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## GENERAL INFORMATION

<b>TITLE OF THE CASE</b>	How to become an entrepreneurial minded university using a bottom up approach
<b>SALES PITCH</b>	How to create a holistic approach and interdisciplinary program to foster entrepreneurial behavior in an entire university and overcoming departmental borders
<b>ORGANISATION</b>	Lucerne University of Applied Sciences and Arts
<b>COUNTRY</b>	Switzerland
<b>DATE</b>	April 2017
<b>AUTHOR</b>	Patrick Link and Valentina Fontana
<b>NATURE OF INTERACTION</b>	<input type="checkbox"/> Collaboration in R&D <input type="checkbox"/> Academic mobility <input type="checkbox"/> Student mobility <input type="checkbox"/> Commercialisation of R&D results in science <input type="checkbox"/> Lifelong learning <input checked="" type="checkbox"/> Curriculum development and delivery <input checked="" type="checkbox"/> Entrepreneurship <input type="checkbox"/> Governance
<b>SUPPORTING MECHANISM</b>	<input type="checkbox"/> Strategic instrument <input checked="" type="checkbox"/> Structural instrument or approach <input checked="" type="checkbox"/> Operational activity <input type="checkbox"/> Framework condition



# CASE STUDY PROFILE

## 1. SUMMARY

The university management of the Lucerne University of Applied Sciences and Arts wanted to increase entrepreneurial thinking and acting among the entire university, covering all departments, study programs, including employees and fostering spin-offs. Therefore an interdisciplinary project team was created and an interdisciplinary program called “smart-up” was launched at the end of the year 2013. The program consists of 6 main levers:

- ▶ Offering integrated entrepreneurial education by giving the students the possibility to work up to 15% of their studies on their own venture. Not just in business classes but also in the other study programs
- ▶ Foster **venturing** by offering free expert coaching, infrastructure (access to labs, co-working-spaces) and networking for all students, employees and Alumni
- ▶ Creating an entrepreneurial **spirit** by organizing own networking events, promoting partner events (e.g. business ideas, startupweekend) and bringing start-ups into classes
- ▶ Building up an **ecosystem and network** by organizing a start-up-day with all regional partners, inviting partners into the classroom (e.g. jury member and guest lectures) and building up trust between partners in general
- ▶ Overcoming all **policy barriers** (e.g. IP rights, cross-departmental thesis)
- ▶ Initializing an interdisciplinary **research** projects on entrepreneurial studies.
- ▶ Organizing events to bring the Start-ups together for exchange and to build a visible community

The program was planned in 2011 in a traditional way. The execution however followed a lean approach. The team members coming from different departments and backgrounds formed a strong and independent work force creating fast results. There was a close link to university top management without the need to follow the traditional hierarchical reporting lines. The project team received a top-down budget and could work and act interpedently between the silos. The independence any organizational structure proved to be a key success factor. Building up trust between persons and departments and understanding the different languages and cultures helped to find consensus and a joint approach.

The project team acquired additional external support (e.g. sponsoring, foundations and governmental support) which give more freedom to the team and internal reputation. Approx. 1/3 of the budget was funded externally.

After a pilot of the two departments Business and Engineering & Architecture, the program is enrolled in the other departments Art & Design, Information Technology, Music and Social Work since the early 2017.

## 2. BACKGROUND

The Lucerne University of Applied Sciences and Arts is a university of applied sciences that is supported by the six cantons of Central Switzerland. With 6,000 students attending bachelor's and master's degree programs, more than 4,400 students attending continuing and executive education programs. It is the largest educational institution in this region, the heart of Switzerland.

According to the GUESSS study 2013/14, about 4% (Engineering & Architecture) and 3% (Business school) of the students of the Lucerne University of Applied Sciences are motivated to start a business during or directly after their studies. Five years after graduation there are 22% (Engineering & Architecture) and 18% (Business). It is therefore hardly surprising that for 5% of the students the support offered for start-ups is decisive for the choice of the University.

2011 there was no Start-up-support at the Lucerne University of Applied Sciences and Arts. The university management was contacted from governmental organizations and politicians and set up a project team to plan a project called "Entrepreneurial Thinking and Acting". A project for all departments was set up, but the pilot project was only launched and expedited by two departments: Engineering & Architecture and Business school. The pilot project started 2012. It was a clearly "green field" approach since nothing existed until then.

## 3. OBJECTIVES

The Smart-up Program pursued the following objectives:

- ▶ As the project is primarily designed as a service to students (and employees), the program clearly has a service orientation, although it is the declared goal that all university areas (e.g. education, advanced education as well as research) are sensitized for entrepreneurial thinking and acting.
- ▶ In the medium term, it is intended to create value for the region and its economic situation
- ▶ The aim of smart-up is on the one hand to motivate the students to pursue their business ideas and to provide concrete support for their implementation.
- ▶ The latter 18-22% has to be sensitized and should get the know-how to build up a business. Students should be encouraged and empowered to increase their ability to innovate and act as an intra- or entrepreneur.

Young self-employed persons, who study at the same time, get the opportunity to use certain parts of their education or training for the development of their start-up in order to create synergies. Depending on the study program up to 15% of the credits can be obtained by working on their own projects. Nobody should be faced to the decision whether to continue the studies or pursue his business

- ▶ The networking with other funding institutions is of huge importance for the program. The goal is not to build up further funding instruments with a similar offer to the numerous already existing offerings. Rather, smart-up is to pick up the start-

ups in very early phases, and then pass them on to external institutions if they are ripe.

It is obvious that the university, with its proximity to the students, has an almost exclusive access to ideas at an early stage. In addition, the close networking between the university and the project team allows close cooperation with further providers. In this sense, smart-up is also supposed to play a transfer role between science, business and society: its role is to create ideas and innovations arising in the scientific context

The overall objective is to motivate and inspire Students (Bachelor, Master and Advanced Studies), but also alumni, employees and to a lesser extent third parties of the region to become self-employed or an entrepreneur.

