

The Rise of the Estonian Startupsphere

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Estonia is a small country of 1.3 million inhabitants, north of two other small countries (Latvia and Lithuania) in a narrow band on the border between the European Union and Russia, known as the Baltic states. Surprisingly, this smallness and peripheral geographic situation – combined with a lack of dominant exporting industries – has created the conditions for the emergence of an ecosystem of IT startups that few would have predicted 20 years ago when the local economy was in shatters following the Soviet collapse.

How has it happened and what has enabled it? These questions are multi-faceted, but one thing for sure, it has not happened overnight. Indeed, the evolution of the Estonian IT startupsphere can be conceptualized as a three-phased process: a *gestation phase* (roughly 2000-2007), a *wake-up phase* (2008-2010) and a *growth phase* (2011-now) – hopefully to be followed by a consolidation phase.

Gestation

The precursory drivers of the Estonian startupsphere can be partly traced to a handful of engineers who created the technical foundations of two global companies: Skype (acquired by eBay and later by Microsoft) and Playtech – a large provider of software for online casinos. Both companies arose from a partnership of Estonian engineers with foreign businesspeople. In retrospect, such partnership was the only one possible for the emergence of Estonian IT entrepreneurship, as local capital and international business skills were missing. Both of these companies maintain large development centres in Estonia to this day. Their presence contributed to the emergence of a robust IT labour market that continuously attracts talent to the sector. Their successes also inspired subsequent entrepreneurs who saw first-hand how an IT startup could grow from little to a global company if the right engineering team meets with visionary businesspeople.

Upon their exit from Skype, members of the original Estonian engineering team created Ambient Sound Investments – a venture fund that, while investing worldwide, injected funds into the local startup scene and sparked interest from to-be entrepreneurs. Some of Skype's early employees later went on to found other startups themselves (e.g. Transferwise mentioned later).

From this period also date a handful of native startups, including NOW! Innovations – a payment provider for parking and mobility services – and Mobi Solutions – a mobile services company that later spun-off Fortumo – now a fast-growing startup.

Another precursory driver for the emergence of the Estonian startupsphere was the aggressive IT development strategy of Estonian banks (later acquired by Scandinavian counterparts). Estonian banks were vigorous adopters of Internet banking since 1996, leading to a situation where 98% of banking transactions in Estonia are made online nowadays. Meanwhile, the Estonian government adopted an

ambitious e-government strategy in the late 1990s, which saw Estonia develop an integrated e-government backbone known as X-Road [1] and become a pioneering adopter of nationwide digital signature and e-voting. These developments fostered the emergence of high-level IT skills and high Internet usage, both instrumental in later phases.

Wake-up

The 2008 global crash took its toll on the Estonian economy, with a dramatic GDP drop of 18% in 2008-2009. This crash caused a concomitant (though less dramatic) drop in domestic demand of IT workforce. For instance, Swedbank, which used to have the largest IT operation in Estonia pre-2008, significantly reduced their demand for IT specialists. This trend was mirrored to varying degrees in other banks, telcos and large domestic IT service consumers. As a result, resources were freed up for the emergence of startups.

One startup characteristic of this period is ZeroTurnaround, which started in 2008 as a side-project of four engineers at a local IT service provider – Webmedia (now Nortal). The team identified a niche in the Java productivity tools market - namely the lack of full dynamic update capabilities in Java application servers. The team lead, Jevgeni Kavanov, then PhD student at University of Tartu, ideated a technique to provide this capability in a plugin style. The time-savings brought by the product and lack of competition in this niche, paved the way for ZeroTurnaround to grow a substantial user base worldwide.

Another startup characteristic of the wake-up phase is mobile payments broker Fortumo. As previously mentioned, Fortumo spun-off from an existing startup, namely Mobi Solutions, when the latter found itself in need of new product lines to fuel growth.

Other startups emerging from the wake-up phase include Erply (point-of-sale software), Fits.Me (robot mannequins) and Realeyesit (eye-tracking technology).

Growth

The growth phase is characterized by a more intensive and systematic approach to startup creation. We see in this phase a number of teams of Estonian engineers and businesspeople joining startup accelerator programs in Estonia and abroad. One example is GrabCAD, which won the Seedcamp London event and joined the Techstars accelerator program in 2011.

The same year saw the emergence of a raft of IT entrepreneurial events. For example, the Garage48 foundation, created in 2010, specializes in organizing weekend hackathons, initially in Estonia and later elsewhere in Eastern Europe, Africa and Middle East. In 2012, a Seedcamp event was organized in Tallinn, followed by the MIT Global Startup Workshop in 2013.

This period also saw the emergence of local startup clubs, accelerators and angel investment networks including the Estonian Startup Leaders Club, Startup Wise Guys and the Estonian Business Angels Network. This latter network invested 4.6 million euros across 66 companies in 2013 - <http://www.estban.ee/about/2013-review>

Appetite for entrepreneurial events and accelerator programs led to the emergence of a significant number of startups and a concomitant increase in venture capital investments. In 2012, investment in Estonian startups exceeded 17 million euros

(about \$22 million USD).¹ Meanwhile in 2013 eight deals alone, listed in Table 1, already exceeded \$34 million. This table does not include smaller deals such as Digital Sputnik, Vitalfields, IsePankur and Weekdone, nor foreign startups with development centres in Estonia (e.g. SaleMove). The table does include Estonian-founded startups that have established their headquarters elsewhere for business reasons (e.g. Transferwise and ZeroTurnaround).

As expected in the startup world, by far not all ventures have been successful. An anonymous blog (DotEEBubble – <http://doteebubble.blogspot.com/>) retraces a number of Estonian startup failures. The blog contends that many failures are attributable to distortions created by public funding being artificially channelled into startup creation.

