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Innovating Acceleration

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Innovating Acceleration

Executive summary:

Most of the STPs and areas of innovation target startups with an aim to support innovation but mainly to grow the best suitable future larger clients for themselves. The other reason is to attract media attention as it is easier with attractive new startups and their global breakthrough stories. A potential of acting as an investor in startups adds also one additional revenue source.

The present paper gives a short overview about all three of incubation phases. Then it goes deeper into acceleration models and how we are trying to innovate the acceleration.

Accelerace Life is a model where quick acceleration is developed into a longer support process in three phases to help the startups not only to start but also get more securely to the growth phase in health and wellness domain. The aim is to able startups to validate their product on multiple markets during one process.

The full paper:

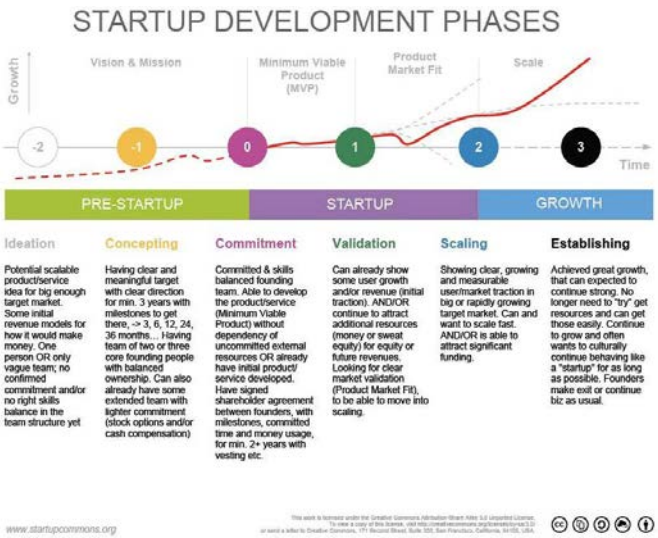
Introduction – startup development and incubation phases

There are three levels of incubation:
•Pre-incubation, mostly in close collaboration or even lead by the universities
•Incubation – a hub with small cubicles and mostly investor readiness program, sometimes also labs
•Acceleration – an international hub and a short concentrated programme for market validation, launch of scaling and raising the next round of capital

The two first levels have been connected with the STPs for many years. The models, of course, are in constant development. The accelerators have been the boom for the recent years and most of them have been private initiatives and not so much connected with the STPs. The reason has been two folded: the accelerator managers, mostly investors by themselves have considered STPs somewhat old fashioned, slow and more infrastructure oriented and STPs have had their incubators and considered it enough to deal with startups. In reality it has meant that several startups leave incubators, also STPs after incubation, i.e. too early and do not stay there while they are in the high growth phase. There STPs should consider accelerators as a good tool to keep and attract later stage startups and keep them until they become mature enough to become a larger tenant. It also helps to attract investors and high level experts, therefore get even more media attention.

There are four basic stages of startup life:
While it's important to understand the deeper aspects of each stage, it's not always helpful. Better is to find out what the basic stages are, and then determine what goes into each stage.

Realistically, you can break startups into four stages of starting up. These are:
1.Research – Discovery – What is the Problem?
2.Validation – Product/Market Fit – Does Our Solution Make Sense?
3.Efficiency – Process Improvement – How Can We Do This Better?
4.Scale – Growth – Can We Leverage Our Process for Fast Acquisition[1]?



1. http://majoran.co/startup-stages/

In most cases pre-incubation process deals with Research – Discovery phase or according to six phases Ideation and Concepting phase.Incubation focus is on Commitment and Validation – Product/Market Fit until getting the initial proof of sales and raising angel capital.

Startup stage 1: Research and Discovery
At this point, you are trying to work out whether or not you are solving a problem. It involves a lot of research, reading, and discussion. You might start putting feelers out into the community, connecting with people, finding mentors. And, realistically, you don't have to quit your job to do it. Find out that a problem exists, before you dive into the deep end.

Startup stage 2: Validation of Product/Market Fit
This stage is where you work out whether or not you are even solving a problem. Do people need it? Does the market understand it? Can it grow? Is it something that is understandable?