The following objectives have been defined as the main objectives:

- 1) SPIRIT - Create entrepreneurial spirit and mindset  
Encourage students (and employees) for a holistic, entrepreneurial thinking and motivate them, to pursue their ideas for new ventures, now or in a second life section. Various forms of entrepreneurship are presented (social, creative, green / eco, corporate, etc.).
- 2) EDUCATION - Teach necessary skills  
Teach the knowledge and skills for entrepreneurial thinking and acting, while at the same time enabling experimentation and testing as well as promoting interdisciplinary work.
- 3) VENTURES - Enable Ventures  
Foster business start-ups (from students and employees), provide effective incentives and promote external networking.
- 4) RESEARCH - Establish research as a supporting role  
Promote interdisciplinary research in entrepreneurship.

Our vision is to become a leading center to promote entrepreneurship, regionally embedded, nationally known and globally orientated.

#### **4. RESPONSIBILITY**

Before starting the project a pre-project was carried out to setup the project scope and team. The Project leader consist of: Prof. Dr. Patrick Link, Prof. Dr. Rene Zeier, Valentina Fontana and Angela Müller

In the Steering Committee, the directors of the participating departments are involved and get therefore all the insights and information directly. The project team members come from all departments

In the project core team are approx. 12 lectures of different study programs and departments. In each program at least one lecture form each department is involved. Additionally approx. 30 coaches and mentors with different subject areas are regularly offering coaching's for the start-ups.

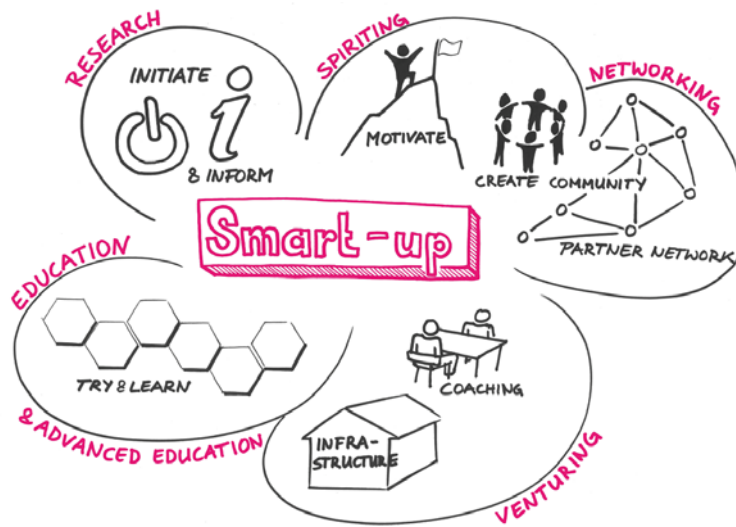


# IMPLEMENTATION & FUNDING

## 5. STRATEGY & ACTIVITIES UNDERTAKEN

Lucerne University of Applied Sciences and Arts (LUASA) uses a holistic approach to foster entrepreneurial thinking and behavior of students and employees. (see Illustration)

### «Smart-up – Support for Start-ups»

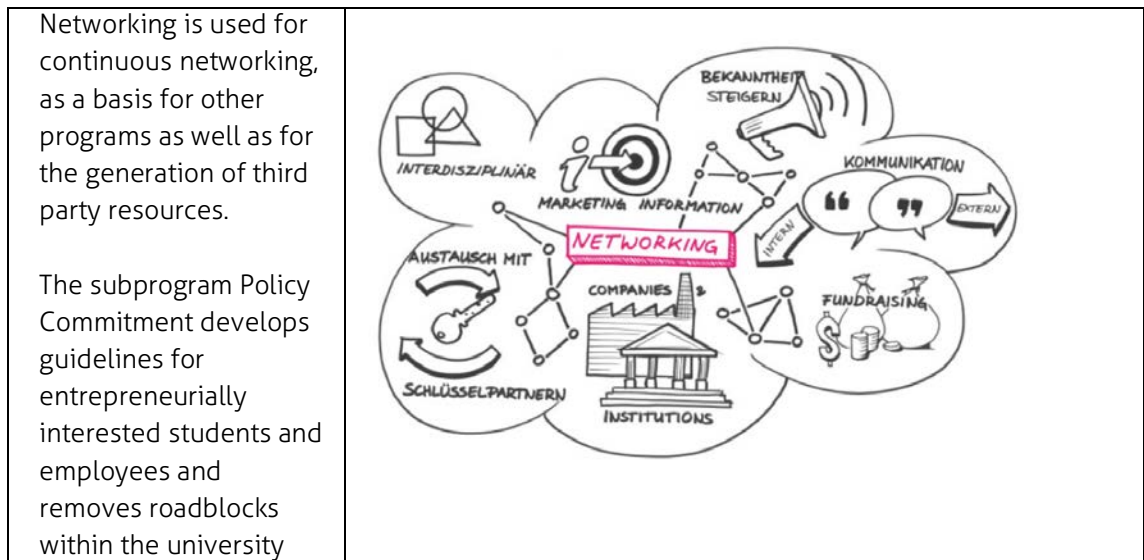


In order to achieve this goal, the project is implemented in six subprograms: one subprogram for the aforementioned goal and two additional subprograms, Networking and Policy Commitment.

Sub-Program	Illustration
<p>The Spiriting program coordinates existing entrepreneurship events and organizes its own events with the aim of promoting an entrepreneurial spirit.</p>	

<p>Education brings new ideas of fostering entrepreneurial thinking and acting into the different study programs (Bachelor and Master) and where possible into the advanced education.</p>	
<p>In the Venturing subprogram, company foundings are specifically promoted (for example by coaching, infrastructure, virtual and physical platforms)</p>	
<p>Within Researching, research and student work in entrepreneurship are carried out and supported.</p>	





Aside from educating and motivating students, it is important that an eco-system and network is built. External partners (business parks, Technoparks, Innovation Hubs, economic development organizations, chambers of commerce, innovation centers, providers of start-up competition, start-up promoters, business angels, etc.) should have access to students (and the reverse).

