	1
Total	41	20	7

4.1.2 Intangible Structural Elements

The entrepreneurship and innovation competitions not only provide the opportunity for securing seed funding for new startups, but also enable young entrepreneurs to develop their skills and build a network of contacts which are essential for establishing a startup company²⁷. Furthermore, social groups and business and innovation support organizations could promote a new business model in Greece and contribute decisively to the massive creation of new, quality jobs and the overall development of the national economy. Table 5 includes all the twenty (20) entrepreneurship and innovation competitions taking place in Greece, along with the existing social groups.

Table 5. Business incubation mechanisms in Greece.

Organization	Entrepreneurship and innovation competitions	Social groups and business and innovation support organizations
AEGEAN Startups	•	
Angelopoulos Clinton GIU Fellowship	•	
AppWARDS	•	
Athens Startup Digest		•
Blue Growth Competition	•	
Breakthrough Greece		•
Business IT Excellence	•	
Business Plan Competition of Anatolia School of Business	•	
Business Talents	•	
Call to innovation	•	
CANVAS - Debating Business Ideas		•
Cleantech Open Global Ideas	•	
ClubNE		•
Crazy Business Ideas	•	
Ennovation	•	
Enterprise Europe Network - Hellas		•
Entrepreneurs' Organization Greece		•

²⁷ Russell R., Atchison, M. and Brooks, R., 2008. Business plan competitions in tertiary institutions: encouraging entrepreneurship education. *Journal of Higher Education Policy and Management*, 30(2), pp.123-138.

Organization	Entrepreneurship and innovation competitions	Social groups and business and innovation support organizations
ESYNE Hellenic Associations of Young Entrepreneurs		•
European startup initiative		•
Ginetai		•
Global Shapers Community		•
Greece Innovates!	•	
Greek Startup Manifesto		•
Greek startup map		•
Greek startups		•
Hellenic Entrepreneurship Award	•	
Hellenic Startup Association		•
i-bank Innovation and Technology Competition	•	
iDea		•
Industry Disruptors-Game Changers		•
Institute of Entrepreneurship Development		•
JADE Hellas		•
Kepnet		•
Make Innovation Work	•	
MIT Enterprise Forum Greece		•
MITEF Greece Startup Competition	•	
Odysseys Innovation	•	
Open Coffee		•
Reload Greece		•
Repower Greece		•
Sevstegi		•
Startup Genome		•
Startup Greece		•
Startup nation		•
Startup students community		•
Startup.gr		•
Stelios Award Young Entrepreneur of the Year - Greece	•	
The Digital Gate	•	
The Hellenic Initiative		•
Thessaloniki Tech Community		•
Ideatree	•	

4.2 Survey

In this Section we briefly present our survey results. Figure 5 shows the growth in the number of startup companies participated in our survey per year of foundation. We observe that within the economic crisis era, except for 2012, the number of startups established annually presents an increasing trend, which shows that the startup business model is being adopted, despite the overall financial pressure. The reported investment break-even point is 26.59 months.

