
The Competitiveness Repository Finland — The VIGO Venture Accelerator Programme

Competitiveness is widely accepted as the key driver for sustaining prosperity and raising the well-being of the citizens of a country. Enhancing competitiveness is a long-term process that requires improvements across many areas and long-lasting commitments from relevant stakeholders to mobilize resources, time and effort. Accordingly, to make the right decisions, these stakeholders need information and data.

For more than 30 years, the World Economic Forum has studied and benchmarked competitiveness. From the outset, our goal has been to provide insight and stimulate discussion among all stakeholders on the best strategies, policies and activities to overcome the obstacles to improved competitiveness.

Against this backdrop, the Forum is taking the next step to inform the discussion on competitiveness practices among stakeholders by embarking on a project to build a **Competitiveness Repository** that compiles relevant information about practices that have aimed or are intended to build competitiveness. It will be complemented by a series of private events that provide a safe space for countries to better understand approaches that have worked elsewhere.

The platform will be built around a collection of practices collected through the completion of the template below. With this exercise, we seek to identify practices that:

- Had or are expected to have **system-wide impact**
- Are **scalable and potentially replicable** in other countries
- Have a **strong multistakeholder** component (they should rely on public-private collaboration and could include, for example, programmes and activities led or facilitated by government, but implemented or funded completely or partially by the private sector or civil society such as foundations, trust funds, etc.)

The practices collected will ideally follow the 12-pillar structure of the Global Competitiveness Index (GCI) Framework (www.weforum.org/gcr). They will include a variety of factors critical for competitiveness and offer a comprehensive tool to inform stakeholders about the different approaches for enhancing competitiveness in specific areas, as well as the key barriers to their implementation and factors that enabled change.

As well as reflecting the 12-pillar GCI structure, each of the practices will be structured along the following dimensions:

- A) **Background information about the practice**
- B) **Context and need for action**
- C) **Actions/activities adopted**
- D) **Role of the different stakeholders**
- E) **Results, lessons learned and additional information**

A) Background information about the practice

Title of the practice: The VIGO Venture Accelerator Programme

Country of practice: Finland

Region: Nationwide

Status: Ongoing

Public-private collaboration is/was a key for success? Yes

A systematic evaluation was undertaken? Yes

Contact person for this practice:

Pertti Valtonen, Counsellor

Email: pertti.valtonen@tem.fi, Tel: +358505003198,

Seppo Ruotsalainen, Vigo-Programme Coordinator:

Email: seppo.ruotsalainen@profict.fi, Tel: +358400502569.

Related area of competitiveness: Innovation

B) Context and need for action

What was the situation/challenge that resulted in a need for this competitiveness practice?

The Finnish Paradox, as it has been called,¹ refers to the situation in which Finland, despite strong innovation and institutional capacity, has been unsuccessful in introducing new high-growth start-ups to the global market.

According to statistics,² the venture capital market has not developed as favourably as R&D investment has in Finland. This may explain one reason for the lack of high-growth start-ups, because venture capital is seen as an important prerequisite for emerging high-growth ventures. In the past, investors avoided the venture capital market because of poor expected returns. Mostly, the background of venture capital teams has been concentrated in the banking sector, and not necessarily focusing on any specific industry sector.

Traditionally, the Finnish government has responded to the financing gap for innovative start-ups by providing its own capital to the market. However, simply providing capital alone does not create fast-growing companies. Capital is typically available whenever there are projects that are perceived to be good enough to invest in; investors have been pointing this out for years in Finland.

A Nordic study³ showed that, even if the presence of an entrepreneurial culture and a favourable competitiveness ranking, new enterprises experienced difficulty in scaling up start-ups to enter the global market. The government started to realize that the biggest obstacle to growth was not money, but know-how; this problem persisted at both a fund management level as well as at an investee company level. Consequently, the government shifted its priority from the supply side (providing capital) to the demand side¹.

At the same time, the pressure to speed up the creation of new high-growth enterprises grew once large corporations seemed to be cutting back the size of their workforce. Several studies show that new high-growth companies have the highest potential for creating new jobs in the future leading to more public support for start-up incubation.

