



# AAU

## ENTREPRENEURSHIP SPACE – A BUILDING GUIDE.

Entrepreneurial Engineering  
Aalborg University.



# TITLE SHEET

Theme: Internship Project

Subject: AAU Entrepreneurship Space

Type of report: Process Report

Project Period: September 2015 – January 2015

Supervisor: Johan Lervang

Number of copies: 2

Number of pages: 10

Characters:



---

Alexandru Baltat



## 1 ABSTRACT.

---

It is argued that business incubators have an important role in assisting upcoming entrepreneurs, especially in the incipient stage of their startup. They allow startups to be provided with a wide gamut of services. The range of services starts from access to facilities that support knowledge sharing and non-formal education – such as coworking spaces and shared offices – to access to research laboratories and a variety of software that can help in maintaining or growing their firm’s life-cycle. The support offered, gives the startup owners a pinch of security and a head start. University-Based Incubators are not only providing the perks that a general incubator has, but also a pool of human resources that thrive to succeed on their own. This paper reviews the academic literature to understand the role and value of University-Based Incubators in Northern regions. The outcome, in trends, suggests that University Business Incubators are dependent on the pool of resources; and they are capable of providing important services to emerging economies, by leveraging know-how from the pool of knowledge and creating value. (H.Bathula and M. Karia and M. Abbott, 2011) The findings imply the decision makers, the industry and the government.



# Coworking & University-Business Incubator Aalborg

## AAUES. A Building Guide.

A "How to" Approach on Building a Vibrant Coworking Space  
Merged with a University-Business Incubator  
Called AAU Entrepreneurship Space for  
Aalborg's Growing Entrepreneurial Workforce.

**Aalborg University.**

**Entrepreneurial Engineering.**

Semester: MSc 03

Project Period: September 2015 – January 2016

University Supervisor:

*Johan Lervang*

Internship Supervisor:

*Morten Dahlgaard*



## 2 ACKNOWLEDGEMENTS.

---

**F**irst and foremost, I offer my sincerest gratitude to the interview participants, who dedicated their time and contributed with valuable insights to this research project. Without their willingness and interest to share their thoughts, ideas and expertise, this study could not have been undertaken.

I would like to sincerely thank my supervisor, Morten Dahlgaard, for his guidance and inspiration throughout this study – especially for his confidence in me. I offer my special thanks to SEA (Supporting Entrepreneurship at Aalborg University) and its employees, for giving me the opportunity to conduct this research project, and their patience and tolerance throughout this work.

I would also like to acknowledge them for their excellent supervision, encouragement and advice in many stages of this study.

My sincere thanks go to Johan Lervang for accepting the responsibilities as examiner and providing relevant feedback to improve this project work.

This internship project was conducted as part of the master's degree program in Entrepreneurial Engineering at Aalborg University.

## 3 CONTENT.

---

<b>1</b>	<b>ABSTRACT.</b>	<b>3</b>
<b>2</b>	<b>ACKNOWLEDGEMENTS.</b>	<b>5</b>
<b>3</b>	<b>CONTENT.</b>	<b>6</b>
<b>4</b>	<b>PROJECT HYPOTHESIS.</b>	<b>9</b>
<b>5</b>	<b>PROJECT DIRECTION CRITERIA.</b>	<b>11</b>
<b>6</b>	<b>PROJECT STRUCTURE.</b>	<b>14</b>
<b>7</b>	<b>METHODOLOGY.</b>	<b>15</b>
7.1	TARGET GROUP	15
7.2	RESEARCH DESIGN	19
7.3	RESEARCH METHOD	19
7.4	PROBLEM FORMULATION	22
7.5	LIMITATIONS	23
<b>8</b>	<b>TYPES OF INCUBATORS.</b>	<b>23</b>
8.1	BUSINESS INCUBATOR	23
8.2	UNIVERSITY-BUSINESS INCUBATORS	25
<b>9</b>	<b>UNIVERSITY INCUBATOR MODEL.</b>	<b>26</b>
9.1	FRAMEWORK	26
9.1.1	<i>SELECTION</i>	27
9.1.2	<i>BUSINESS SUPPORT</i>	29
9.1.3	<i>MEDIATION</i>	30
<b>10</b>	<b>FRAMING.</b>	<b>31</b>
10.1	BUSINESS MODEL CANVAS	31
10.2	COWORKING AND NON-FORMAL EDUCATION	34
<b>11</b>	<b>FIELD RESEARCH.</b>	<b>35</b>
11.1	INTERVIEW WITH NIELS MAARBJERG – INNOVATION DIRECTOR OF AAU INNOVATION	36



11.2	INTERVIEW WITH TINE THYGESEN – CO-FOUNDER OF FOUNDERSHOUSE, COPENHAGEN	37
11.3	INTERVIEW WITH MORTEN DAHLGAARD – HEAD OF ENTREPRENEURSHIP AT AAU INNOVATION	38
11.4	INTERVIEW WITH RAZVAN CRACIUNESCU – RESEARCHER AT VOICE, THE ONLINE ACCELERATOR	41
11.5	SURVEY ANALYSIS	43
11.5.1	<i>TESTING THE NEED OF A COWORKING FACILITY</i>	43
11.5.2	<i>TESTING THE NEED FOR A UNIVERSITY BUSINESS INCUBATOR (UBI)</i>	45
11.6	STAKEHOLDER ANALYSIS	46
<b>12</b>	<b>VALIDATION.</b>	<b>49</b>
12.1	VALIDATION BOARD	49
12.2	MINIMUM VIABLE PRODUCT	51
	<b>CONCLUSIONS.</b>	<b>53</b>
<b>13</b>	<b>APPENDIXES.</b>	<b>54</b>
<b>14</b>	<b>FIGURE LIST.</b>	<b>56</b>
<b>15</b>	<b>REFERENCES.</b>	<b>57</b>



## INTRODUCTION

**B**usiness incubators are receiving relevant attention in academic research. Mr. Chinsomboon had taken a great attempt in defining what a business incubator is – “A controlled environment that fosters the care, growth, and protection of a new venture at an early stage before it is ready for traditional means of self-sustaining operation.” *“In today’s world where information technology and the Internet are normal parts of the business environment, the term “controlled environment” could be either physical (real estate and office facilities) or virtual (networks)”*. (V.Ryzhonkov, 2013) However, business incubators had begun much earlier in time than many researchers agreed to acknowledge, and it was considered that any environment that supported business growth could be considered as a business incubator. (V.Ryzhonkov, 2013) Moreover, the services provided range from managerial support, advice and counselling, to shared offices, access to research labs and network pools. (Malcom H.Bathula and M.Karia and M. Abbott, 2011) On the other hand, University Business Incubators have increased in popularity as they find new ways of supporting and guiding young entrepreneurs, through the usage of mentoring and qualified guidance in growing a successful business.