Events by partners can be marketed to students, or common events can be organized. At these events start-ups, best are active or former students of the institution, should give presentations.

Potential start-ups should thereby be offered professional support in the form of coaching or use of infrastructure (laboratories, workshops, co-work spaces, etc.), so that they rapidly achieve a degree of maturity that permits linkage to external partners.

The main goal of an institution of higher learning remains education and continuing education, and awareness of important topics. This also includes the motivation to think in entrepreneurial terms - not only now but also in the future - in one's own enterprise or as an intrapreneur. The number of start-ups and spinoffs established thereby is not the goal, but rather more of a by-product.

The program "smart-up" of LUASA is running since three years as a pilot in two departments and is now rolled out to the entire University. Since program start-up more than 120 start-ups have been founded.

Just as a start-up team should be set up to be as interdisciplinary and lean as possible, it should also be the start-up-promoting organization. The selected organization should be very agile and oriented toward interdisciplinary functioning and not directly dependent on an institution. Virtual organizations, project teams or "un-institutes" are possible choices that could ideally comprise a core team with representatives from all departments/ study programs. Thus, interdisciplinary work and networking can be promoted.

A pilot with the two biggest department covering approx. 2/3 of the students had the advantage that consensus was more easily found and experiments could be carried out in



different modules and organization. Following the initial targets and levers the following activities have been carried out:

**Education:**

Specific interdisciplinary courses open to all students and employees are offered. Smart-up offers own interdisciplinary courses on Bachelor level (e.g. Business Ideation and Business Concept). In addition, courses supported by the government (CTI Entrepreneurship) are offered for Master students, employees and start-ups in the region (Business Creation and Business Growth).

Thereby a methodological approach using a hybrid management model, combining Design Thinking and Lean Start-up is used, own tools have been created to support this approach and enrolled/offered to all study programs.

Smart-up supports existing study classes with material, coaching and teaching support. So a common approach using the Lean Start-up methodology can evolve at the University. In more than 10 different modules in different study program the "Smart-up Lean Canvas" is used.

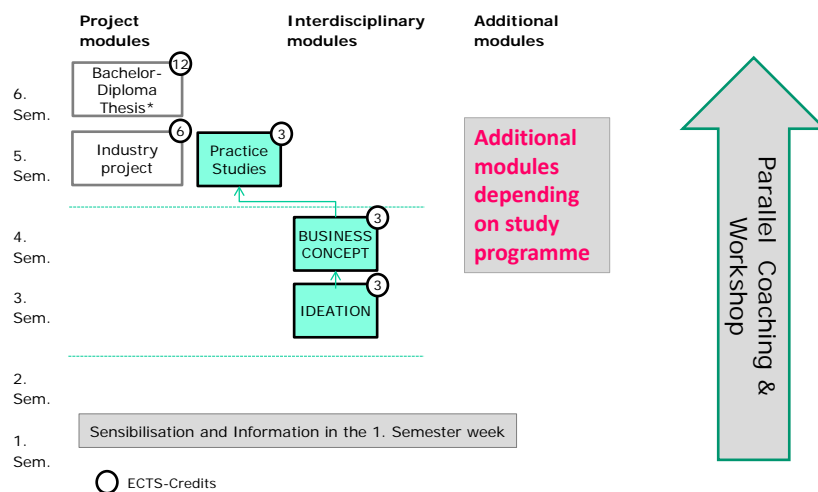
Students can work on their start-up projects and earn (ECTS) credit points.

Both modules are the "heart" of interdisciplinary, entrepreneurial education. Students in both modules ("Ideation" and "Business Concept") learn how to go forward through iterative learning cycles (experiment and learn) and can apply this learning to a personal project at a later point in time. This can be entirely as an intrapreneur in an existing enterprise or as entrepreneur during or after studies have been concluded.

ISA Module	IDEATION	BUSINESS CONCEPT
Type	3 ECTS, Intensive week	3 ECTS, during semester (12 evenings)
Content	Idea generation and –evaluation Redefining the problem Build and test simple prototypes Customer and user needs Value Proposition Create first version of Lean Canvas	Concretization of the idea with Lean-Start-up Minimal Viable Product (MVP) Financial and Marketing plan Team, legal aspects Eco system Pitching in front of Investors
Results	Tested business idea Verified problem and needs First idea of a business concept Simple prototype ("pretotype")	Concrete/verified business model Basics to write a business plan Further elaborated prototypes (MVP)

In these courses, interdisciplinary teams can work on business ideas that they develop. Ideally, in this case there is already a team of students that would really like to pursue the idea further. Interested students can further pursue their ideas in other modules depending on the course of study (e.g. Industrial project, thesis work, practice project, practice during studies, business plan, etc.). This, of course, can be done only to the extent that the learning goals of the module permit. To this end, the "Entrepreneurship Track" course of study was defined, in which respective modules are defined that, from an entrepreneurial point of view, are particularly recommended or make work on a personal project possible. (See Illustration)

## Entrepreneurship - Integration in a study programme



In addition, students can consider coaching (up to seven hours guaranteed for each student) and a workplace in a co-work room at the university. The room is rent-free the first year, in the second year a small amount is charged. In the third year the projects should have reached a degree of maturity such that offers by partners (e.g. business park, technoparks, etc.) can be considered. Workshops are offered for subjects for which there are regular coaching needs (e.g. legal aspects or pitching).

### Venturing:

Students and employees interested in creating their own ventures are supported as much as possible – not only by receiving credits. They get coaching and infrastructural support. A coaching team has been built that cover the most important aspects. For most of the recurring questions (e.g. legal, social media, pitching preparation) additional open workshops are offered where general advices and specific questions are answered. Each interested person gets 7h of coaching for free. Start-ups participating at the university smart-up program get 20h of coaching with experts. Co-working facilities are built up at various university locations. In addition, partnerships with external co-working labs, offer the students to work at different location with university conditions. To get financing, the start-up profit from the network and relationships of the coaches. They have e.g. easier access to Business Angels or Venture Capital. The university does not offer direct financial support – with the exception of some research projects. In this case the money paid from the University must be paid back if the start-up is successful.