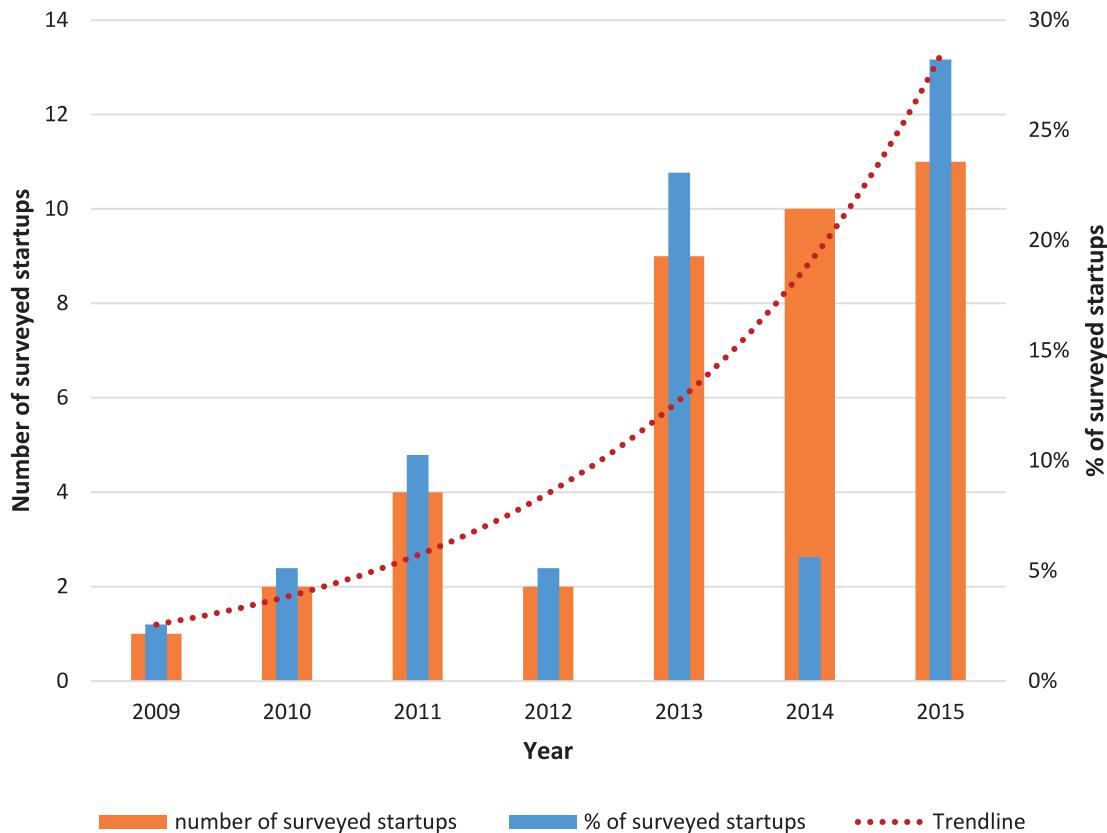


Figure 5. Number of startups established in Greece during the contemporary economic crisis era (n=39).

Furthermore, the most important motivation for creating startup companies in Greece is reported to be the exploitation of a business idea (87.50%) and the recognition of a market opportunity (70.0%). Therefore, the creation of startups does not appear to be significantly related to the national dismal economic situation, as the incentives of employment/income (37.5%) and improving the economic situation (25%) gather smaller response rates. These results are further verified by the IOVE survey²⁸ which reports that Greek entrepreneurship is mainly motivated by the perceived competitive advantage of a business opportunity (35% in 2013). Also, most startups are not limited to the domestic market, but target the global market (55%). Moreover, the 72.5% of startups appears to have used external consultants or other support mechanisms in their research and development process, with the majority of startups elaborating business incubators (60%) and accelerators (37.14%). The majority of startups in Greece has used equity/bootstrapping (75%) and funding from friends, family and foes (37.5%), while the 71.05% of startups appears to actively seeking funding. What is more, the challenges confronted by startups during the creation and the development phases are presented in Figure 6.

²⁸ IOVE, 2015. Entrepreneurship in Greece. Foundation for Economic & Industrial Research. Available at: <http://iove.gr/research_b.asp> [Accessed: 16 March 2016].