## 4 PROJECT HYPOTHESIS.

---

The working hypothesis for this project is that developing a professional coworking facility, together with a University-Business Incubator (UBI) utilizing available places in Aalborg University, will enable the targeted group to benefit from the state of the art technology, laboratories and other perks provided by Aalborg University and by its potential partners. Moreover, by colliding a coworking space with a University Business Incubator, convergence can be achieved by helping start-up companies improve their survival rates, growth potential and their competencies; as well as building a sustainable business model for the desired facility. In the long run, a business incubator can contribute to the growth of emerging economies. Similarly, when it comes to the value perceived by the state, business incubators can contribute to the growth of the region itself, by helping companies fit into the growth highway, translating into the creation of jobs, knowledge transfer, building industry contacts and consulting professional service providers. Moreover, the project aims at testing the hypothesis that, by merging a coworking space with a university business incubator, a sustainable and scalable business model can be developed for this type of facility.



**"PRESENTEEISM"** HAS COME TO MEAN SHOWING UP AT AN  
OFFICE EVEN WHEN YOU COULD BE MORE PRODUCTIVE  
ELSEWHERE.

## 5 PROJECT DIRECTION CRITERIA.

---

This study aims at increasing the understanding of how a merger between a coworking space and a University-Business Incubator will be developed on a university campus, and what the different stakeholders' roles, as well as the political influences are, in the development process.

Since there is not a defined terminology for coworking facilities merged with University-Business Incubators, the term used to define their merger will be “**Entrepreneurship Space.**”

While assuming that the entrepreneurship space will provide value to its users, there are multiple available perks that the space will provide.

The report project's aim is to identify, define, validate and implement the framework followed by the entrepreneurship space to produce value. While value can have different meanings, for this project to reach its goals, there is a need to define value according to the objectives that the major stakeholders have in the process of building a merged coworking facility with a startup incubator.

As the main stakeholder – in this case, Aalborg University – they are providing the physical space for this facility. The returns of investment will first be defined from their perspective. In AAU Strategy for 2016, it is mentioned that the university's strategic development towards 2021 will focus on research, problem-based learning, education and knowledge collaboration. For each core activity, the vision and actions have been outlined in their strategy portfolio, as follows (AAU Strategy, 2016-2021):

“Actions for the realization of the vision for research are to enhance the *“research quality and value contributed to society, through the publication of research results in high impact journals, and the acquisition of funding from prestigious grantors”*. (AAU Strategy, 2016-2021)

Another step towards achieving its goals is to develop new strengths, by expanding and enhancing its comprehensive and solution-oriented research and new positions of strength.

According to this, the aim of this project report is:

1. To develop a building guide for the university business incubator for the entrepreneurial environment around Aalborg University.
2. To reflect upon the building guide developed by testing the hypothesis through different validation methods.

- To allow for a deeper understanding of what value is coming from a university business incubator for different stakeholders.

When mentioning the problem-based learning methodology, “AAU is internationally renowned” for their approach. (2015 AAU Strategy, 2016-2021) In their path to achieving their vision, there will be several initiatives, as a “cross-faculty research” project that will “document the knowledge and effect of PBL through action research”. (AAU Strategy, 2016-2020)

Education is also prepared for development; as the university plans on reassuring robust study programs, with the development of an attractive and supporting student learning environment that will supplement the decentralized “student environment initiatives, to ensure the active inclusion of the students in the formulation of the student environment across the university”. (AAU Strategy, 2016-2021)

Moreover, knowledge collaboration is also part of AAU’s vision, by increasing integration between research, education and knowledge collaboration. (AAU Strategy, 2016-2021) On one hand, “the strategy will promote the integration of core activities, through physical, organizational and virtual collaboration platforms” (AAU Strategy, 2016-2021). Similarly, the aim of AAU regarding entrepreneurial activities is to increase the number of successful entrepreneurs that startup in the business right after graduation. (AAU Strategy, 2016-2021)

The objective of this project is to create a fit between AAU’s strategy, vision and the entrepreneurship space. The hypothesis here is that the entrepreneurship space will provide the values that AAU is looking for in a coworking facility, combined with an incubator that plans on supporting the process of business incubation – from “idea generation, business development, prototyping, proof-of-concept development” (AAU Strategy, 2016-2021), until it’s termination.

The findings from AAU strategy are highlighting what AAU sees as value. In terms of research, the university’s value production mechanism is through the publication of research in highly rated journals; while their aim is to have a return on investment by accessing funds from different grantors. Regarding knowledge collaboration, AAU’s vision is to increase the collaboration between the various study programs through

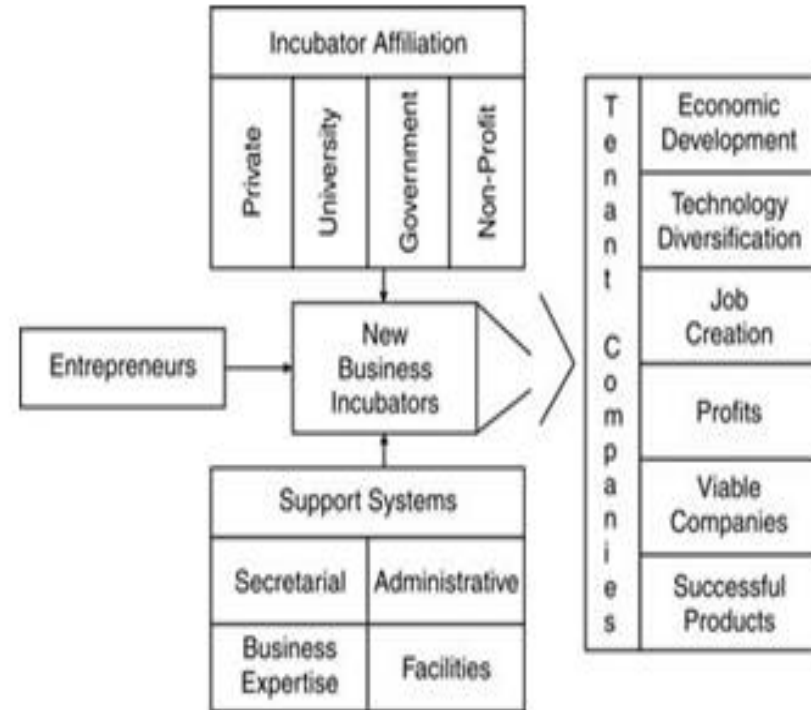


Figure 1 Business Incubator model proposed by Smilor (1987)



various means. One possible step in achieving their vision is mentioned in their strategy, as opening a physical space that would support the process of business development.

