

MASTER THESIS

Assessment of the practices of Aalborg University Inkubator: current state and future possibilities.

MASTER IN INNOVATION AND ENTREPRENEURIAL DYNAMICS (MIKE-B)

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Abstract

In recent times, business incubators have acquired significant importance in supporting entrepreneurship, especially in connection with universities.

Among the multitude of University Business Incubators (UBIs), the paper intends to build upon previous research carried on into the specific case of AAU Inkubator, describing how the services offered by the Danish incubator are facilitating the challenges encountered by its incubatees. Through gathering and analysing the experiences of three different start-ups which have been attending the incubator programs, and considering the incubator management point of view, the author describes the services offered by the organisation and their influence on entrepreneurial challenges.

Furthermore, some recommendations for improving the incubation process are provided, based on the practices of a Swedish top-performing UBI and the feedbacks of the three start-ups previously interviewed.

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The incubator management, as well as the members of the start-ups who agreed to be interviewed, should also be acknowledge for their essential support.

1. Introduction

The first chapter of the paper is intended to describe to the reader the general context of the selected case, with an overview of the current AAU Inkubator practices. The motivation behind writing about this topic is also hereby presented.

It is known, when talking about entrepreneurship, that many challenges are encountered on various levels from those who would like to start a new business. In the last decades, business incubators have been created and widely adopted all over the world in order to facilitate the creation and nurturing of new and innovative start-ups.

Different kinds of business incubators can be found, but what appeared to be of interest for the author was incubators managed directly by universities (UBIs), also in connection with the case chosen for the selected research paper (AAU Inkubator).

Several researchers have previously focused on the matter of entrepreneurial challenges, although not a vast literature has linked them in particular to the processes of University Business Incubators, and how these organisations and their set of services has helped start-ups in facilitating their birth and growth.

1.1. Case description – AAU Inkubator

The paper analyses the Aalborg University business incubator, called AAU Inkubator, which is hereby described. Its context, organisation and important facts are also considered, in order to give the reader a better overview of the past, current and possible future situation of the incubator. Its two main programs will be further described in the following chapter.

Thanks to the nature of the organisation and its services offered, the author decided to consider AAU Inkubator as a University Business Incubator (UBI), also following the classification made by Bathli (2014): in particular, AAU Inkubator can be considered and analysed as a UBI directly managed by the university.

1.1.1. Context

AAU Inkubator is located in Aalborg, the fourth biggest city of Denmark. Alongside a relevant industrial history, Aalborg is characterised by several technological poles and firms, as Siemens Wind Power, Aalborg Industries and Aalborg Portland.

The presence of technological clusters, as the Novi Science Park one, can also be considered one of the reasons which have helped the growth of the city and the surrounding area in the last decade.

Furthermore, the foundation of its university (AAU) in 1974, and the implementation of its several faculties have contributed to set the city to a growing path, with the number of students attending AAU constantly growing in recent times (AAU, 2017) and attracting many foreign students, bringing new and innovative perspectives to the area.

One of the many tools adopted by AAU in order to implement its overall innovation strategy, also related to the concept of entrepreneurship, can be found in the university incubator.

1.1.2. Organisation

AAU Inkubator is a not-for-profit business incubator affiliated to Aalborg University and it is part of a bigger organisation, called SEA (Supporting Entrepreneurship at AAU). The incubator is located at the main campus of the university, and answers directly to the head of Sea, which is a sub-section of AAU Innovation and Research Support.

AAU Inkubator is strongly connected to Sea's activities and services, especially from an administrative point of view. Sea's offices are also located at the university main campus (Niels Jerns Vej 10, Aalborg Øst), just a bit less than a km away from the incubator's space (located at Fibigærstræde 11, Aalborg).

Sea's office manager can be identified in Marie Fallsgaard (Sea, 2018), who has been in this position since the beginning of the year 2017. Currently the manager of the incubator itself can be found in Heidi Nørgaard Jensen, who took over Marie's position also in 2017.

The overall organisation of Sea, as reported in the AAU Innovation official website (Innovation, 2018), can be found in Fig. 1:

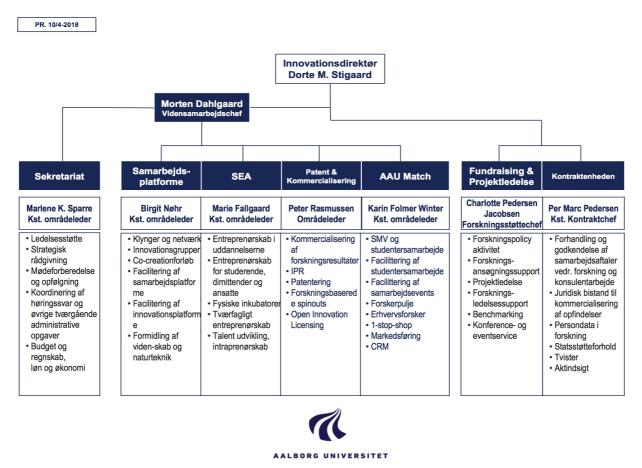


Figure 1: AAU Innovation Organigram

The head of Sea has to directly report to Morten Dahlgaard, who has previously been head of the AAU Inkubator himself. Dorte M. Stigaard, who is director of Innovation, is directly reporting to the AAU rector.

Due to its organisational structure, employees working for the incubator are formally employed under various types of contracts by Sea. The staff consists mainly of business developers (four full-time and three part-time), with different tasks assigned individually, as confirmed by the Inkubator's manager.

1.1.3. Facts

AAU started to develop its own incubator in 2005, with the aim of enhancing entrepreneurship among its students and alumni, as well as promoting the economic growth of the region.

Even though Sea and AAU Inkubator have been existing for over a decade, recent investments brought in at the beginning of 2017 pushed furtherly the growth of their activities, as well as their employees' numbers (who were just two in the first half of 2016).

1.1.4. Incubation process, programs and activities

The overall set of programs offered by Sea and carried on within the incubator's facilities has changed constantly in the last years. However, the author decided to describe here the two most recent and widely attended programs that took place last year and are still active as in 2018: Innovativ Vækst and the Startup Program.

While the first has mainly aimed at enhancing entrepreneurship among alumni (former students graduated from AAU within a three-year period), the second one had the same purpose but a different target group: students currently attending AAU.

Candidates who would like to join one of the incubator's programs would have to go through a selection process. One of the main prerequisites for the applicant is the will of exploiting a particular idea for a product or a service that could lead to the creation of a start-up built around that concept in the near future. Among the other selection criteria, the committee takes into high consideration the commitment of the applicants, as well as the chance of adding value to the regional economy through their idea.

Furthermore, a series of appointments between the applicants and the business developers are set in place, in order to develop a suitable business strategy for the group. After being accepted to one of the incubator's programs, the incubatees gain access to the set of services offered by AAU Inkubator: free access to the incubator's space, possibility of fruiting of the incubator's networking, business developers' counselling, a series of workshops for enhancing entrepreneurial and business management skills, as well as other services granted through third-parties (as, for example, legal help).

The group is constantly evaluated through regular meetings with the staff of the incubator, and several deadlines are set up in order to keep a good pace of growth for the incubatees.

The incubation process is expected to have a different duration according to the related program in which the group/person is enrolled at.

Among the most relevant activities carried on by the incubator can be found in the several social events (like the Town Hall one) and workshops organised by the business developers.

The Entrepreneurial Talent Workshop is a clear example in this sense, consisting of a series of workshops touching various entrepreneurial themes, as business planning, pitching and minimum viable product.

Open office hours (about 20 hours per week) are also offered by the staff of the incubator, giving the opportunity to informally walk in the offices of AAU Inkubator and talk with the business developers available at the moment about entrepreneurial issues encountered by the incubatee, making this process not formal (and possibly longer) as asking for meetings (first through emails) and then waiting for the answer, especially for small issues that might as well be left alone if the process was too long and complicated.

Networking is also central to the incubator's overall set of activities, since the many contacts between the incubator on one side, and the outside industry world and the local government on the other side, might prove themselves crucial for the development of the start-ups.

An external business committee which has the aim of evaluating the performance and the growth of the incubatees is also called to work in many occasions by the Inkubator's staff.

The members of the committee are chosen for each occasion from a wide pool of individuals, external to the incubator but with a relevant interest and experience in the business and entrepreneurial world.

Post-graduation services are also offered at the moment, consisting of access to a dedicated mentor program for a one-year period, as well as still maintaining close contact with the graduated companies in order to implement the networking activities.

A relevant percentage of graduated companies usually finds place in the offices available at Novi Science Park, also thanks to the networking activities of the incubator itself and the many connections between Sea and the Novi environment (located in the same area).

1.1.5. Future

Regarding the possible future of AAU Inkubator, the author finds worth mentioning that administrative offices of Sea, the incubator's space and all the incubatees are expected to be moved to a new facility. This new building will be probably called "Innovation Hub" and is currently being built within the main campus perimeter.

The building is expected to be completed in 2021: this further growth of the incubator's space is also one of the reasons why the staff of Sea is concerned about setting up a general "model", which will be possible to transfer to the new hub, as well as improving the incubator's overall efficiency, regarding in particular the usefulness of its services, programs and practices.

1.2. Motivation

The writer has already researched the topic of UBIs *best practices* in a previous student project, concluding with several recommendations for the particular case of AAU Inkubator. The findings of that research will be exposed and summarised in Chapter 3, since some of the insights gained during that research will be used also for the purposes of this paper.

On the other hand, since the writing of that project (second semester of 2016), some changes have occurred within the organisational structure of AAU Inkubator.

Three different incubator managers have been employed in different times, and the turn-over rate of employees has been quite consistent: the staff number has grown sensibly, and while some left the organisation, even more have been hired. The set of activities and services which have been offered by the incubator have also grown, due to the major funds acquired by the incubator.

The management is currently trying to define the best operational model for the incubator and the most suitable common practices that could be used to help AAU students and alumni to create startups, and therefore should add value to the regional economy.

The author saw an opportunity of implementing the previous work, also using his personal experience and knowledge gained during a five months period as an intern for the host organisation, Sea, during the second semester of 2017.

Through this experience it was possible to gain several insights about the dynamics, the organisational culture, the services offered and the general mindset of those employed at the incubator and at Sea.

Through informal talks with some members of the start-ups hosted at the Danish incubator (still during the internship period), it was possible to sense a possible gap between what the incubator's management team is thinking and offering, and what the start-ups perceive as useful and decide to get, in terms of services utilised.

1.3. Scope of the Research

In order to investigate this possible gap, the author decided to perform a further research into what is the current situation regarding the challenges of the incubatees and which services are being offered by Aalborg Inkubator to facilitate those challenges.

The intent is to reach a possible conclusion about which services are perceived as most useful from the considered start-ups, and which results can be seen as affecting the incubation process of the firms.

Furthermore, the author is intended to clearly define possible improvements that could be put into place regarding the services offered by AAU Inkubator, through a comprehensive literature review about best practices, the feedbacks and suggestions from the start-ups interviewed, and a case comparison with a fairly experienced Swedish incubator, Uppsala Innovation Centre (UIC).

1.4. Structure of the project

The structure of the presented paper can be described as following:

- 1. *Chapter 1 Introduction*: the overall context of the research is here presented, together with the main facts regarding the actual situation of AAU Inkubator, its organisational structure and offered services; the motivation behind the paper is also hereby presented.
- 2. Chapter 2 Previous knowledge and experience: in this chapter the author describes the findings of his previous research done into the topic, as well as the relevant knowledge originating from the internship period at the AAU Inkubator. From this point of departure, the writer will give a clear idea about the intentions of this paper and its contribution to the previous research, as well as which data he will need and access again for the purposes of this particular paper.

- 3. *Chapter 3 Problem formulation and research question*: the author presents the problem identified behind the reasoning of choosing these particular research questions, which are also hereby offered to the reader.
- 4. *Chapter 4 Methodology*: the research methods are hereby defined and presented, together with the data gathering techniques utilised.
- 5. *Chapter 5 Literature review*: the literature considered for this paper is here presented, as well as the underlying theoretical frameworks of the research.
- 6. Chapter 6 Data gathering and Analysis: this chapter comprises the gathering and analysis of the data from the qualitative interviews with the start-up managers, finally comparing them. The findings originating from the interview with the AAU Inkubator management are also hereby presented. An answer to the first research question, based on the previous findings, is therefore available.
- 7. Chapter 7 Discussion and Solutions: In this chapter, the second research question finds its answer, through recommendations originating from the interviews with the incubatees and the Uppsala Innovation Centre, whose practices are hereby presented and related to the case of AAU Inkubator.
- 8. *Chapter 8 Conclusion*: the author concludes the paper with personal thoughts and hopes for AAU Inkubator, as well as indications for future research.

2. Previous knowledge and experience

Due to a previous semester project done in the second semester of 2016, together with other fellow students, the author gained a particular insight into the situation of AAU Inkubator at that particular time. Alongside the overall services provided, it was possible to explore the mindset of the incubator's manager back then, together with the overall view of the incubation process at that point in time. Many aspects have changed since then, including a new top management of the AAU Inkubator and the host organisation, Sea.