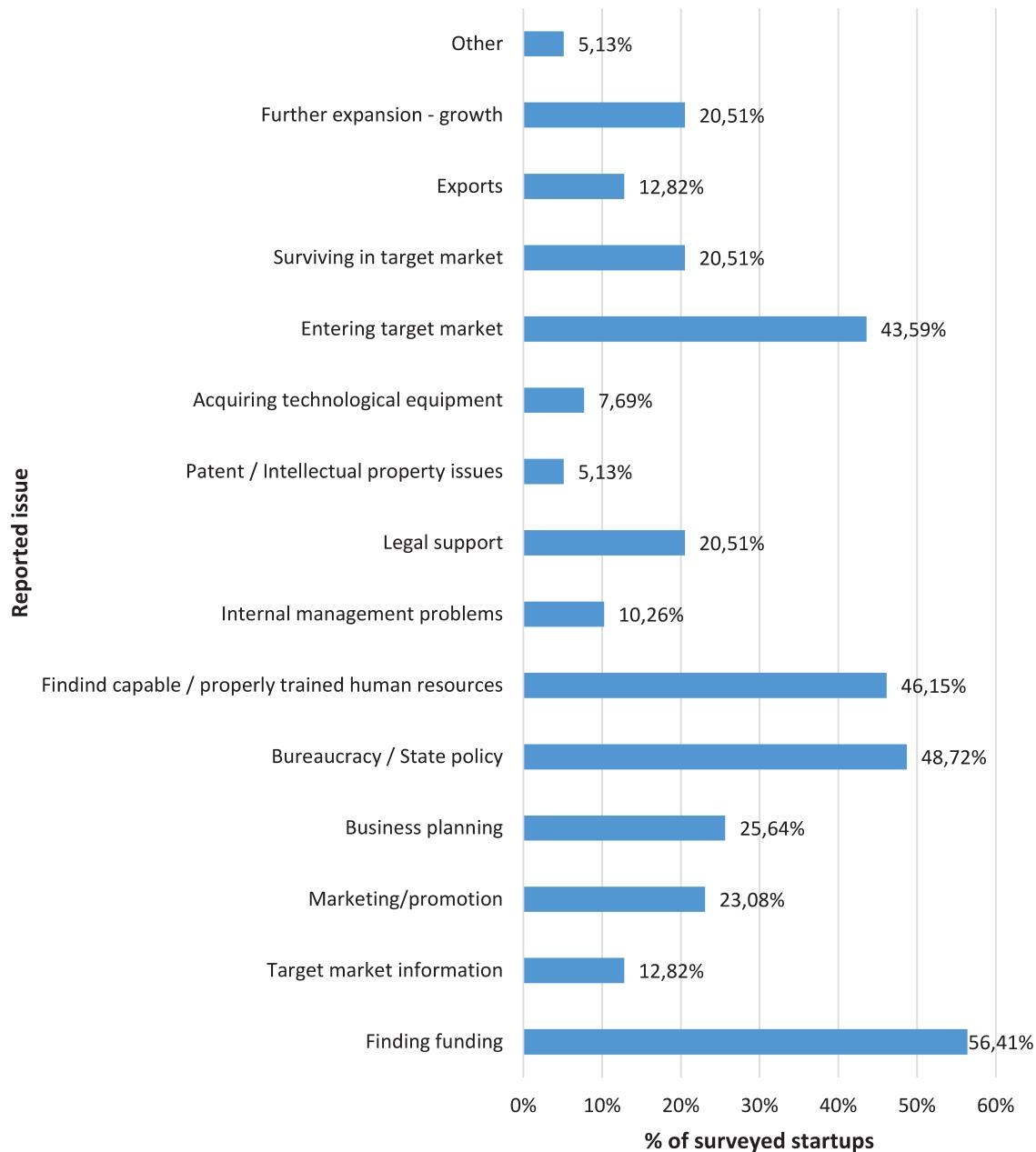


Figure 6. Reported issues encountered while creating and developing a startup company (n=39).

Analyzing the difficulties encountered by startups in finding financing, we observed that the greatest difficulty is the limited number of funding sources (59.26%) followed by the reluctance of investment funds (48.15%) and the lack of information (40.74%). The latter result indicates the need to improve the functioning of the startups ecosystem support mechanisms in Greece. Moreover, the results on the education level of the workforce employed by startups is of great interest as well, as most companies employ graduates who have received higher education (68.42%), postgraduate diploma (65.79%) and Ph.D. (21.05%). This aspect is particularly important, as it shows that startups employ highly educated workforce, hence allowing the Greek economy to exploit the wealth of human resources available. Finally, in Figure 7 we present the startups' prerspective about actions/initiatives they could pursue to improve their performance.

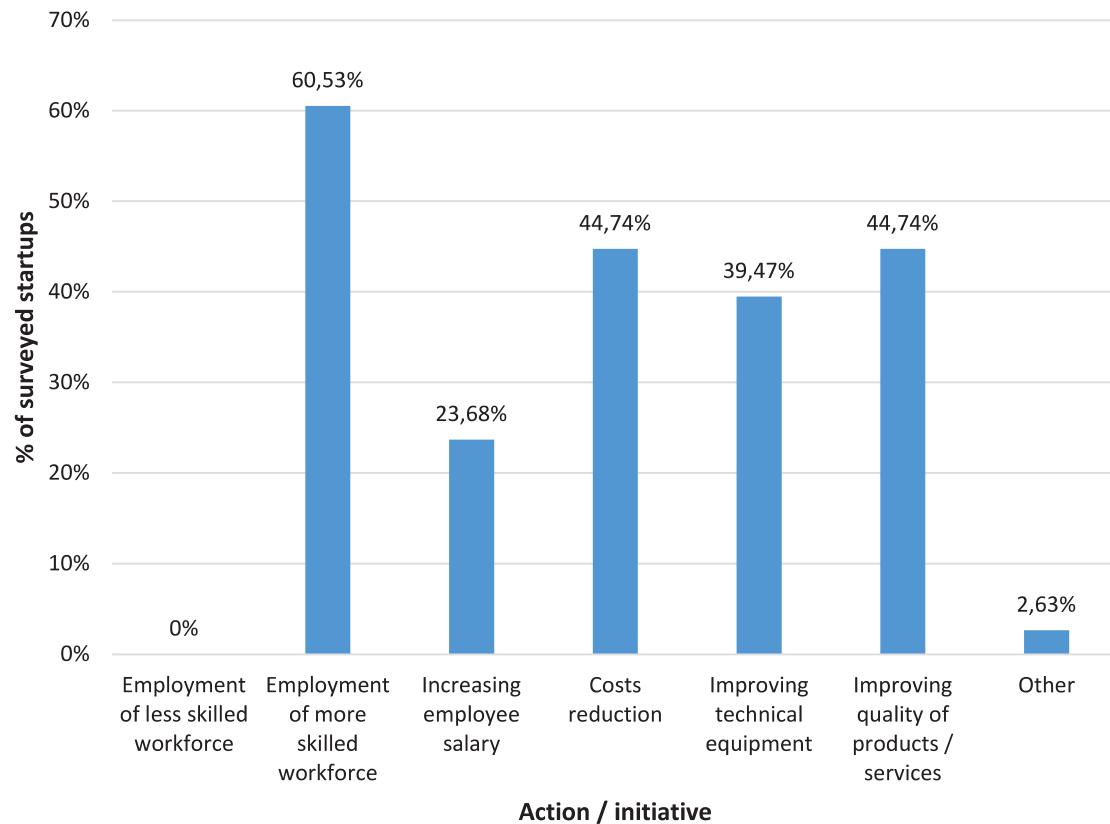


Figure 7. Actions/initiatives that could improve startups' performance (n=38).