### Coaching concept:

The main idea is to offer quick, tailor-made inputs for concrete problems by experienced coaches; In addition longer-term support, visibility and networking support is offered as well as further transfer to external actors (mentors and coaches / funding institutions / investors) who are particularly suitable for the start-ups are supported.

We build up a broad internal and external network of funding institutions, investors, incubators, platforms

#### Infrastructure support:

The students have access to Co-Working spaces and extent few individual office spaces (only if really necessary and availability is given). The first year the rooms are for free, the second year, the teams pay 100 CHF per month and the third year is not defined, because by then, the teams should know if the business model is successful and can move on to professional institutions and Co-Working spaces.

In addition the Smart-up teams have access to workshops, laboratories, FabLabs, design ateliers, etc.

#### Workshops:

- ▶ Regular workshops are offered to build up specific knowledge and to discuss the "hot" topics in that subject area
- ▶ Idea generation & potential analysis
- ▶ Systematic Development of successful business models
- ▶ Pitching & Marketing of ideas
- ▶ Start-up Weekend Luzern
- ▶ Creathon – in 48 hours from the idea to a prototype
- ▶ Smart-up Feedback Workshop
- ▶ Legal hotspots for start-ups

#### Spiriting:

The key is to select and promote existing events and offer some own events. There is a very broad offering of events. For the students it is difficult to get an overview. Having one internet site that promotes the entrepreneurial events help both sides: The event organizer gets access to the students and the students get insights and can better select the relevant events to go.

We also invite startups or investors into the education modules and give support to organize jury members or guest lectures. It is important to go into the different modules in the different study programs and to inform the students directly. Joint information events, facebook sites, email newsletters, blogs is good but the best is a face to face contact in key modules with key lectures.

Communication is key.

The Smart-up project maintains a blog, which provides weekly news from the start-up scene, references to offers for start-ups, updates to the program, reports about events, etc.

In addition, this blog also serves as a website, event calendar and starting point, where interested persons are informed about the offer and the program of Smart-up.

The number of blog views and Facebook posts and likes are monitored.

One of our own events is "Meet with us ..." it is a series of events organized by the Smart-up program, in which inspiring personalities from the entrepreneurship world are invited to take part and talk about their entrepreneurial experiences and answer questions of the audience

The informal exchange between the young entrepreneurs is extremely important.

The need to meet like-minded people and to exchange ideas must be awoken among the young entrepreneurs. Often at the beginning of the entrepreneurial journey students are not so open to share their ideas, but with more and more exposure, they change their mind-set.

For this the "smart-up beer" has been launched. The idea is that interested students and employees can easily have one (or two or...) beers, to get to know themselves outside of the university, to learn what others are doing and to exchange ideas about ongoing or planned projects.

Very important are also university-internal project updates to give a review, insights and an outlook. In addition to the rector of the Lucerne University of Applied Sciences, the directors of the departments well as numerous start-ups and invited guests were present. Some of the start-ups had the opportunity to present themselves to the university management.

### **Networking:**

A joint entrepreneurial eco-system is built up and a close partnership with regional key actors established. Important parts of such a program is inviting the network partners to events, making joint events, promoting the partner in general and giving them access to the students and start-ups.

The university has the advantage to have a direct and close access to the target group and can easily create a win-win-win situation. By working with all partners, communicating transparently and building up trust between all partners, this can be overcome easily.

Together with the Lucerne Economic Development Agency, TECHNOPARK Lucerne, Gewerbe-Treuhand and Genilem Zentralschweiz and other sponsors, on September 13, 2016, the first "Start-up day Central Switzerland" was organized.

The program consisted of

- ▶ Information points in the field of start-up promotion
- ▶ Workshops and individual coaching's
- ▶ Short presentations and panel discussion
- ▶ Start-up pitches with businessplan contest
- ▶ Central Switzerland New Entrepreneurs' Award

### **Researching:**

The team built up an interdisciplinary network between students, start-ups, support organization, corporate venturing organization, etc. This base is now used to build up research projects. Up to now research mostly took place this student thesis work. Research projects are a nice by-product of building up trust-based networks.

## **6. MONITORING AND EVALUATION**

We measure on a quarterly basis the most important figures. In addition university management asked to carry out a sustainability analysis. Main goal was to see if the created start-ups are still active and if the program creates value.

The following key figures are measured on a quarterly basis:

- ▶ No of start-ups
- ▶ No of ideas (start-up pipeline)
- ▶ No of start-up funded
- ▶ No of coaching's performed
- ▶ No of blogs and blog views
- ▶ No of Facebook posts and Facebook likes

- ▶ No of students/employees interested in smart-up

See also: [https://blog.hslu.ch/smart-up/files/2017/01/Smartup\\_Barometer\\_Q416.pdf](https://blog.hslu.ch/smart-up/files/2017/01/Smartup_Barometer_Q416.pdf)

## 7. SUSTAINABILITY MEASURES

We stay in close contact on a formal and informal basis with the university management and key stakeholder. On a quarterly basis, we provide reports about our activities and status of the initiative. On a yearly basis review/feedback workshops are carried out with our customers (start-ups, students and team members).

The strategy and program setup has been reviewed on a two year basis.

## 8. COSTS

The total costs depends strongly on the undertaken activities, e.g. amount of events, workshops, modules and coaching which have been offered. The general structure is very lean since there is no formal structure in place and overhead costs.

Almost all project/program team members have other assignments at the university and their overhead/fix costs are covered.

Only the program coordinator /has a 60% position and works only for this program. The working time of all other team members varies between 1% (e.g. special coaching's) and 25%. The core team composition may change over time. The organisation is rather temporary and reformed depending on the tasks.

After a three the year pilot with only two departments, the program is now rolled out to all six departments. The estimated overall costs correspond to five Fulltimeequivalents (FTE).