There are many ways to work this out, but the best method is simply to talk to people. Find out how they currently do things, what their pain points are, what they believe will make it better. If you tell them what you are planning and they don't like it, find out why and what would make it work. Keep in mind, this process called Customer Discovery, where one goes through lots of customer interviews has developed it's own pedagogy in a similar fashion to startups now and returns millions of results from Google.

The main point to keep in mind is not to lead the interviewee, people don't want to upset you and so will always answer yes to questions like "would you use something like this, to solve problem X?" What we want to find out is how they're solving that problem now and we want to observe behaviour not words about what they may or may not do. Then ideally go back with an early prototype and see if they can solve it better with what you've built.

This is the point where you start getting customers, too. Your first 10 customers do not equal a business, they are validation. And your first five long-term customers you will have for life. Once you have your first 100 customers, you are at post-revenue point, and no longer in that scary, touch-and-go startup phase[2].

There is a range of possible science based pre-incubation and incubation models, both technology push and market pull version and including the options of going very narrow in the specialisation. I would like to bring out the following university connected pre-incubation models:
•The most common one is that university technology transfer offices also arrange incubation programs, either in the form of business plan competitions and/or IP commercialisation and business mentoring, access to university databases, library and labs

•Some incubators offer mostly lab and office space combined with some business advice with the main aim to get the researchers out from university into the business environment. Incubator labs start with elementary lab equipment and develop bit by bit based on the needs of new incubator companies.

•The model where business advice is well balanced with engineering and design assistance and even more importantly with access to patient population for clinical trials.

•Mostly networking based models, where the focus is on matching scientists and entrepreneurs with different models and intensity.

•Still rare but more to become: programmes that involve students from different universities, i.e. students

with different know-how (technology, business, design). These are usually based on study programmes in the universities and the initiatives comes from the business universities with no technology students. Tallinn Startup Incubator leads such a programme at the Estonian Business School involving also engineers from Tallinn University of Technology. INSEAD is having its Startup Bootcamp

•Involvement of large companies (big pharma, telecoms, insurance) and hospitals (e.g. BioX)

The acceleration always means doing the process quicker and more unified way than in incubation. The method itself has been used in all different startup phases although initially meant mostly for proof of scaling. Still in most of the cases incubation and acceleration are not gone through by startups in a linear way as bachelor and master studies at universities and therefore the some of the previous phase steps need also to be reviewed. Most ICT accelerators also tend to be mostly in validation phase and due to the small investment manage to get quicker to the beginning of scaling.

There are well over 2000 business incubators and accelerators in the world, many of which are in the United States, and many of which are non-profits. Some like the much publicized Y Combinator and 500 Startups are much sought after by startups due to their big reputations and successful track record.

Business incubators have been around since the 1980s, but in those days they were primarily places that gave free office space and little of anything else. Since then, incubators have been going through an evolution, and some have changed into 'business accelerators'. These accelerators still provide free office space, but they also invest up to $100,000 in young startups and nurture them into more mature businesses[3].

In 2005, Paul Graham created Y Combinator, and while the program is loosely based on the incubator model, a few differences stand out. First, the time period is limited — startups come in as classes and graduate together after a few months, while incubators were flexible with how much time each startup might need to get on its feet. Next, exchanging pre-seed funding for equity is generally standard across startups accepted to accelerators. Lastly, the participating startups are incentivized by the prospect of A-list mentors — at Y Combinator, all partners were previous involved in highly successful companies.

A startup accelerator is built to foster rapid growth of its portfolio companies. It's a man-made perfect storm of mentorship, access to technology, office space and an innovative community, packed into a short time frame. Essentially, the function of an accelerator is to turn the art of starting a company into a program that can be repeated, churning out valuable companies as if on an assembly line.

While each accelerator has nuances, programs tend to share several traits: Startups apply to be part of a program lasting a few months, in which they obtain mentorship, office space and funding, usually in exchange for company stock. The accelerator program hopes to enable exciting new businesses and of course get a return on the investment.

For Y Combinator (YC), the original accelerator, that vision seems to have worked. The organization sprouted two billion-dollar startups (Airbnb and Dropbox) since the accelerator's inception in 2005.