At three different points in time, including the current one (first semester of 2018), the writer was able to access the situation of AAU Inkubator and its related services. The first two periods will be described in detail in the following paragraphs.

The aim of this chapter is to describe the findings of the previous research, together with listing the main facts about the internal situation of the incubator which were apprehended during the internship period in the last semester of 2017. Some of the aspects here presented will also be used again, during the developing of this research.

2.1. Previous knowledge

The author would like to present the reader with the main findings of his first research project about the AAU Inkubator, in order to describe what the situation of the organisation was at the time of that particular research (last semester of 2016). More in detail, the main findings and final recommendations for the incubator will also be listed and explained.

2.1.1. The Best Practices from the literature

One of the aims of that particular research project was to understand, starting from the business incubator best practices found in the literature, how could the organisation improve its overall efficiency and support to the incubatees.

In that Semester Project (Ciucci, et al., 2017), seven main best practices for business incubators were first identified in the literature (Pals, 2006), and will be here shortly reported:

1. Clear mission statement: the mission of the business incubator should be known and clear to all employees of the incubator, as well as the incubatees. The purpose, the long-term and middle-term goals should be publicly declared, in order to increase the rate of start-ups graduation (Mubarak Al Mubaraki & Busler, 2014, p. 50).

Furthermore, a clear mission will also simplify the admission process of possible incubatees if they fit entirely or partially the overall purpose of the incubator itself. For example, if a business incubator will have as mission "to spread and increase innovativeness in the region", then one of the main selection criteria for admission will be the level of innovation presented by the applicant.

Profit is usually not a goal of top-performing incubators around the world, which would rather adopt the not-for-profit model.

- **2. Ties with Universities**: having a strong connection with a local university can help the business incubator in several ways, from credibility boost to student helps, from infrastructure, laboratories and equipment to public sector support.
- 3. Tenant entry selection and exit: proper entry selection criteria should be put in place in order to ensure the best survival rates of the start-ups during and after the incubation period, as confirmed by a wide literature. A selection committee should be formed and should define these criteria, which will consequently be applied to all future applicants by the committee itself. Pals also indicates that those who would like to join the incubator, should first expose (written and oral), trying to convince the selection committee of their worth.

Furthermore, adequate exit criteria to determine the right moment and conditions that will put an end to the incubation process of a start-up is also extremely important. Average incubation period, still according to Pals (2006), should be around 2.5 to 3 years.

- **4. Networking**: another key aspect for business incubators should be the ability to connect the incubatees to a wide network of contacts, who could become partners, potential customers, financiers or just some expert counsellors. Still according to Pals, keeping a database of contacts based on their skills or potential (for example, if they are donors) might help in the matching up with the entrepreneurs further on.
 - Nevertheless, networks might also prove useful in the process of attracting new entrepreneurs (who might become potential incubatees). In particular, networking during seminars and workshops can help attract and retain entrepreneurs, but this could also support the acceptance of the incubator in the community.
- 5. Monitoring and keeping records: in order to monitor, review and receive feedbacks about the performance of the incubator and its start-ups, annual reviews are a widely adopted tool in this sense. There should be several subjects of the reviews: for example, activities and events carried on by the incubator (and, if possible, feedbacks from the attendants to each activity or event); the stage and performance of the incubatees, even after the incubation period, is also something that top-performing incubators have widely adopted.

This data collection and storage of information might prove quite useful, even when securing funds in the future (many donors consider more impressive or effective to be shown some actual data and statistics about the incubator and its successful stories so far). Also, evaluating constantly the incubator's services might bring to improve the ones perceived less useful, or enhance (in quality and frequency, perhaps) the ones well appreciated by the attendants.

Among the various aspects that should be considered for the data collection, revenue and employment rates of incubated and graduated start-ups, as well as companies survival rates after the graduation, should be kept into consideration.

6. Strong Manager: according to various sources in the literature and by empirical cases, Pals (2006) found out that a "strong" manager is also a characteristic common to many topperforming incubators. Even though the definition of such concept might be hard or too subjective to be given, the author decided to include some skills and personal traits which should be proper of a "strong" incubator manager, also according to his personal experience in the incubation world: business experience, high motivation, visionary, willingness to work hard, being structured and organised, as well as being able to network, monitor and evaluate the performance of both incubator and incubatees.

Several studies and researches (Allen & mcCluskey, 1991) have showed that the incubator manager might influence other success factors, as pointed out also by Theodorakopoulos et al. (2014).

7. Focus on services as opposed to infrastructure: business incubators have usually been working on diversifying and improving their offer of services, based on the needs of their start-ups (Clarysse & Yusubova, 2014, p. 4).

Still according to Theodorakopoulos (2014, pp. 608-609) a shift can be seen in the existing literature: the focus has moved from providing physical space and facilities to ensuring business development support and less tangible features.

While entrepreneurs still enjoy the features of low-cost office space, however this can be also offered by many other facilities similar to the business incubator or even other of the same kind. On the other hand, business support and networking are generally quite difficult to replicate, ensuring the uniqueness of the incubator (Bøllingtoft and Ulhøj, 2005, p. 280 in Theodorakopoulos 2014, p.609).

This newly acquired importance of services over infrastructure can also be explained thanks to the need of unexperienced entrepreneurs of advices and tools over just physical space for succeeding.

2.1.2. The practices of AAU Inkubator by the end of 2016

As a result of the semester project paper, the author and his colleagues were able to assess the situation of AAU Inkubator at that point in time, in relation to the best practices identified in the literature and described in the previous paragraph.

Through a comprehensive qualitative interview with the manager of the incubator at the end of 2016, who could be found in the person of Morten Dahlgaard (who is, at the moment, responsible for the overall activities of Sea and other sections inside AAU Innovation), it was observed that AAU Inkubator was still lacking experience and knowledge regarding some of the seven best practices suggested by the literature.

More in detail, the position of the Danish incubator and the related recommendations made by the author and his colleagues were the following:

1. Clear mission statement: two main missions statements could be found about the AAU Inkubator: to build value for the economy of the area, as well as supporting and promoting the concept of entrepreneurship among students of AAU.

The manager also expressed the will of diversifying the "type" of incubator, from a solely technological one to a business incubator which takes interest in all fields connected with different faculties of the university (for example social sciences, humanities, economics).

<u>Recommendations</u>: it was observed how the overall mission for the AAU Inkubator was only partial and could still be improved and narrowed down. Most importantly, it was identified the need of spreading awareness of this mission among all the members of the organisation, so that they could contribute to it fully.

2. Ties with Universities: AAU Inkubator was part of networks with all Danish universities, some in Europe and even a few in America. Being managed directly by AAU, it was also benefitting from it by having the opportunity of hiring student helps (both for incubatees or the incubator itself).

However, one issue was noticed in relation to the lack of awareness within the AAU about the existence and the set of activities offered by the incubator. A plan of changing this perception and awareness among students and employees of AAU was supposed to take place at the beginning of 2017, as confirmed by the manager.

A big event called Wofie was also organised once a year with the cooperation of AAU, having the purpose of attracting and recruiting possible entrepreneurs.

<u>Recommendations</u>: in order to improve awareness of the incubator inside the university environment, a stronger presence on social media was suggested. Furthermore, the possibility of expanding the events in partnership with other departments of the same university was also recommended, so that not only students, but also teachers, supervisors and secretaries would think of the incubator as an option to suggest to those who might need this kind of help.

3. Tenant entry selection and exit: at that particular time, AAU Inkubator focused its entry criteria on innovativeness of the idea and commitment of the applicants. A proper selection committee and a list of criteria was not used.

Regarding the exit criteria, the incubator manager stated that there was not a time constraint in this sense. However, once start-ups began selling their product/service and therefore started having an income, they were expected to leave the incubator as soon as possible.

If the incubatees did not show tangible signs of development after a prolonged period of time, the relationship with the incubator was also brought to an end due to the low level of commitment.

<u>Recommendations</u>: a 4-phases selection process was presented and recommended. This can be shortly described as (1) the establishment of a selection committee including experts with different backgrounds and experience, followed by (2) approval of the selection criteria by the committee.

Then, an (3) assessment of the start-ups (based on written and oral interview with committee) and finally (4) decision making process, including the evaluation of the applicants and if they can join the incubator.

On the other hand, exit criteria were suggested to be based both on a time constraint (maximum 2-3 years of incubation period) and on an adequate commitment level.

4. Networking: this factor was perceived by the manager as extremely important for the success of the services of the incubator. Particularly developed were the ties with some venture cups and with researchers. Some issues regarding workshops (considered also relevant to networking activities) held in English that would scare away a part of the Danish students were also pointed out by the manager. A database including a list of contacts that business developers could access every time it was needed was also absent, and not even on the way of being developed.

<u>Recommendations</u>: at the time it was suggested that professional and experienced staff should take care of the networking activities, possibly organising regular formal and informal events to enhance the chances of bringing entrepreneurs to meet and to get to know about the incubator.

5. Monitoring and keeping record: no database, no performance reviews, no feedback system nor any other kind of statistics were recorded nor developed at that particular point. The lack of a regular monitoring process was identified as a consistent issue for the incubator.

<u>Recommendations</u>: constant and regular data collection and storage should be set in place, concerning mainly revenues and employment rate of both incubated and graduated start-ups, feedback about services and programs carried on by the incubator, as well as firm graduation rates and intellectual properties created.

6. Strong manager: Morten Dahlgaard, manager of the incubator at the time of the project, compensated the lack of experience in other incubator environments with a legal knowledge and strong focus on raising funds for the incubator. As a matter of fact, he succeeded fully in the latter, given the investments that were accessible to the incubator starting from 2017.

However, it is opinion of the writer that the lack of continuity given by the high turnover rate regarding the top management of the incubator had contributed to slow down the development of regular and well-established practices, as well as adding confusion to the overall mission and long-term objective for the organisation.

<u>Recommendations</u>: Morten Dahlgaard was recognised as having positive qualities as business and legal experience, however it was clear some things could have improved.

Business incubator area management experience would most likely be a plus for the future manager of AAU Inkubator. High motivation, vision and will to monitor and keep records would also be desirable characteristics of such figure.

Proper training programs for incubation management were also suggested at the time for the top-management of the incubator.

7. Focus on services: AAU Inkubator was able to provide for physical housing, but also some other kinds of services as well. For example, particular focus was put on finding financing opportunities for the incubatees and setting up a proper business developer program for helping the start-ups with long-term and everyday issues.

<u>Recommendations</u>: it was highly suggested to develop and assemble an incubator advisory board, consisting of 8 to 20 individuals with different backgrounds and experience.

Another recommendation could be identified in the creation of an entrepreneurial training program. Developing mentor programs was also suggested, as well as starting to include preand post-incubation services.

2.1.3. The services offered at the end of 2016

In order to better sum up the main services offered by AAU Inkubator in 2016, the author decided to represent them in the following list:

- a. Access to free office space;
- b. Printing and copying services;
- c. Business developer support (just two at the time);
- d. Legal help through a third party;
- e. Access to limited network of investors;

- f. Possibility to attend series of workshops for enhancing entrepreneurial knowledge (Entrepreneurial Talent Workshops);
- g. Some social events organised with different purposes (Town Hall).
- h. Networking through the business developers.
- i. Initial capital for prototyping.

This list will also serve for the purpose of comparing the services offered 18 months later and assess which of the recommendations previously expressed were actually followed in building the incubator set of services.

2.1.4. The challenges of AAU Inkubator back in 2016

Concluding the research briefly presented in the previous chapter, the authors were able to identify a set of main challenges that the AAU Inkubator was facing at the time:

- Recruiting and attracting entrepreneurs;
- Definition and awareness of AAU Inkubator mission;
- Attracting new investors;
- Implementing the selection and exit criteria;
- Starting a project for monitoring and keeping records.

These challenges could have been faced and possibly overcome by following the set of recommendations described in the previous paragraph and represented in Fig. 2:

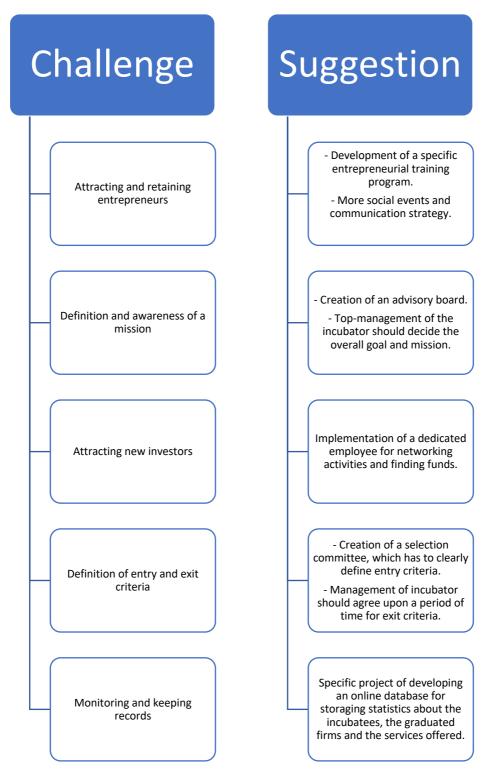


Figure 2: Challenges and recommendations for AAU Inkubator in 2016

However, it is possible to notice (also thanks to the interview with the management of the incubator), that most of the challenges are still active at this moment and faced by AAU Inkubator.