## 9. FUNDING

In January 2015, a broad sponsoring request was launched to the most important regional and national companies, generating around CHF 44,000.- of sponsorship support for the period 2015 to 2017 as well as about CHF 14'200.- of patron's contributions for the entire duration of the program.

Smart-up partners, in addition to a tangible logo presence, also have the opportunity to exchange ideas with the young entrepreneurs. There are occasions when smart-up partners are involved specifically.

See here: <https://blog.hslu.ch/smart-up/netzwerk-2/sponsoren-goenner/>

In addition to sponsoring the Swiss government supported financially entrepreneurial courses ([www.cti-entrepreneurship.ch](http://www.cti-entrepreneurship.ch)). We are offering three modules financially supported by the CTI (Commission of Technology and Innovation).

A third funding element is foundations. The main financial support with approx. 70% is covered by the University itself.



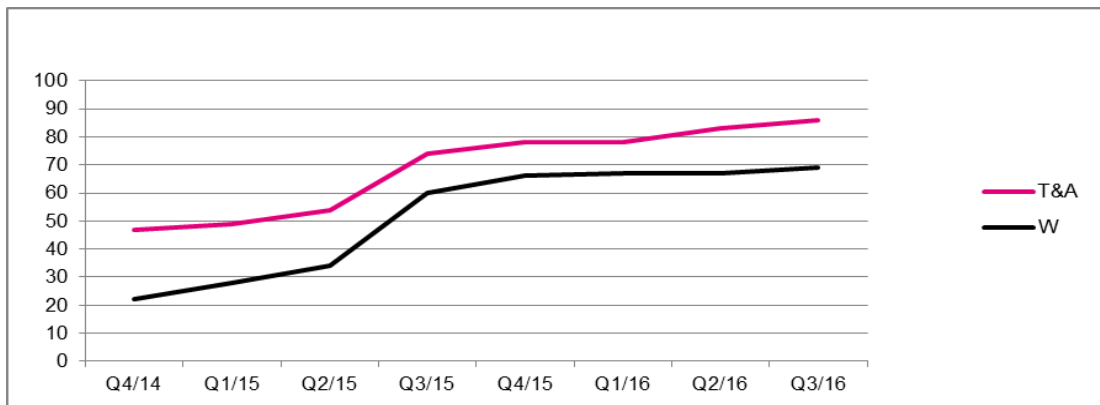
# OUTCOMES & IMPACT

## 10. OUTCOMES

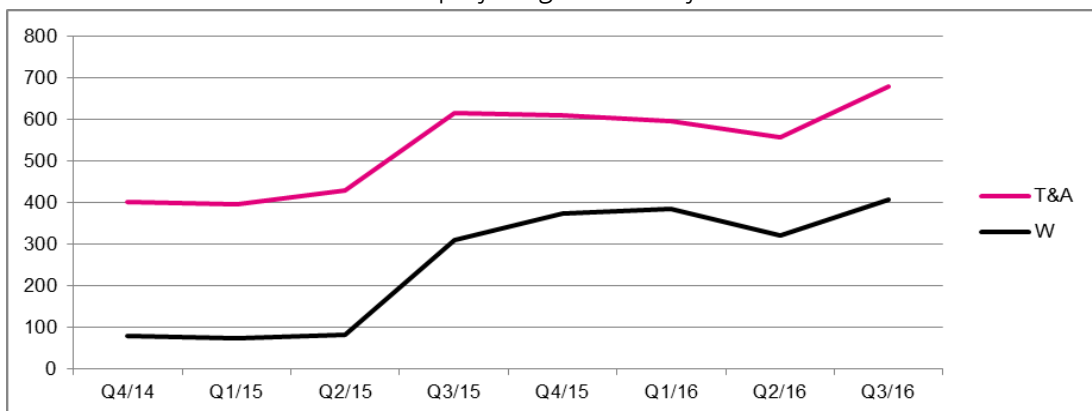
As a result, in the two departments Engineering & Architecture and Business with a total of about 4000 students and 450 academic personal, 140 enterprises have been created. In more than 10 different modules in different study programs, mostly interdisciplinary modules have been built up or adapted to offer the possibility to create start-up's. Some modules focus rather on the ideation phase, others on the implementation. All modules follow the lean start-up mindset. Per year around 300 cases are created among the different study programs. 20% of those students consider the implementation of their ideas. 10% really plan the implementation (30 cases per year) and 1% (3 cases per year) is financed excessively by external investors.

### Number of Start-ups in total

The numbers of start-up doubled from almost 70 at the end of 2014 to more than 140 at the end of 2016.