Now, the concept of an accelerator itself is being repeated, with everyone from Chile to Nike launching their own version of the program. Are these dilettantes in the space comparable to the slew of Pinterest or Groupon clones? Or perhaps the startup ecosystem needs accelerators to generate better businesses the

3. http://www.forbes.com/sites/markfidelman/2014/03/06/this-silicon-valley-accelerator-is-the-model-of-the-future/

same way employers benefit from colleges producing graduates.

The acceleration models in life-sciences are often different from ICT ones, especially when it is more than health apps. The aspects of process and methodology and different financing models (grants, loans, shares) will be dealt. Also the importance and possible new models of having specialised funds, also international ones, next to the incubator/accelerator, are covered. Examples from Israel, US and Scandinavia will be covered, including a Baltic-Nordic life-science accelerator.

The following elements make it different:
•Length of the process
•Methodologies used for speeding up development of companies
•Financing (offers to the companies but also how to make the incubator/accelerator sustainable)
•Partners involved (investors, large companies, international partnerships)

[4]Named one of the top trends of 2012, digital health incubators and accelerators are undeniably on the rise. After their emergence in 2011, there are now several to be found in Europe and the US (Mobihealthnews, 2013). Key factors in this emergence are the technological evolution, the diffusion of smartphones and healthcare policy changes that leave room for innovation.

Mr Verhoort has found four types of accelerators:
•commercial seed accelerators which are basically healthcare specialized versions of the earlier technology accelerators with seed capital, business support and office space in exchange for equity.

•market-led programs which compared to the former have a much more specific focus. Tenants are selected based on their potential to contribute to the goal of the accelerator. An example of this is Healthfounders in Dublin. They search individuals and start-ups that can contribute to their goal of 'changing the traditional hospital based doctor focused solution to empowering individuals to take ownership of their well-being' (healthfounders, 2013).

•virtual networks where except for the occasional in-person meetings, the majority of the activity happens online. This allows for a large number of tenants over longer periods of time. Key activities include education and peer-to-peer networking.

•university-affiliated accelerators where no seed capital is promised nor do they take an equity share (Apodaca, 2013) but otherwise function as commercial seed accelerators.

Some examples of new European health accelerators:
•Healthfoundersis founded in 2013 by two entrepreneurial-minded people with backgrounds in technology and healthcare. The organization is based in Dublin, Ireland, where there goal is "… to create a new healthcare system" with a focus on "empowering the individual to take ownership of their own well-being" (Healthfounders, 2013).

•The Modern Aging program is an initiative of Access Health International that is focused on improving elderly care. The program, which is based in Stockholm, Sweden, welcomed their first batch of entrepreneurs in 2013. There is only one team of entrepreneurs that gets to win 50.000 SEK (about €5.600) start-up capital.

4. Master Thesis by Loïc Vervoort „Mapping the m-health industry" 2013-1014

•[5]XLHealth Berlin based incubator & accelerator. 3 month program offering office space, finance, mentoring and follow up guidance.

•HealthXL (Startup Bootcamp) - A European startup accelerator that is putting together a dedicated healthcare program in Dublin. 3 months program. €15k investment, asking 8% equity

•Health Axis Europe – Another European initiative, the Health Axis Europe (HAE) is a strategic alliance between the health innovation clusters Cambridge (UK), Leuven (Belgium), and Heidelberg (Germany). The program comprises a startup competition, and a 5-day 'summer camp' for winning startups to prepare them for the 'expo' where they're able to present their plans to VCs.

•Moebio – Probably the most impressive accelerator/fellowship program we've seen emerge in Europe. 8 month program based in Barcelona, inspired by Stanford University's Biodesign Fellowship.

•Reshape Healthcubator – A new 6-month program organised by Lucien Engelen of Radboud Reshape Centre in the Netherlands. A 6 month, University Medical Center, program facilitating young short-to-market health start-ups that aim for patients as partners.

And some US ones:
•XLerate Health accepted its first batch of tenants in 2012 and is based in Louisville, Kentucky. Their focus is on "early-stage companies with technologies that we believe are solving a real problem within the healthcare delivery and wellness continuum" (XLerate Health, no date). The contact persons here are Bob Saunders, chairman and co-founder of XLerate Health as well as Jackie Willmot, the chief operating officer. The accelerator is involved with mobile health companies, however the focus is on the total healthcare universe, except drug development (Willmot J., interview, November 7, 2013).

