

ANALYSIS OF AALTO STARTUP CENTER'S FAST GROWING ALUMNI COMPANIES - GAZELLES

**HOW A HYBRID ACCELERATOR FOLLOWS THE DEVELOPMENT AND GROWTH OF ITS
ALUMNI COMPANIES BY FOSTERING ENTREPRENEURSHIP AND INDUSTRY**

PERTTI KIURU

Helsinki 2022

1



**Aalto University
Startup Center**

Table of content

Summary	3
1. Study profile	3
1.1 Background.....	3
2.2 Objectives.....	4
2.3 Responsibility	4
3. Implementation and funding	5
3.1 Strategy and activities undertaken	5
3.2 Monitoring and evaluation.....	6
3.3 Sustainability measures.....	7
3.4 Costs	7
3.5 Funding	7
4. Outcomes and impact	7
4.1 Outcomes	7
4.1.1 Background of ASUC's alumni companies.....	7
4.1.2 Gazelles – Long term review	10
4.1.3 Gazelles – Last period (2016-2019) review	11
4.2 Impacts	12
4.3 Involved stakeholders and beneficiaries.....	13
4.4 Awards / recognition	14
5. Lessons learned	14
5.1 Primary challenges	14
5.2 Success factors	15
5.3 Transferability	15
Further information.....	16
Publications / articles	16
Links.....	17
Keywords	17
Public contact details	17

Summary

The purpose of Aalto Startup Center (ASUC) is to drive new business activity, and it works with both external startups who want to be part of Aalto University's infrastructure as well as commercialization projects from Aalto University's research.

The objectives of monitoring companies that have participated in Aalto Startup Center's incubation and acceleration programme (later referred to as alumni companies in this document) are:

- Collect long-term comparable data about all alumni companies.
- Examine the data of fast growing companies (later referred to as gazelles in this document) among ASUC's alumni companies.
- Compare ASUC's alumni companies' growth and profitability to all Finnish companies in total and particularly to small and medium sized Finnish companies in total.
- Compare the changes in the share of gazelles in ASUC's alumni companies to the growth of Finland's GDP.

The data consists of 618 alumni companies incubated in Aalto Startup Center where 382 companies are still active. This is a survival rate of 62 percent. In the year 2020, the total turnover of alumni companies was EUR 560 million and their operating result was 14 percent. In addition, it can be estimated that alumni companies had a total of about 3 200 employees in 2020.

The growth of alumni companies was reviewed in four-year periods, the first of which was from 2003 to 2006 and the latest one is from 2017-2020. From the first period 2003-2006 to the last period 2017-2020 in total 249 alumni companies have been gazelles at least one period. It is about 40 percent of all alumni companies and about 57 percent of those alumni companies that have at least one four-year period of financial statements. None of the alumni companies has been gazelle in all 15 periods. The highest number of gazelle periods is nine with two alumni companies.

In the last period 2017-2020, the number of gazelles is 52 and their share of alumni companies is 18 percent. The number of gazelles has increased but the share has decreased with time. ASUC's gazelles grew substantially faster than the whole business population in Finland.

1. Study profile

1.1 Background

Aalto Startup Center (ASUC) is a **hybrid accelerator** with roots in year 1997. A hybrid accelerator offers client startups both business incubation and business acceleration services.

At the beginning, ASUC was a part of Small Business Center of the Helsinki School of Economics. Aalto University started its operations in 2010 by merging three different universities together; Helsinki University of Technology, the University of Art and Design and the Helsinki School of Economics. It did this to strengthen the innovative ability of Finland through first-class research, artistic activities and teachings.

In 2016, ASUC became a part of Aalto University's Research and Innovation Services after the transfer of ownership of the Small Business Center to South-Eastern Finland University of Applied Sciences.

Aalto Startup Center has been offering services to startups for more than 20 years. Today, the hybrid program draws on the cross-disciplinary expertise offered by Aalto University on **design, business and technology**, and it also has access to a network of six schools. It is at the moment one of Europe's largest hybrid programs and is a significant player in Finland's entrepreneurship ecosystem.

Monitoring of the development and growth of the ASUC's alumni companies started in the late 2000s. Data was collected from year 2003 and the latest available year is now 2018.

2.2 Objectives

The purpose of Aalto Startup Center is to foster entrepreneurship and startups which is part of the strategy of Aalto University. ASUC works with both external startups and new businesses set up as part of Aalto University's commercial research projects. Aalto Startup Center is currently working with some 40 businesses, 10 of which are involved with the European Space Agency's Business Incubation Service Finland, which forms part of Aalto Startup Center. Aalto Startup Center is based at the Aalto University A Grid in Otaniemi, Espoo, Finland.

The objectives of monitoring companies that have participated Aalto Startup Center's incubation and acceleration programme (later referred to as alumni companies in this document) are:

- Collect long-term comparable data about all alumni companies.
- Examine the data fast growing companies (gazelles) among ASUC's alumni companies.
- Compare ASUC's alumni companies' growth and profitability to all Finnish companies in total and particularly to small and medium sized Finnish companies in total.
- Compare the changes in the share of gazelles in ASUC's alumni companies to the growth of Finland's GDP.

2.3 Responsibility

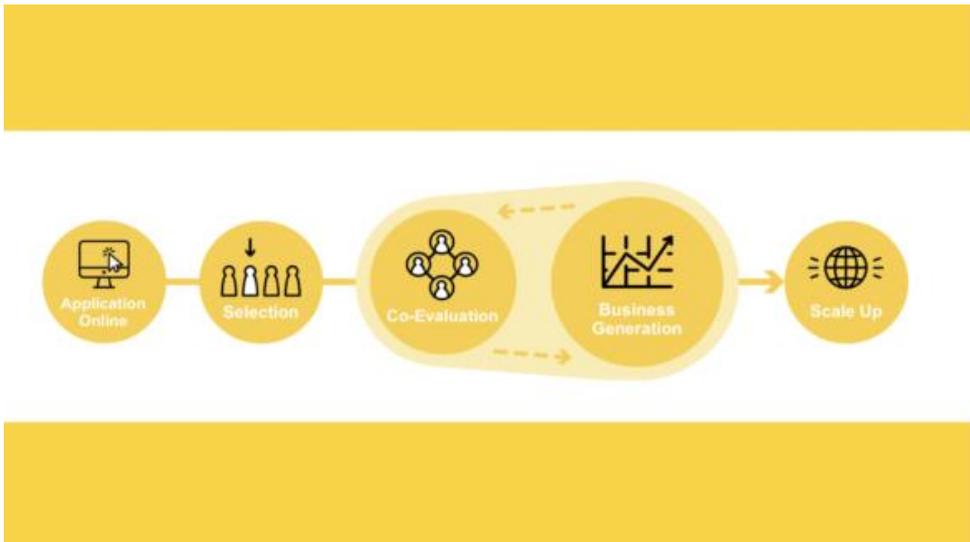
The operation logic of Aalto Startup Center can be understood through the public sponsorship theory (Amezcuca et al., 2013, Autio et al., 2016). According to this theory, there are three essential tasks that an incubator/accelerator can do to facilitate survival and growth of startup firms. **These three tasks are buffering, bridging and boosting.**