Also due to the sudden and frequent changes at the top of the management of the incubator, as well as a slow administrative machine that has to go through the bureaucracy of the university and Sea, most of the challenges have not been completely solved at this point.

Therefore, the answer to the second research question will also relate to this particular set of challenges. The possible solutions provided by this paper can also be combined with the recommendations presented from the previous research, back in the beginning of 2017.

2.2. Previous experience

During the second semester of 2017, the author has been working as an intern for the organisation known as Sea which, among the other tasks, directly manages the AAU Inkubator.

One of the many tasks of the writer, alongside being a consultant together with business developers when helping the incubatees, was to try and define the overall strategy and blueprint for the incubator itself.

During this period, it was possible to observe the everyday practices which occur in the incubator environment, as well as the overall culture of the organisation, the expectations of the management and the changes since the previous year, following the receival of new and consistent funds.

More in detail, it was possible to access private documents and experience the practices about the two main programs currently undertaken at AAU Inkubator and described in the following paragraph.

2.2.1. Current programs

At the moment two different programs can be found for what is concerning the offer of AAU Inkubator to the applicants. In order to access the set of services offered by the incubator, a potential entrepreneur would need to apply to fit the requirements and apply to one of these two programs. As confirmed by the incubator manager, the different programs are accessible to individuals or teams according to their work/student situation at the moment. Unemployed alumni have the possibility to apply to Innovativ Vækst (roughly translated from Danish as "innovative growth"), while current student can apply to the AAU Startup program.

2.2.1.1. The AAU Startup Program

The first one, named Startup program, is mainly aimed at recruiting students currently attending Aalborg University (including the Esbjerg and the Copenhagen Campus). Usually applicants are students currently working on a semester project, that could be interesting to implement forward and could possibly lead to the creation of a start-up. Application to this program is possible at any moment during the academical year. A total of 65 teams is currently enrolled at this program.

The program is divided into three different phases, named Discovery, Start and Growth. Unfortunately, the last phase is currently undertaking a review of the university administration, since it appeared that some legal issues concerning giving an actual salary to incubatees might not be suitable for policy of AAU.

In the discovery phase, an initial capital of 10.000 Danish Krones for developing prototypes can be allowed if the applicants might be in need for it. At the moment of applying for the program, a meeting with business developers employed at the incubator is set. During the initial meeting, the applicants will have the opportunity to expose their idea, to present the members of the team and to describe the development stage at which they are currently at.

If the business developers will allow the applicants to join the Discovery phase, they will have about three months for preparing a prototype of their product (or further develop their service) and improve their pitching skills, in order to be ready for the evaluation of the external business panel. This is usually summoned from a list of contacts of experienced business individuals with different fields of expertise, all external to the incubator's staff. During the discovery phase, access to a first-come first-served area (called Fly-in/Fly-out Room) inside the incubator is granted.

The role of the external business panel is to assess if the incubatees are ready to enter the second phase, called Start. If the evaluation has a successful outcome, the incubatees can have access to a regular spot inside one of the many rooms at the incubator. This second phase is supposed to last about twelve months. During this period, the incubatees have also the opportunity of joining the Entrepreneurial Talent Workshops, in which they can learn about (among the others) business model canvas, minimum viable products, business planning and further pitching of investors and possible partners. No financial income is granted directly from the incubator.

The exit criteria from this particular program involves the commercialization of the start-up, meaning that as soon as the company has a revenue and starts selling its product (or service), it will be required to leave the incubation process.

2.2.1.2. Innovativ Vækst

The second program at AAU Inkubator aims at reducing unemployment in the region, through offering an entrepreneurial option to unemployed alumni (prior students of AAU, who graduated within a three-year period). This program is furtherly divided into three different phases, carrying Danish names: Afklaring ("Clarification"), Udvikling ("Development") and finally Etablering ("Establishment").

For simplicity, the Danish names will be here translated to English when referring to them further on. A total of 25 teams is currently enrolled at the Innovativ Vækst program.

The first phase, Clarification, has an expected duration of six weeks. During that period, the incubatees will have access to the counselling of business developers, as well as up to 20.000 Dkk for prototyping, the possibility to join workshops for enhancing their entrepreneurial skills and further developing (or even finding) their idea for a possible start-up. Matching different individuals attending the program based on their separate sets of skills is also possible at this point.

In order to access the second phase, the incubatees will have to undertake an evaluation with an external business panel (summoned from the same list of contacts previously mentioned for the Startup program). The Development phase has an expected duration of ten weeks. Thanks to the further help of dedicated business developers, the incubatees should be able to develop their idea to a more concrete plan, in order to be able to face the external business panel again before having the possibility to join the third and last phase.

The Establishment phase will allow the incubatees to join a dedicated mentor program. This phase should also last around ten weeks and will be concluded with a final evaluation of the external business panel.

2.3. Services back in 2016 and services in 2018

Thanks to the interview (whose reviewed notes are available in Appendix A) that was conducted both with the manager of AAU Inkubator at this moment, Heidi Nørgaard Jensen, and one of the business developers (Lasse Jensen), it was possible to further define the sets of services currently offered by AAU Inkubator:

- 1. Access to free office space;
- 2. Printing services;
- 3. Individually tailored business developer support (marketing and business modelling counselling; open office hours);
- 4. Evaluation, networking and feedback from an external business panel;
- 5. Mentor program;
- 6. Legal help through a third party;
- 7. Access to network of investors and pitching counselling;
- 8. Possibility to attend series of workshops for enhancing entrepreneurial knowledge (Entrepreneurial Talent Workshops);
- 9. Several social events organised with different purposes (Town Hall);
- 10. Matching function when creating a team;
- 11. Networking through the business developers;
- 12. Initial capital for prototyping.

Taking a look at the services offered now, it is possible to notice how some features have been added since the end of 2016 and described in chapter 2.1.3.

Starting with the number of business developers available to the incubatees, that increased from just two back in 2016 to four full-time and two part-time as in 2018. This new feature has also increased the networking activities through the business developers since more contacts in the industry world were suddenly available.

Introducing an external business panel, with the related evaluating and networking features, has also been added since 2016.

While the series of workshops has maintained the same name, it was possible to observe that more themes were added. Also, the number of social events has increased, given the availability of more members of the incubator who could plan and follow up the organisation.

A matching function for entrepreneurs who might lack co-founders or team members was also added. Following these considerations, due to the experience of the writer gained during the internship period and also the insights obtained during the interview with the management, it was possible to notice that the overall incubation process has acquired more structure and solidity, with the sets of services offered starting to be well rooted in the management minds and the organisation's culture.

3. Problem formulation and research question

The author, given the past researches and the internship period spent at the considered organisation, decided to focus on the relationship between the incubator of Aalborg University and the entrepreneurial challenges faced by its incubatees, with the particular aim of understanding the impact of the provided services on the challenges encountered by start-ups.

On top of the previous aim, the research is intended to investigate how the overall incubation process and services of AAU Inkubator might be improved in the future, thanks to a comparison with a top-performing UBI named as Uppsala Innovation Centre.

3.1. Motivation

Incubators have become reasonably popular and common solution to entrepreneurial issues on a macro-economic scale in the last decades.

This phenomenon can be considered closely related to the topics of innovation and entrepreneurship, since business incubators usually deal with innovative ideas behind the creation of new start-ups.

Among the many reasons that brought the writer to research this particular topic, it has to be considered that the author has already researched the case of AAU Inkubator, having also been employed as an intern for the organisation itself in the second half of 2017, for a period of six months.

Due to the extensive research and inside knowledge acquired during the internship period, the author decided to further investigate the dynamics between the AAU Inkubator's services and the entrepreneurial challenges encountered by its incubatees.

Furthermore, given also the will of AAU Inkubator management of knowing how they can improve their overall incubation process, the author decided to find some possible suggestions for the implementation of this process.

3.2. Problem formulation and research question

Talking with the management of the incubator, as well as some of the incubatees, but also with the purpose of developing the previous research done about AAU Inkubator, the author identified lack of research in this area at this particular point in time.

By researching this, the writer is intended to provide a general overview about how incubation services have been impacting the challenges of incubatees at AAU Inkubator, as well as which services have proven useful in this sense.

Taking a look at the future of AAU Inkubator, the author identified a possible knowledge gap between what the Danish incubator is aware of and what practices is currently pursuing (and will also in the next future), and what are the best practices of other successful incubators in Scandinavia.

The author believes that at this point in time, while setting up the general guidelines for services and activities at AAU Inkubator, it might be crucial to have some interesting insights coming from further literature and empirical research, also in light of the future expansion planned for the incubator before 2021. Considering this future development of the incubator, which will be most likely moved to a new facility and further expanded, it is believed that this area may need further research.

Having known that the incubator's management is also interested in this topic, the author defined the first research question as following:

• How is the AAU Inkubator currently facilitating entrepreneurial challenges for start-ups during the incubation period through its set of services and activities?

This question will be answered in Chapter 5, thanks to the qualitative interviews with some of the start-ups which have fruited of the incubator's services.

Based also on the findings of the first research question, the author is intended to answer the following:

• How could the incubation process be furtherly improved in the future?

On the other hand, the second research question will be answered (among the other things) through a comparison, which will consider another relevant and experienced UBI (Uppsala Innovation Centre) and its related best practices, as well as the feedbacks from the start-ups of AAU Inkubator who were interviewed.

3.3. Delimitations

This paragraph is intended to describe the choices made by the author, representing the boundaries set for the presented research study.

Delimitations for this particular paper can be listed as following:

- The research considers the services provided by AAU Inkubator mainly in the period between 2017 and the first half of 2018, due to the fast pace which has characterised the mutability of the services and activities carried on and offered by the Danish incubator in recent times.
- The study mainly relies on the knowledge of the author about AAU Inkubator's practices and
 the insights of the start-up's managers who have been interviewed, together with the material
 available online about the other case here analysed.
- The point of view of the Inkubator's manager and one of the business developers are also taken into consideration, and it is assumed they reflect the view of most of the organisation's employees.
- The data about Uppsala Innovation Centre is mainly based on publicly accessible material since it was not possible to access other sources at the time of this research.

4. Methodology

This chapter is intended to discuss the underlying theories and the methodological choices which were taken by the author during the overall research process.

At first, the research philosophy which lies behind the assumptions of the paper will be described, followed by the chosen research design, the research methods, the retrospective case study methodology, the qualitative data analysis methods and the methodological delimitations.

This chapter is modelled following mainly the "four levels of discussion of methodology" proposed by Kuada (2012, pp. 58-60):

- Level 1 philosophical viewpoints (concerning ontological choices);
- Level 2 epistemological choices (how knowledge should be intended);
- Level 3 methodological decisions (concerning the overall methodological approach and retrospective case study method);
- Level 4 choice of methods and techniques (description of data collection methods and their reason).

The first two levels mentioned above will be discussed in the following paragraphs.

4.1. Research philosophy

To the author of an academic paper, the underlying philosophy of a research also contains the explanation of the fundamental assumptions taken during the research process. Therefore, it is important to state the philosophy and explain the reasoning and consequences of such paradigm (Saunders, et al., 2015).

The concept of paradigm, just mentioned before, is strictly connected to the way the researcher sees and understands reality. According to Kuhn (1970) in Kuada (2012, p. 71), each field of research has a set of common understandings in relation to the nature of the phenomenon researched: this leads to the importance of agreeing about which kinds of questions is relevant to ask, how the approach should be structured in order to better find an answer to the research questions, and how these answers should be understood.

The notions of ontology and epistemology are relevant to explain, in order to better define the idea of research philosophy.

Ontology, more in detail, refers to the nature of reality and investigates "how things really are" and "how things really work" (Denzin & Lincoln, 1998, p. 201). Mainly two philosophies identified in the literature are objectivism and subjectivism. The first one has an assumption that social entities and organisations are independent of social actors, the second one implies that social phenomena continuously change in relation to the activities and choices of those actors (Saunders, et al., 2015).

Furthermore, it is clear as stated by Singleton and Straits (1999) that different research problems need equally different research approaches. Robson (1993) argued that positivist methods (connected with objectivism) are mainly used when generalising and replicating different settings, whereas the qualitative (subjectivism) approach implies a deeper understanding of complex real-life scenarios.

These two different dimensions can be linked by the researchers to different approaches: exclusive and complementary. Whereas the first implies that the researcher would choose only one philosophy, the second one allows to combine subjectivism and objectivism.

For the purpose of the paper and given nature of the research, a complementary approach has been chosen by the author.

As suggested by Kuada (2012), the preferred approach in this case could lead to pragmatism. This underlying concept would let the researcher determine a different paradigm, given each specific case analysed: pragmatists neither accept nor refuse the idea that subjectivism and objectivism could be combined or used separately.

As pointed out by Powell (2001, p. 884), pragmatists are not interested in finding the absolute truth, which is continuously changing, but to "facilitate human problem-solving". Ontology in relation to pragmatism would therefore implies a view of nature external and multiple (Saunders, et al., 2015).