While assuming that providing this facility, together with a well-structured framework of an incubator, will generate enough high-growth companies that will help to facilitate economic growth and will create jobs in the respective area, there is also the possibility that none of the selected group of ideas succeed. Nine out of ten startups fail; and it's not because they are too optimistic and have high expectations, but because policy makers, mentors, and advisors are not able to differentiate the startups with a low probability of growth, and tend to supply resources and mentorship for entrepreneurs with not-so-great ideas, but with potential. One can argue that this is not a wrong mentality, and that it can boost the confidence of the future entrepreneur.

When talking about the value that an entrepreneurship space could provide, the reference to AAU's vision brings the idea closer to the understanding that value can be translated into many different aspects, depending on who acts as the main stakeholder. If the Regional House is considered as the main stakeholder, then the value in their perspective changes radically.

In Aalborg's Sustainability Strategy for 2013 – 2016 are mentioned different values such as traffic reduction, construction and infrastructure that are energy-efficient and of good quality, the creation of jobs and others. (Aalborg Kommune, 2013-2016) If the entrepreneurship space provides value for the students solely, then the concept takes a 90-degree turn, as the values for students depend on what their goals are, domain, study program and career path. Business incubators were and still are receiving significant attention in academic research. These facilities are usually equipped with a broad range of resources, starting with the hardware, such as shared offices, access to laboratories and services such as mentoring, managerial advice, counseling, and legal advice. (B.Bathula, M. Karia, M.Abbott, 2011) In the last years, a different type of incubator, named University-business incubators have become a well-researched and implemented framework in university campuses.

Their aim is to seek for talented and skilled entrepreneurs that are keen to work hard and spend more hours on building a successful business. The perks of such an incubator provides business owners with access to research laboratories, seminars on campus, a vast new network of students, and allow for improved collaboration quality. (B.Bathula, M. Karia, M.Abbott, 2011)

However, universities “*benefit from supporting and/or sponsoring University Business Incubators*” (B.Bathula, M. Karia, M.Abbott, 2011), as the framework of the program can be seen as a tool for training students to be either well educated employees or entrepreneurs. University-business incubators are initiated with different expectations, such as the capacity to devour technology, institutional support frameworks, the level of involvement of the academics, the investment in commercial opportunities that arise and the aim and role of an upcoming entrepreneur. (B.Bathula, M. Karia, M.Abbott, 2011)

## 6 PROJECT STRUCTURE.

---

This section is proposed with the aim of allowing for a helicopter view of the contents of this process report. The next section aims at describing the **methodology** and the approach used while developing this process report. Describing the target group and the research design allows for a deeper understanding of the framework used to describe the implications and drawbacks from making use of the mentioned tools and methods. This paragraph also describes the aims and reaches of this process through the **problem formulation** section. The **limitations** and **delimitations** of the project were also mentioned to illustrate the steps and challenges faced when developing the project.

The paragraph mentioning the **types of incubators** focuses on the *Discovery* phase of this process report, and provides the reader with the definitions of the origin of business incubators by reviewing different records of academic literature. While understanding the meaning of the two types of incubator, it allows for a deeper understanding of what the differences are between general incubators and university business incubators, from an academic point of view. The paragraph then goes on to describe the values that each type of incubator has, allowing the reader to differentiate between general business incubators and university-affiliated business incubators.

The next paragraph, '**Framing**', is part of the *Incubation* process that makes use of the methodology and the tools described in the previous section to construct the framework of the process report. This includes the development of a business model canvas; a tool that allows for a helicopter view of the business structure of the university business incubator and all its building blocks. The sections also provide the reader with a list of insights of Aalborg's potential when it comes to the reliability of hosting the development of a **coworking** facility, together with a **university business incubator**. This will also allow for displaying different outcomes of being part of the AAU Entrepreneurship Space. One mentioned is **non-formal education** and **coworking** environment.

The **field research** section aims at gathering insights from different stakeholders, as well as testing the assumptions and the hypothesis developed during the development of this process report. This leads into the new section, called **survey analysis**, with the aim of testing the perks that AAU Entrepreneurship Space should provide in the first place; considering what their future incubates would see as value for this types of facilities. The design thinking approach allows for the upcoming customers to design their own concept of an entrepreneurship space.

In the following section, **Execution**, two different approaches are taken in the process of validating the assumptions developed during the whole process. The section makes use of tools such as **Validation Board**, to allow for differentiation between the tested assumption and hypothesis, and the ones that were not tested due to the limitations encountered while developing the process report. Another tool used in this section is the **MVP**, meant to provide the customer with an overview of what is yet to become the real product, and the stakeholder analysis. Finally, the last section will draw a summary of the process and conclude the overall research.

## 7 METHODOLOGY.

---

The report project study makes use of extensive qualitative research, which is required when the research field is broad and complex, and the aim is important. (Eisenhardt M. & Graebner 2007) also state that this technique is useful in new research fields, or occasions in which there is little or no information related to the specific field or happening. Thus, the approach is used to give answers to questions as “how” and “why” (Eisenhardt M. & Graebner 2007). The research questions used, represent basically “how” questions, which gather information about how different types of incubators differentiate themselves while following the same guidelines and having the same objectives; thus, also aiming at internal and external alignment. During the internship period, two surveys, one presentation, one interview and a focus group with coworking space founders were conducted. The topics of the research were touched in every data gathering methodology.