Buffering refers to insulating new ventures against harsh market realities. In accordance with buffering, ASUC provides space and training to startup firms. Bridging refers to facilitating new ventures with access to external resources such as money, customers, corporates and employees. By bridging startups and the rest of the world, ASUC organizes networking events and connects students and research to startup firms. Boosting refers to activities that make entrepreneurs to concentrate on growth creating activities in their startup firms. An example of this activity at ASUC is the work of both in-house and Aalto external startup advisors who monitor that entrepreneurs' time is allocated at right tasks.

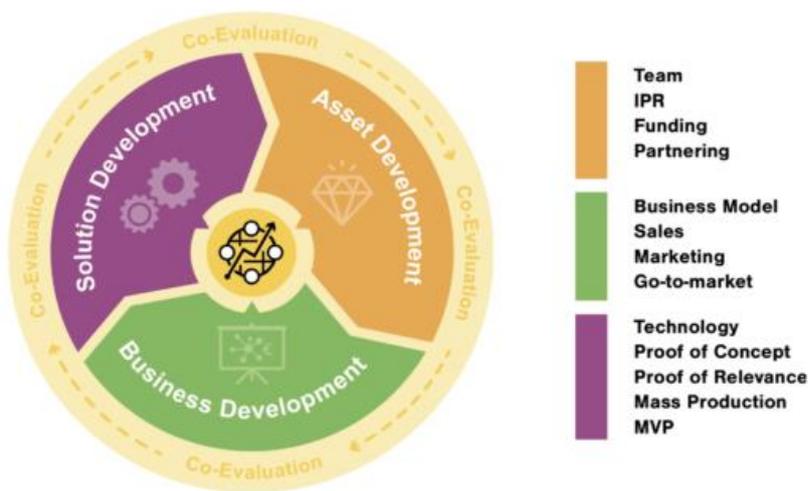
Aalto Startup Center runs a Business Generator program for startups. ASUC offers services to startups at the beginning of their journey. Business Generator model "From Ideas to Impact" lasts 12 + 12 months (picture 1). The program provides startups with support, coaching, tools and modern, communal workspaces, as well as networks for fundraising.

The main component of the program is the Business Generator (picture 2) supported by Co-Evaluation sessions with Aalto Startup Center team member. ASUC prepares teams for faster Business Validation and Scale Up. The work starts with a co-evaluation session, where the founders and Aalto Startup Center team members together will assess the current status of the company. ASUC will select together focus areas and prioritizing them to find areas for further development and to get a common view of the company. The executions assessed in separate status check days three times a year. This execution will be supported with the Business Generator's three development areas, which consist of the most important areas of activity for a growth company. ASUC provides expertise in these particular areas by offering trainings, experts, sparring, digital data tools, networking events and access to funding.

Aalto Startup Center helps with the scaling up of the company by networking with international partners and by connecting the startups to big corporates.



Picture 1. Program journey.



Picture 2. Business Generator Model.

3. Implementation and funding

3.1 Strategy and activities undertaken

David L. Birch (1979, 1987) studied US companies and he classified them by size and growth as mice, elephants and gazelles. He called gazelle companies those who doubled their turnover over four consecutive years, ie increased each year turnover at least 20%. Acs et. al. (2008) repeated Birch research from 1994-2006 and included in the analysis jobs. Acs et.al. (2008) called companies that quickly increase turnover and jobs "high impact firms (HIF). They said these high-impact firms were on average quite mature, their average age in the US was 25 years. In the same way as gazelles high impact firms were found in all regions and industries and they are not focused on high technology. However, it can be said that knowledge-intensive companies have an important role in the development of new innovations (Rannikko 2012).

The creation of new jobs depends on the growth of companies in the region. Quickly growing gazelle companies are being sought to boost regional development in particular because they are expected to bring a

lot of new jobs. Universities create goal-oriented development environments to encourage knowledge-intensive entrepreneurship and the commercialization of research results. Hackett and Dilt (2004) suggest that non-profit incubators represent a politically rational model when allocating community resources to incubator companies' development. Supporting incubation activities shows the long-term community dimension commitment to promoting economic development through entrepreneurship.

Aalto Start-Up Center (ASUC) has adopted its gazelle definition from the Danish financial magazine Børsen. This definition includes four different criteria.

1. Turnover of the company should be larger than 135 000 € every year during the four years period.
2. Growth of turnover should be positive every year (three observations).
3. Cumulative operating result (ENIT) should be positive during the period of analysis.
4. Turnover should be doubled during the research period (four years).

In other words, the chosen growth indicators are turnover, profitability and threshold size, and the measurement period is 4 years. The first criterion refers to the size and the third one to profitability of the company. Conditions 2 and 4 measure the growth of the company.

Gazelles and other alumni companies of ASUC were both defined in four categories depending on their growth, size and profitability. Categorisation in four+four groups is:

1. Gazelles
 - 1.1 Profitable adult gazelles (all conditions fulfilled).
 - 1.2 Non-profitable adult gazelles (growth and size fulfilled).
 - 1.3 Profitable baby gazelles (growth and profitability fulfilled).
 - 1.4 Non-profitable baby gazelles (growth fulfilled).
2. Other alumni companies
 - 2.1 Profitable adults (size and profitability fulfilled)
 - 2.2 Non-profitable adults (size fulfilled)
 - 2.3 Profitable babies (profitability fulfilled)
 - 2.4 Non-profitable babies (no conditions fulfilled)

It should be noted that all sample companies reside in a hybrid program, and are thus not entirely comparable to average startups, not to mention average companies. The clear distinction of this definition is the inclusion of profitability as a growth indicator. Supplementary growth variables are recommendable when attainable, and profits have the clear advantage of taking also company costs into consideration. A monetary size threshold is logical for ASUC, as many alumni companies function with only a handful of employees – if an employee size threshold were to be used, it would have to be set very low, which in turn could result in a bias towards the smallest companies.