C) Actions/activities adopted

What were/are the main activities/actions of the competitiveness practice?

The government decided to launch a venture accelerator programme called Vigo, to coach start-ups to quickly enter the global market with the help of successful serial entrepreneurs, named accelerators. Selected accelerator teams invest their own money in the start-ups that they have selected. By putting their own money into the start-up and agreeing to coach it, the accelerator teams made a strong commitment to ensure the growth of the company. At the same time, it reflects an incentive for the accelerator team to continue to engage in the value creation process² following the accelerator period.

A start-up is typically innovative but, in most cases, it lacks the know-how and capabilities for managing rapid growth. While there are a number of highly talented professionals working in the global market, they are primarily sitting on boards of large corporations or medium-sized companies, and not willing to devote themselves to the hands-on coaching required by start-ups.

The objective of the Vigo accelerator programme is to create a market for start-ups and experienced business people and help them to find each other, with proper incentives. Another objective is to create a new-generation venture capital market based on experts' experiences with how to grow start-ups for the global market. Thus, the selection criteria for the accelerator teams includes a wealth of entrepreneurial experience as well as a willingness to invest their own money in the start-ups.

An accelerator team, which consists of 3-4 full-time team members, selects their target start-ups (a maximum of 10 at the same time) to be coached by their accelerator group for a period of 18-24 months. An accelerator company can apply for an equity investment of up to €1 million from a state agency called Finnvera and a grant of up to €1 million from another government agency called Tekes. The start-up can use the grant money to pay a fee³ to the accelerator team for its services.

In summary, the Vigo accelerators are private companies that are run by experienced entrepreneurs. The accelerators offer their proven business expertise, funding and extensive contact networks to the target companies. The accelerators invest both money and time in the target companies and take on both a strategic and an operative role in the companies. A team member from an accelerator group can periodically take on the task of the managing director in a company.

More than 100 start-ups have gone through the Vigo accelerator programme. Currently, there are 80 start-ups in the programme.

D) Role of the different stakeholders

Which stakeholders have been involved (public sector, private sector, civil society, etc.) in the competitiveness practice?

The role of the public sector

In 2009, the Ministry of Employment and the Economy decided on the policy guidelines for the Vigo programme for the next six years. To administer the programme, the ministry set up an advisory group, which, among other things, selects the teams for the programme based on demanding criteria.⁴ For example, in the first round, only six out of 60 candidate teams were selected for the programme. The group consists mainly of experts from the private sector, such as business angels and other professionals representing industrial associations and the entrepreneurial community. Accelerator teams arrange their own gatherings to exchange experiences and communicate with the advisory group.

Government agencies make their financing decisions independently from the accelerator start-ups. Funding often varies by accelerator team due to differences in the quality of their preparatory work.

The role of the private sector

After a competitive bidding process, Tekes nominates a programme coordinator;⁵ this person helps the advisory group and accelerator teams when necessary, doing all of the paperwork for the programme, which includes providing information to the media, maintaining the websites for the programme, preparing all of the necessary documents, and so forth.

The advisory group establishes the indicators used to measure the success of the programme. It sets priority actions⁶ and decides if an accelerator team should leave the programme due to poor performance.

Current accelerator teams and their focus areas

- Cleantechinvest – Investing in a clean future
- East Wings – Finnish innovations for Asian markets
- Helsinki Ventures – Digital East Europe
- Gorilla Ventures – ICT and media
- KoppiCatch – Digital media, analytics, commerce
- LifeLine Ventures – Health, web, games, advanced tech
- Newentures – Clean energy, ICT
- Royal Majestics – Fashion, design, lifestyle
- Vendep – Online services
- Veturi – B2B and B2B2C ICT

E) Results, lessons learned and additional information

Implementation date for the competitiveness practice

The Vigo accelerator programme started in 2009. It is ongoing until 2015; continuation of the programme, in one form or another, will be decided after the final evaluation.