5. Conclusions

To sum up, regarding the tangible elements of the Greek startup, a total of 41 business incubation mechanisms, 20 co-working spaces and 7 science and technology parks exist, the majority of which is concentrated around the two larger cities of Greece, namely Athens and Thessaloniki. Apropos of the intangible startup ecosystem elements in Greece, a total of 20 annual entrepreneurship and innovation competitions were identified, while 34 social groups and business and innovation support organizations exist. In addition, throughout our study we identified 138 startup businesses operating in Greece, with their number presenting an increasing trend in the crisis period. Notably, most of the startups are not active on the high-tech sector, but rather focus on the promotion of traditional Greek cuisine, culture, history, and tourism. Despite the economic crisis, only 5.13% of startups report a dismal economic status, while no startup claims any business survival issues. The average time of reaching an investment break-even point is reported to be 26.59 months.

Our research highlights the need to improve the startup ecosystem in Greece, in order for the country to be able to embrace innovation and growth. We envisage that our research might assist public authorities, regulators and private stakeholders towards the realization of the critical role of startups at a national level. Additionally, it is anticipated that the yielded research results motivate future research on the field and allow the drafting of effective and efficient policy-making interventions.

Appendix

Table A1. Questionnaire and included research objects.

#	Question:	Answer:
1.	Startup name	
2.	Contact person	
3.	Website	
4.	E-mail address	
5.	Year that the startup was founded	
6.	Company's products and/or services	
7.	Incentive for creating the startup	<p>[Checkboxes]</p> <input type="checkbox"/> Employment / income <input type="checkbox"/> Improving economic situation <input type="checkbox"/> Realising an idea <input type="checkbox"/> Circumstance of cooperating with the right partners <input type="checkbox"/> Recognizing a gap in the market <input type="checkbox"/> Other: _____
8.	Startup's ownership pattern	<p>[Multiple choice]</p> <input type="radio"/> Sole proprietor <input type="radio"/> Co-ownership <p>[Multiple choice]</p> <input type="radio"/> Individual business <input type="radio"/> General partnership <input type="radio"/> Limited partnership <input type="radio"/> Limited liability company <input type="radio"/> Private capital company <p>[Multiple choice]</p> <input type="radio"/> Survived successfully <input type="radio"/> Still evolving <input type="radio"/> In difficult situation <input type="radio"/> Won't survive
9.	Legal form of company	
10.	State of startup	
11.	Background of founding members. Do they have previous experience with startup companies?	<p>[Multiple choice]</p> <input type="radio"/> Yes <input type="radio"/> No
12.	Level of educational attainment of founding members	<p>[Checkboxes]</p> <input type="checkbox"/> Elementary

#	Question:	Answer:
		<input type="checkbox"/> High school degree <input type="checkbox"/> Bachelor's degree <input type="checkbox"/> Master's degree <input type="checkbox"/> Doctorate
13.	Main target market	<p>[Multiple choice]</p> <input type="radio"/> Local market <input type="radio"/> Greek market <input type="radio"/> European market <input type="radio"/> US market <input type="radio"/> Global market
14.	Did you use external consultants or other support mechanisms in the research and development process of your company's products / services?	<p>[Multiple choice]</p> <input type="radio"/> Yes <input type="radio"/> No
15.	Use of business incubation mechanisms or other support mechanisms of startup companies	<p>[Checkboxes]</p> <input type="checkbox"/> Coworking space <input type="checkbox"/> Business pre-incubator <input type="checkbox"/> Business incubator <input type="checkbox"/> Business accelerator <input type="checkbox"/> University <input type="checkbox"/> Innovation center <input type="checkbox"/> Science and Technology Park <input type="checkbox"/> Other: _____
16.	Select the sectors in which you encountered problems while creating and developing your startup company	<p>[Checkboxes]</p> <input type="checkbox"/> Finding financing <input type="checkbox"/> Target market information <input type="checkbox"/> Marketing / promotion <input type="checkbox"/> Business planning <input type="checkbox"/> Bureaucracy / State policy <input type="checkbox"/> Finding capable / properly trained human resources <input type="checkbox"/> Internal management problems <input type="checkbox"/> Legal support <input type="checkbox"/> Patents / Intellectual property issues <input type="checkbox"/> Acquiring technological equipment <input type="checkbox"/> Entering target market