With regards of the research here presented, the author has been thinking and investigating mainly from a subjective (qualitative) point of view, consequently implying the choice of mostly relying on qualitative research methods.

Concerning issues of epistemology, which is mostly interested about what can be considered acceptable knowledge in a certain field, this can also be intended as a concept attempting to describe "the nature of knowledge and the means of knowing (Kuada, 2012). Usually the question "How do we know what we know?" is tried to be answered by epistemological choices.

Therefore, given the chosen philosophy, the related epistemology would imply that acceptable knowledge can be found by using either or both observable phenomena and subjective meanings, according to the research questions.

Being the focus of the researcher on practical applied research, different perspectives are here integrated in order to help the comprehension of the data gathered and analysed, together with the related conclusions.

4.2. Research approach

As pointed out by Saunders et al. (2015), defining the underlying approach to the researchers reasoning could help the understanding and comprehension of the conclusions.

Three main approaches – deductive, inductive and abductive – were identified in the literature by the author. Given that deduction moves from theory to data, induction from data to theory and abduction moves in both directions - combining the other two approaches (Suddaby, 2006), the author has chosen induction for the purpose of this paper.

More in detail, the author has been moving from data (the qualitative interviews and the data about UIC) to theory, trying to understand and describe the possible knowledge gap between what are the practices and services of AAU Inkubator and what the theory tells us about what the most effective practices and services are, as well as how this process could be improved in the future.

4.3. Case study methodology

As argued by Yin (2009), case study is one of the several strategies which can be chosen for investigating research questions starting with "why" or "how", fitting the conditions of this particular paper.

Furthermore, as pointed out by Eisenhardt and Graebner (2007), this particular strategy is relevant when the aim is to develop a deeper understanding of the context of the research and the processes that take place there, as well as when the focus is on a contemporary phenomenon within a real-life context.

Given the will of the author to gain a deeper insight in the everyday practices and the services offered by the AAU Inkubator, as well as understanding the knowledge gap between what the theory suggests and what the start-ups experience in view of the thoughts of the management of the incubator about what it is relevant for facilitating the incubation process of its incubatees, a single case study is chosen to represent this particular research.

More in detail, following the directions of Yin (2009), who describes two different types of case studies - holistic or embedded, the first one was chosen by the author. The holistic single case study has its main focus on one unit of analysis, which in this particular case can be found in the concept of UBI (in the manner of its practices and services, with a particular relation to the case of AAU Inkubator).

4.3.1. Nature of the case study

Yin (2003) also identified three different types of case studies:

- Exploratory cases: usually concerning new or undiscovered topics. Especially useful when limited previous research has been developed in relation to the chosen phenomenon. It also usually concerns questions starting with "what", rather than "why" or "how".
- Descriptive cases: these are mostly driven by theory and involve developing a descriptive
 theory before starting the research. The theory has usually the purpose of pointing the data
 collection to the right direction. Usually the effects of a certain cause can here be investigated.
- *Explanatory cases*: this type of case studies focuses on establishing causal relationship between variables. It usually aims at relating how things happened in relation to causal studies. Research questions starting with "how" and "why" usually are characteristics of this kind of case study. Pattern matching is also utilised in the data analysis section.

Given the different nature of the two research questions adopted for this particular research, it is possible to argue that the first research question "How is the AAU Inkubator currently facilitating entrepreneurial challenges for start-ups during the incubation period?" can be mainly related to a descriptive case study. This can be explained thanks to the intent of this part of the research of uncovering the effects of certain activities and services provided by the AAU Inkubator.

On the other hand, the second research question "How could this process be furtherly improved in the future?" is, in the opinion of the writer, mainly connected with an explanatory case study, given the constant usage of pattern-matching with theory, the UIC case and the AAU Inkubator situation.

4.3.2. Retrospective case study

Retrospective research is usually adopted when considering issues of problem solving, conflict management and decision making (Taran, 2011). A point of view which should be external as well as objective should be achieved by the author when using this particular case study strategy.

Having interviews with multiple sources, not relying therefore only on the incubator's management point of view about the effectiveness of the services provided by the AAU Inkubator so far, should help overcoming the typical issue of retrospective case study (mainly related to recognising cause and effect from past events).

Also, evaluating the situation of the Danish incubator at different points in time and having accessed the environment of the incubator during the internship period, granted the author the opportunity to assess the development of its services and practices over time, facilitating the answering of the last research question.

4.3.3. Validity and reliability

Four important criteria must be respected when using case study strategy (Yin, 2009), ensuring the quality and the validity of the research:

• Construct validity – reached through the adoption of multiple sources of evidence (as different authors for articles about UBIs services and practices, several interviews, online documents) and a proper chain of evidence (data collected was carefully selected and reported trying not to distort the inner meaning);

- Internal validity the credibility of inferences was granted through the evaluation of all other possibilities according to the situation;
- External validity reached thanks to the usage of theory for this single case study;
- Reliability regarding data collection, all interviews were recorded, and notes were taken.

4.4. Research methods

The overall qualitative method research design will be hereby presented and described. More accurately, a multimethod research design was chosen, according to the description provided by Saunders et al. (2015).

More than one data collection techniques were utilised, with various analysis procedures. A semistructured qualitative method interview was chosen for the start-ups interviews, whereas an unstructured interview was carried on with the management of AAU Inkubator.

Documents were also accessed and used in order to gather data about AAU Inkubator, the Uppsala Innovation Centre case and the literature developed so far and included in chapter 5.

4.4.1. Data gathering techniques used

The choice of using semi-structured and unstructured interviews is consistent with what stated by Kuada (2012), who recommends these two types of interviews when the researcher is dealing with a study that implies an exploratory element.

They both allow the author to investigate themes and aspects that he or she may not be previously aware of and though were not immediately available from theories previously developed.

As stated by Kuada (2012), semi-structured interviews usually imply a list of questions (or themes) that he or she intends to cover. However, in contrast with structured interviews, a certain degree of variation is granted, in connection with the flow of the conversation. In this way, if any additional question pops up during the interview, it is allowed to add it "last minute". Even changing the order in which the questions are asked is possible if that facilitates the purpose of answering the research questions.

An unstructured interview was, on the other hand, the choice of the author for what is concerning the AAU Inkubator management interview. This kind of interviews is more informal than the previous one and is used to gain a deeper insight into general areas of interest.

No list of questions was prepared beforehand, leaving the respondents a high degree of variation during the conversation in order to represent a deeper and clearer picture of how the management of AAU Inkubator sees the overall incubation process at the moment and which services were mostly relevant from their point of view.

The interviews were conducted mostly face-to-face, but also in some particular cases (as in the interview with the incubatee known as ReStart) mediated through a telephone call.

All the interviews were recorded and the related mp3 files including those conversations are available upon request. All the interviewers were aware of the recording and gave consensus for the usage of the data obtained for the purpose of this research. Notes about the main aspects of the answers given by the respondents were also taken by the researcher, in order to simplify and narrow the consequent work of analysing the recordings.

The notes were then furtherly reviewed, while listening to the recordings of the interviews. The notes resulting from this process are available in Appendix A (interview with management of AAU Inkubator), appendix B (e-Shoptmizer), appendix C (Adore) and finally appendix D (ReStart).

Regarding the documents consulted by the author, it has to be noticed that mainly public documents (as company reports for UIC) and other written documents (books, academical papers, articles in scientific journals and reports) were accessed in this sense.

4.4.2. Data analysis choice

According to Yin (2009) data analysis can also be described as recombining and examining both quantitative and qualitative data to address the initial propositions of a study.

Three main analytical strategies can be used in order to analyse properly case study evidence: relying on theoretical propositions, thinking about rival explanations and developing a case description.

For the purpose of this particular research paper, developing a case description was the choice, given the roots of the research being in both theoretical frameworks, the opinion of the start-ups of AAU Inkubator and a comparison with UIC.

In regard to the interviews, a partial transcription of the notes, reviewed while listening to the recordings, was chosen in order to better categorise and analyse the findings of what it was said during all the four interviews.

4.4.3. Cross-case analysis

The distinction made by Eisenhardt (1989) among three different tactics for cross-case comparison is described as following:

- 1. Selection of categories and dimensions, followed by within-group similarities paired with differences.
- 2. Selection of couples of cases and listing the similarities and differences between each couple.
- 3. Division of the data according to data source.

The first tactic seems to be the more appropriate for this kind of research, since the different services and practices followed by AAU Inkubator will be related to the experiences and thought of the incubatees.

4.5. Methodological delimitations

The author can hereby list the methodological delimitations which occurred during the research period:

- 1. Impossibility of interviewing the managers of the other UBI considered for the comparison of best practices (UIC);
- 2. Impossibility of interviewing more of the founders (or members) of the incubated start-ups currently at AAU Inkubator; as well as impossibility of interviewing members of some start-ups attending the Innovativ Vækst program;
- 3. Qualitative and recorded phone interviews were conducted when meeting face to face was not possible.
- 4. The interviews were not entirely transcribed, however the notes which were taken during the interviews were then reviewed while listening to the respective recordings and are available as Appendix A, B, C and D.

5 Literature review

The aim of the following chapter is to present the existing literature which has been reviewed for the purpose of this particular research paper. The literature here presented is also to be considered as a guideline for further data collection and analysis.

Firstly, since entrepreneurial challenges are part of the first research question, they will be here presented and described in detail according to the selected literature developed so far. These challenges identified in the theory section will be also utilised for further describing the challenges of the start-ups at AAU Inkubator.

Secondly, the author will present the main theoretical definitions and classifications about different kinds of incubators, mainly focusing on UBIs, given the nature of the case here considered, in order to provide a clearer picture of the context of UBIs, in which AAU Inkubator and UIC are operating.

Thirdly, an incubator model from Bergek & Norman (2008) and its components will be described: that will serve as framework for the analysis and comparison between UIC and AAU Inkubator, available in chapter 7.

Lastly, typical incubator's services and practices will be listed, in order to allow a further categorisation of the services provided by AAU Inkubator.

5.1. Entrepreneurial challenges

The reader should be aware of the fact that the author will refer to entrepreneurial process as the initial period (around the first three years) of creation of a company.

During the creation of each start-up, entrepreneurs constantly encounter challenges of various types. Especially during the initial stage of business development, entrepreneurs have to face issues such as access to the suitable human, social and physical capital (Lougui, 2014). Issues related to start-up creation can differ accordingly to the connected industry, region or type of firm which is being started (Martin, et al., 2004, p. 19).

However, Lorrain and Laferté (2006, in Lougui et al., 2014, p.278) have stated that the main issues faced by entrepreneurs mainly concern three different aspects: (I) ability to acquire enough financial, informational, human and technological resources, (II) ability to execute proper and effective management of the resources and (III) ability to adapt to their new work environment as an entrepreneur, being able also to deal with financial issues, work overload and possible problems between their personal life and the one as entrepreneurs.

Following the work of Gorji & Rahimian (2011), entrepreneurs can encounter three different categories of barriers: the first being about individual entrepreneurship, the second can be identified as organisational barriers and finally the third as environmental barriers.

These three dimensions can be furtherly narrowed down to the following list:

- I. *Education and entrepreneurship*: training, experience and knowledge have been considered relevant for entrepreneurs, who are more likely to lead successful business, also due to this set of skills.
- II. Organisational barriers: these are usually concerning matters of financing (in the manner of attracting and retaining funds), physical resources (all tangible assets as equipment, machineries and facilities) and marketing (lack of customers).
- III. *Environmental barriers*: socio-cultural factors might influence the success or failure of a startup. Values, entrepreneurial culture and attitude towards innovation are just some of the various aspects that might influence a business. Furthermore, rules and regulations may influence the development of the entrepreneurial process.

A more detailed list of challenges of entrepreneurs can be found in the work (Ciucci, et al., 2017, p. 21) and represented as following:

Challenges	Authors
Education and Entrepreneurship	Gorji et al. (2011); Jodyanne (2009); Kanchana (2013); Laferté's (2006)
Financing	Gorji et al. (2011); European Entrepreneurship Cooperation (2004); Kanchana (2013); Laferté's (2006)
Physical resources	Gorji et al. (2011); Kanchana (2013); Laferté's (2006)
Marketing (lack of customers and competition)	Gorji et al. (2011); Robison et al. (2010); Kanchana (2013); Laferté's (2006)
Socio-cultural factors	Gorji et al. (2011); European Entrepreneurship Cooperation (2004)
Rules and regulations	Jodyanne (2009); Gorji et al. (2011); European Entrepreneurship Cooperation (2004); Laferté's (2006)

Table 1: Challenges of entrepreneurs according to literature review

5.2. UBIs

Today's companies are exposed to a fast-moving environment and a holistic knowledge of business practices is required to establish and manage a business successfully. Especially when setting up a company, there are various factors that a future entrepreneur has to take into consideration: as it was possible to notice in the previous chapter, many challenges are usually faced by individuals and teams who start a company.

This set of challenges and the risk of the unknown may appear as an overwhelming task and deter young entrepreneurs from turning the vision of their own company into reality. A study of the OECD (2003) shows that one out of three European enterprises fails before the second year of its existence.

Business incubators come then in the picture, aiming at making a significant contribution to overcome these obstacles. A definition of business incubator in general and the UBIs type of incubators seem to be needed for the multiple purposes of this paper.