What were/are the resource requirements (human and financial resources) of the activity?

No additional resources were allocated in the state budget for the programme; instead, the programme makes use of the existing funding resources (equity, grants) from two government agencies (Finnvera and Tekes). The only extra funding designed for the programme includes the salary of the coordinator, paid by Tekes, and the fee for the accelerator team, which was paid using the grant money from Tekes to the start-up.

What were the outcomes/results (expected or achieved) of the competitiveness practice in terms of quantitative (metrics) and qualitative results?

During its four-year existence, the Vigo accelerator teams have succeeded in attracting more than €200 million in funding for their target companies, with the number of companies totalling more than 60. One-third of the funding comes from the public sector and the remaining two-thirds from the private sector. The total amount and the division between public and private funding are very much in line with the original objective. One unexpectedly positive outcome was Japanese investment of €1 billion in one of the Vigo programme's flagship start-ups, called Supercell, a company that did not exist three years ago.⁷

What were the main barriers/challenges to implementing the practice and what were their effects on the implementation process? How were these barriers overcome?

In the beginning, the start-ups were suspicious of the added value that accelerator teams could bring to the companies. But gradually, when they heard about cases of positive financing opportunities provided by investors with whom accelerator teams arranged the contacts, this suspicion faded away.

The regulatory framework, both on a national level and by the EU, caused problems with respect to fine-tuning the incentive structures and making the financial arrangements sufficiently flexible for both the accelerator teams and target companies. A conflict of interest resulted in practice when an accelerator team selected its target company, but then the fee paid to the accelerator team went through this company. Hence, the fee practice will be replaced by a risk loan given directly to the accelerator team by Tekes.

An initial incentive option of giving an accelerator team the chance to buy a share of the government investment by paying a nominal price did not work. In the future, this preferential treatment will be given to all private investors in the form of asymmetric profit-sharing, which means that Tekes, in a fund raised by the Vigo team, will only take a nominal interest rate for its investment, with the rest of the profits going to the private investors.⁸

Please describe the areas, if any, where the projects fell short of its objectives.

Three accelerator teams left the programme⁹ because their business concept, the sector and the business culture were not appropriate for the programme. One of these teams decided to focus all of its resources on one company, which did not fit the acceleration concept. Another team noticed that the two-year acceleration period was not long enough for start-ups in their sector. Finally, the third team did not find deal flow to be large enough in its sector, which was traditionally strongly scientific and tied to universities, which were not familiar with the entrepreneurial culture.

What have been the main enablers and their importance/relevance for the success of the practice implementation?

Finnish start-ups had never before succeeded in attracting direct investments from the United States, from prominent venture capital companies, such as Accel Partners, or from business angels. Typically, cross-border investments go through funds. Another curiosity is that, while Finnish investors have for years announced that they do not want to invest in start-ups, we have seen investments flow from abroad, mainly from the United States.¹⁰

This dilemma can be explained by the fact that experienced accelerator teams have global networks of investors. It is noteworthy that start-ups had never before succeeded in raising risk finance from abroad for starting up or scaling their business directly. The Vigo accelerator concept, based as it is on the coaching of start-ups by top-level and highly experienced business people working with their global networks, helped to change this.

What were the lessons learned from this activity?

In principle, the accelerator concept works rather well and has achieved its objectives in a broader context – better than what was initially anticipated. The concept proved that start-ups need the best available outside advice from committed individuals to grow quickly and successfully. It has also been proven that investors do not rely on start-ups and their excellent innovations, whatever they might be, without the support and coaching from committed and experienced business people.

The financing gap for start-ups seems to be more of a competence gap, one that can be healed by infusing top-level, experienced business advice in a committed way into the enterprises concerned.

Channelling government funding, whether it is in the form of a grant or equity, seems to be much more efficient when it is controlled by experienced Vigo teams. Direct government financing for enterprises tends to be “loose” money without control. Recent studies show that even government R&D financing in the form of grants does not have any effect on the productivity of a company.