•The Iron Yard is a very people-focused accelerator based in Greenville, South Carolina. They started with an open tech program in 2011 and added a Spartanburg based digital health program in 2013. Next to their accelerator activities they also provide educations in programming and design (The Iron Yard, 2013).

•Healthbox launched their accelerator program in 2012 in Chicago. By 2013 they had also opened offices in Boston, Florida, Nashville and London. This makes Healthbox the only case in this research that has programs in both Europe and the United States. However, because the company originates from the latter and this is where four of their five offices are situated, Healthbox is included as a US case. On their website they state that the company "…has a dual mission to empower healthcare entrepreneurs while serving as a catalyst of change by exposing the industry to new and innovative solutions" (Healthbox, 2013).

•[6]Rock Health - the granddaddy of accelerators (into its fourth class of startups), based in SF, 5-month program, invests $100k and asks nothing, yes nothing.

•Redesigning Data – somewhat unique, this program integrates elements of a competition, hackathon and mentoring-based accelerator. The '2013 Data Design Diabetes Innovation Challenge' awards $100,000 to the winner. To participate you'll need to submit a proposal online. Finalists take part in a weekend bootcamp in San Francisco and receive mentoring in the month following that. The final winners are selected at the Demo Day in Washington DC.

5. http://healthstartup.eu/the-ultimate-health-startup-resources-guide/
6. http://healthstartup.eu/the-ultimate-health-startup-resources-guide/

•ZeroTo510 – a Memphis-based accelerator of medical devices companies. Offers a 2 x 90-days program to help companies get through FDA approval. The first 90-day program is focused on mentoring and market validation (with $50k investment, in return for equity participation). 3 winners are selected from the first program who continue for another 90-days with an $100k investment.

No two accelerators are the same. There are vertical-focused programs like Nike Accelerator, a TechStars-run program that works with startups who utilize Nike+ data. There are regional programs including EvoNexus in San Diego and Startup Chile — both do not take equity from participating companies. These nuances show that each accelerator will produce rather different results. Therefore, most startups do not apply to a bunch of accelerators and then join whichever one accepts them — it's all or nothing.

If an accelerator takes too much equity, that's one red flag (YC takes 7%, the accelerator at 500 Startups takes 5%, but some programs are said to take up to 50%). This will make it more difficult to raise another round later as you'll have less equity to offer VCs. At the opposite end, a program that doesn't take equity might be a bad fit — these programs are looking to promote local business growth rather than generate financial returns — and will have a different set of resources on hand.

A third point of concern is when attending an accelerator requires relocation. When Agu De Marco, founder of Wideo, was accepted to 500 Startups, he moved to Silicon Valley from Argentina.
YC defends the logic of startups coming to the Valley for an accelerator even if they don't stay, and notes it has had many startups come from New York and return after graduating (especially startups in advertising or publishing[7]).

The main shortcomings of the existings acceleration model that have motivate us to innovate the model are the following:
•Regional or national development focus is too narrow
•Early stage startup focus – validation phase
•Short term development (mostly 3 months) does not give the boost enough
•Only the likelyhood of raising the next round of capital
•Mentors and network being the only main value
•Cohort and one size fits all process
•Pitch and window dressing
•Too small investment to get the startups into scalinhg phase, especially in health technologies

AcceleraceLife Model

Tallinn Science Park Tehnopol, Estonia and Accelerace and Symbion Science Park, Denmark, are launching Accelerace Life (AL) - an elite cross-border acceleration platform for healthtech start-up companies based on Accelerace's long-term experience and methodology.

There are regions in the world that systematically out-perform the others when it comes to creating successful start-up companies in the life sciences sector. Boston, Basel, London, Singapore and Israel are examples of areas that have managed to produce successful companies. Denmark and especially Medicon Valley have traditionally belonged to the international elite measured by the number of new companies annually within life sciences and a similar cluster in Stockholm focused around Karolinska has made considerable progress

7. http://mashable.com/2013/06/11/startup-accelerator-growth/

but the position of both is threatened as the number of new viable businesses has declined in recent years. And this decline is despite the fact that in international studies the two clusters rank high on the underlying conditions for growth.

The regions that show continued performance in creating successful companies appear to have a well-functioning ecosystem. They have high quality research at world-class institutions, they contain large companies that are open to creating new businesses and to investing in the development of promising projects, they have a functioning investment environment for funding these promising projects - in spite of capital drought – and they have strong incubators to help early projects shape their progress in alignment with the initial financing and early growth.