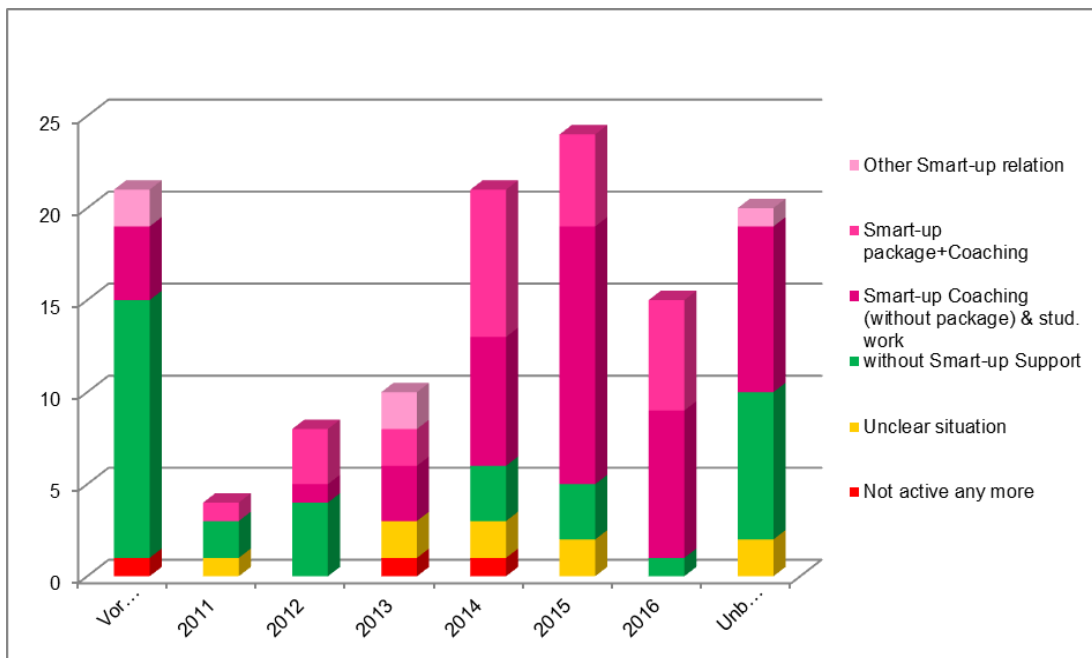


No of students and employees interested in start-ups (in our database, emailing list)  
Also the number of students and employees grow steadily.



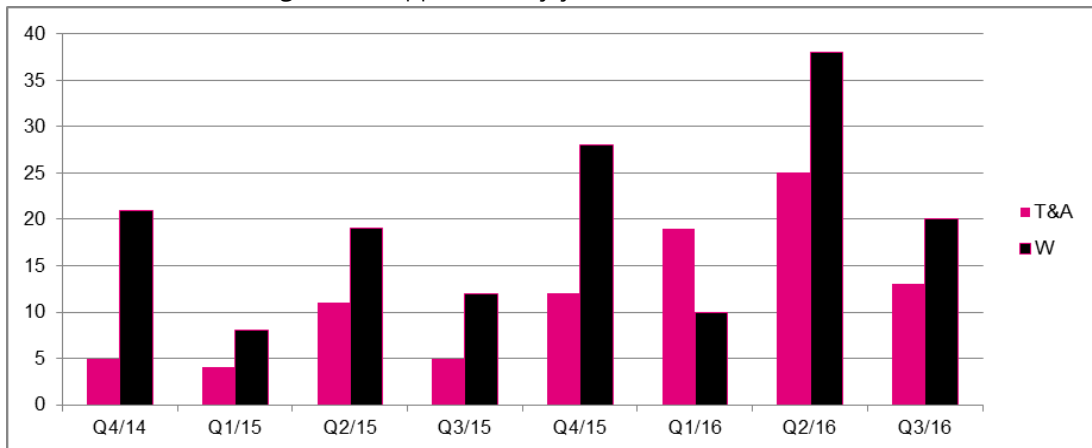
### No of Start-up created per year

We have followed up the status of the start-ups funded over the last years. Only very few (3) are not active any more. Almost all of the start-ups, supported by Smart-up, are still active.



### No of Coaching performed:

The number of coaching double approx. every year since 2013

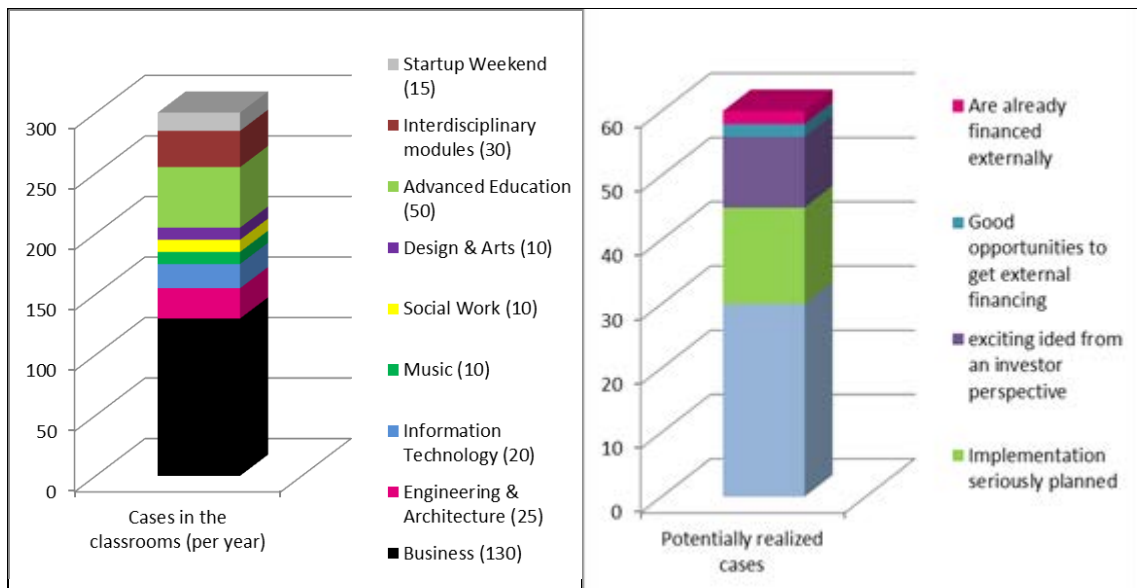




## 11. IMPACTS

A central pillar of the smart-up program is to establish entrepreneurial thinking and acting even more strongly in the classrooms and the different curricula. The goal is that a substantial proportion of the students have the opportunity to develop a business idea at least once during the course of their studies.

Of the roughly 300 business ideas developed in the classroom, a further development is considered at around 20% (see figures)



Here are some selected examples of externally financed cases:

- ▶ Eqipia / BuddyBroker AG (Social Recruiting Platform): Several external financing rounds generated, then sold to XING AG
- ▶ Relish guitars (high-end guitar label): winner of CHF 130,000 generated by CTI Entrepreneurship as well as the first external financing round
- ▶ Advanon AG: Several external financing rounds generated as well as collaboration with different banks

Selected examples of start-ups with good opportunities for external financing

- ▶ 2point GmbH (bike lamp in the high-end segment)
- ▶ Fidesso / Makellos GmbH (online real estate sales platform)
- ▶ Kidesia GmbH (software for administration of children's playgrounds)
- ▶ Swisens AG (optical method for pollen measurement)
- ▶ Yamo AG (organic baby food)

The benefits are of tangible and intangible nature. In general a cultural change and increased motivation of staff and students can be observed.