A rigid and inefficient regulatory framework can pose an obstacle for a start-up environment aiming at rapid growth. For private sector players, it is often hard to understand how difficult it can be to change regulations. To boost the venture capital market, government policy should pay more attention to the demand side, with measures to improve the investment readiness of start-ups. The whole start-up ecosystem must be fine-tuned to favour start-ups and investors. According to a recent Nordic study,⁴ Finland ranks number one in Europe in providing business environment for high-growth ventures, just behind the US.

While the Vigo accelerator programme is the most powerful policy measure to improve the demand side of the venture capital market to date, the Finnish government has also radically improved the supply side. The decision to provide €1 billion in funding as well as tax incentives to business angels was ground-breaking, especially when, at the same time, the government had to cut down extensively on budget expenses and increase taxes.

Government decisions and the regulatory environment alone do not explain the success of start-ups. The attitude of people towards entrepreneurship in general and even more high-growth entrepreneurship – fuelled by a strong spirit to impact the world with new, innovative ideas and products – are also important. Five years ago, the most talented individuals dreamed of being hired by large corporations and banks, but now the most talented want to create their own firm.

Another lesson can be learned from the rise and fall of the Nokia mobile phones business. In a small economy such as Finland's, it is better to have 100 fast-growing smaller companies than one big company.¹¹ Meanwhile, the success story of the Vigo flagship company, Supercell, is an encouraging example for other start-ups

Accelerators are a new phenomenon, and several governments are eager to learn from the experiences and results achieved in existing programmes. So far, Norway, Denmark, Austria, Hungary and Slovenia have shown an interest in the Vigo accelerator concept.

Several private accelerators have emerged in the market, but their concept seems to be focused more on organizing training sessions and attracting individual investors without the hands-on coaching offered by accelerator teams. Government support for accelerator teams and start-ups might be essential for helping the teams achieve a critical scale.

On the other hand, accelerators or incubators organized by the public sector alone seem to have modest results because, with a lack of incentives, they cannot attract the most experienced and best business people as team members to accelerators.

Endnotes

¹ The Vigo accelerator programme is the best example

² The incentive for the accelerator team to invest its own money in a target firm brings profits only several years after the investment, provided that the value of the investment has grown and somebody is ready to buy the shares owned by the accelerator team.

³ To a maximum of €9000/month/start-up.

⁴ Proven experience as a start-up entrepreneur, as a venture capitalist or experience in global business.

⁵ This person comes from the private sector, after a competitive bidding process.

⁶ Priority actions mean common actions for all accelerators or start-ups on a programme level, for example marketing actions, information campaigns, international events, measurement of results, providing relevant agreements and documentation.

⁷ Out of the dozens or even hundreds of candidates, the accelerator teams select the start-ups that they believe they can help to build access to global markets.

⁸ Preferential treatment for private investors, compared to the government investor, was removed from firm-level investments to fund-level investment at the same time that the government decided to stop direct investment and instead started to invest only in funds that focused on start-ups.

⁹ An accelerator team that left the programme focused on only one start-up in which all the resources of the team were focused. Another team, in the field of food processing, left the programme because the lead time from innovation to production proved to be too long, compared to the objectives of the programme. Similarly, the third team that left the programme, in the field of biotechnology, identified after a one-year trial that the development period from research results to production was too long.

¹⁰ During the four-year programme period the Vigo teams have succeeded in raising more than 200 million euros in their target firms, excluding the 1 billion euro investment from Japan in the firm Supercell, but including the 100 million US- investment in Supercell. The majority of those investments came from abroad and the vast majority of these came from the U.S.

¹¹ A typical case start-up in the Vigo programme is described in the Appendix.