3.2 Monitoring and evaluation

Five sources have been used mainly for monitoring and evaluation ASUC's alumni companies and all Finnish companies:

1. Business Information System (Finnish Patent and Registration Office).
2. Company Database (Asiakastieto Oy).
3. Orbis Database (Bureau van Dijk, A Moody's Analytics Company).
4. Structural business and financial statement statistics (Statistics Finland).
5. Annual national accounts (Statistics Finland)

From Business Information System was collected background data from all alumni companies:

1. Year of establishment.
2. Business ID.
3. Company form.
4. Main line of business.

5. Active or nonactive (end of business, year).

From Company Database and Orbis Database was collected financial statements from all alumni companies that are public limited companies, public companies or cooperatives:

1. Turnover.
2. Operating result (ENIT).
3. Number of employees (randomly reported).

From Structural business and financial statement statistics was collected financial statements in total from Finnish companies and small and medium sized companies Finnish:

1. Turnover.
2. Operating result (ENIT).

From Annual national accounts was collected:

1. Annual growth of Finland's GDP.

All data has been collected starting from year 2003 if possible. Last year in data is 2021 (Finnish Business Information System) or 2020 (other sources).

3.3 Sustainability measures

The monitoring of ASUC's alumni companies is based on **a long-term assessment of sustainable development indicators**. The first four-year period of monitoring was years 2003-2006 and since then the evaluation has been repeated thirteen times. The latest evaluation is from years 2017-2020.

3.4 Costs

Aalto Startup Center has an annual budget of about one million euros. The monitoring is very cost effective, because of long term data collection.

3.5 Funding

Aalto Startup Center receives public funding from Aalto University and for example Business Finland. Customer companies pay a very reasonable participation fee per month. At the end of their contract, startups are subject to a success fee. With the success fee, ASUC benefits from the growth of alumni companies.

4. Outcomes and impact

4.1 Outcomes

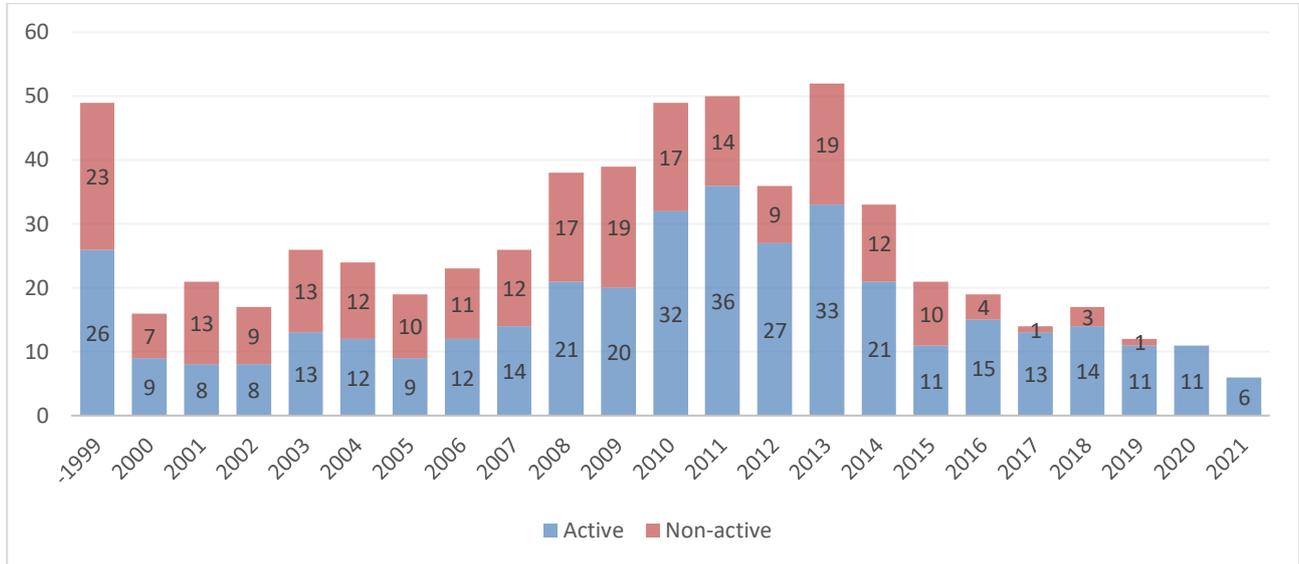
4.1.1 Background of ASUC's alumni companies

The number of ASUC's alumni companies is at the end of year 2021 in total 618. Of these 382 were active and 236 nonactive. **At the end of 2020, 62 percent of all Aalto Startup Center alumni companies were still up and running.**

About 50 percent of alumni companies were established between years 2008 and 2014. The share of nonactive alumni companies is growing with age. (Picture 3)

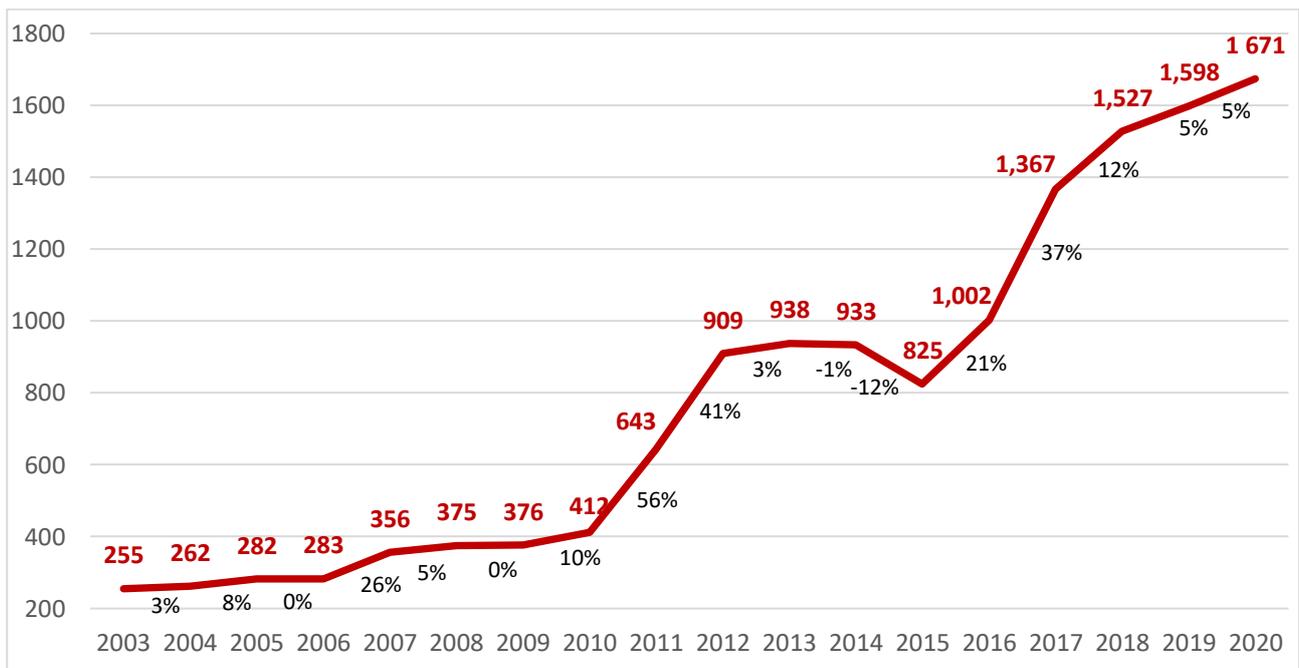
ASUC's alumni companies belong in total to 128 different industries. However, alumni companies are very strongly focused on a few industries. Almost 40 percent of alumni companies belong to two industries: **Computer programming activities and Business and other management consultancy activities.**