But perhaps most importantly, they have a lot of serial entrepreneurs. That is, they have individuals who have helped to establish several new businesses and have thus acquired extensive experience in and knowledge concerning how best to make it all happen. Recent analyses by Accelerace in cooperation with FORA, The Danish Enterprise and Construction Authority's Division for Research and Analysis, suggest that these serial entrepreneurs play an essential role. What distinguishes the leading regions from the rest seems to be the number of resident serial entrepreneurs.

Israelis an interestingexample ofa country that has built,within relativelyfew years, a very effective life sciences ecosystem by focusing, among other things,on attracting both serialentrepreneurs andexperiencedinvestors.

Denmark also has a strongecosystem for the life sciences. Measured byanumber of significantindexes – research, capital, strong &establishedlife sciencecompanies – we perform very wellinternationally.In a recen tinternationalanalysisbyScientific American[8] ,Denmarkranked second among countries across the world for startingbiotech companies.And overthe comingyears, with particular help from the Novo Nordisk Foundation, Denmark will investeven more instrengthening researchand development.Yet there is some indication thatwe do not capitalize on our good framework conditions and translate them intoenoughsuccessfulstartups. We seem to havea "missing link"between the strongresearch anddevelopment opportunities in the regionon one handand the access to capital and effective functioning oflife sciencecompanies onthe other.

Estonia, on the other hand, has proved its innovativeness and effectiveness as an e-country which includes state wide e-health system implemented and well working. That is a great basis for validating and launching new e-health and m-health services. Estonian people have got to trust and quickly adapt new e-services and therefore are a good country to start. Also the public health side has become more and more open to work together with the private sector and open the data and competition to them. Therefore we consider Estonia as a good place to launch an international digital health accelerator.

International research[9] and our practical experience from working with start-ups suggest that the development of successful companies is a process. It is a process formed by iterative learning, where new input, experimentation, collaboration with partners, and dialogue always leads to adjustments in the technology, in the business model, of the strategy, etc.

Accelerace Management, in collaboration with The Danish Industry Foundation, analysed a Swedish database with data from 65000 entrepreneurs to identify whether or not the development of successful businesses is a learning process. The first part of the analysis attempted to identify any relationship between

8. Scientific American Worldview –the 4th Annual Worldwide Scorecard
9. See "Effectuation" by Saras Sarawathy, among other publications

the number of times a given person started a business and the chance of success.

The first time a person starts a business there is a 50% chance that the company survives over its first three-year period. If you want more than mere company survival and focus only on those companies meeting the definition of a high-growth business, the probability is typically much smaller; only 2-3%. An interesting aspect of the analysis is that the probability of success actually falls for the second business started, both in terms of survival and the creation of a high-growth company. The third effort rebounds back to the same level of success as the first one and after this the probability increases almost exponentially. The fifth to seventh start-ups clock in at a success rate greater than 80%.

The study suggests that there is a "U-shaped" learning curve, that successful entrepreneurs develop patterns of behaviour & skills as well as acquire techniques & tools, all of which enable them to make better decisions and increase their chances of success.

The big question is quite clear: What do serial entrepreneurs do and can one learn it beforehand? That is, can one quickly develop the experience, knowledge, and network that it takes to succeed or does one simply have to learn by doing, with the region having to wait until "enough people" have tried it "enough times"? Unfortunately, we don't know enough to give an authoritative answer, but various studies suggest that the difference between serial entrepreneurs and others lies predominantly in the ways they behave. Serial entrepreneurs have an ability to organize the iterative development process and do so both faster and more cost effectively. An increasing number of international scholars argue that this method can be learned and that it is actually possible to increase the chance of success for a given project through quickly developing the skills and knowledge that are most important. Our knowledge of this entire process and its teachability is still modest, and we see a need to study and nurture it more systematically.