5.2.1. Definition of Business Incubator

The need to assist new entrepreneurs in their vision, led to the creation of incubators. The first incubator was established in 1959 in Batavia, New York in the United States, where Charles Mancuso aimed at supporting start-ups by guiding them through their growth process. Since the 1970s, incubators have seen a remarkable expansion and are nowadays spread and common all over the world (Hackett & Dilts, 2004).

Still according to Hacket and Dilts (2004), the definition of a "business incubator" is "a shared office-space facility that seeks to provide its incubatees ('portfolio' or 'client' or 'tenant-companies') with a strategic, value-adding intervention system (i.e. business incubation) of monitoring and business assistance"

This intervention system pursues two key objectives, which can be identified as:

- to facilitate new venture development of the incubatees;
- to contain the risk of their potential failure (Hackett and Dilts 2004, p. 57).

In order to establish a company successfully and to manage it sustainably, business incubators usually provide a wide range of support services. Among them, it is possible to find business modelling, business planning, marketing consultancy, but also access to a range of more specialized professional services, as legal advices and funding (Grimaldi & Grandi, 2005, p. 111).

After Smilor (1987), the main benefits that incubatees can gain from the provided services are: development of credibility, shortening of the entrepreneurial learning curve, quicker solution of problems and access to entrepreneurial network. (Hackett and Dilts 2004, p. 64).

5.2.2. Classification of Incubators

Incubators can be classified by their sponsors/stakeholders or according to their objectives (Aernoudt, 2004, p. 128). Then again, the first classification sponsors/stakeholders can be divided in *public/institutional operators* and *private incubators*. In order to reduce the costs of doing business, public/institutional operators mainly use public resources to offer their services (e.g., provision of space, infrastructures, facilities, etc.).

An example of a public incubator is the University Business Incubator (UBI) which will be explained in more detail in chapter 5.2.3.

Private incubators represent another concept of incubation. The aim of private incubators can usually be found in supporting entrepreneurs by providing investments. The main sources of their revenue are the charge of service fees and the demand for a percentage of profit share from incubated companies. Business guidance and various services, such as validation of the entrepreneur's business models, provision of experienced operation staff, recruiting mechanisms, access to network, etc. are usually offered by private incubators.

A further sub-classification of private incubators is made by differentiating between Corporate Business Incubators (CPI), which are owned and set up by large companies, and Independent Business Incubators (IPI), which are owned by single individuals or groups of individuals. The first type aims at supporting the emergence of new independent business units whereas the latter aims at helping rising entrepreneurs (Grimaldi and Grandi 2005, p. 113).

5.2.3. University Business Incubators (UBIs)

University graduates are potential young entrepreneurs who, depending on their field of study, usually do not have the required knowledge as well as the resources to start and run a company.

In this case, University Business Incubators (UBIs), which are defined as Incubators connected to universities in various ways, come into play.

According to the paper "Best practices at university business incubators", published by the UBI Index (Bhatli, 2014), UBIs can be furtherly divided into three categories:

- Business incubator managed by a university;
- Business incubator affiliated to a university;
- Business incubator informally affiliated to a university.

Independent of the university connection, UBIs are pursuing the goal of supporting students or alumni in realising their business visions, creating value from them and developing the region.

By acting in general as non-profit organisations, UBIs provide services in the following two categories:

- Typical incubator services (shared office services, business assistance, access to capital, business network and rend breaks)
- University related services (faculty consultants, student employees, university image conveyance, library services, lab/workshops and equipment, mainframe computers, related R&D activity, education and training and other social activities (Grimaldi and Grandi 2005, p. 112).

The previous description will serve as common base for AAU Inkubator and Uppsala Innovation Centre, having verified that both incubators fit the overall definition of UBIs.

5.3. Incubator model

Business incubators usually follow certain procedures and the overall incubator model is formed of the following main components (Bergek & Norman, 2008):

- 1. *Selection*, which includes the evaluation of which applicants to accept and based on which criteria;
- 2. Localities, regarding the office space and administrative services;
- 3. *Business support*, referring to all the coaching and training activities that will accompany the incubatees;
- 4. *Mediation*, in relation to how the incubator handles the networking among incubatees and also the outside industry and business world;
- 5. *Graduation*, concerning the exit policy for start-ups finishing their incubation period.

However, still according to Bergek & Norman (2008, p. 10), selection, business support and mediation are the most important and distinctive categories through which it is possible to assess the situation of a certain business incubator.

Incubator Model		
Selection	Business Support	Mediation

Table 2: Components of incubator model (Revised by author based on Bergek & Norrman, 2008, p. 28)

Therefore, these three factors will be shortly analysed and presented here:

- 1. *Selection*: it is considered the process of evaluation and selection of the tenant firms (Smilor, 1987, p. 153), and can be based on several criteria. For example, a certain focus can be put on the idea, but it could also be on the person (or group) applying. The first approach (ideafocused) would require an incubator manager (or selection committee) with deep knowledge of the relevant field, market and product. On the other hand, the second approach (entrepreneur-focused), by focusing on the applicant, would require the manager or whoever is in charge of the selection process to possess skills in determining and judging personalities, sets of experiences, skills and driving forces of the applicants (Bergek & Norrman, 2008, p. 12).
- 2. Business support: it usually would include entrepreneurial training programs and business development advices, together with counselling related to legal issues, financing, accounting and advertising. Citing the work of Allen & McCluskey (1991), the incubator may be seen as having a dual interest: if from one side it is concerned about adding value to the regional economy, on the other side one of its goals is to develop services and programs to assist its incubatees.
- 3. *Mediation*: as pointed out by Peters et al. (2004), the role of the incubator as an intermediary between incubatees and related innovation systems is to be considered relevant when analysing business incubators. Bergek and Norrman (2008) talk about the idea of network mediation, stressing out the importance of the role of the incubator in building networks from which the incubatees can find (among the other things) experts, industry contacts and legal aids. The incubator, still according to the same authors (2008, p. 15), can be seen as providing a "bridge between the incubatee and its environment with the purpose of leveraging entrepreneurial talen and/or resources". As stated by Collinson & Gregson (2003, cited in Bergek & Norrman, 2008), mediation of networks can provide information, knowledge and expertise which could facilitate the survival of new start-ups. This process of mediation might also prove itself useful when considering the institutional demands coming from new laws or even existing traditions and norms, through the form of institutional mediation by the business incubator (Scott, 1995, cited in Bergek & Norrman, 2008).

The three factors will serve as theoretical framework for the discussion chapter, since AAU Inkubator and UIC cases will be also compared through the three components of the business model identified by Bergek & Norman (2008).

5.4. Main incubator services

The variety of services offered by AAU Inkubator will be grouped and categorised following the theoretical framework of Zedtwitz (2003), which will be hereby presented.

The sets of services usually offered by business incubators had been grouped into five different categories, also thanks to the work of Zedtwitz (2003):

- a. *Access to physical resources*: infrastructure is one of the basic functions common to almost all kinds of incubators, which are usually able to provide for office space, computer networks and security. Some may even provide with office equipment.
- b. *Office support*: services as reception, meeting rooms, car parking, conference rooms and printing equipment are often offered by business incubators (Bruneel, et al., 2012, p. 111). This time saving process would allow the incubatees to focus on other and more relevant tasks directly related to their core activities.
- c. *Access to financial resources*: overall the incubator allows an initial capital for the start-up in order to support their early stage. This initial capital might come from business angels, private funds or local organisations.
- d. *Business support*: as pointed out by Bruneel et al. (2012, p. 115), incubatees might benefit from different training programs or workshops, aimed at shortening the entrepreneurial curve based also on the previous experience of the staff of the incubator.
- e. *Access to networks*: during the life period of the incubator, but also by bringing in new staff with prior experience and contacts, there has been the possibility of creating a network which might prove itself useful (if properly exploited) for the incubatees.

As furtherly pointed out by Zedtwitz (2003), usually an incubator can be defined according to the number of the five categories of services previously listed. If an incubator will appear to provide all five categories, it can be defined as an "incubator in the strong sense of the term".

On the other hand, by providing only four out of the five categories, that incubator should be considered as an "incubator in the weak sense of the term".

If three or less categories can be found in the offer of an organisation, that should be considered as "business accelerator" or "technology transfer office", rather than a proper business incubator.

6. Data gathering and analysis

In this chapter, the writer will present the findings of the qualitative interview which was conducted in order to gain knowledge about what the incubator's management is currently providing (in terms of services offered), and what the experiences of some of the incubatees consist of, according to the interviews with three start-ups currently enrolled at AAU Startup Program and in relation to the services accessed.

Based on the data gathered from all the interviews, in the first part of this chapter the author intends to answer the first research question: "How is the AAU Inkubator currently facilitating entrepreneurial challenges for start-ups during the incubation period?".

In order to answer this particular research question, the researcher will proceed to analyse the insights of the management of the Danish incubator in regard to the services offered to the start-ups and teams attending its programs.

Secondly, the entrepreneurial challenges and the experiences of the three start-ups will be presented. Since the nature of the research question involves a strong descriptive side, the author will present the findings of this part of the research mainly in a narrative way.

Through answering this question, the author will define the sets of services and activities that have been offered by AAU Inkubator and will be used in chapter 7, facilitating the research necessary for answering the second research.

6.1. The incubator management side

In this chapter, the point of view of the management of AAU Inkubator, as it is in 2018, will be expressed and the interview conducted with the same management will be analysed, with the aim of finding expression of what are the thoughts about the services currently offered by the Danish incubator and how they should help the start-ups.

6.1.1. Services of AAU Inkubator in 2018

Thanks to the interview (whose reviewed notes are available in Appendix A) that was conducted both with the manager of AAU Inkubator at this moment, Heidi Nørgaard Jensen, and one of the business developers (Lasse Jensen), it was possible to define the services currently offered by AAU Inkubator and also previously listed in chapter 2.3.:

- 1. Access to free office space;
- 2. Printing services;
- 3. Individually tailored business developer support (marketing and business modelling counselling; open office hours);
- 4. Evaluation, networking and feedback from an external business panel;
- 5. Mentor program;
- 6. Legal help through a third party;
- 7. Access to network of investors and pitching counselling;
- 8. Possibility to attend series of workshops for enhancing entrepreneurial knowledge (Entrepreneurial Talent Workshops);
- 9. Several social events organised with different purposes (Town Hall);
- 10. Matching function when creating a team;
- 11. Networking through the business developers.
- 12. Initial capital for prototyping.

6.1.2. Theory and practice

A comparison with the work of Zedtwitz (2003) - previously described in chapter 4 - could help frame the different categories of services offered at AAU Inkubator and can be seen in Table 3 (developed by the author):

Sets of services (Zedwitz, 2003)	AAU Inkubator services
a. Access to physical resources	- Free office space (1)
b. Office support	- Printing services (2)
c. Access to financial support	- Access to network of investors and pitching
	counselling (9)
	- Initial prototyping capital (12)
d. Business support	- Business developer support (3)
	- Mentor program (5)
	- External business panel (4)
	- Workshops on entrepreneurial knowledge (8)
e. Access to network	- Legal support through a third party (6)
	- Network of investors (7) and external
	business panel (4), networking through the
	business developers (11)
	- Social events (9) and workshops (8)
	- Matching function (10)

Table 3: Sets of services of AAU Inkubator

As it can be noticed in Table 3, all AAU Inkubator services are in some way connected with the categories developed by Zedtwitz (2003).

While access to physical resources (a) can be related to the free office space (1) available at AAU Inkubator, office support (b) can be connected to the printing and copying services (2) offered at the facility.

On the other hand, access to financial support (c) can be linked with the possibility of contacting the networks of investors (9) available to the business developers, as well as the pitching counselling for attracting investors. The initial capital for prototyping (12) can also be included in this category. Furthermore, business support (d) is widely represented by the business developer support (3), the mentor program (5), the external business panel (4) evaluation and the series of workshops (8) about entrepreneurial issues.

Finally, access to network (e) can be relatable to legal counselling through a third party (6), the investors network (7), the external business panel networks (4), the social events (9) and workshops (8), as well as the matching function (10) for creating teams and the networking available through the business developers (11).

Even though the office services are not the strongest represented category at AAU Inkubator, it is still possible to find some university-related services, as printing and copying.

Therefore, it is possible to consider AAU Inkubator as an "incubator in the strong sense of the term", following the definition of Zedtwitz (2003) and given the fact that all five categories of services are offered at the moment.

It is also possible to observe that the two categories of "business support" and "access to network" are the most represented in the Danish incubator, including nine of the twelve main services offered at AAU Inkubator.

6.1.3. The opinion of the management

On top of these observations, the interview with the management of the incubator revealed which services are considered to be the most important and will be further implemented in the future.

When asked which services, in their opinion, were the most relevant for the incubatees, the management answered as following:

- 1. Access to business developers (3): the competencies and the connected list of contacts in the industry world of the business developers are the most important service, in the opinion of the management of AAU Inkubator.
- 2. The counselling and the preparation for pitching in front of the external business panel (4), together with the networking that the members of the panel can provide, are listed as second most important service available to the incubatees.
- 3. Open office hours (3) and physical space (1) were listed together as third most important service. The possibility of informally accessing the offices of the incubator, as well as having a physical space for free are to be considered extremely relevant in the management opinion.