Of ASUC's alumni companies, 578 are public limited companies, limited companies or cooperatives. Financial statements can only be collected from these companies. Financial statements for at least one financial year were found for 522 alumni companies. Because the monitoring requires four consecutive financial statements for each review period, there were a total of 435 alumni companies that received financial statements for at least one of the four-year periods between 2003 and 2020.



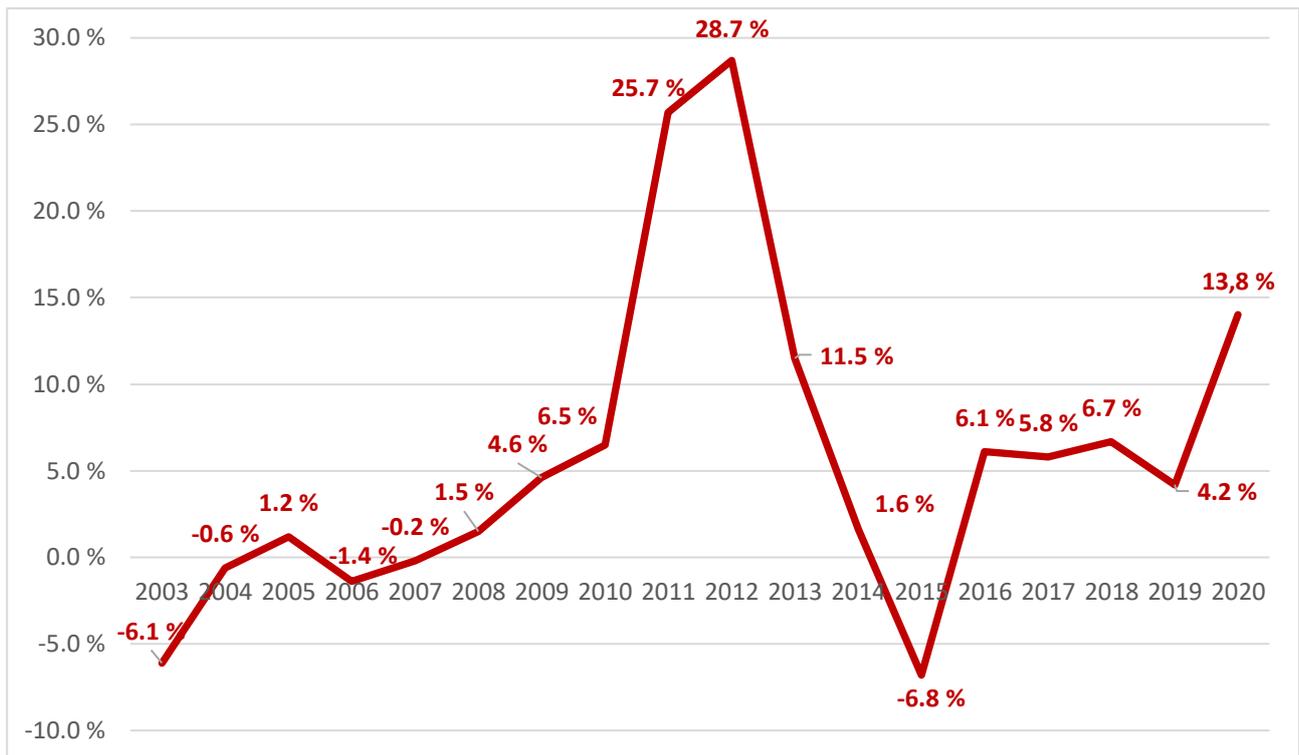
Picture 3. The year of establishment of alumni companies and the number of active and nonactive alumni companies.

All the alumni companies who have received at least one financial statement for the years 2003-2020 have been taken into consideration in the following review. In 2003, the financial statements are reviewed by 33. The number of financial statements is increasing annually and is 333 in 2020. Picture 4 shows the development of turnover per company, where the different number of companies in different years does not cause a significant illusion. Picture 5 shows the development of operating result (ENIT).

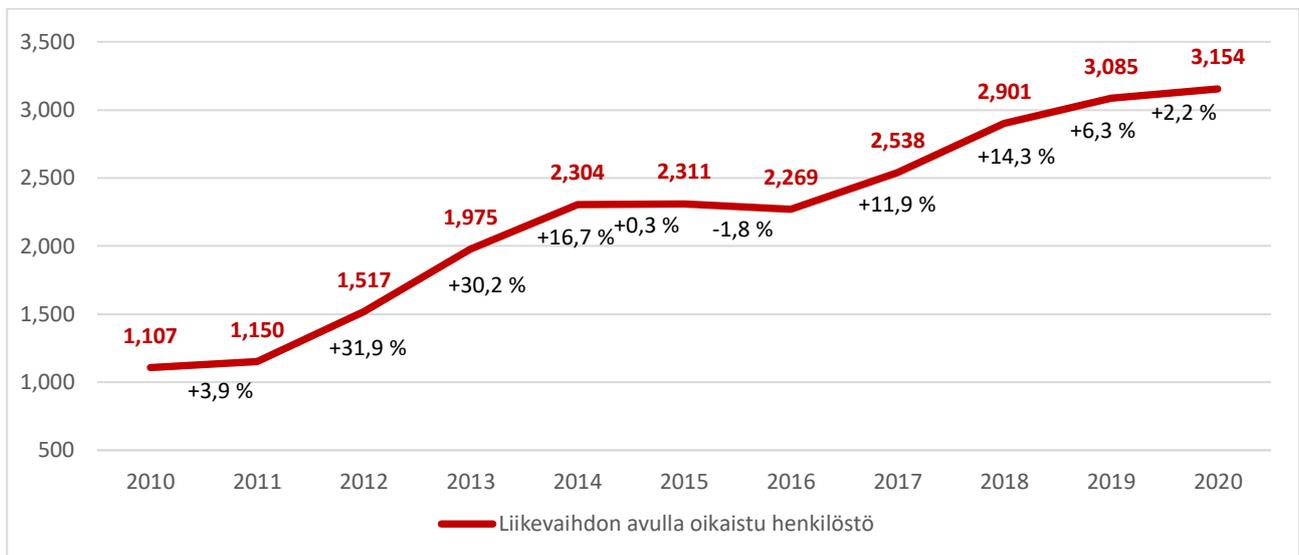


Picture 4. The average turnover of alumni companies (EUR 1000) and annual change (%) in 2003-2020.