### 7.1 TARGET GROUP

Mentioning the target group, as the study is still conducted, it has an important definition that is crucial to comment on. (Eisenhardt M. & Graebner 2007) refers to it as “population” and states that it serves as a definition for the set of entities from which the research sample is to be taken. This approach allows for increased value and external validation. Thus, for this project report to comprehend the customers’ needs and demands, there is the need for a critical analysis of “who’ the customer is, and by the customer, the referral targets, the tenants, who consider using an entrepreneurship space and see value in a physical space. Therefore, the need to initiate an extensive investigation of tenants’ expectations is highly required. To get a grasp of how an inside perspective of an incubator looks like, such as resources, processes and capabilities, a detailed desk research was conducted in dedicated literature. Given the fact that the incubator’s roles worldwide are to help flourish the economic development, research commercialization and integration of social classes; the perspective on the following process report focuses on University-Based Incubators. This focus aligns with the aims and objectives of general business incubators. Thus, most economic development incubators have the same objectives as strengthening the local development, generating new labor markets and helping upcoming entrepreneurs in their path of opening a new company.

To start with, the first customer-acquiring strategy was initiated by focusing on the previous customers that have been part of AAU Incubator program in the previous years. The former incubates have agreed to fill in a survey, that can be found attached in the Appendix, to identify the resources and services that are necessary for AAUES to fulfill the customer requirements. By assuming that the previous incubates could qualify as early adaptors for AAUES, a brainstorming session has been developed together with four of the previous incubates to identify other groups of customers.

The brainstorming session followed the following model:

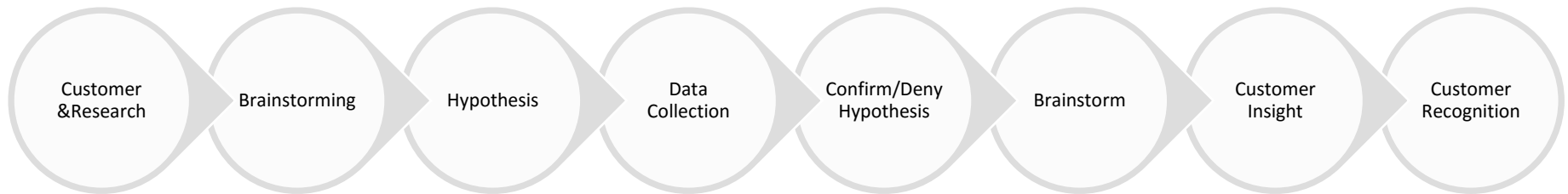


Figure 2 Customer Identification Model – “The Four Steps to the Epiphany” by Steve Blank – Self Adaptation

To discover and validate the target group of customers, Steve Blank’s Four Steps of Customer Development model has been followed. In 2006, Steve Blank published the bestseller in business development of that year, “The Four Steps to the Epiphany”, that builds on top of the existing techniques, and innovates with his concept of Customer Development.

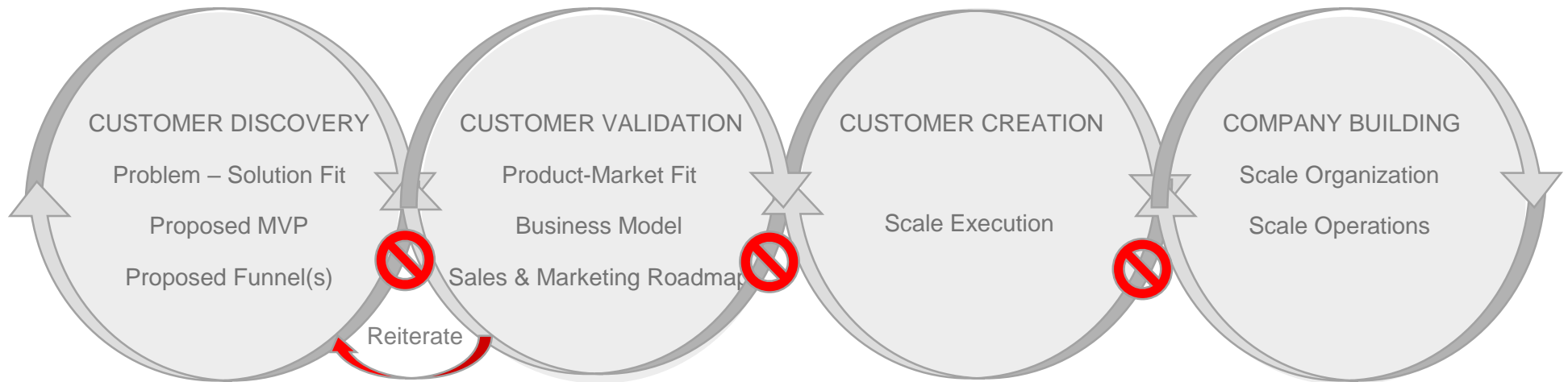


Figure 3 Customer Development Model – “The Four Steps to the Epiphany” by Steve Blank.



The model aims at providing a comprehensive framework for grasping and understanding of the needs and problems that the customer has. In the customer discovery phase, there is a focus on developing a minimum viable product, as well as a customer funnel, while in the customer validation phase, the focus is on developing a repeatable model, that can be scaled. In the customer creation phase, the aim is to create demand, aiming at the discovered users and targeting them through different channels. On the other hand, when reaching the company building phase, the focus shifts from a model to a more established framework that needs to be followed thoroughly. An important perspective when working on customer development phase, is not to focus on gathering features from hypothetical customers, neither having focus groups, but to define the business according to the assumptions made, and then test them for a market fit. (Steve G. Blank, 2006)

According to Steve Blanks, the customer discovery phase is finished once the following questions had been answered:

“• *Have we identified a problem a customer wants solved?*

- *Does our product solve these customer needs?*
- *If so, do we have a viable and profitable business model?*
- *Have we learned enough to go out and sell?”* (Steve G. Blank, 2006)

In attempting to further comprehend the framework for customer discovery, an analysis of the different phases will be undertaken. In Phase 1, the hypotheses exemplified and depicted in the company’s vision are portrayed by writing a series of briefs that capture their essence. These hypotheses comprise assumptions made about the product, pricing, customers, demand, market and competition; which will subsequently be tested in the latter part of the step.