We have worked systematically and for many years in a number of areas to spot those with potential talent and to train them intensively in order to achieve international success. In the realm of research we have created centres of excellence that attract internationally acclaimed researchers and produce new generations of leading researchers. In sports, we have elite training centres for the very best athletes in various sports. And in the world of education, we have recently begun offering elite programs for the most promising young students. From all these quite different areas, we know that the quantity and quality of training has a profound if not a definitive impact on the results. We are aware that it is always possible to nurture and cultivate talent and thereby enhance the chances of success.
We have not, however, previously worked systematically toward the development of entrepreneurial talent and the creation of successful projects in welfare and life sciences locally and even less across borders. Nor have we worked systematically to discover and train these potential talents, including the development of new knowledge about how this training should be approached and delivered to increase the chances of success. But why not?

It is quite unlikely that one can learn to become a good entrepreneur by sitting in a classroom. One learns only by doing, by working with a specific project and by training with some of the best and most experienced existing entrepreneurs. In this way, the development of successful projects and entrepreneurs is a parallel process, a process that on the one hand is about developing the projects, technology, business, and so on, and on the other hand is concerned with developing the individuals who will run these (and future) projects. Recognition of this parallel nature, requiring both focus on the development of the projects and of the individuals involved, is only slowly gaining ground. But the potential may be huge.

Accelerace Life is sharing methodology, networks, expertise and resources between participating countries

enabling to look at the region as a de-facto larger ecosystem that offers unique benefits for all stakeholders participating in the acceleration process. The most remarkable benefits definitely include a wider spectrum for soft funding, sharing of experience and a possibility to validate the products and business models in three to five different markets during at the acceleration process more easily and cost-efficiently. The main distinctive characters of this cross-border acceleration process include:
•Applications are accepted from the entire world with primary focus in Scandinavia and Baltics.

•The joint process for all chosen start-ups is coordinated centrally by the executive team of AL (incl. choosing mentors, managing investments).

•In addition to individual mentoring and business labs for the accelerator start-ups, the acceleration process contains joint camps (trainings, networking) which rotate between the locations of all participating partners.

•The cross-border approach leads to economies of scale and enables to share costs between partners, improving the cost-efficiency of the proposed acceleration process.

Box: Examples of serial entrepreneurs within life science
***DK / UK: Jan Leschly,** Partner in Care Capital. With a background as MSc. and BCom Leschly has gone from top positions in Novo Group and Squibb & Sons, USA, to CEO of the world's sixth largest pharmaceutical company, SmithKline Beecham.*
***US: Randal Kirk,** Founder General Injectables and Vaccines, King Pharmaceuticals, and New River Pharmaceuticals all sold to big pharma. In 1999, Kirk created Third Security, a management investment firm to identify and develop promising new opportunities in the life sciences industry. A 2010 article in Forbes magazine estimates his current worth at $1.6 to $2.2 billion.*
***DK/US: Jack Johansen**, Cofounder of Boston Probes and Senior Vice President, at Millipore Corporation. He has also served as President of MilliCorp, Millipore's $20 million venture fund. Dr. Johansen is also a cofounder of several biotechnology companies including CarlBiotech, Peptech and Boston Biosystems, which was sold in the spring of 2000 to Avecia.*

Attracting the best projects

The numbers of concrete, promising start-up opportunities in the health and wellness - as well as of serial entrepreneurs to chaperone them to success - are relatively modest. Companies and research institutions in the region produce a wealth of project ideas, and we have traditionally been very effective at performing the necessary testing on customers and ex. preclinical trials. However, these two alone are hardly enough to create a solid foundation for the development of both successful companies and serial entrepreneurs. In connection with the establishment of our elite experimental forum, there needs to be a broader effort, one that extends both nationally and internationally in order to incorporate sufficient excellence for our efforts. Yet most similar initiatives to date have only had a narrow, regional focus.

There is also a strong need for these initiatives to focus on the absolute elite people and opportunities, to focus on those projects and individuals who have the best chance to succeed. This approach is based on the philosophy that cultivating and studying excellence enables the best conditions for the broader community, simply because this community will be motivated to acquire and to apply this new knowledge about what their successful role models do.

The projects themselves will be selected in collaboration with an international advisory board so that both the project's technology and its team will be assessed at an international level with international competition; selection criteria will be aligned with the success criteria shown below. The aim of setting the standards so high is to identify projects for the elite center that are able to operate on the international scene, i.e., able to

attract international investment and resources.