In the year 2020 the total turnover of alumni companies was EUR 560 million and their operating result was 14 percent. In addition, it can be estimated that alumni companies had about 3 100 employees in 2020.



Picture 5. Operating result (ENIT) of alumni companies in 2003-2020.



Picture 6. Personnel of alumni companies (repaired by turnover) in 2003-2020.

In 2020, there were 56 alumni companies with a turnover of over one million euros out of a total of 333 alumni companies that reported their turnover. The turnover of these 56 companies was in total EUR 519 million. These companies, with a turnover of over one million euros, accounted for only 17 percent of the companies, but their turnover was 93 percent of the turnover of all 333 alumni companies. **Most of alumni companies are very small.** The average of their turnover was EUR 1,7 million, but the median was only EUR 87 000.

4.1.2 Gazelles – Long term review

From the first period 2003-2006 to the last period 2017-2020 in total 249 alumni companies have been gazelles at least one period. It is about 40 percent of all alumni companies and about 57 percent of those alumni companies that have at least one four-year period of financial statements. None of the alumni companies has been gazelle in all fifteen periods. The highest number of gazelle periods is nine with two alumni companies. Two alumni companies have been gazelles in eight periods and seven periods have reached four alumni companies. In six gazelle periods there are seven, in five periods 15, in four periods 26, in three periods 34 and in two periods 52 alumni companies. In total 107 alumni companies have only one gazelle period.

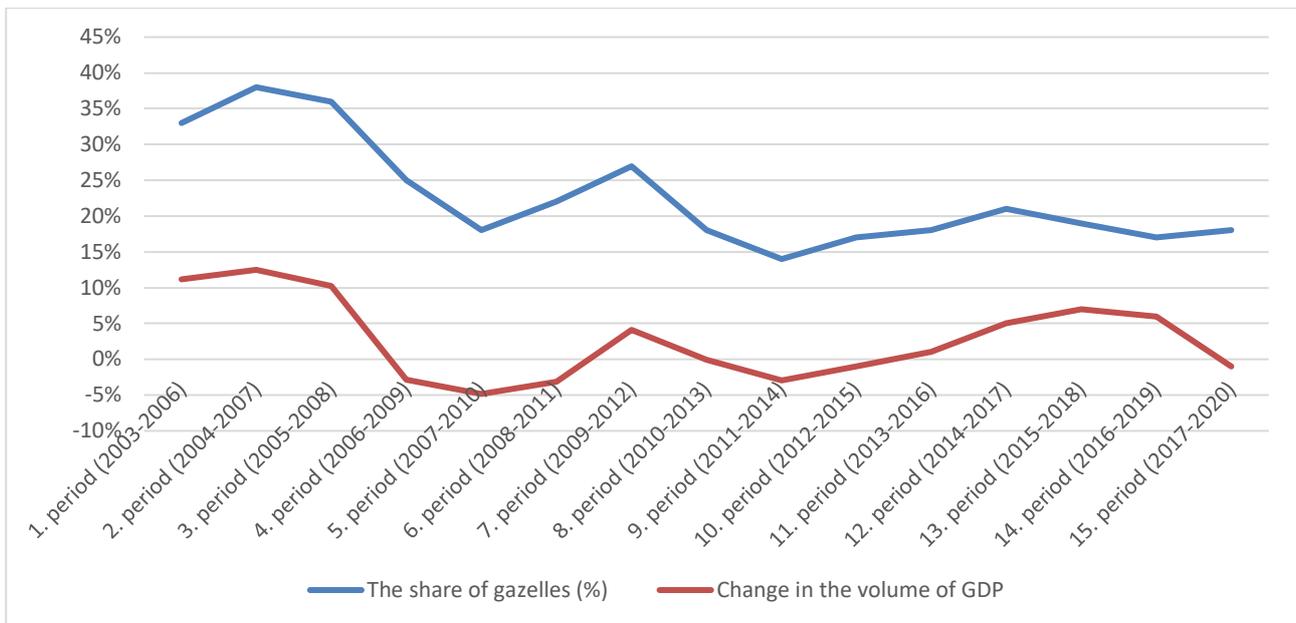
In the last period, the number of gazelles is 52 and their share of alumni companies is 18 percent (Table 1). The number of gazelles has increased but the share has decreased with time.

Period	Gazelle categories					Alumni companies with four-year period	Percentage of gazelles
	Profitable adult	Non-profitable adult	Profitable baby	Non-profitable baby	Total		
2003-2006	4	1	5	1	11	33	33 %
2004-2007	6	2	9	6	23	61	38 %
2005-2008	8	3	12	8	31	85	36 %
2006-2009	8	2	9	6	25	102	25 %
2007-2010	5	2	8	7	22	122	18 %
2008-2011	7	2	8	17	34	153	22 %
2009-2012	11	3	17	18	49	184	27 %
2010-2013	7	3	18	12	40	218	18 %
2011-2014	7	1	12	16	36	250	14 %
2012-2015	8	3	16	18	45	268	17 %
2013-2016	9	4	23	16	52	284	18 %
2014-2017	21	4	14	24	63	296	21 %
2015-2018	18	5	16	17	56	300	19 %
2016-2019	15	7	14	18	54	310	17 %
2017-2020	16	8	14	15	53	295	18 %

Table 1. The number and distribution of gazelles by gazelle category and the share of alumni companies that have received four financial statements for each four-year period.

The growth and aging of the alumni companies is a major contributor to the decline in the share of gazelles. For example, doubling the turnover of € 10 000 to € 20 000 over four fiscal years is in the early stages of the company much easier than, for example, doubling the turnover of € 10 million to € 20 million.