Phase 2 involves qualifying these hypothetical suppositions by testing them out in front of potential customers. It is advisable at this stage to listen more and talk less, seeing as objective to understand the customers and their problems. Doing this will give the business developer a greater insight into the business, organization, workflow and product needs. At this point, the business developer returns to the company/team and then incorporate everything that has been learned or acquired during phase 2, while apprising the Engineering of customer feedback and jointly modifying the product and customer briefs.

Phase 3 involves testing the features of your revised product concept in front of customers. (Steve G.Blank, 2006) The primary objective here is not to sell the product, but to confirm the prior Phase 1 hypothesis by getting feedback from customers that those features solve their problems. Testing the product features will enable the business developer at the same time to test the soundness of the entire business model. A valid business model consists of customers that highly value the solution offered, and for the individual, it is a product that he has to have; or for the company, it is a solution that is critical to their mission objectives. Subsequently, the business developer tests his pricing, channel strategy, sales process and sales cycle in front of potential customers in order to discover who the budget customer is.

This also applies to consumer products where, for instance, selling to a teenager implies the child is the end user while the economic buyer is the parent.

Lastly, in Phase 4, a pause to verify that one understands the problems of the customers is required, that the customers are willing to pay for the product, and that the accruing revenue results in a profitable business model. (Steve Blank, 2006) This final segment of this stage concludes in the deliverables for the Customer Discovery step: a problem statement document, an expanded product requirement document, an updated sales and revenue plan, and a sound business and product plan (Steve Blank, 2006). Having validated the product features and business model, the business developer can decide if he has sufficiently learned enough to try selling his product to some interested customers or if he needs to go back to learn more.

The business developer may only proceed to Customer Validation if he is successful in this step. That basically summarizes customer discovery.




The summary table at the end of the chapter captures this step in detail, along with the deliverables that will tell the researcher whether he has succeeded or not. (Steve Blank, 2006)

It has been decided on sticking with the first hypothesis of having as earlyvangelists, the customers that fulfill all the mentioned characteristics. (so, the ones who have been earlier in the incubator program)

To quantify the results of the customer discovery phase, a short but intrinsic brainstorming session derived from the conversation the developer had with the previous incubates, while the results are presented in the table below. The table is separated on two axes.

1. Nr. /Crt. – the plausibility of having the mentioned customers in the incubator, as five being the highest and 1 lowest.
2. The category/field of activity that the customers have that would benefit from having the incubator

Outcome of Brainstorming session:

<b>NR. /CRT.</b>	<b>SOCIAL STARTUPS</b>	<b>RENEWABLE ENERGY STARTUPS</b>	<b>TECH-STARTUPS</b>	<b>E-COMMERCE</b>	<b>E-NEWS</b>	<b>ENTREPRENEURS</b>	<b>STUDENTS</b>	<b>FREELANCERS</b>
1								
2								






3								
4								
5								

Table 1 Results of the Brainstorming Session

## 7.2 RESEARCH DESIGN

(Eisenhardt M. & Graebner 2007) sustain (Mathison Sandra 1988) hypothesis, which states that well-developed research practice obligates the individual that does the research to triangulate: that is defined as, using multiple methods, data sources, and researchers, to enhance the validity of research findings. (Eisenhardt M. & Graebner 2007) The aim of this project is to follow the previous mentioned guidelines. As for testing the mentioned hypothesis through methods as data triangulation and multiple sources of research, methods and sources have been made use of. The primary data was gathered from interviews with specialized individuals, e.g. interview with Niels Maarbjerg, previous Head of AAU Innovation Department and the brainstorming session with the representatives of StartupWorks – an initiative developed by clusters of specialized individuals that have the same goals and objectives, such as bringing together the startup community in Aalborg, and allocating space and specialized mentorship and guidance for individuals that thrive to succeed on their own. Moreover, open discussions and presentations have also played an important role in the data gathering process.

## 7.3 RESEARCH METHOD

Considering the fact this project presents a hypothesis – that the sustainable performance and functioning of new start-up businesses is fostered by Nordic business incubators – this may only invariably be accepted or rejected. The method of research utilized in this report is inextricably connected to the research entity.

In considering the significance of the term ‘hypothesis’, Wallimann (2006, 207) defines a hypothesis as “a theoretical statement that has not yet been tested against data collected in a concrete situation, but which it is possible to test by providing a clear evidence for support or

*rejection*”. This project therefore adopts a methodology based on the foregoing, in answering the question of the hypothesis. As such, the project is characterized by an iterative approach, which consists of both elements from inductive and deductive reasoning.

The project begins with deductive reasoning, presenting a summary hypothesis which deviates from the current literature on assessing the sustainable performance of incubators. The project adopts inductive reasoning, even as a consideration of the literature review reveals that an appropriate framework for assessing the environmental and social performance of business incubators is deficient. Inductive reasoning is applied in proceeding from observations, towards theory, or in this case, developing a model for fostering the sustainability of university business incubators. The project subsequently proceeds on inductive reasoning – where the hypothesis may either be accepted or rejected – after establishing the analytical framework.

The preferred research method, as observed earlier, is largely dependent on the object of interest. (Yin, 2009) *argues that three conditions determine which research method is appropriate:*

1. *“The nature of the research question. “*
2. *“The extent to which the researcher can control actual behavioral events.”*
3. *“Whether the focus of the study is on contemporary or historical events.”*

<b>SOURCE OF EVIDENCE</b>	<b>STRENGTHS</b>	<b>WEAKNESSES</b>
Documentation	Stable – can be reviewed repeatedly Unobtrusive – not created as a result of the case study Exact – contains exact names, references, and details of an event Broad coverage – long span of time, many events, and many settings	Retrievability – can be difficult to find Biased selectivity, if collection is incomplete Reporting bias – reflects bias of author Access – may be deliberately withheld

Interviews	<p>Targeted – focuses directly on the study topics</p> <p>Insightful – provides perceived casual inferences and explanations</p>	<p>Bias due to poorly articulated questions</p> <p>Response bias</p> <p>Inaccuracies due to poor recall</p> <p>Reflexivity – interviewee gives what interviewer wants to hear</p>
Direct observations	<p>Reality – covers events in real time</p> <p>Contextual – covers context of “case”</p>	<p>Time- consuming</p> <p>Selectivity – broad coverage difficult without a team of observers</p> <p>Reflexivity – event may proceed differently because it is being observed</p>
Archival records	<p>Precise and usually quantitative</p> <p>[Same as those for documentation]</p>	<p>Accessibility due to privacy reasons</p> <p>[Same as those for documentation]</p>

Table 2 Yin, 1994

Bearing in mind that this process report takes its point of departure in attempting to understand the “who;” “what;” “where;” and “how many/much” of the needs of student entrepreneurs, as well as the problems of the targeted customers, an interview is one of the most important sources of study information. (Yin 2009) Consequently, this process report will adopt research methods including guided interviews, surveys and documentation; as well as direct observations and archival records as supplementary research methods.