#	Question:	Answer:							
		<input type="checkbox"/> Surviving in target market <input type="checkbox"/> Exports <input type="checkbox"/> Further expansion - growth <input type="checkbox"/> Other: _____							
17.	How long until your startup reached or is expected to reach the break-even point?								
18.	Have you used funding?	<p>[Multiple choice]</p> <ul style="list-style-type: none"> <input type="radio"/> Yes <input type="radio"/> No 							
19.	If so, what types of funding have you used?	<p>[Checkboxes]</p> <ul style="list-style-type: none"> <input type="checkbox"/> Self-finance - Bootstrapping <input type="checkbox"/> Friends, family financing <input type="checkbox"/> Small Business centers financing <input type="checkbox"/> Crowdfunding <input type="checkbox"/> Business Angels / Seed investors <input type="checkbox"/> Venture capital / Risk capital <input type="checkbox"/> Government funding <input type="checkbox"/> Bank loan <input type="checkbox"/> Other: _____ 							
20.	Amount of funding used	<p>(€)</p> <table border="1"> <tr> <td>0</td> <td><10,000</td> <td><25,000</td> <td><50,000</td> <td><100,000</td> <td><500,000</td> <td>500,000 and more</td> </tr> </table>	0	<10,000	<25,000	<50,000	<100,000	<500,000	500,000 and more
0	<10,000	<25,000	<50,000	<100,000	<500,000	500,000 and more			
21.	Do you actively seek additional funding?	<p>[Multiple choice]</p> <ul style="list-style-type: none"> <input type="radio"/> Yes <input type="radio"/> No 							
22.	Have you obtained additional funding, beyond the initial funding, in the form of an exit (IPO), merger or acquisition?	<p>[Multiple choice]</p> <ul style="list-style-type: none"> <input type="radio"/> Yes <input type="radio"/> No 							
23.	If so, select the type of financing	<p>[Checkboxes]</p> <ul style="list-style-type: none"> <input type="checkbox"/> Exit (IPO) <input type="checkbox"/> Merger <input type="checkbox"/> Acquisition 							
24.	Difficulties encountered in finding funding	<p>[Checkboxes]</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lack of information <input type="checkbox"/> High interest rates 							

#	Question:	Answer:																																			
		<input type="checkbox"/> Lack of collateral to ensure loan <input type="checkbox"/> Lack of government support <input type="checkbox"/> Reluctance of investors <input type="checkbox"/> Limited funding sources <input type="checkbox"/> Other: _____																																			
25.	Level of Educational Attainment of startup's work force	<p>[Checkboxes]</p> <input type="checkbox"/> Elementary <input type="checkbox"/> High school degree <input type="checkbox"/> Bachelor's degree <input type="checkbox"/> Master's degree <input type="checkbox"/> Doctorate																																			
26.	Number of people with bachelor's degree employed																																				
27.	Number of people with master's degree / doctorate employed																																				
28.	Total number of employees																																				
29.	Has domestic market demand affected your sales in the last 5 years?	<p>[Multiple choice]</p> <input type="radio"/> Yes <input type="radio"/> No																																			
30.	If so, was the effect positive or negative?	<p>[Multiple choice]</p> <input type="radio"/> Positive <input type="radio"/> Negative																																			
31.	Has global market demand affected your exports - sales in the last 5 years?	<p>[Multiple choice]</p> <input type="radio"/> Yes <input type="radio"/> No																																			
32.	If so, was the effect positive or negative?	<p>[Multiple choice]</p> <input type="radio"/> Positive <input type="radio"/> Negative																																			
33.	Annual turnover of startup company in the last 4 years	<table border="1"> <tr> <td>0</td> <td><10,000</td> <td><25,000</td> <td><50,000</td> <td><100,000</td> <td><500,000</td> <td>500,000 and more</td> </tr> <tr> <td>€ year 2011</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>€ year 2012</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>€ year 2013</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>€ year 2014</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	0	<10,000	<25,000	<50,000	<100,000	<500,000	500,000 and more	€ year 2011							€ year 2012							€ year 2013							€ year 2014						
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€ year 2011																																					
€ year 2012																																					
€ year 2013																																					
€ year 2014																																					

#	Question:	Answer:																												
34.	Annual exports of startup company in the last 4 years	<table border="1"> <tr><td>€ year 2011</td><td>0</td><td><25,000</td><td><50,000</td><td><100,000</td><td><500,000</td><td>500,000 and more</td></tr> <tr><td>€ year 2012</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>€ year 2013</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>€ year 2014</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	€ year 2011	0	<25,000	<50,000	<100,000	<500,000	500,000 and more	€ year 2012							€ year 2013							€ year 2014						
€ year 2011	0	<25,000	<50,000	<100,000	<500,000	500,000 and more																								
€ year 2012																														
€ year 2013																														
€ year 2014																														
35.	Select the marketing and promotional tools you use	<p>[Checkboxes]</p> <input type="checkbox"/> Company website <input type="checkbox"/> Email <input type="checkbox"/> Direct Marketing <input type="checkbox"/> Word-of-mouth <input type="checkbox"/> Events <input type="checkbox"/> Phone promotion <input type="checkbox"/> Facebook <input type="checkbox"/> Twitter <input type="checkbox"/> Linked-in <input type="checkbox"/> Other social media <input type="checkbox"/> Other:																												
36.	Intellectual property of startup	<p>[Checkboxes]</p> <input type="checkbox"/> Patents <input type="checkbox"/> Copyrights <input type="checkbox"/> Trade secrets <input type="checkbox"/> Trademarks <input type="checkbox"/> Domain names																												
37.	Number of intellectual property rights owned	<p>[Checkboxes]</p> <input type="checkbox"/> Simple and stable tax system <input type="checkbox"/> Reduced tax for an initial period <input type="checkbox"/> Creating spaces for hosting and supporting startup companies <input type="checkbox"/> Increasing funding programs for startup businesses <input type="checkbox"/> Reducing bureaucracy <input type="checkbox"/> Easy and quick creation of new businesses <input type="checkbox"/> Other: _____																												
38.	What measures do you think can strengthen the development of innovation and startup companies in Greece?	<p>[Checkboxes]</p> <input type="checkbox"/> Employment of less skilled workforce																												
39.	Select the actions you think could improve the performance of your startup	<p>[Checkboxes]</p> <input type="checkbox"/> Employment of less skilled workforce																												