Company	Amount (million USD)	Source
Fortumo	10	http://www.crunchbase.com/company/fortumo
Transferwise	6	http://www.crunchbase.com/company/transferwise
Fits.me	7.2	http://www.crunchbase.com/company/fits-me
Realeyesit	3.2	http://www.crunchbase.com/company/realeyes
ZeroTurnaround	3	http://www.crunchbase.com/company/zeroturnaround
Pipedrive	2.4	http://www.crunchbase.com/company/pipedrive
Erply	2.2	http://www.crunchbase.com/company/erply
Plumbr	1	http://www.crunchbase.com/company/plumbr

Table 1. Sample of Estonian-founded IT startups' fund raising in 2013.

Enablers

There are at least three factors that enable the development of the Estonian startupsphere. All three have to do with smallness.

The first enabler is that being a small country, the barriers for launching a first product are lower than what is typical in larger countries. For one, creating and maintaining a legal entity is relatively simple. Bureaucracy is low, arguably due to the young age of the country but also because in a small country there are less exceptions and less complexity, which makes it possible to have less rules and requirements. One can add to this the e-government strategy mentioned earlier, which allows citizens and businesses to do most of their dealings with government online. Again, such level of e-government services is partly enabled by less regulatory baggage and the fact that the existing regulatory baggage has grown in parallel to the corresponding government e-services, allowing the former to keep pace with the latter.

In a similar vein, the local market being small and having high Internet usage, it is a convenient testbed to attract first customers. Startup founders do not need to worry much about scalability, reliability or security issues during their first few steps.

¹ <http://news.postimees.ee/1178890/investments-in-estonian-startups-exceeded-eur-17-mln-in-2012>

Secondly, Estonian startups are condemned to think internationally. Given that the domestic market is small, speaks a language with about one million speakers, and is surrounded by other countries with similar characteristics (barring Russia), startups are necessarily international upfront. An Estonian startup typically speaks English from birth and can easily engage international manpower and talk to international partners and customers right from the start.

In contrast, software companies in larger European countries, say Germany, suffer from the dilemma of being in markets protected by language and legal barriers, that are sufficiently large to sustain their growth, but that in doing so end up reducing their incentives to develop global ambitions [2]

The necessity for Estonian startups to go international is exacerbated by the absence of a fully developed and deep-pocketed local investor network, thus forcing local startups to seek investment abroad from the start. This necessity in turns leads to startups being coached by international entrepreneurs and advisors from their early phases. As a side-effect, Estonian-founded startups find it easy to set up their official headquarters abroad (chiefly UK and USA).

Downscaling complexity

Thirdly, as expected in a small country with a heavy tail of small and micro companies, Estonian startups tend to focus on developing simplified and agile solutions to problem domains where traditional approaches are rather complex and require heavy customization. For example Erply aims to simplify point-of-sales management, Pipedrive does so for sales funnel management, Toggl for time tracking, QMinder for queue management, Fortumo for mobile payments and Weekdone for team management. In other words, a subset of Estonian startups specialize in simple and agile alternatives to heavyweight solutions, with a value proposition that appeals to micro and small businesses.

In a similar vein but targeting rather the consumer market, Transferwise aims to cut down wire transfer overhead by short-circuiting the traditional heavyweight international bank transfer system, while IsePankur operates in the rapidly emerging field of peer-to-peer lending.

Obsession with agility and speed also motivated the emergence of ZeroTurnaround, which aims to cut down idle time wasted by Java developers on deployment steps. And as one success calls for others, ZeroTurnaround's success spilled over into another start-up in the field of Java productivity tools—Plumbr, which aims to cut down time spent in monitoring and tuning of Java applications.

What's next?

One potential threat to the development of the Estonian startupsphere is the arrival of foreign IT operations requiring significant engineering manpower. For example, in 2012 a large Swiss logistics company set up a development centre in Tallinn that now employs over 120 IT specialists. Meantime, early 2000s startups like Skype and Playtech now employ about 800 IT specialists in Estonia, which sounds little in global terms, but represents 5% of the Estonian ICT labour market, estimated at 16000 according to [3]. In other words, having played a positive role in the emergence of the Estonian startupsphere, smallness may play against it by starving startups of manpower during their growth phase.

Another threat is that a hyped startup environment may lead to excessive resources being channelled into even more startups rather than growth and consolidation of existing ones. It is not far-fetched to talk about an Estonian “startup fever”. Evidence of it is a hectic calendar of entrepreneurial events (cf. the events calendar maintained by the Startup Leaders Club – <http://www.startupleadersclub.com>), as well as a proliferation of blogs and social media activity around the Estonian startup scene, including an active twitter hashtag #EstonianMafia, which has recently given way to #balticmafia, reflecting similar trends in neighbouring Baltic states.

Is Estonia's startup growth becoming a bubble waiting to bust? This question is posed in the DotEEBubble blog mentioned earlier. The extent of this blog's conclusions is debatable given that several companies listed in Table 1 have sustainable customer bases. On the other hand, a grounded study by Kütt [4], points out that traditional innovation metrics (e.g. patent filings and engineering journal articles) show a relatively dim picture of the state of innovation in Estonia – suggesting that while IT startups are popping out and some are achieving success, the broader innovation environment in Estonia needs further development.

Any attempt to answer the Estonian startup bubble question will quickly turn into controversy. What is perhaps less controversial is the fact that there is relatively little private local capital in the equation. Hence, even if the bulk of existing startups do not manage to successfully transition into mature and sustainable companies, it will at worst leave behind a generation of skilled IT labour with entrepreneurial experience, which could become an asset for future development of the Estonian IT sector.

References

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