4. At the fourth place, the managers put the matching function (10) available to the incubatees when creating a team. If needed, this service is believed to be unique of the organisation in the regional landscape.

On top of this chart, the management shared the will of adding more themes to the series of workshops (8) offered to the incubatees, believing that more knowledge and experiences from experts in certain fields may be of extreme interest for the members of the start-ups.

It was also mentioned that the incubator is currently working on a solution for an online database with the aim of monitoring and keeping records, even though this is still at the preliminary stage. This is also in line with one of the suggestions coming from the previous research paper and that still has to be properly set in place.

6.2. Entrepreneurial challenges of incubatees and related services from AAU Inkubator

Through a set of qualitative interviews with three of the start-ups currently attending AAU Inkubator and its programs, it was possible to define more clearly which entrepreneurial challenges identified in the literature could be found also in these particular cases and which ones were facilitated by the Danish incubator.

The notes from the interviews, who have been reviewed while listening to the respective recordings, can be found in Appendix B (e-Shoptimizer), Appendix C (Adore) and Appendix D (ReStart).

6.2.1. The challenges and experiences of the start-ups

The three start-ups, named respectively Adore, e-Shoptimizer and ReStart, have all been part of AAU Inkubator for about or more than one year.

Therefore, they were chosen due to their experience in connection with the services of the Danish incubator. It has to be noticed that they are all currently attending AAU Startup program and will therefore be representative of that particular program (which is, though, the most attended one at the moment).

However, it must be noticed that the kinds of services/products at the core of the three start-ups are really different from each other: while e-Shoptimizer is developing an online platform for price comparison for companies, Adore is focusing on building and commercialising cheaper solutions for automatic door openers. On the other hand, ReStart could be considered as a crowdfunding platform for raising capital for refugees, who had to abandon their home country and are looking forward to starting a company in their new home (Denmark).

The composition of the start-up teams is also variable: while e-Shoptmizer and Adore members are all Danish, ReStart involves mainly foreigners. This may reflect different needs, especially in connection with socio-cultural challenges.

It is clear how the start-ups differ sensibly for their core products and team composition, and therefore their challenges may be also different due to their particular needs.

However, the focus of this paper is to understand how AAU Inkubator was able to help them in overcoming their respective challenges: this can actually offer an interesting variety of solutions.

It needs to be kept in consideration that, when the companies started at AAU Inkubator, the AAU Startup program looked quite differently: a third phase was also supposed to take place, with all the related benefits (even monthly financial income for the incubatees).

However, this phase was suspended due to regulation problems between Sea and the legislation and policy of Aalborg University.

It also needs to be remembered, as pointed out also by the incubator manager, that the three start-ups which have been interviewed all benefit from the free incubator office space.

This might somehow alter their opinion and view in regard to the usefulness of actually sitting at the incubator's facility, compared to start-ups who actually do not benefit from this service.

In relation to the findings of the interviews about the challenges encountered and their respective use of the incubator services, the author was able to develop Table 4:

No relevant Lack of Lack of No help (b)	a)
Entrepreneurship knowledge knowledge developer support (c) Need for No relevant No relevant Initial capital prototyping challenge challenge prototyping (challenge)	a)
support (c) Need for No relevant No relevant Initial capital prototyping challenge challenge prototyping (challenge)	a)
Need for No relevant No relevant Initial capital prototyping challenge challenge prototyping (a)
Financing prototyping challenge challenge prototyping (a)
funds	ace
Turids	ace
	ace
PhysicalNeed for officeNeed for officePartial need forFree office s	
resources space space office space (a), (b), (c)	
MarketingNo relevantNo relevantDeveloping aInitial capital	
(customers and challenge challenge marketing used for	
competitors) strategy marketing	
counselling ()
Socio-cultural No relevant No relevant Issue with No help (c)	
factors challenge challenge Danish culture	
Rules & Patenting Legal issues Legal issues Third party 1	egal
regulations product help (b), (c)	
Networking	a),
(c)	12

Table 4: Challenges of start-ups and services used from AAU Inkubator

In the first column from the left, it is possible to find the categories of challenges found in the literature and previously mentioned in chapter 5.1. Starting from those categories, that gave also the inputs for the questions asked in the first part of the interviews with the start-ups, the author was able to assess which challenges in particular were experienced in the three considered cases.

From the table above, it is possible to observe the importance given to physical resources from all the start-ups, but also the need of legal help experienced from all of them.

Financing, on the other hand, was mainly an issue for Adore, which needed help for prototyping funds. Lack of entrepreneurial knowledge was also typical of two cases (ReStart and e-Shoptimizer), while marketing was mainly an issue for ReStart. Socio-cultural issues were also only experienced by ReStart, most likely due to the nature of its core service (raising funds for refugees) and the cultural barriers encountered in the Danish environment.

6.2.2. The opinion of the incubatees

On top of what was indicated in the first part of the interviews with the incubatees, it was also possible to define which services have been identified as useful, not useful or partially useful from the three start-ups.

In the final part of each of the three interviews with the start-ups, the researcher has asked them to identify the services or activities provided by AAU Inkubator that they found most useful, together with their experience about the overall services of the incubator.

6.2.2.1. Adore – Start-up A

In the case of Adore, it is possible to notice how the incubator has helped them with finding a professional patenting lawyer, which otherwise was declared to be a task that might have taken way more time. Networking was therefore a service used and enjoyed by Adore: the list of contacts available to the business developers of AAU Inkubator have been used various amount of times and saved a lot of efforts in researching the individuals needed (as, for example, the patenting lawyer). Fruiting of free office space and open office hours was also a service utilised by Adore: as the interviewee stated, working in the same facility as well as other start-ups and the business developers had provided with helpful and fast counselling (also thanks to the open office hours) and facilitated networking with other entrepreneurs, as well we for saving money for a possible rent somewhere else. The initial capital for prototyping was found partially helpful from the member of the start-up who was interviewed, since it provided funds for researching on product development that would have been otherwise hard to find at the beginning. The series of workshops on entrepreneurial knowledge, on the other hand, was thought to be not really helpful, accordingly with the development stage the start-up was facing at the moment the workshops took place.

6.2.2.2. E-Shoptimizer – Start-up B

Furthermore, in the case of e-Shoptimizer, free office space was again a service found useful for money saving (no rent to pay). Since February 2017, so for more than one year, the firm saved money for rent that it would have probably been requested in another facility.

The networking from the business developers, as in the case reported above, was also mentioned as really useful and facilitating many tasks otherwise thought to be time-consuming for a firm at the initial stage, that lacked the network of contacts necessary for further development.

The entrepreneurial workshops were found to be not relevant for the purposes and the knowledge needed at the time.

6.2.2.3. ReStart – Start-up C

The third incubatee who was interviewed, founder of ReStart, mentioned as positive and probably critical the help from the business developers of the incubator, who helped since the beginning (even before being accepted to the program) with the idea validation and development.

Free office space was also enjoyed in this case, however the founder thought it was not essential given the nature of their firm and the fact that they could have from any other room in the university.

On the other hand, help with finding legal support through the channels of the incubator (third party legal company and networking) was remarked as relevant, as well as the initial capital that was further on decided to be used on a marketing specialist.

6.2.3. The impact of the services

Concluding, it can be observed that most of the services provided to the start-ups were found to be time and effort saving. Networking (11) and open office hours and probably critical to the development of the firms. Essential was also the help of the business developers (3), mentioned from all three start-ups.

Free office space (1) was also an important factor in the three cases, even though in one case it was not thought to be essential. Adore and ReStart benefit from the initial capital (12) in some way, however they did not mention it as being highly relevant to the development of their start-ups.

Based on the findings of the interviews the author was able to develop Table 5, representing the impact the services have had on the development of the three start-ups:

Start-up	Helpful	Partially	Not Helpful
		Helpful	
Adore (a)	Networking (12) &	Free office space (1);	Workshops (8)
	Legal help (6)	Open office hours (3);	
		Initial capital (11)	
E-Shoptimizer (b)	Free office space (1)	Networking (12);	Workshops (8)
		Business developer	
		help (3) – in relation	
		to marketing issues	
ReStart (c)	Business developer	Third party legal	Lack of social
	help (3)	company (6);	entrepreneurship
		Networking (12);	knowledge
		Initial capital (11)	

Table 5: The impact of services during the start-up incubation process at AAU Inkubator

The table was organised by categorising the findings and thoughts of the interviewees, based on three simple categories: starting with "useful", for a service thought to have been vital to the development of the start-up; "partially useful" for a service which has been important to the incubatee; "not helpful" for a service that has not provided with significant results or was not evaluated as even worth attending or experiencing.

The author chose this way of categorising the thoughts expressed by the interviewees in order to better represent the impact of the services on the incubation experience of the three start-ups.

As it is possible to observe, networking (12) and legal help (6) have been identified as "helpful" and "partially helpful" in two cases, as well as free office space (1). Business developer help (3) and open office hours (3), which is somehow related to the first kind of service (since the open office hours involve the free and informal consulting of the business developer), have also been pointed out as "helpful" and "partially helpful" in two different cases.

The initial capital (11), on the other hand, has been recognised as being "partially helpful" in the cases of Adore and ReStart. Business developer help (3) was thought to be "partially helpful" by e-Shoptimizer.

The series of workshops, on the contrary, have been thought to be "not useful" by two out of the three start-ups.

6.3. Cross-case comparison

In order to answer the first research question, "How is the AAU Inkubator currently facilitating entrepreneurial challenges for start-ups during the incubation period through its set of services and activities?", the author will present the findings coming from the experiences of the start-ups, together with the considerations expressed from the incubator management team.

Focusing on which services were used and in relation to which challenge, it is possible to notice that educational issues about entrepreneurship were solved thanks to the help and knowledge of the according business developer (in the case of ReStart, while e-Shoptmizer preferred utilising other forms of help).

The management of the incubator also expressed that this is the most valuable service that they are able to provide at the moment, given the many resources allocated there and the will of continuing and implementing this activity.

Financing, on the other hand, was mainly an issue in relation to prototyping and was solved thanks to the initial capital that the incubator provides for this particular purpose. The incubator management team has also confirmed that this is their only way, at the moment and in the near future, of directly providing with a capital for the start-ups.

Physical resources were an issue common to all three start-ups, and solved thanks to the free office space offered to the incubatees. The will of the management is to keep this service, as they listed it as the third most important service that they currently provide. Even though not all start-ups attending the incubator programs are fruiting of this service, it is believed to be extremely important, also in connection with the open office hours and the close networking that working in the same facility clearly allows.

Marketing was not stated as being of particular interest of the management, and as it possible to observe from the experiences of the start-ups, not much effort is put into this.

However, as in the case of ReStart, the initial capital coming from the incubator allowed them to afford an external marketing consultant, who is supposed to help them with this particular problem. In a way, even though the incubator was not able to provide directly for a marketing expert, the organisation was still able to help the start-up in need of it.

Socio-cultural issues were also not stated nor mentioned from the incubator management team, showing little effort in this sense. This is also confirmed by the experience of one of the founders of ReStart, who pointed out that the incubator was unable to help them with this matter.

Furthermore, rules and regulations were also perceived as an issue from all the three start-ups but were not mentioned from the incubator management. This can also be explained by the fact that the incubator is not allowed (according to university regulation) to provide directly with legal counselling. However, the networks of the various members of the incubator helped out the start-ups about this issue, providing with a legal patenting expert (in the case of e-Shoptimizer) and with a collaboration with a third party legal firm service, who facilitated the experience of e-Shoptimizer and ReStart.

Concluding, it can be noticed that most of the entrepreneurial challenges encountered by the incubatees were solved (directly or indirectly) through the help of AAU Inkubator, even though more work is needed in the organisation and communication strategy behind the workshops about entrepreneurial knowledge.

7. Discussion and solutions

In this chapter, the UBIs services and practices typically offered and available at Uppsala Innovation Centre will be presented. The feedbacks of the incubatees will also be kept in consideration, in order to allow proposing a list of solutions for improving the incubation process at AAU Inkubator.

This division in two separate parts (feedbacks from incubatees and practices of UIC) will help answering the second research question: "How could the incubation process be furtherly improved in the future?".

In order to answer such question, the writer will first discuss the situation at AAU Inkubator in light of the feedbacks and suggestions provided by the three start-ups in the last part of their interviews, also considering the challenges faced by the incubatees.

This is intended to provide some recommendations based on the direct experience of start-ups which have attended (and still are) the incubation programs in recent times.

Regarding the second part, the researcher will compare the AAU Inkubator and the UIC incubation process, based on the framework of Bergek & Norrman (2008) and previously described in chapter 5.3. By comparing them utilising the framework found in the literature and also in light of the challenges faced by the Danish incubator in connection with enhancing its support to incubatees, the author will describe some possible suggestions for implementing the overall incubation process of AAU Inkubator in the future.

7.1. The feedbacks from the start-ups

In each of the three start-ups interviews the researcher has asked to point out the services and practices that could be improved in the future, as well as some general suggestions for enhancing the incubation process at AAU Inkubator.