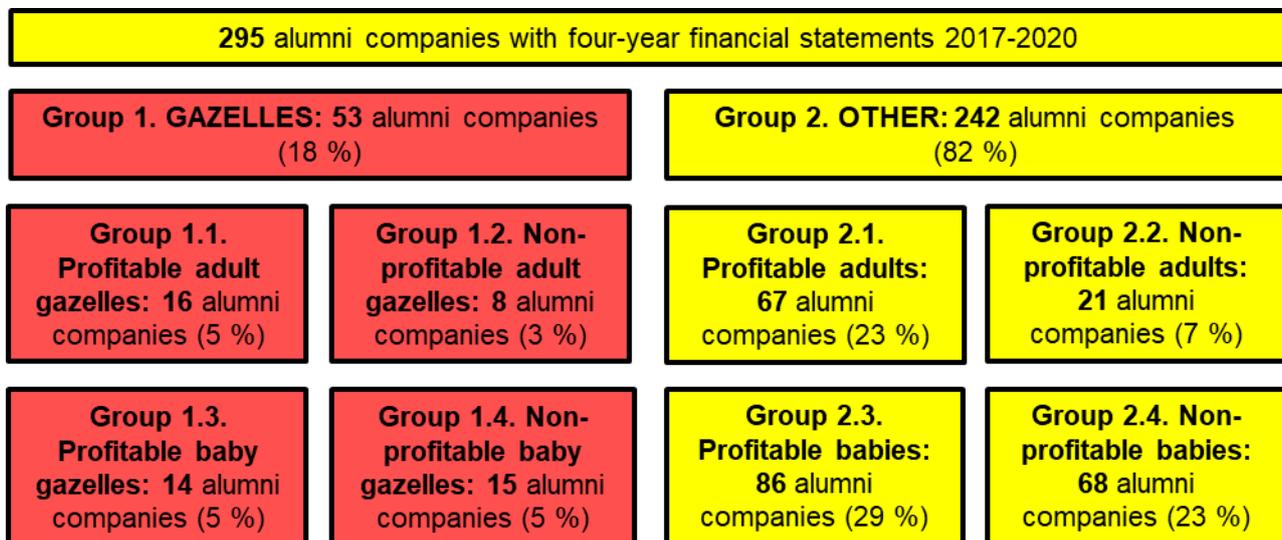
Changes in the share of gazelles are well in line with the changes of Finland's GDP. Picture 7 shows the share of gazelles and the change in the volume of GDP in each four-year period. Seems to be clear, that the change in GDP and the share of alumni gazelles go hand in hand. Last period seems to be an exception, GDP has fallen but share of gazelles has increased. This is probably the result of an exceptional corona year.



Picture 7. The share of gazelles in alumni companies (four financial statements/period) compared to the change in the volume of Finland's GDP during same period.

4.1.3 Gazelles – Last period (2017-2020) review

The last period review includes 294 alumni companies with financial statements for four years 2017-2020. **There were 53 gazelles. That was 18 percent of all alumni companies with four financial statements.** Both gazelles and other alumni companies have been categorised in four groups depending on their growth, size and profitability (picture 8). About one third of alumni companies are adults



Picture 8. Categorisation of gazelles and other alumni companies in period 2017-2020.

In four-year period 2017-2020 gazelles' turnover has grown almost 250 percent. In the same time turnover of other alumni companies has grown only 15 percent. **The growth of gazelles has been very fast, but the growth of other companies has been quite low** (Table 2).

The operating result of gazelles in four years period 2017-2020 has been lower compared to other alumni companies. The operating result of alumni companies has been on the same level as Finland's entire business population in first three years, but in 2020 operating result of alumni companies has been significantly higher.

Categorisation groups	Turnover (EUR million)				Change (%) 2017-2020
	2017	2018	2019	2020	
Profitable adult gazelles	14,3	22,7	33,8	44,3	188 %
Non-profitable adult gazelles	6,0	10,2	13,6	18,1	204 %
Profitable baby gazelles	0,2	1,2	3,1	9,3	3 025 %
Non-profitable baby gazelles	0,2	0,4	0,8	2,5	1 235 %
Gazelles in total	20,7	34,4	51,4	71,1	244 %
Profitable adults	418,3	432,6	445,0	438,1	5 %
Non-Profitable adults	30,0	33,6	41,7	38,0	27 %
Profitable babies	6,1	5,2	3,6	3,5	-43 %
Non-profitable babies	5,3	4,0	4,0	2,7	-48 %
Other companies in total	459,8	475,4	494,5	482,4	5 %
Alumni companies in total	480,4	509,8	545,9	553,5	15 %

Table 2. Turnover of gazelles and other alumni companies in 2017-2020 and relative change of turnover from 2017 to 2020.

Categorisation groups	Operating result (ENIT) (%)			
	2017	2018	2019	2020
Profitable adult gazelles	10,9 %	11,8 %	12,0 %	14,7 %
Non-profitable adult gazelles	-13,0 %	-19,2 %	-22,9 %	-8,0 %
Profitable baby gazelles	-193,5 %	-8,8 %	2,1 %	9,3 %
Non-profitable baby gazelles	-643,5 %	-462,5 %	-268,7 %	-76,5 %
Gazelles in total	-4,1 %	-3,6 %	-2,3 %	5,0 %
Profitable adults	10,4 %	12,2 %	8,2 %	20,0 %
Non-Profitable adults	-23,7 %	-21,8 %	-13,4 %	-11,0 %
Profitable babies	25,6 %	18,5 %	19,5 %	21,8 %
Non-profitable babies	-86,8 %	-133,3 %	-98,9 %	-185,3 %
Other companies in total	7,3 %	8,6 %	5,6 %	16,4 %
Alumni companies in total	6,8 %	7,8 %	4,9 %	14,9 %