Identify potential serial entrepreneurs

There will be a large difference between the types of projects and types of people who may join the elite experimental forum. Projects will range from those that have already established themselves in a company to projects that could be described (almost!) as drone aircraft, i.e., where there is no formalized team to drive its development. For each project admitted to the elite experimental forum we will ensure that such an organization is established. This means that the elite centre must actively seek out prospective entrepreneurs for some of its projects and assign these entrepreneurs to the projects. The idea is to establish a very lean and effective organization for each project, continuously assigning and pulling resources depending on the specific needs at each of its phases; this will hold costs down for each project and yet not compromise efficiency. This also means that full-time employees will only rarely be involved in the centre's projects, while part-time resources and external consultants will be the norm.

Within the existing collaborations for Accelerace Life (collaborations such as: BioBusiness & Innovation Program, Copenhagen School of Entrepreneurship, Copenhagen Innovation and Entrepreneurship Lab, Copenhagen Spin-outs, and so on) and together with relevant institutions, we will build a process that identifies the 'Unique Star Entrepreneur' (USE). These junior entrepreneurs will be enrolled as part of the team on a given project in concert with and under the guidance of an established and successful serial entrepreneur. Any USE taken onto a project will gain access to a challenging position if his or her performance is top notch, as measured via the achievement of milestones (proof points), testing of hypotheses, establishment of networks, and so on. The competition to join these elite teams for our world-class projects will be tough for both the USE and the experienced serial entrepreneurs – the focus must be on recruiting elite and world-class personnel from the start.

Training the talented

The creation of successful companies is a process that is typically characterized by high uncertainty; factors such as the market, technology, customers and so on are largely unpredictable, and combine with lack of resources and lack of insight to increase risk. Consequently, training of serial entrepreneurs is a combination of a number of generic principles and approaches to action linked to a set of specific insights plus the networks these entrepreneurs build for the specified market.

What distinguishes serial entrepreneurs from others is their ability to organize the initial stages of their business development both quickly and effectively. In practice they accomplish this by working constantly and repeatedly with four steps:

1.identification of hypotheses about the business – that is, establishment of central assumptions concerning customers, pricing, business models, the technologies involved, and so on

2.establishment of the concrete experiments required to test these central hypotheses in order to confirm or refute them

3.interpretation of these experiments with the goal of either developing new hypotheses or proceeding with the existing ones

4.definition of concepts for products, sales, and so on. based on the completed experiments

This approach to action can be learned. This isn't to say that all projects or people participating in them will

be a success, but training can increase the likelihood of success significantly. Therefore, the centre will also work diligently to train projects and individuals in this process. In practice, we will accomplish this in part by organizing Labs approximately every two months, where the projects and people involved can learn the basic methods and tools. Our other training mechanism will be monthly Sprints, where we will work with creating hypotheses, defining experiments, interpreting experiments, and building new hypotheses or concepts.

While the basic training is focused on learning and acquiring the behaviour of successful serial entrepreneurs, the more specific or concrete training focuses on how this behaviour is used in relation to solutions for life sciences and welfare technologies. In other words, how can we make or design experiments with relevance for example in clinics, nursing homes, hospitals and other healthcare settings? We need early in the process to test with international perspective by often running in parallel on different sites in the region to avoid "national bias". How can we experiment with different revenue models for different types of customers, such as end-users, other business, public organisations, NGOs? Different countries often require different business models and this can be tested early when we are working in a regional rather than narrow national setting from day one.

Research on successful real-life and real-time

Usually when we examine entrepreneurship or commercialization, we first find successful projects and then try to discover the critical decisions that led to the success, as well as who did what. Unfortunately, this method holds a number of challenges.

First, we typically obtain a rear-view mirror picture of what happened and how. And this means that we often get only a partial picture, a rationalization after-the-fact of the events that enabled or influenced the success. The entire view of the real process and the actual input that has led to the key decisions is almost never available in this scenario.

Second, we find it difficult to isolate individual factors and to study their impacts on the success. For example, we often find it difficult to assess the relative importance of various essential inputs, such as capital, consultancy, and so on. We simply cannot discover through looking backwards if it was a mentor who delivered critical advice at the right time or if it is more generally the case that companies having the best initial conditions also actively seek good mentors.