#	Question:	Answer:
		<input type="checkbox"/> Employment of more skilled workforce <input type="checkbox"/> Increasing employee salary <input type="checkbox"/> Costs reduction <input type="checkbox"/> Improving technological equipment <input type="checkbox"/> Improving quality of products / services Other: _____
40.	Identify the factors that you think will affect the performance of your startup in the next 3 years	
41.	What are the biggest risks - problems that you think you will face?	
42.	Proposals for changes in state policy concerning labor relations and tax system	
43.	Other comments or observations you would like to add	

Table A2. Greek startups identified during our research.

#	Startup Name	Business Activities/Products/Services	Website
1.	FEAC Engineering	Engineering company specializing in product development through simulation	www.feacomp.com
2.	Heliix	A novel apparatus that efficiently converts heat from low temperature fluids into electrical energy, using an innovative thermodynamic cycle	helixinc.com
3.	TruckBird - Nestcargo	Electronic cargo market that brings together commercial / industrial enterprises with transport companies and freight forwarders	nestcargo.com
4.	Mooddeet	Social networking platform connecting people based on their current location	www.upstreamsystems.com
5.	Upstream	Marketing platform for mobile operators	www.out-there-media.com
6.	Out There Media	Marketing platform for mobile operators	taxibeat.gr
7.	Taxibeat	Smartphone application for taxi finder	www.taxiplon.com
8.	Taxiplon	Smartphone application for taxi finder	www.parkaround.com
9.	Parking Defenders - Parkaround	Application for finding parking space in any desired area	
10.	Pinnatta	Distribution platform for audio-visual communication content	pinnatta.com
11.	Qrator	Social networking platform	qrator.com
12.	Daily Secret	Newsletters' composer concerning travel destinations	world.dailysecret.com
13.	Radiojar	Automated platform for online radio and streaming services	www.radiojar.com
14.	Warply	Mobile marketing platform that offers the opportunity for targeted advertising and promotion activities with the use of smartphones	warp.ly
15.	Intelen	"Smart" energy management services	intelen.com
16.	Pollfish	Platform for conducting global surveys through smartphones	www.pollfish.com
17.	LazyPub	Platform which allows the easy publication of PDF, EPUB and HTML file versions on mobile phones and tablets	www.lazypub.com
18.	Frogs & Flies	Mobile educational entertainment applications for small children	
19.	Bugsense, Mint(new name)	Tool that collects and analyzes error reports in real time during the development phase of applications for mobile phones	mint.splunk.com
20.	Simple Apps	Company for designing websites and applications for mobilephones and computers	www.simpleapps.gr
21.	MusicalLogic	Developer of innovative computer applications for automatic music composition	musicalogic.net
22.	Verdical	Designer and manufacturer of vertical surfaces' planting systems	verdical.co
23.	Insiders Travel Experiences	Offers personalized travel experiences in Greece	athensinsiders.com
24.	Hellenic Gastronomy Museum	Museum for the promotion of Greek history and culture focusing on gastronomy, its historical development and its cultural value	www.gastronomymuseum.gr

#	Startup Name	Business Activities/Products/Services	Website
25.	Cherry Pick	Safe and timely transportation services provider for older and younger children to and from their extracurricular activities based on innovative fleet tracking and information technologies	www.cherrypick.gr
26.	180Degrees	Transforming clothing (design, manufacture, retail and wholesale)	www.transformableclothing.com
27.	Rubber Duck Software	Specialized software that changes the management way in computer memory, speeding up the operations and saving energy	www.rdssoftware.eu
28.	Necova	Device that upgrades existing energy household solar panels	www.necova.gr
29.	Clio Muse	Application that narrates historical information about museum exhibits	cliomuseapp.com
30.	Cookisto	Online service that allows buying homemade meals	www.cookisto.com
31.	Forky	Order and delivery services of quality food	www.forky.gr
32.	Workable	Easy to use software which facilitates the recruitment process	www.workable.com
33.	Busood	A smart mobile application for urban transportation and in favor of sustainable cities	
34.	City Fast	Courier company aiming to provide hybrid mail services	www.cityfast.gr
35.	City Tales	Application that provides historical information for buildings	www.citytales.eu
36.	isMood	Data analysis and data mining company specializing in the analysis of data from social networks in real time	www.ismood.com
37.	Owiwi	Developer of strategy games that are meant to be used by companies for the selection of candidates and the evaluation and training of the existing employees	www.owiwi.gr
38.	Hermes-V	Integrated services provider that allows for the monitoring of a vehicle's condition in real time	www.hermes-v.com
39.	Berryland	Growing hypertrophy (superfoods) of various kinds	berryland.gr
40.	R tiles	Manufacturer of handmade cement tiles	www.rtiles.gr
41.	Helbio	Manufacturer and retailer of hydrogen biofuel processors for energy applications	www.helbio.com
42.	Hartovasion	Company specialized in creating and constructing paper utilitarian objects	www.hartovasion.gr
43.	100mentors	Web platform that allows students to find mentors in targeted universities and companies	www.100mentors.com
44.	The life goddess	Greek grocery in London	thelifegodness.com
45.	Hellas direct	Insurance services provider without intermediaries	www.hellasdirect.gr
46.	FEREIKOS HELIX	Company breeding snails	www.fereikos-helix.gr
47.	Insurance Market	Insurance services provider without intermediaries	insurancemarket.gr
48.	ERGON	Greek deli company	www.ergonfoods.com
49.	BrainBox	Company manufacturing and installing bicycle sharing system	www.brainbox.gr
50.	Farmers Republic	Online store allowing certified organic producers to sell their products in Greece and other European Union countries	farmersrepublic.gr