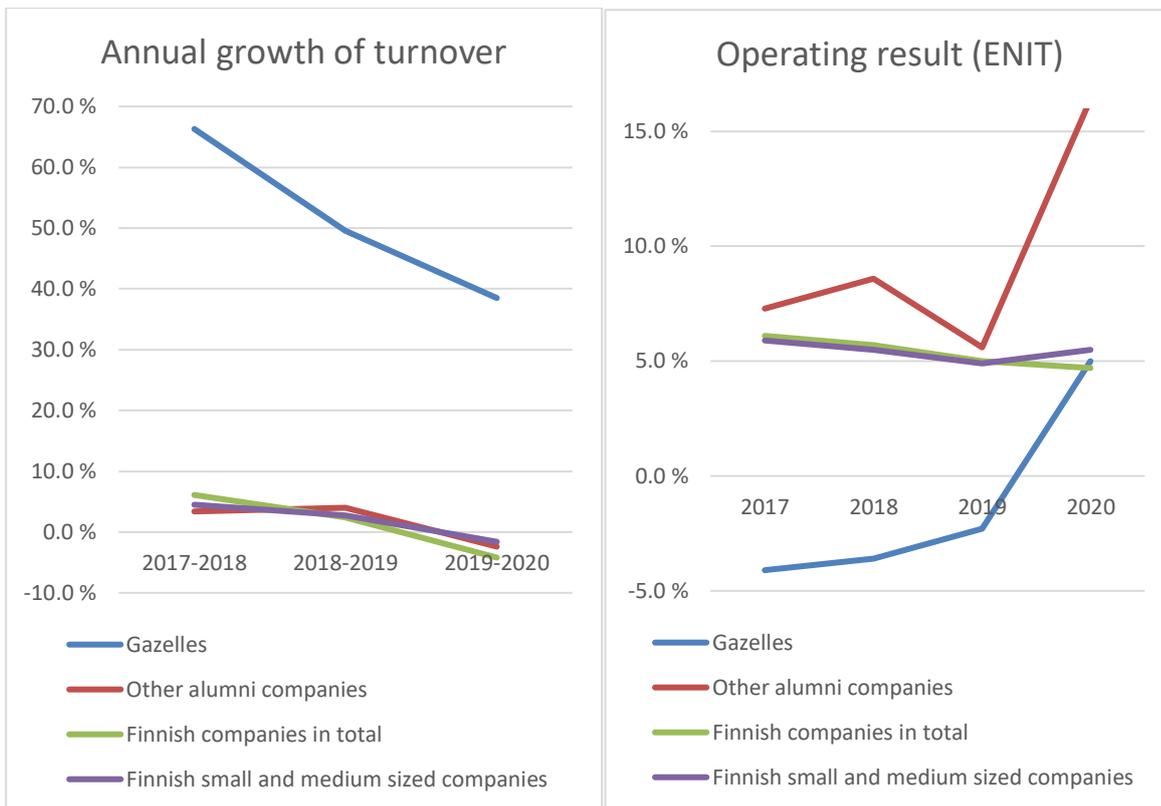
Table 3. Operating result (ENIT) (%) of gazelles and other alumni companies in 2017-2020.

4.2 Impacts

On the share of growth companies (gazelles) in the total business population most studies come to around 5 percent. At best, it only speaks of 10 percent. Thus, the proportion of ASUC's gazelles is high compared to the general situation. Of course, ASUC's alumni companies are a select group that naturally creates the conditions for such gazelle shares.

The share of ASUC's alumni companies' gazelles has varied between 14 and 38 percent during the 15 periods under review. Changes in the share have followed changes in Finnish GDP (picture 7). ASUC alumni companies are, for the most part, small, young and still quite dependent on the domestic market. As a result, **they are highly sensitive to fluctuations in the Finnish economy.**

The sensitivity to fluctuations in the Finnish economy is also reflected in the figures for the last four years. When comparing gazelles and other alumni companies to all Finnish companies and small and medium-sized companies, the effects of the mild recession in Finland are observed. It appears in the growth of gazelles and is also clearly visible in the growth of other alumni companies. On the other hand, the impact on the operating result was clearly reflected in the figures for gazelles, but not for other alumni companies (picture 9).



Picture 9. Relative annual growth of turnover and operating result (ENIT) of gazelles, other alumni companies, Finnish companies in total and small and medium sized Finnish companies in 2017-2020.

The monitoring of ASUC's alumni companies has confirmed the idea that hybrid program creates an excellent foundation for start-ups. Aalto University's multidisciplinary expertise in design, business and technology provides a strong foundation on which Aalto Startup Center can rely on its operations. ASUC has an important role to play in bringing forward innovations and related business ideas from this community. Based on the results of the monitoring, there are successful and growing companies.

Although ASUC's aluminum companies are divided into many industries, the two industries (Computer programming activities and Business and other management consultancy activities) are dominant among alumni companies. In addition to these, ASUC also focuses on the creative industries. Space technology has become a new priority. The European Space Agency Business Incubation Center is part of Aalto Startup Center.

4.3 Involved stakeholders and beneficiaries

Aalto Startup Center is widely linked to a number of stakeholders and beneficiaries. The following is a brief introduction of the most important ones.

Companies that are ASUC's current portfolio startups, alumni companies, other companies, corporations and international partners that may be beneficiaries or stakeholders. For example, one of Finland's largest trademark, model and patent offices has an agreement with ASUC on IPR advice for incubator companies.

Students and researchers who can take their business ideas with ASUC and develop it in a safe and dynamic environment.

Private and public funders, venture capitalists and business angels are actively looking for funded companies with growth potential and readiness for internationalization.

Cities, municipalities, universities, universities of applied sciences, vocational schools and other schools involved in the start-up ecosystem of the Helsinki region.

Foundations that support research and publishing activities of **research organizations** and **researchers** concerning to alumni companies.

Entrepreneurship support organizations such as Suomen Yrittäjät (Finnish Entrepreneurs) and the Chamber of Commerce, which have extensive advice and lobbying for businesses.

4.4 Awards / recognition

- ASUC was called to participate UBI-Global – an interactive learning community for business incubators and accelerators.
- Aalto Startup Center has been awarded among the top 5 university business accelerators. The world's best business incubators and accelerators received their awards at the World Incubation Summit 2019 organized by UBI Global and held on 6 November 2019 in Doha, Qatar. This was the fifth time the biennial event has been held and Aalto Startup Center was now participating in it for the first time.
- ASUC was selected to participate to the first EU-India Incubator/Accelerator Networking event in Bangalore, India, October 2018.
- Foundation of Economic Education and Pienyrityskeskukseen tukisäätiö (Support Foundation of Small Business Center) have supported ASUC's publishing activities.
- Finnish and international media have dealt with ASUC's activities and the development and growth of alumni companies in their articles and writings: For example Finnish economic journal "Tekniikka ja talous" and international journal "The Journal of Product Innovation Management".
- ASUC and the number and success of the gazelles born there are discussed in several abstracts and conference papers.
- ASUC's close and extensive cooperation with stakeholders has also been taken into account.

5. Lessons learned

5.1 Primary challenges

Aalto Startup Center has changed to cover the whole Aalto University. Its position and operating model have been built to fit the new environment. As a result, the number of companies in ASUC has been less than a few years ago. The position of ASUC in the current organization of Aalto University is now well established and its operations have expanded. For a significant part, this has been supported by success stories proven through the monitoring of previous years, including: a large number of new growth companies among alumni companies.