<b>METHOD</b>	<b>FORM OF RESEARCH QUESTION</b>	<b>REQUIRES CONTROL OF BEHAVIORAL EVENTS</b>	<b>FOCUSES ON CONTEMPORARY EVENTS</b>
Experiment	How, why?	Yes	Yes
Survey	Who, what, where, how many, how much?	No	Yes

Archival Analysis	Who, what, where, how many, how much?	No	Yes/No
History	How, why?	No	No
Case study?	How, why?	No	No

Table 3 Yin, 1989

## 7.4 PROBLEM FORMULATION

The problem formulation was structured to express a constant and clear picture of the direction and purpose of this project, which would also act as a broad framework for constructing the structure of the paper. In line with the presented background, and while considering the academic requirements concerning the theme of this project, its goal was set around building a framework for AAUES. The problem formulation consists of two questions,

**“What are the value propositions for AAU Entrepreneurship Space business model that provide significant gains for the target customers and how would the University benefit from having this facility?”**

**“How does AAU Entrepreneurship Space certify that the combinations of selection strategies, business support and meditation are compatible with the surroundings?”**

While constructing the problem formulation, a broad-to-specific approach was used, leading to having the problem formulation consisting of two parts. This also reflects the structure of the project, with its first half revolving around having a qualitative and quantitative exploration phase aimed at finding out the ideal combination of business model elements; which would generate enough value for the given target segments, in order for the community members to pay for the services provided by AAUES.

The second half consists of an action-oriented ‘how’ question, aimed at finding key information useful for constructing realistic implementation and operational financial plans, as well as developing a relevant implementation plan designed to take AAUES to the market. This second part is directly related to the first part, being based on the heavily-tested and iterated business model developed in the first part of the problem formulation. Given the contents implied behind working on the two different parts of the Problem Formulation, the outcomes will be presented in the two documents that the internship project is constituted from as following: The Process Report will mostly include the work being done

in order to answer the first part of the problem formulation, and will be aimed at finding potential business models for AAU Entrepreneurship Space, performing validation-iteration-reframing loops, and identifying a final business model that has a higher chance for providing enough value for the respective target market that it would be willing to pay for. The Business Document will mostly include the output of the work being done in order to answer the second part of the problem formulation, and will be aimed at developing an implementation plan of the newly identified business model. It will revolve around constructing a new set of product and service specifications and a go-to market strategy that is scalable. The entire Business Document will use the learning outcomes from the Process Report, and will be an applied extension of it.

## 7.5 LIMITATIONS

Due to the limited timeframe of this project and its hands-on approach, as well as due to the necessity to match the development of the project with the internship requirements and university regulations, several limitations were encountered. The section that follow this paragraph describes the general ones. Considering the limited amount of research available on university business incubators, and coworking facilities in general, this project will primarily be built on a framework based on literature review.

## 8 TYPES OF INCUBATORS.

---

### 8.1 BUSINESS INCUBATOR

Upcoming start-ups go through a vast amount of challenges due to lack of networks, resources, knowledge, experience, etc (Stinchcombe 1965), and also have a tendency of closure before reaching maturity (Dollinger 2003). The (National business Incubation Association (NBIA) ) refers to “business incubation” as a helpful business process that nurtures and provides the successful development of start-up and fledgling companies, by providing entrepreneurs with a wide gamut of necessary resources and services. These services are usually implemented by the incubator and offered both in the business incubator and through its network of contacts. (Malcom H.Bathula, M.Karia, M. Abbott, 2011) A business incubator’s main goal is to produce scalable, self-sustainable and successful companies that will graduate the incubator. (National business Incubation Association (NBIA) )

While remarking on the definition, business incubators can also provide other relevant services such as SME support, managerial advice, and can also help in making entrepreneurs comprehend and fill knowledge gaps.

The (OECD 1997) report identifies six main services that incubators provide: physical infrastructure, management support, and technical support, access to finance, legal services, and networking. Business incubators help develop the corporate world by researching new technologies, improving existing services and products, allowing for new channels of investment into developed industries, and providing a highway for growth and thrive. Therefore, business incubators are meant to benefit the community by engaging the startups or incubates to grow successfully, with the aim of job creation, innovative products, and economic growth, as presented in Figure 1. Business incubators are designed to accelerate the rate at which an entrepreneurial initiative reaches successful development, through an amalgam of business support resources and services offered by the management team in a predefined structure. (Malcom H. Bathula, M.Karia, M. Abbott, 2011) The program’s main purpose is to help future entrepreneurs in the process of producing new high-growth firms that will terminate the program financially viable and self-sustainable. (National business Incubation Association (NBIA)) Some business incubation programs also provide assistance for non-tenant clients, also referred to as virtual or *affiliate clients*.

To differentiate between incubators, a group of academics divided the concept into five types of programs: regional-business, physical & virtual, independent commercial, company internal and university-business incubators. All the models described are separated in two categories of strategic objectives, non for profit and respectively, for profit. This method allows for distinguishing business incubation models, as well as their scope and objective.