#	Startup Name	Business Activities/Products/Services	Website
51.	Lenga Wine Spa	Cosmetics manufacturer from Greek grapes	www.lengawinespa.gr
52.	Stella Mare	Packaging, standardization, processing and distribution company of fresh fishery products	www.stellamare.gr/el/
53.	We deliver taste	Consultancy company that creates products and services that connect agricultural producers with gastronomy restaurants	www.wedelivertaste.com
54.	Calypsotree	Special varietal olive oil producer	calypsotree.com
55.	The Governor-Olive Fabrica	Extra virgin olive oil producer	thegovernor.gr
56.	GALA	Portfolio of applications supporting agricultural production processes, accessible through the internet	www.c-gaia.gr
57.	TIMION	Extra virgin olive oil producer	www.timion.gr/#products
58.	Bunkering at Sea (BAS) Ltd	Integrated market intermediation services and marine fuel supplier	www.bunkeringatsea.com
59.	We design	Creative agency designing houses, functional products, corporate identity, web sites, architectural works, commissions and competitions	www.wedesign.gr
60.	Beetroot	Visual communication and creative design team	www.beetroot.gr
61.	Yyaiα	Greek production and excellent taste berries farmer: myrtilo (blueberry), goji berry and Aroni (chokeberry) from the top of Mount Parnon	www.yyea.gr
62.	Three Cents co.	Producer of premium classic and original Greek refreshments based on sparkling water	threecents.gr
63.	Alexandros Chocolate	Producer of handmade chocolate products	www.alexandroschocolates.gr
64.	Trebbble	Mobile agency with expertise in strategy, design and development of innovative applications and value added services for smart mobile devices	www.trebbble.co
65.	Historious	Application that helps in exploring historical sites such as museums, archaeological sites or monuments through the mobile phone	www.trebbble.co/work/historious
66.	The family beez	Waste management company, and biogas and compost producer	www.thefamilybeez.com
67.	Λακωνική Bioεργειακή A.E.	Waste management company, and biogas and compost producer	www.bioenergeiaiki.gr
68.	FOS	Producer of juice from Greek tomatoes, preserved naturally without the addition of preservatives and colorings	www.fos-nc.gr
69.	E-food.gr	Online food ordering platform	www.e-food.gr
70.	Clickdelivery.gr	Online food ordering platform	www.clickdelivery.gr
71.	Globartery	Innovative B2B electronic platform for connecting wholesalers to their customers (stores)	http://www.globartery.com

#	Startup Name	Business Activities/Products/Services	Website
72.	Bottilia.gr	Electronic platform that brings together winemakers with wine lovers offering the best wines of small Greek producers at winery prices	www.bottilia.gr
73.	Of Dreams and Knowledge MILESTONE	Organic green olive oil producer	www.ofdreamsandkno
74.	Ploos Design	Modern souvenir design services provider	www.ploosdesign.com
75.	Gogreek	Manufacturer of Greek traditional Ouzo miniatures and other traditional packaging for products such as olives and olive oil	www.gogreek.gr
76.	Scooterise	Company that creates and offers tourist products/services such as private tours in various areas in Greece by also using innovative electric vehicles	scooterise.com
77.	Roomius	On demand online accommodation platform	www.roomius.com
78.	Fixers.gr	Company promoting the philosophy of open source, creativity and solidarity	www.fixers.gr
79.	Inverse Greece: History & Culture	Application about the history and ancient monuments in Greece	inverse.gr
80.	Icaria Pure	Greek traditional culinary products manufacturer	www.icariapure.com
81.	Yoleni's Mediterranean Food & Taste	Innovative electronic delicatessen platform sourcing traditional products from all around Greece	www.yole
82.	Donorwiz	Online platform that connects non-profit associations and organizations with potential supporters and volunteers	www.donorwiz.com
83.	PROGNOSIS	Application for "smart" phones, which in combination with a wristband gathers data and creates a vector behavior associated with the symptoms of Parkinson's	
84.	Lovegreece	Greek products and souvenirs' manufacturer	www.lovegreece.com.gr
85.	Doctor anytime	Electronic platform where anyone can easily and quickly book an appointment with doctors and medical centers in every part of Greece	www.doctoranytime.gr
86.	Happy hour plus	Application that informs users about offers for attending entertainment places in Greek cities	happyhourplus.gr
87.	Incrediblue	Online yacht charter portal for holidays	www.incrediblue.com
88.	Intale	Organization and management software for small retailers	www.intale.com
89.	Offerial	Personalized hospitality information provider, designed to profile specific visitors and incentives that apply exclusively to reservations through the website	www.offerial.com
90.	Captainwise	Search engine for travel destinations	captainwise.com
91.	Mist.io	Services provider for system administrators and developers in order to help simplify the management and monitoring of the servers	mist.io