The author, based on the answers of the interviewees, was able to develop Table 6:

Adore (a)	e-Shoptimizer (b)	ReStart (c)
Improve networking among	More informal relationship	More help on social
incubatees in the same facility	with the business developers	entrepreneurship for service-
		based start-ups
Better organisation and	More tailored workshops, as	Monthly reports and deadlines
communication strategy for	well as better communication	may speed up the growth of
workshops	strategy about them	the start-ups
Decreasing bureaucracy for	Development of a database of	
the limits of the incubation	contacts for a faster and easier	
programs	networking activity	

Table 6: Suggestions from the interviews with the start-ups of AAU Inkubator

As it is possible to observe from the table, two out of three start-ups lamented a poor organisation and a weak communication strategy for the workshops organised by AAU Inkubator.

The author, having attended the workshops as a coordinator during his internship at the Inkubator, would also recommend a better communication about what it is the subject of each workshop and most importantly, who should attend it and why.

The first start-up (a) pointed out that a better work environment, with a higher attendance of the incubatees, would also increment the networking activities among start-ups.

Referring to the cancellation of the possible third phase that was initially planned for the AAU Startup program, the interviewee from Adore also observed that less restrictions coming from the university bureaucracy would facilitate the development of the incubation programs.

The second start-up (b), on the other hand, pointed out that a more informal relationship with the business developers would speed up the overall counselling process.

In regard to the networking activity, the same start-up also recommended the development of a database including all the (business related) contacts of the members of the incubator, in order to facilitate the finding process of persons of interest to the incubatees.

The third firm (c), given its core service relying on the matter of social entrepreneurship and the not existent help from the incubator about it, recommended an improvement of the business developers knowledge about issues regarding service-based start-ups, with a particular interest in social entrepreneurship.

Finally, the same start-up also recommended an implementation of monthly reports and deadlines that the incubatees should comply with, in order to stimulate and possibly speed up the growth and advancement of the same incubatees.

7.2. Uppsala Innovation Centre

UIC is a top performing Swedish business incubator, situated in Uppsala (north of Stockholm). The material and data regarding the Swedish incubator was accessed from the annual reports of UIC available online, as well as their official website.

7.2.1. Facts about UIC

It is a university related incubator since it is managed directly by the University of Uppsala. UIC was created in 2004 and it has created since then several successful companies.

It presents a mixed ownership, given the fact that is owned by STUNS (a foundation for collaboration between the university in Uppsala and the public sector), but also by Uppsala's municipality, SLU Holding and Uppsala University Holding Company. Therefore, it implies both public and private funding. It is also a member of the Swedish Incubators and Science Parks (Sisp).

For the years 2017/18 UIC was ranked by UBI Global (a company which annually gathers data and compile charts about business incubators) as fourth best incubator in the world with a connection to a university. It can be categorised as a technological incubator since it mainly aims at improving the regional economy by nurturing the creation and development of technology-based companies.

UIC offers business development support, tools and knowledge for innovative projects and companies which would like to grow and possibly reach the international market. Even if mainly concerned about technology-based firms, UIC supports projects belonging also to other industries and has the aim of facilitating entrepreneurs and researchers to commercialize their product or service.

On average, around 80 companies (or projects) are enrolled annually to its business development programs. According to the data available online, UIC has a high company survival rate after the graduation.

The clear mission statement of UIC can be found in "helping businesses to achieve sustainable and viable growth", stated on the website of the Swedish incubator (UIC, 2018). On top of the mission, the long-term goal is also clarified: "UIC supports entrepreneurs, scientist, innovators and management in their efforts to commercialize their ideas".

7.2.2. The entry criteria

The applicants have to face several entry selection criteria:

- ➤ Level of commitment drive;
- > Innovativeness of the idea;
- > Commercial interest and potential;
- ➤ International potential;
- > Growth potential;
- Possibility of creating patents.

7.2.3. The programs

The UIC offers five different business development programs that applicants can attend based on the level of development of their idea/company at the moment of the application:

- 1. UIC Business Startup (get to idea to customers in only three months with a particular focus on customer development);
- 2. UIC Business Lab (aims to strengthen early-development business processes);
- 3. UIC Business Prep (for selected firms with strong potential in preparation for UIC Business Accelerator);
- UIC Business Accelerator (aimed at firms close to commercialization, providing business coaching, counselling, support for financing, seminars and a comprehensive business network);
- 5. UIC Alumni (for firms that have completed UIC Business Lab or UIC Business Accelerator programs, still granting access to business coaches and creating experience and knowledge sharing among companies within UIC).

7 2 4 The services

On top of these five programs, an additional networking service - called EuroIncNet - that has as partners other five business incubators all over Europe is offered in order to increase the networking at an international level for incubatees.

The business coaching model is a relevant aspect of UIC for the purpose of this paper: around 70 specialists coming from different industries and fields are part of the UIC business coaching model, helping the incubatees by sharing their experience, knowledge and networks.

UIC facilitate entrepreneurs in the process of finding financial support and also accessing technological and commercial networks.

7.2.5. The practices

Monitoring and keeping records is also an aspect clearly emphasised by UIC, also considering the annual reports and the amount of data stored and published about the incubatees and graduated companies.

Most of the focus is not on physical incubation, but on the business development. Start-ups have the freedom of choosing the facility and location for their activities.

UIC does not take part directly in the ownership of its start-ups, acting therefore as much as possible as a neutral partner.

The network of UIC, which is constantly expanding every year, consists of about 20 business partners (for example experts in product development – from prototyping to production phase) who have the delicate task of supporting the growth of start-ups through individual counselling, financial contributions and seminars.

7.3. The UIC and AAU Inkubator

This final chapter of the paper is intended to compare the incubation process in AAU Inkubator and UIC. The comparison will be based on the factors identified by Bergek & Norman (2008) and previously mentioned in chapter 5.3. This should allow the researcher to identify some key features from the UIC case that might help the management team of AAU Inkubator to improve the overall incubation process in the Danish case.

For the purpose of the research it was decided to focus only on the three factors indicated as most relevant by Bergek & Norrman (2008):

- Selection;
- Business support;
- Mediation.

In order to facilitate the understanding of the three components of the incubator model in the case of AAU Inkubator and the UIC, Table 7 was developed:

Incubator component	AAU Inkubator	UIC
Selection	 Students or alumni of AAU with an entrepreneurial idea Level of commitment drive 	 Individuals with great commitment drive Innovativeness of the idea Commercial interest International potential Growth potential Possibility of creating patents
Business Support	 Free office space Business developer counselling Mentor program External business panel Legal help through a third party Entrepreneurial Talent Workshops Initial capital 	 5 business development programs Business coaching model Monitoring and keeping records Focus on developing business, not renting office space
Mediation	 Access to network of investors Several social events Matching function Networking through business developers 	 20 business partners Access to network of investors Access to network of technological and commercial experts UIC Alumni EuroIncNet

Table 7: Incubator model of AAU Inkubator and UIC

7.3.1. Selection

The practices and criteria utilised when selecting which applicants can access incubator services and programs have a relevant impact on the overall performance of the incubator itself according to the literature, as mentioned in chapter 5.

In the case of AAU Inkubator, it can be observed that only students or alumni can apply to the programs in the first place. Everyone with an entrepreneurial interest, on the other hand, can apply to one of the UIC programs.

Furthermore, it can be noticed that while AAU Inkubator has mainly adopted an entrepreneur-focus approach, UIC can be seen as focusing more on the idea itself (based on criteria regarding innovativeness level, commercial potential, growth and international potential, as well as possibilities of creating patents linked with the core idea), still considering though the commitment drive of the applicant.

The writer was able to assess some important differences between the two cases. Being aware of the legal limitations affecting AAU Inkubator in regard to the nature of the applicants to its programs, that particular aspect will not be discussed here.

However, regarding the kind of approach identified for the selection process, it can be suggested to develop more criteria focusing also on the idea itself and not just on the commitment level of the possible entrepreneur: an initial market research for evaluating how many customers would be interested in a particular product or service, for example, might help validating the idea and may provide with helpful insights whether or not it is the case to proceed in a certain direction, or if a change or adjustments might be needed.

Customer validation, as we may refer to the process just described, happens at the beginning of the UIC program named Business Startup, and it can be considered an interesting practice and AAU Inkubator might benefit from it, since it may be seen as preparatory for product (or service) development.

7.3.2. Business support

Referring to the business support aspect of the two Scandinavian incubators, several differences can be found between them: starting with the office space, quite relevant and central to the AAU Inkubator model, while UIC prefers to focus on developing products rather than providing with physical facilities.

Furthermore, we can notice as both organisations offer business developers help, even though in a different way: while business developers are employed at AAU Inkubator, it is possible to observe how around 20 business partners have the task of supporting the growth of start-ups in the UIC case. This so called "business coaching" model presents different implications and it is mainly focused on product development.

While two main programs (Innovativ Vækst and Startup program) can be found in the Danish incubator, UIC offers five different incubation programs. Apart from the number of programs, a relevant difference between the two incubators can be found in the way the entrepreneurs can apply to the programs: while AAU Inkubator focuses on the distinction between being students or alumni, UIC prefers to distinguish among the different levels of development of the idea.

It is possible to notice how UIC has built its practice from a different theoretical approach, where different stages of development require different incubation services. AAU Inkubator, on the other hand, prefers to separate students and alumni, based on the time available to the possible entrepreneurs for working on their idea: while students enrolled at the Startup program have more time, since they are also studying at the same time, alumni face a higher time constraint, due to the fact that they have more time to dedicate to the idea. As for the selection part, it is possible to notice how AAU Inkubator has chosen a more entrepreneur-based approach, while UIC focuses more on the idea and its current development stage.

On top of this aspect, AAU Inkubator offers a mentor program, an external business panel evaluation, initial prototyping capital and legal help through a third party. While some data about these practices was not possible to access just from the publicly available sources used for this paper, it is possible to notice how UIC has a strong and developed monitoring and keeping records practice. The annual reports of UIC constitute an important database, both for evaluating the performance of the incubator and also for attracting investors.

It is therefore recommended to AAU Inkubator to implement as soon as possible a reliable database about incubatees, as well as evaluating the performance of the services offered and the experience of the graduated start-ups after the incubation period. In this direction points also the fact that one of UIC programs, named UIC Alumni, is offered to firms who have completed one of the other incubation programs with the aim of enhancing knowledge sharing among companies at UIC and keeping close contacts with firms after the graduation.

7.3.3. Mediation

Concluding with the mediation component of the business incubator model, it is possible to observe how both incubators have a strong focus on the practice of networking and present some similarities: they both offer to the incubatees access to a network of possible investors, as well as to networks of business experts coming from different fields.

Both incubators are connected to a science park, which facilitate the networking among graduated companies (some of the start-ups from AAU Inkubator, after finishing one of the programs, end up finding a place in one of the Novi Science Park facilities). UIC is probably at a more advanced stage in this matter, having created a specific program (UIC Alumni) for graduated companies.

While several social events, networking through the business developers and the external business panel are proper of AAU Inkubator, UIC offers a network of 20 business partners, as well as EuroIncNet: having consolidated a partnership with other five European business incubators, the Swedish organisation has focused also on international networking for its incubatees (and graduated companies too).

It is therefore recommended to AAU Inkubator to start looking for partnerships with other Danish incubators, but also at an international (Scandinavian first, then possibly European) level.

This would increase the credibility of the incubator (and of its incubatees thanks to image conveyance), as well as enhancing the chances of international networking for the start-ups and benchmarking with other cases.

7.4. Solutions

In this chapter the author intends to sum up the most relevant findings of the paper, including the most appropriate suggestions for the development and improvement of AAU Inkubator incubation practices and the answer to the second research question.

The writer is also able to relate the suggestions here presented with the challenges faced by the Danish incubator in 2016, but still worth attention at this point in time, and represented in Fig. 2 and available in chapter 2.1.4.

While it is possible to notice that some improvements were taken in enhancing the incubation process at AAU Inkubator, those particular challenges are believed to be mostly true also at this time for the considered case, given also the insights gained during the internship period and the interview with the management of the incubator.

Starting with the most relevant feedbacks and suggestions coming from the start-ups which have been interviewed the author is able to conclude that:

- In the future, also considering the experience of the writer in first person in the process of assisting the planning of the events, more efforts should be devoted to the organisation of events and workshops, as well as the related communication strategy. As pointed out by two interviewees, the aim and the target group of the workshops should be clearer and better known to the incubatees. This implementation of communication strategy and planning of events will try to solve the challenge faced by the incubator in attracting and retaining entrepreneurs; this is also in line with the recommendation (from 2017) of enhancing the communication strategy behind the social events and workshops.
- Furthermore, as suggested by one of the start-ups, requiring monthly reports and feedbacks from the incubatees might have the effect of speeding up and motivating the growth of the start-ups. These monthly feedbacks and reports might as well help the monitoring and keeping records challenge, adding available data to the process of gathering and storing information about the incubatees, which was also a recommendation back in 2017.