Third, we find it a challenge to study in depth whether there are fundamental differences between businesses in different sectors. Is there a difference between the elements and actions required to create success for a welfare or life science company and those that are important for an IT success story? Maybe. And as a consequence, perhaps we end up studying the more general aspects concerning commercialization and entrepreneurship than those essential processes and competencies for creating a successful life sciences company.

All these challenges are typically an inherent part of social science research. By contrast, when we develop knowledge within welfare, medicine or the natural sciences a different procedure is required. In these and the other experimental sciences, we design tests and controlled investigations to study the component parts of a phenomenon by changing one or a few parameters while the others are kept constant. For example, modern studies on the training of sports stars are conducted with experimental scientists as part of the process. The scientists participate actively in planning the athletes' training regimes and continually test the quality of the training result by examining the uptake of oxygen or other vital parameters. The feedback they receive is then

used to design new experiments and tests, which in turn deliver new knowledge and better training.

This “sports star” approach has not been available to us previously when we wanted to study the development of successful companies and the commercialization of research results. But this invaluable experimental perspective is precisely the ambition of Accelerace Life. Through both an efficient selection of projects and by constantly working closely with these projects, it is possible to study their development in much greater detail. This level of detail includes a real-time view of the types of inputs that lead to different decisions as well as valuable and extensive insights into the processes and relationships between project theme, the individuals running it, the technology involved, and so on. This possibility has not existed before Accelerace Life, but will now be one of its essential components, with the resulting opportunity to create an experimental approach to the understanding of successful start-up companies.

It will be the first time in the world to set up a live experiment in a region which performs real-life, real-time studies of the development of successful companies as it happens. And it can contribute to making the region a world leader in terms of building new knowledge about entrepreneurship in welfare, life science and research commercialization.

Dissemination of knowledge

A major aim of creating this new knowledge about successful entrepreneurs and their projects is to organise it and to spread it to all relevant stakeholders and in so doing, to improve the overall quality of the entire business development ecosystem for life science companies. The ultimate ambition of our experimental forum is in fact to become obsolete through this sharing and transfer of knowledge. Once the detailed understanding of what it takes to create successful businesses has been spread to the essential stakeholders, such as the technology transfer units, investors, entrepreneurs, and so on, the centre itself will no longer need to operate. The final goal is to help to create a viable self-sustainable business development ecosystem. From international research analyses we know that such ecosystems are viable in the long run when they created approximately one successful business for every 100,000 inhabitants.

Once this level is reached, there will be more than enough inherent competencies and serial entrepreneurs for the ecosystem to function independently. This is the level that California’s Silicon Valley has reached within the IT sector.

Process and financing

The acceleration model at Accelerace Life is divided into four phases:
•2-month pre-acceleration – projects selected by the Accelerace Life team will get a business lab which will result in field tests that the startups need to carry out to validate the key assumptions during a short time. The aim is to validate the team execution and coachability and get initial proof.
•6-month acceleration phase 1 – projects selected by Accelerace Life investor panel will get 75.000€ investment (50% equity, 50% convertible loan) and process focuses on finding 2-3 best markets to enter with a concrete product and finding suitable business models
•6-month acceleration phase 2 – projects selected by Accelerace Life investor panel will get 100.000€ investment (50% equity, 50% convertible loan) and process focuses on market entry and scalability proof on selected 1st markets and finding the follow up investors
•6-month acceleration phase 3 – projects selected by Accelerace Life investor panel will get 125.000€

investment (50% equity, 50% convertible loan) and process focuses on preparation for scaling on large markets and closing the investment round for scaling.

Conclusion

Accelerace Life is innovating the acceleration in the following aspects:
•International testing starts from day one - mentoring and network is fine – real customers and life testing is better
•Scale up focus
•Long term relation with startups but short learning loops – sucessful health companies are not build in 3 month
•Proven track record - 70 % of startups raise capital after the acceleration
•Systematic apporach with focus on milestones and investment readiness – pitching your venture is good – real proof of your case is better
•Individual journey
•Actual market access
•Money that can get you real proof s- erious funding – up to 300.000 € on fair terms – running lean does not mean running cheap

Working with startups stays an important aspect in STPs and regions of innovation as they are the future stars. The models of incubation and acceleration are in the stage of exaggeration and looking for new models of attracting best startups and finding a sustainable model for themselves. STPs and regions of innovation can work together here and a fruitful dialogue is very much expected.

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