#	Startup Name	Business Activities/Products/Services	Website
92.	E-nios	Computing platform that allows the automated analysis of complex genetic data using advanced computational intelligence methods to develop new diagnostics and propose individualized therapeutic activities	e-nios.com
93.	Persado	Persuasion marketing services provider	persado.com
94.	Giveit	Online community allows for sharing items with nearby people	www.giveit.gr
95.	Teamup	Online business interface platform	teamup.gr
96.	Deliveras	Online food ordering company	www.deliveras.gr
97.	Microdeals.gr	Internet platform for marketing and selling products and services	www.microdeals.gr
98.	EmployMe.gr	Online platform for analyzing and extracting information on Greek labor issues	www.employme.gr
99.	Ntynomai.gr	Internet platform for Greek fashion	www.ntynomai.gr
100.	Bonusdeals	Platform gathering and presenting offers from all deal sites	www.bonusdeals.gr
101.	MyMD	Online search engine for physicians	www.mymd.gr
102.	i-kiosk	Organization and management software for small retailers	www.i-kiosk.gr
103.	Spitogatos	Online real estate adverts platform in Greece	www.spitogatos.gr/gr/homepage
104.	Datalive	Business intelligence and data analysis services provider	www.datalive.gr
105.	Active Citizen	Application that allows easy, direct, simple, fast, inexpensive reporting of citizen daily problems to the municipalities	activecitizen.cgs.gr
106.	Goodvideo	Software services provider that facilitates e-commerce businesses to upgrade the experience of the online customers and increase sales utilizing videos as a medium	goodvid.io
107.	TomoTech	Software for processing three different MRI examinations (DTI, fMRI and Perfusion Scan)	tomotechsolutions.com
108.	BLOODE	Online service that aims to meet the need for blood by increasing the proportion of blood donors and the organization of the blood system in Greece	www.bloode.org
109.	Nimbata	Performance analyses provider of telephone campaigns	www.nimbata.com
110.	Acropolis Rock	Application that helps in exploring historical sites such as museums, archaeological sites or monuments through the mobile phone	acropolisrock.com
111.	Geomiso	Isogeometrikis analysis and design software (CAD & CAE)	geomiso.com
112.	Care across	Web platform that focuses on accurate and timely provision of information for cancer patients	www.careacross.com
113.	Classfund	Equity raising crowdfunding platform	www.classfund.gr
114.	Giaola	Online platform that brings communication professionals serving everyday needs, with customers seeking their services	www.giaola.gr
115.	Suburbia	Optical communication platform	www.suburbia.gr
116.	Philanthropoli	Platform for providing promotional and marketing services, and finding voluntary organizations and fostering corporate social responsibility	www.philanthropoli.com

#	Startup Name	Business Activities/Products/Services	Website
117.	Ambassador	Application for smartphones and web-based platforms that combines corporate engagement features	Ambassador.com
118.	GRAPES	Precision agriculture services provider used for improving grape collection in order to produce better quality wine varieties	www.grapes-project.tk
119.	Bluperty	Online real estate auctions and investment services provider	www.bluperty.com
120.	i-host	Customer base management software for restaurants, hotels and related businesses	www.i-host.gr
121.	BFP	Production of nano-materials and functional films	www.bfphellas.gr
122.	Reccodo	Electronic commerce platform	reccodo.com
123.	Recycglobe	Innovative enterprise in the recycling area	www.recycglobe.com
124.	LIA Premium Evoo	Extra virgin olive oil producer	www.lialiveoil.com
125.	Forky	Online food ordering platform	forky.gr
126.	Madbrain		www.madbrain.eu
127.	GMB		
128.	Ideably	Electronic platform	
129.	Nubox		
130.	The SARM Project	A new rotary engine concept designer	www.thesarmproject.com
131.	Mermix.gr	Online agricultural machinery exchange platform	www.mermix.gr
132.	Pressure.gr	Cultural magazine with topics relevant to the cultural agenda of Athens, articles about relationships, people, woman, health, entertainment, etc.	www.pressure.gr
133.	EMSK	Sustainable services and eco-manual software kit	kpluslab.com/emske/mock
134.	Ecoverified	Advisory service to ecology and sustainability issues	www.ecoverified.com
135.	Tourismart	Integrated mobile suite for tourism businesses	www.tourismart.gr
136.	Green Products	Marketing services provider for agricultural products targeting overseas markets	www.sensorflare.com
137.	Sensorflare	Platform through which the management of different smart devices is feasible	www.sensorflare.com
138.	Network Bliss	Networking and marketing services provider	www.networkbliss.gr