Website/links if available and/or references to published material

Evaluation of the Finnish industry Investment:
http://www.tem.fi/files/38395/TEMjul_1_2014_web_09012014.pdf

Industrial Competitiveness Approach of Finland:
http://www.tem.fi/files/37744/TEMjul_9_2013_web_17102013.pdf

The Vigo Accelerator Programme Mid-Term Evaluation:
http://www.tem.fi/files/35626/TEMrap_4_2013.pdf

Nordic Growth Entrepreneurship Review:
<http://www.nordicinnovation.org/julkaisut/nordic-growth-entrepreneurship-review-2012/>

Evaluation of Tekes – The Finnish Funding Agency for Innovation:
http://www.tem.fi/files/33176/TEMjul_22_2012_web.pdf
www.vigo.fi

F) Annex



Accelerator: Lifeline Ventures

Vigo accelerator Lifeline Ventures invests in companies and teams looking to radically change the industries they operate in. Run by serial entrepreneurs, Lifeline takes a practical, hands-on approach to its portfolio companies, and actively helps teams successfully navigate critical moments in the life-cycle of their businesses.

ZenRobotics

ZenRobotics Ltd. brings high technology to recycling. The company's main product is ZenRobotics Recycler; an artificial intelligence controlled robotic recycling system which reclaims valuable raw materials from construction and demolition waste. The ZenRobotics Recycler waste sorting system uses robots to pick raw materials from Construction and Demolition waste. The system relies on artificial intelligence technology in both identifying the valuable raw materials in the waste, and in controlling the robot's adaptive picking motions.

ZenRobotics Ltd. was founded in 2007. Idea is based on the scientific work of Dr Harri Valpola's neuro robotic research group at Aalto University.

Initial market research for the machine learning technology in 2008 resulted in a number of high-profile projects for various industries. The customers included e.g. Teollisuuden Voima (TVO) (Nuclear plant fuel bundle order optimization) Sandvik Mining & Construction (novel R&D analysis tool for drilling equipment), and Ekokem Ltd (Predicting peak CO levels in toxic waste incineration). After this period ZenRobotics decided to concentrate quickly on robotic recycling and got funding for R&D process from Tekes – the Finnish Funding Agency for Innovation.

5/2010 Veraventure, a venture capital investment company serving as the hub for public early-stage venture capital investments, invests in ZenRobotics. With this round of funding, ZenRobotics can concentrate on the development of the ZenBrain™ machine learning software over the next two years. The product will be introduced starting 2010 in a pilot project in the field of recycling. In the pilot project, ZenBrain will be used to pick valuable raw materials from a refuse stream.

9/2010 SITA Finland Ltd. a subsidiary of the largest environmental services provider in Europe and ZenRobotics makes public their collaboration on a robotic artificial intelligence recycling system. The ZenRobotics Recycler™ system that SITA Finland will receive is the first of its kind in the world.

4/2011 Jorma Eloranta, the former President and CEO of Metso Corporation, appointed as a Chairman of the board

5/2012 ZenRobotics is accepted in YIC (Young Innovative Companies) program of Tekes. The YIC program supports young innovative Finnish companies to fast international growth.

6/2012 Juho Malmberg, the former Managing Director of Accenture Finland and Executive VP of Customer Experience and Member of the Executive Board, KONE Corporation, appointed as a CEO

9/2012 The Netherlands Baetsen Recycling purchases the world's first robotic recycling system, ZenRobotics Recycler™ .

9/2012 ZenRobotics raises € 13 million funding from Invus, an international equity investor with evergreen capital.

12/2012 SITA Finland buys the world's first multi-robot ZenRobotics Recycler process

4/2013 Lassila & Tikanoja, a service company that is transforming the consumer society into an efficient recycling society, with operations in Finland, Sweden, Latvia and Russia, (employs 9000 persons), acquires the ZenRobotics Recycler system.

9/2013 Suez Environnement and ZenRobotics announces a global framework agreement for the delivery of new sorting and recycling automation systems.

11/2013 The Prime Minister of Finland Mr Jyrki Katainen opened the ZenRobotics Recycler Semi-mobile product launch

11/2013 ZenRobotics wins Global Cleantech cluster Association's 2013 Later Stage Award

Today the company employs over 50 people and the ZenRobotics system is being distributed globally through a network of resellers in 49 countries.

www.zenrobotics.com