- ➤ If the Danish incubator will decide to accept to one of its programs other start-ups based on social entrepreneurship, a further knowledge in this field (especially from the business developers) is recommended to be gained. This can be seen also connected with the challenge of attracting and retaining entrepreneurs, by widening the overall offer of knowledge possible to acquire through the incubator services. Back in 2017, a development of a specific entrepreneurial training program was also recommended.
- ➤ Clarifying the rules and regulations coming from the university in the matter of what is allowed for the incubator to offer to the start-ups might as well simplify the overall incubation process, making it clearer to the incubatees themselves in terms of which services they are allowed to expect. This might also help in clarifying the mission of the incubator, as well as spreading awareness of such mission and the related limitations of such help that is being provided at AAU Inkubator. On top of this, the creation of an advisory board (as suggested in the previous research paper), might as well facilitate the challenge.
- A list of contacts available to all business developers, divided by categories (business help, legal counselling, product development, marketing, etc.), as suggested by one start-up, may reduce the time needed for a proper networking. This solution is believed to be functional to the facilitation of networking activities, a challenge common to all business incubators.

In terms of what was possible to deduce from the knowledge of UIC practices, the author was able to conclude the following:

➤ Definition of clearer entry criteria, possibly focusing on both the level of commitment of the applicant and the core idea itself (level of innovativeness, validation of the idea through customer validation, commercial and growth potential). This is strictly related to the challenge of defining entry criteria that was also identified in 2016 and it is still going on at the moment. A selection committee that should properly agree upon the entry and exit criteria was recommended at the time.

- ➤ Tailoring programs and services based on the level of advancement of the core idea may increase the efficiency and the performance of the incubator, in terms of decreased waste of time and efforts, as well as being possibly able to provide more narrowed and specific workshops and services. This might facilitate the challenge of attracting entrepreneurs, by consolidating the professionality and credibility of the incubator itself.
- Implementation of monitoring and keeping records activities is also recommended to AAU Inkubator. As it is possible to notice, this particular challenge was also faced back in 2016 and it still requires a suitable solution. The chance of offering actual data about the performance and the activities of the incubator may as well have an impact when attracting new investors, giving the chance of showing some real results achieved by AAU Inkubator. This should be done by carrying out the following:
 - Developing a database with feedbacks about the perceived efficiency of the services offered to the start-ups;
 - Keeping a list of the start-ups enrolled (with data about their employment rate and possibly growth speed);
 - Gathering data about the performances of graduated companies for a certain period of time (2 to 5 years);
 - o Publishing annual reports about the overall performance of the incubator itself;
- ➤ Joint partnership with an incubator association (as UBI Global) or other national and international business incubators, for increasing the networking activities and benchmarking from other experiences. By realizing this recommendation, the incubator may increase its credibility (and by image conveyance, the credibility of its incubatees), also facilitating the challenge of attracting both new investors and new entrepreneurs.

If the management of AAU Inkubator will put efforts in developing most of these recommendations, combined with the suggestions from the previous research paper by the author and his colleagues, it is believed that the overall incubation process and experience for the start-ups will improve in the future, and most of the challenges faced by the incubator itself might be facilitated.

8. Conclusion

While the paper has elaborated further on previous research done by the author on the case of the AAU Inkubator, it is hoped that the research on this matter will not stop at this point.

Defining the parameters of action of a UBI is believed to be a complicated task. Since large funds are dedicated to this particular organisation, it is something that should not be taken lightly. Certainly, "trial and error" is the strategy that the management of the incubator has mainly adopted so far. However, the author believes that much can be learnt from benchmarking with other top-performing UBIs, still maintaining the unique identity of AAU Inkubator.

It is not just "copying" from other cases, it is about taking the best practices from the best incubators in the world, reshaping them and make them proper of the "AAU Inkubator model". This might as well help increase and enhance entrepreneurial activity in the region, adding value to the local economy and helping students and graduated individuals in achieving their dreams and inner goals that might be otherwise left alone and never tested.

The author has dedicated consistent research in this particular subject, with the hope that the current (and future) management of AAU Inkubator will pay attention to the findings and will take into consideration the recommendations here presented: setting up the correct procedures and sets of services before 2021 and the opening of the new Innovation Hub will prove to be essential to the survival of the incubator, left alone increasing its performance and the one of the incubatees.

However, it is possible to notice how some positive steps had been taken in the last two years, as it can be seen in the implementation of an external business panel, the increased number of business developers, the enhancement of the matching function and a general increased structured organisation of the practices of AAU Inkubator.

Steady and slowly, the incubator is on the right path and has the potential to become one of the leading UBI in the region and then in the nation.

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Appendix A

Notes interview Inkubator. from the with management of **AAU** the

15/05/2018

Interviewer: Manuel Ciucci

Interviewees: Heidi Nørgaard Jensen and Lasse Jensen

Type of interview: Face to face, recorded, qualitative semi-structured interview.

Two main incubation programs: AAU Startup Program and Innovativ Vækst.

AAU Startup Program is for students of AAU and is divided in two phases: Start phase and the

Discovery phase. A third phase was planned; however, it was blocked due to regulations issues with

the administrative section of AAU.

The first phase involves a 10.000 Dkk initial prototyping capital for the incubatees, while the second

one involves a starting capital up to 20.000 Dkk for further product developments. The first phase is

expected to last about 6 months, while the Discovery phase for about one year. When the start-up is

ready to commercialize, the incubator terminates the contract and the incubation process ends.

An evaluation from an external business panel is required in between the two phases.

Innovativ Vækst is for alumni (previous students at AAU, who graduated within a 3-years period),

currently unemployed. The program is further divided into three different phases. Between each phase

and the following one, an evaluation of an external business panel is required. Since the incubatees

have more free time due to their unemployment situation, the program is more intensive: just 26

weeks to complete all the three phases. Matching function and the mentor program are available to

the individuals and teams enrolled at this program.

In the opinion of the management, the most useful and successful services which have been provided

are:

1- Access to business developers (for their networks and competences);

2- External business panel and related pitching skills training, as well as networking;

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- 3- Office hours (also in connection with the importance of physical space);
- 4- Matching function for creating teams for future start-ups.

After the graduation, the start-ups can still benefit from the support of a mentor for one year, as well as the incubator is hoping to maintain close contact with them.

There is a new plan for widening the topics discussed at the workshops (as for example, for social media crowd funding).

Appendix B

Notes from the interview with e-Shoptimizer

16/05/2018

Interviewer: Manuel Ciucci

Interviewee: Thomas Thomsen

Interview type: Face to face, recorded, semi-structured qualitative interview.

What is your role and what is the product or service at the core of your start-up activities?
 Thomas Thomsen is one of the three founders and is currently finishing his master, in software engineering.

The company is trying to develop an online platform for comparing prices for firms. Three founders (with a software engineering education) and one intern (graphical design).

How long have you been fruiting of the incubator's help?
 Since February 2017. So more almost one year and a half. Office space was offered from the beginning, and the company has been taking full advantage of it.

Which development stage is your start-up currently in?
 The firm is almost ready to commercialize. They are currently attending the last period of the second phase of the AAU Startup program. They will soon take place in the Novi Science Park facilities.

- How has the AAU Inkubator helped your firm, in relation to educational programs (such as workshops) and entrepreneurship?

The firm has not really used the workshops because they were not thought to be interesting and useful accordingly with the development stage of the start-up at the time.

- How about its help with financial issues? How did it help with finding funds for your startups and possibly how to manage those resources?

No money so far from Inkubator. E-Shoptimizer won a Novi scholarship and therefore gained access to 250.000 Dkk for its activities.

- What about physical space for your start-up? How has the incubator helped with it?
 The need for physical space was facilitated in full by AAU Inkubator, which provided the firm with a room in the university facilities from which they could work free of rent.
- Has the incubator also helped with issues related to marketing? For example, considering finding customers and addressing the competition problem?
 The incubator has not really helped in relation to this matter, just few inputs came from the business developers.
- Have there been issues connected with socio-cultural aspects in relation to your firm and its product/service? If yes, how has the AAU Inkubator helped with them?
 Not really any problem was encountered in relation to this matter.
- What about rules and legislation? In which was has the incubator addressed this issue?
 At the beginning, the third party legal help accessible through the incubator was used for legal counselling. After the Novi scholarship, the firm was eligible for 50 hours of free legal counselling, so that channel was preferred.
- Which incubator's service has proved essential, which one was relevant, and which one just helpful for your start-up and its employees in your opinion?
 Access to free physical space have been essential to the start-up. Networking (especially from the business developers) has been relevant. Marketing counselling from the business developers was helpful.
- Do you have any suggestions for the future, in order to improve the overall process of incubation here at AAU Inkubator?
 Relationship with the business developers more informal. Workshops should be more tailored on specific issues, as well as a better communication strategy about them is needed.
 A database with all the contacts of the incubator should be implemented for a faster and easier networking activity.

Appendix C

Notes from the interview with Adore

11/05/2018

Interviewer: Manuel Ciucci Interviewee: Jacob Muldbjerg

Type of interview: Recorded, mediated through phone, qualitative semi-structured interview.

- What is your role and what is the product or service at the core of your start-up activities?
 The core product of Jacob's start-up is to offer cheaper solutions for automatic door openers to their target customers.
- How long have you been fruiting of the incubator's help?

 The company has been using the incubator's help for one year.
- Which challenges had / has your start-up to face?
 The validation of their business idea was a challenge the company experienced. Moreover, the creation of the physical product as well as the acquisition of customers are current obstacles the company has to overcome.
- How has the AAU Inkubator helped your firm, in relation to educational programs (such as workshops) and entrepreneurship?
 With regard to entrepreneurship, the AAU Inkubator did not provide much help. The workshops offered are perceived by the company owner as poorly organized wherefore he did not attend them.
- How about its help with financial issues? How did it help with finding funds for your start-ups and possibly how to manage those resources?
 Initial capital of 10.000 Danish Krones.
- What about physical space for your start-up? How has the incubator helped with it?

 The incubator helped providing physical space as the company can make use of a small room.

 To have a space to work is paramount to the company and is therefore used on a daily basis.

- Has the incubator also helped with issues related to marketing? For example, considering finding customers and addressing the competition problem?
 The company did not take advantage of marketing services and the competition issues were managed by themselves.
- Have there been issues connected with socio-cultural aspects in relation to your firm and its product/service? If yes, how has the AAU Inkubator helped with them?
 Until today, the company did not face any challenges concerning socio-cultural aspects in relation to the firm and their products.
- What about rules and legislation? In which was has the incubator addressed this issue?

 The business field they are active in is confronted with many rules and regulations. The patenting of products raises questions about intellectual property. Regarding this problem, the company is supported by professional patent lawyers.
- Which incubator's service has proved essential, which one was relevant, and which one just helpful for your start-up and its employees in your opinion?
 The most useful service from the incubator was networking. Another valuable service is the existence of open office hours and the resulting reachability of incubators.
- Do you have any suggestions for the future, in order to improve the overall process of incubation here at AAU Inkubator?
 Even though the provided office space is very valuable for the company, there is currently only little possibility to interact with other companies. This aspect of experience exchange could be improved and might be beneficial for all start-ups. Furthermore, the workshops have still room for improvement. A better organisation would encourage more companies to participate.

Appendix D

Interview with ReStart 12/05/2018

Interviewer: Manuel Ciucci Interviewee: Alexis Rhyner

Type of interview: Recorded, mediated through phone, qualitative semi-structured interview.

- What is your role and what is the product or service at the core of your start-up activities? ReStart is a start-up which aims at building up crowdfunding for refugees.

- How long have you been fruiting of the incubator's help?
 The company has been fruiting of the incubator's help for a time span of one year as they became part of the organization in May 2017.
- How has the AAU Inkubator helped your firm, in relation to educational programs (such as workshops) and entrepreneurship?
 No help has been sought in this area.
- How about its help with financial issues? How did it help with finding funds for your start-ups and possibly how to manage those resources?
 In terms of financial support, the company could rely on the help of the incubator. At the beginning the company raised funds of DKK 10,000 and at a later point in time DKK 20,000.
 The funds were mainly aimed to contribute to marketing activities.
- What about physical space for your start-up? How has the incubator helped with it? Physical space was provided by the incubator in form of a shared office space.
- Has the incubator also helped with issues related to marketing? For example, considering finding customers and addressing the competition problem?
 Marketing related problems were mainly supported through financial funds. However, no customer- or competition-related assistance has been requested by the company.

- Have there been issues connected with socio-cultural aspects in relation to your firm and its product/service? If yes, how has the AAU Inkubator helped with them?
 The company faced socio-cultural issues regarding language difficulties. However, the incubator could not provide any help on this matter.
- What about rules and legislation? In which was has the incubator addressed this issue?

 The company has been confronted with legal issues, which it has overcome with the support of a third-party company and through networking.
- Which incubator's service has proved essential, which one was relevant, and which one just helpful for your start-up and its employees in your opinion?
 The company perceived the business developer as the most useful service offered by the incubator.
- Do you have any suggestions for the future, in order to improve the overall process of incubation here at AAU Inkubator?
 In general, the start-up would welcome a more active approach. This could be realized by submitting monthly reports followed by a personal feedback. Additionally, the company is seeking for more services in the area of social entrepreneurship.