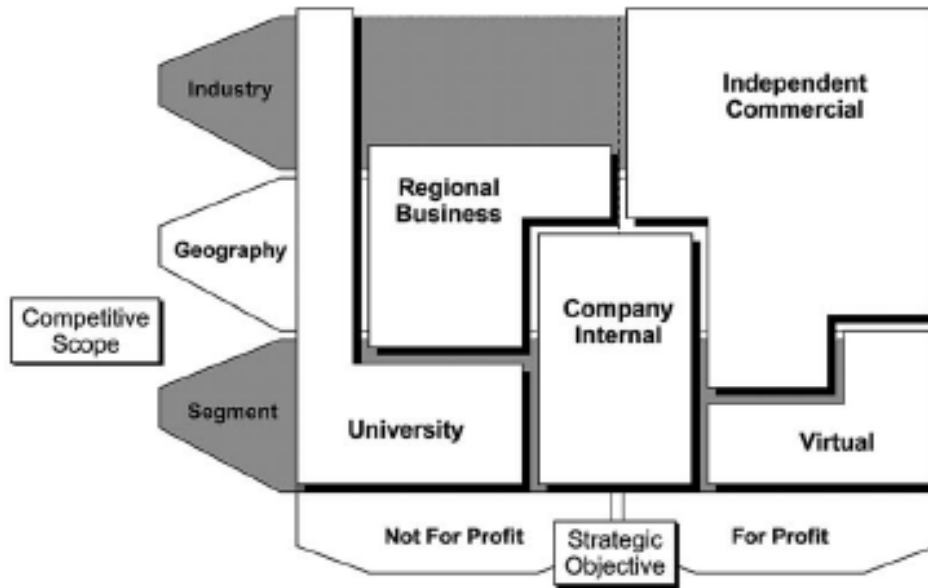


Figure 4 Archetypes of incubation



## 8.2 UNIVERSITY-BUSINESS INCUBATORS

Quite as the name suggests, there is an intrinsic difference between University Business Incubators (UBIs) and Traditional Incubators seeing as they are situated in an academic environment. Despite the apparent similarities to be observed between university-based incubators and business incubators, the distinguishing factors that make the University-Business Incubator unique are the participation of the private sector, the characteristic track of their performances, and the incubates – who are students or graduates of the respective universities. Mian observed that the University-business incubators were somewhat similar to business incubators, because they have distinctive characteristics: collaboration with the private companies, monitor of the processes and the performances achieved during a limited or determined period. (Mian 1994)

It is quite stirring, in gaining an insight into how the university-business incubators are earning attention, to understand the mentioned business activities, likewise the environment that the universities lie into when conducting their activities. Regardless of the fact that a University primarily aims to provide higher learning in various fields, nonetheless, universities also have an important part in connecting with the surroundings and local environment in order to develop a research-dedicated platform, and an opportunity for their students to seek jobs. (Huffman.D & Quigley 2002). University incubators provide two services to clients: incubation-related services, and university-related services (Mian, S.A. (1996)).

The establishment of University Business Incubators is aimed at providing the requisite support to startup ventures which are knowledge-based. This, in essence, is quite comparable to the traditional business incubators. Nevertheless, the primary focus of such incubators borders on generating and transferring technological and scientific knowledge from universities to companies (2005 Grimaldi R. & Gandi A.). These control the access to capital, technology, and know-how that new startup ventures that are knowledge-based can exploit to commercialize their offerings even faster. “*The networks facilitated by the university increases their knowledge and absorptive capacity, which in turn, helps them to overcome the twin challenges of newness and smallness.*” (Stinchcombe 1965) (Malcom H. Bathula, M.Karia, M. Abbott, 2011)

Then again, the word ‘incubator’ has been in existence for a long period, and has assumed a more generic and broad nature, covering many forms of business growth: from supporting to financing. There have been prior attempts to classify incubators. A common classification system specifies that more than 54% of incubators are of the ‘*mixed-use*’ type, considering that the current tendencies are to have specialized incubators that cater to *technology* (39%), *services* (4%), *manufacturing* (3%) and *speciality* (3%). (National business Incubation Association (NBIA) 2009)

Incubators are also classified as ‘*for-profit*’ and ‘*not-for-profit*’ depending on their focus. For-profit incubators function as business accelerators, seeking to speed up product development and startup growth, and thereby enhance the equity and profits of shareholders including their own. (Mourdoukoutas & Papadimitriou, 2002)

## 9 UNIVERSITY INCUBATOR MODEL.

---

### 9.1 FRAMEWORK

While the aim of the process report is to develop a trustworthy incubator model, little amount of research has been written with regards to developing incubator models, and in what ways they allocate support. According to the literature reviewed, the outcomes are however structured into five basic incubation steps. (Hackett and Dilts, 2004b)

1. Selection
2. Infrastructure
3. Business support
4. Mediation
5. Graduation

The *Selection* process refers to the framework behind accepting or rejecting ventures into the incubation process. *Infrastructure* refers to the location of the incubators, as well as the facilities and services provided by that entity. *Business support* defines the coaching and training activities undertaken by the administrative personnel to incubates. *Mediation* also refers to what the degree of connectivity is between the incubate and the outside environment provided by the incubator facility and *Graduation* is defined as the exit strategy, policies and the decisions taken when the incubates leave the incubator. Thus, not all of the steps mentioned are equal in value. According to (Mian, 1996a) business incubators provide overall, the same services and resources. These include: shared offices, facility-related services, office services, etc. Moreover, there is no academic literature in regard to graduation framework or policies.

Citing the Center for Strategy & Evaluation Services (CSES ,2002), a pattern exists that aims at requiring formal exit strategies, which initiate the exit process for incubates after 3-5 years. This strategy however applies mostly to general business incubators. As for the university business incubator, there is no academic literature providing the length of the process behind incubation.

According to (Bergek A. & Norrman C., 2008), the processes that conclude business incubation are selection, business support and mediation.

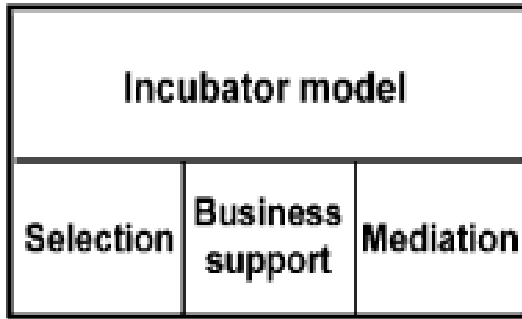


Figure 5 Incubator Model Components (A. Bergek and C. Norman, 2008)

### 9.1.1 SELECTION

The selection process can be a cumbersome gathering of criteria that need to be implemented by the selection committee. When it comes to (Hackett and Dilts, 2004b), it was argued that the research done so far in regards to incubator models is mostly focused on the issue of the process of incubate selection. The process of distinguishing between the incubates that have potential and the ones that don't fit into the incubation process is basically a challenge that requires the selection committee to have a deeper understanding of different criteria. Mostly, it is observed that the market and the process of new venture formation are the processes that need a lot of attention and understanding. (A. Bergek, C. Norrman, 2008) However, regarding the selection criteria, different opinions arise. In principle, the selection process can be applied

to two different parts of the incubator, as in defining what the selection committee should be focused on. The ones worth mentioning are the idea selection process, the innovation in regards to the idea, the experience the entrepreneur has, or the team.