Benefits:

- ▶ Visibility of the university as entrepreneurial university increased
- ▶ Positive feedback of the community
- ▶ LUASA Start-ups are invited to external events  
(e.g. 2 out of 3 in the yearly event of the Technopark)
- ▶ Students start to select to come to LUASA because of the start-up support
- ▶ Sponsors and funds support the Smart-up program
- ▶ Research projects initiated
- ▶ Cultural change visible in certain teams and study programs
- ▶ Co-working spaces and partner network are expanded

Up to now, no disadvantages can be determined. The program runs lean, with less money and can be expanded to all departments.

## 12. INVOLVED STAKEHOLDERS AND BENEFICIARIES

Here you find a list of our main partners. The partners benefit mainly in getting contact to start-ups in early stages and are able to present and offer their services to the start-ups

BusinessPark Zug	Provides low-cost office space for young companies, modern infrastructure and professional services that are optimally adapted to individual needs: <a href="http://www.businessparkzug.ch">www.businessparkzug.ch</a>
CTI Entrepreneurship	The federal training program for the founding of science-based start-up companies in Switzerland: <a href="http://www.cti-entrepreneurship.ch">www.cti-entrepreneurship.ch</a>
Creative factory 62	The new start-up center in Oberkirch near Sursee with co-working space and entrepreneurship-support: <a href="http://www.kf62.ch">www.kf62.ch</a>
Foundation Brändi	Provides useful services for start-ups, from mailing to packaging services. These contracts are important for the Brändi, because it can train and employ people with disabilities. Those who work with Brändi make a valuable contribution to the professional, social and cultural integration of people with disabilities: <a href="http://www.braendi.ch">www.braendi.ch</a>
IFJ	The incorporation of a company is a big step - and wants to be thought through. The IFJ Startup Support helps you with free courses, personal startup support and our online incorporation service. In addition, you save hundreds of Swiss francs with your individual starting credit. <a href="http://www.ify.ch">www.ify.ch</a>
Impact Hub Zurich	The Impact Hub Zurich is a mix of innovation lab, business incubator and community hub - at the same time meeting place and workplace for people with business ideas for the sustainable solution of problems of our age. In addition, specific start-up programs, such as Summerpreneurship and Social Impact Award, offered: <a href="http://zurich.impacthub.net">zurich: www.impacthub.net</a>
ITZ	The ITZ (InnovationTransfer Zentralschweiz) is the hub between science and industry and contributes to the competitiveness of SMEs in Central Switzerland. The program fosters targeted start-ups: <a href="http://www.itz.ch">www.itz.ch</a> and <a href="http://www.zinno.ch">www.zinno.ch</a>

Lucerne Business	The Lucerne Business (Wirtschaftsförderung) is actively young companies in Lucerne as a business location: <a href="http://www.luzern-business.ch">www.luzern-business.ch</a>
MicroPark Pilatus	In the microPark Pilatus, young entrepreneurs and established companies are united under one roof. The entrepreneurial center offers assistance with the mentoring or innovation coaching program in the build-up phase: <a href="http://www.microparkpilatus.ch">www.microparkpilatus.ch</a>
NEUBAD	Co-working in the NEUBAD, your inspiring workplace: working in an unusual place, exchanging with like-minded people from different industries: <a href="http://www.neubad.org">www.neubad.org</a>
Raumbörse Luzern	The Lucerne space exchange is an independent platform for arranging favorable and temporary workplaces and studios, meeting, event and convention rooms: <a href="http://www.raumboerse-luzern.ch">www.raumboerse-luzern.ch</a> :
Seif - social entrepreneurship initiative & foundation	Seif supports people or teams who are looking for entrepreneurial answers to important questions of our society with innovative ideas. The goal of social entrepreneurs is the creation of a social and financial value: <a href="http://www.seif.org">www.seif.org</a>
Startups.ch	The consulting company startups.ch supports company foundations of start-ups and offers consulting and courses in the fields of law, tax, fiduciary, business plan and much more: <a href="http://www.startups.ch">www.startups.ch</a>
Startupticker.ch	The online platform startupticker.ch makes an important contribution to the promotion of the visibility of young companies and the networking of the start-up scene: <a href="http://www.Startupticker.ch">www.Startupticker.ch</a>
Swissnex San Francisco	The Swissnex San Francisco supports young start-ups in the US market and regularly runs start-up camps: <a href="http://www.Cticamp.us">www.Cticamp.us</a> and <a href="http://www.swissnexsanfrancisco.org">www.swissnexsanfrancisco.org</a>
Technology Forum Zug	With its technology network, the Technologieforum Zug supports young companies on their way from technological innovations to market success: <a href="http://www.technologieforumzug.ch">www.technologieforumzug.ch</a>
TECHNOPARK Lucerne	The TECHNOPARK Lucerne offers ambitious start-ups the ideal environment to build a successful business: <a href="http://www.technopark-luzern.ch">www.technopark-luzern.ch</a>
Venturelab	Venturelab organizes the "Fast Track for Start-ups" and brings together the high potentials and high flyers among the start-ups: <a href="http://www.venturelab.ch">www.venturelab.ch</a>
And many more	

### 13. AWARDS / RECOGNITION

The success of the program is widely recognized by the University management, the politicians and the stakeholder. Smart-up is well known in the region, especially within the Start-up Community of central Switzerland. Because of the success of the past three year, the LUASA-management decided to extend the program to all of the six departments. Some of our start-ups have received awards.