As ASUC expanded to cover the whole Aalto University, it became increasingly important to build a path through which the commercialized research teams from Aalto University can utilize the ASUC hybrid accelerator. This path is called "From ideas to impact" and it is earlier referred to as **a Business Generator program for startups** in this document.

The main challenges in monitoring are that the number of financial statements vary year after year and the number of employees is randomly reported (it is not mandatory data).

Deepening and diversifying monitoring is also seen as a challenge for the coming years. There are many interesting development targets in the monitoring of ASUC's alumni companies. In addition to a mere growth

and profitability review, it would be possible to describe the development cycle of an individual company in the timeline. This would give you information about, for example:

- At what stage of the life cycle is the biggest growth?
- How long can a company repeatedly increase its turnover?
- Do you want to apply for profitability from the very first years or to invest in product development under the guise of sales?

In the light of these results, one might better predict, for example, companies' growth potential and product development time before full sales start.

5.2 Success factors

Long term monitoring data is most comparable. All alumni companies can be monitored from year to year using comparable data. It provides a year-round unified development image of the growth and profitability of alumni companies and the impact of some external factors on them.

Viitanen (2015) has creditably included in his benchmarking report the success factors by Aalto Startup Center:

- Combination of co-working space and acceleration gives ASUC a possibility to cater broader startup population by being the first hybrid accelerator in Finland.
- Tailor-made programs for each client startups provide clear milestones. The jointly agreed action plans serve as perfect monitoring tools and speeds up the startup development process.
- Business model supported with success fee, provides ASUC a chance to benefit from the alumni companies' growth.
- Combination of research services and projects on same platform multiplies the incubation effectiveness. The research results can be used for developing the incubator processes, for the business development support and for connecting the incubator to the surrounding ecosystem.
- The network connections improve the service quality and provide access to external resource pools. This frees the incubator to focus on key development issues.
- Own international network boosts the successful market entry to foreign markets. Again, the in-house expertise can be complemented from local sources in each location. The outposts serve as perfect soft-landing bridgeheads, providing direct access to local networks, business channels and markets.
- **Long-term monitoring and evaluation practice** improve the program visibility, builds the alumni relations, and creates the necessary evidence base to convince the decision makers on the necessity and impact of the hybrid program service.
- Hands-on tools improve the start-up skills much faster than more generic coaching. The development targets must be defined in the most practical way.

5.3 Transferability

Discussions have been started to involve all startups from Aalto University in the monitoring process. The possibility of spreading this monitoring model to all incubators and accelerators in the Helsinki region (Helsinki Region Startup Ecosystem) has been examined.

It is also possible to introduce a monitoring model in incubators and accelerators located in other countries. If your country's business statistics allow you to collect the data you need, it's easy to implement the monitoring. The monitoring model is freely copied, but Aalto Startup Center requires that it will be mentioned as a source.

Further information

Publications / articles

Aallon startupit pyörittävät jo puolen miljardin euron liikevaihtoa. (https://www.tekniikkatalous.fi/talous_uutiset/yritykset/aallon-start-upit-pyorittavat-jo-puolen-miljardin-euron-iikevaihtoa-6760031).

Aalto Starup Center (2012). Innovatiivisten kasvuyritysten kiihdytysympäristö. Menestystarinoita jo vuodesta 1997. Helsinki.

Acs, Z.J., Parsons, W. and Tracy, S. (2008), "High-Impact Firms: Gazelles revisited." Washington, USA: SBA, Office of Advocacy.

Amezcuca, A, Grimes, M, Bradley, S, Wiklund, J (2013). Organizational sponsorship and founding environments: a contingency view on the survival of business incubated firms, 1994–2007 *Acad. Manage. J.*, 56 (6) (2013), pp. 1628-1654.

Autio, E., Rannikko, H. 2016. Retaining Winners: Can Policy Interventions Facilitate High Growth Entrepreneurship? *Research Policy*. Birch, David L. (1981). Who Creates Jobs? *The Public Interest* 65, 3-14.

Birch, D. (1987). "Job Creation in America." New York: Free Press.

Hackett, S. M & Dilts, D. M (2004), A Systematic Review of Business Incubation Research. *The Journal of Technology Transfer*, Volume 29, Number 1, 55-82.

Jourdan, J., Kivleniece, I., 2014. The Dark Side of Public Money? The Dual Effect of Public Sponsorship on Firm Performance, DRUID Society Conference 2014. Copenhagen Business School, Copenhagen.

Pitkänen, I, Parvinen, P, Töytäri, P (2014), The Significance of the New Venture's First Sale: The Impact of Founders' Capabilities and Proactive Sales Orientation. *The Journal of Product Innovation Management*, Volume 31, Issue 4, pages 680-694, July 2014.

Rannikko, H (2012), Early Development of New Technology-Based Firms – A Longitudinal Analysis on New Technology-Based Firms' Development from Population Level and Firm Level Perspectives, Publications of Hanken School of Economics, Nr 240.

Startup Center success stories 2015 (readerstage.com), and *Journal of Product Innovation Management* <http://onlinelibrary.wiley.com/doi/10.1111/jpim.12160/abstract>.

The startup space to explore. Aalto University Campus Magazine. Autumn 2018.

Viitanen, J (2015). Benchmarking Report: Case Aalto Start-up Center, Helsinki Metropolitan Area, Finland.

Virtanen, M, Heimonen, T, Hägg, O, Kiuru, P, Rajahonka, M (2015). Gasellitarinoita Aalto Startup Centeristä. Aalto-yliopiston julkaisusarja, kauppa+talous. 2/2015. (Abstract in English: Gazelle stories from Aalto Startup Center).

Virtanen, M, Kiuru, P (2012). Do the incubators foster excellent performance? Analysis of the development of post-incubation gazelles.

Links

<https://startupcenter.aalto.fi/>

<https://esabic.fi/>

<https://agrid.fi/>

<https://www.aalto.fi/>

<https://www.youtube.com/watch?v=JpewveOOroM>

Keywords

Entrepreneurship, Incubator, Business generator, Aalto University, Aalto Startup Center (ASUC), Monitoring the development, growth and profitability of ASUC's alumni companies, Gazelles, Startups, Hybrid Accelerator, Societal impact, Innovation, Scalable business ideas, Creating jobs.

Public contact details

Aalto University

Aalto Startup Center

Marika Paakkala

A Grid, Otakaari 5 A

02150 Espoo

Finland

Phone: +358 40 829 2286

E-mail: startupcenter@aalto.fi

Web: <https://startupcenter.aalto.fi/>