# LESSONS LEARNED

## 14. PRIMARY CHALLENGES

There are several challenges in building up such a holistic and at the same time lean program:

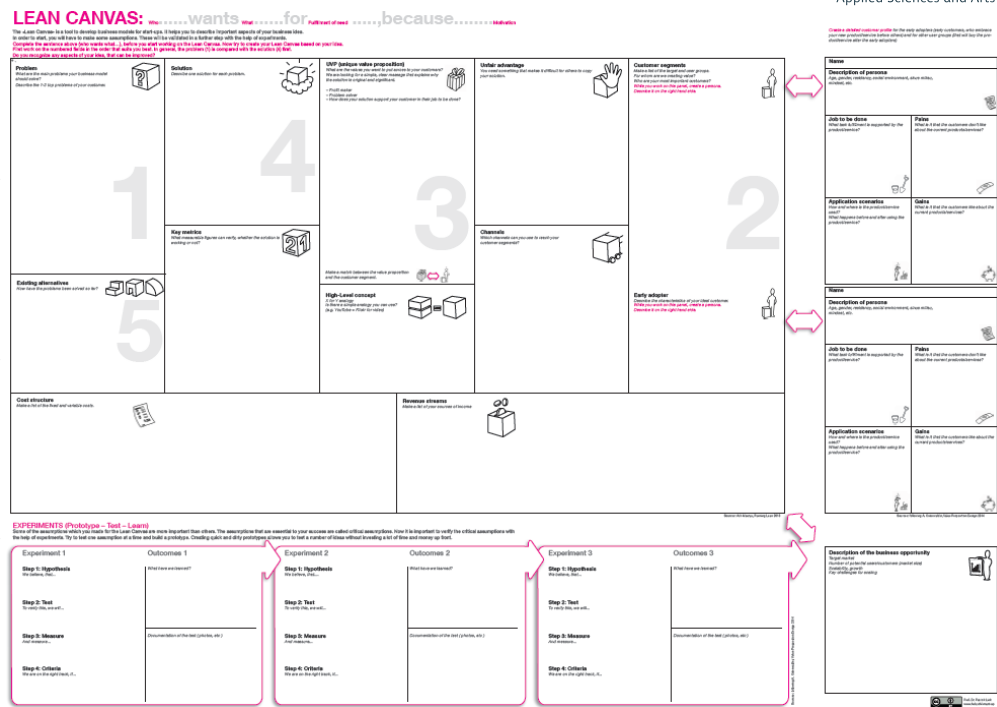
- 1) Mind-set  
It is important to find a common mind-set in the team and with the start-ups to foster entrepreneurial thinking and acting.  
The right mind-set is key for any start-up
- 2) Communication  
Students get overwhelmed with information, like flyer, newsletter, poster. Lecturers often have other priorities than supporting yet another initiative. It is key to create attention and to be present. Present in the university (e.g. with dedicated spaces), in the classroom, social media and to mobilize students to spread the word
- 3) Internal stakeholder involvement  
The main internal stakeholders are all study program responsible and directors of the departments. An early involvement and frequent informal communication is key. Often they are scared that something from the outside is put into their programs without understanding the situation.
- 4) Students have not the time to work on start-ups ideas  
By offering students credit points while working on their own ideas one can easily overcome that challenge.
- 5) Interdisciplinary student teams  
It seems obvious and simple that students can build and benefit from interdisciplinary teams. The formation is difficult and the student plans and schedules rarely match. Interdisciplinary modules or events, like a Startupweekend can help to bring people together. Electronic platform didn't work out for us.

## 15. SUCCESS FACTORS

There are numerous philosophies on how to build a successful start-up. One of them is "Lean Start-up." The Lean Start-up method follows an approach of iterative development and improvement to the range of services offered and the business model. One essential factor for success is finding the "right" problem, the right customer and their needs. "Design Thinking" can be especially helpful in early phases.

The combined Design Thinking and Lean Startup methodology with an enhanced Lean Canvas combining Ash Maurya's Lean Canvas with Alexander Osterwalders Value Proposition Canvas supports the approach. For practical reasons and aimed at start-ups, we have

combined the Value Proposition Design by A. Osterwalder and the Lean Canvas by A. Maurya and supplemented them with Persona, Application Scenarios .



An Ideation Booklet with this enhanced Lean Canvas in A0 is used in more than 10 different modules of various study programs. This Ideation Booklet supports the lecturer and fosters a common understanding between the students, coaches and lectures.

The "lessons learnt" can be summarized as follows:

- ▶ Treat a start-up support program like a start-up itself
- ▶ Start as a small unit and grow it
- ▶ Act lean and entrepreneurial.
- ▶ Use the mindset of Lean Start-up and Design Thinking
- ▶ Build up a strong committed team
- ▶ Create beachheads in all department and study programs
- ▶ Bring added value to the lecturer and help them to transform modules and courses that are close to entrepreneurship to real entrepreneurial modules
- ▶ Student shall be able to work on their own projects and get credit points for that
- ▶ Offer a wide range of spiriting activities to create an entrepreneurial culture
- ▶ Build an ecosystem based on trust and create fast win-win-situation
- ▶ Be independent from university structure and be truly interdisciplinary
- ▶ Get and keep top management commitment
- ▶ Create and celebrate success stories (e.g. awards of start-ups)
- ▶ Continue as Lean Start-up

## **16. TRANSFERABILITY**

The results can certainly be transferred to a university of the same size and scope. Bigger technical universities or more disciplinary-oriented universities might use a different program setup.

The mentioned mind-set, key learnings and success factors are certainly also applicable. The Lean Canvas and the combination of Design Thinking and Lean Start-up is certainly valid for every entrepreneurial activities.



## FURTHER INFORMATION

### 17. PUBLICATIONS / ARTICLES

Smart-up – Unterstützung für Start-ups. 2013-2015. Hochschule Luzern (2016)

Link P. (2017): „How to Become a Lean Entrepreneur by Applying Lean Start-Up and Lean Canvas?“. In: Innovation and Entrepreneurship in Education. Edited by: Papadopoulos, P., Burger, R., Faria, A. Emerald Group Publishing Ltd, Bingley (UK)

### 18. LINKS

[www.hslu.ch/smart-up](http://www.hslu.ch/smart-up)

### 19. KEYWORDS

Design Thinking, Lean Start-up, Smart-up

### 20. PUBLIC CONTACT DETAILS

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