When the selection criteria are focused on the idea, the selection committee has to have a deeper understanding of the technologies, the market and profit generation criteria in order to evaluate an application.

The entrepreneur experience criteria in contrast, allows for the committee to categorize according to the types of personalities the entrepreneur has, as well as business development skills, experience and track record.

However, the selection process is not only backed by the selection criteria, as it can also be open to a matter of flexibility.

Selection strategies	Survival of the fittest	Picking the winners
Idea-focused selection		
Entrepreneur-focused selection		

Figure 6 Selection Strategies (A. Bergek and C.Norman, 2008)

The model seen in Fig. 4 separates the selection criteria into four building blocks. When combining any of the selection components, four selection criteria or strategies are being displayed.

According to (Bergek A. & Norrman C., 2008) the *Survival-of-the-fittest* and *Idea-focused selection* strategy consists of a large quantity of entrepreneurs with underdeveloped ideas focusing on a broad technology or field.

When combining the *Survival-of-the-fittest* block with *Entrepreneur focused selection*, the application requirements are as diverse as the knowledge and skills that the entrepreneur has on the field that his idea is targeting.

*Picking the winners and Idea-focused selection*: This model requires a firmly topic focused application with a niche portfolio within a scoped down technological area. In this regards, ideas coming from this category are often ideas suspended from the highly qualified research institutions or universities.

Picking the winners and entrepreneurs-focused selection consists of a more handpicked selection criterion, relies on the committee’s personal network or on the pool of resources that a nearby university has to offer.

## 9.1.2 BUSINESS SUPPORT

Emphasis has been placed, in recent literature concerning business incubators, on the importance of providing business support in addition to the more general administrative services; and various researchers have likewise described different types of services that may be provided by incubators to their incubates. (A. Bergek and C.Norman, 2008) The business support services generally identified include entrepreneurial training and business development advice, as well as services concerning general business matters such as accounting, legal matters, advertising and financial assistance (Mian, 1996 a) (A. Bergek and C.Norman, 2008). The services of most significance in this study, are those which pertain to entrepreneurial training and business development. (A. Bergek and C.Norman, 2008) This also includes coaching services and business planning, marketing, sales and leadership education.

As observed for instance, according to (A.Berger & C.Norrman, 2008), the success of incubator tenants depends, not only on the nature of these services, but also on how these services are supplied. (Hackett and Dilts, 2004a )observe that the perspective adopted in offering business assistance may differ in relation to how time intensive it is (i.e., the percentage of work hours that are devoted to monitoring and assisting incubates), its comprehensiveness (the degree to which assistance includes strategic and operational assistance as well as administrative-related services) and the degree of quality (the comparative value of the assistance) (A. Bergek and C.Norman, 2008). Rice (2002) adopts a rather more generic approach by differentiating between various types of counselling:

*“(1) Reactive and Episodic counselling — this is entrepreneur-initiated, where the entrepreneur requests help in dealing with a crisis or problem. The proffered assistance is usually limited in period and is also usually focused on the particular issue.*

*(2) Proactive and episodic counselling — this is incubator initiated, where the manager engages entrepreneurs in informal, ad hoc counselling.*

*3) Continual and proactive counselling — this is incubator initiated, where the venture is subjected to a recurrent review by incubator managers and also “intense-aggressive” intervention.”* (A. Bergek and C.Norman, 2008)

The different categories are markedly different in terms of who initiates the process (the entrepreneur or the incubator staff), the intensity of the support or continuity. (A. Bergek and C.Norman, 2008) Although the basic essence of these various dimensions of counselling boils down to the role of the incubator in the incubation process. (A. Bergek and C.Norman, 2008) Using such yardstick, incubators can be scaled depending on the extent to which they see themselves as managers of the incubation process or as external facilitators of a process that is essentially managed by the incubates themselves. (A. Bergek and C.Norman, 2008) Considering one extreme end of the spectrum, which it has been defined as the term ‘strong intervention’, the incubator staff, sometimes even supplied with a complete management team, are actively involved in guiding the enterprises through the incubation process. (A. Bergek and C.Norman, 2008) At the other extreme of the spectrum, which has been defined as the term ‘laissez-faire’, the incubates are left entirely to themselves and provided with very little support, unless they take the initiative. (A. Bergek and C.Norman, 2008)

### 9.1.3 MEDIATION

The incubation process is highly more important than the incubator itself, or how (Hackett and Dilts, 2004 a) argues, the process transcends the incubator. The most significant role is to behave as an intermediary- or mediator – between incubates and important innovation models or systems. ( A. Bergek and C.Norman, 2008) The incubator acts a connection between the incubate and the surroundings. ( A. Bergek and C.Norman, 2008) Such critical resources include for instance, knowledge and technology, financial resources, target market as well as human resources. ( A. Bergek and C.Norman, 2008)Incubators may engage in network mediation, as for example, matching incubates with established entrepreneurs that activate outside of their network (A. Bergek and C.Norman, 2008)having the aim of increasing the incubates chances of succeeding after graduation.

The concept of “network mediation” here acts as an attempt at building a highly qualified network that can support the business activities the respective incubate is in to. (A. Bergek and C.Norman, 2008)

Mediation refers to the process of making use of an independent, impartial and respected third party, with the necessary knowledge and know how in a desired field of expertise in a settlement process, instead of choosing arbitration or litigation. Mediation might facilitate the desired services as well as provide information, know-how and expertise which would benefit the incubate in his new venture creation and may as well mitigate the uncertainty they experience. ( A. Bergek and C.Norman, 2008) Networks might also appear between incubates and external stakeholders, as (Hackett and Dilts, 2004b) suggest. The external stakeholders can be represented by government, university researchers, investors, and even potential partners. By implementing the concept of mediation inside university business incubators, the incubates may understand, interpret and even influence the surroundings. Regulations, laws, traditions, values, norms and cognitive rules are, according to (A. Bergek and C.Norman, 2008) , influenced by the incubates.

Trends show that incubators’ mediation activate in local surroundings, whereas different incubators have a broader range of activity, working on a more international gamut, within a defined technological field. This adds up as a suggestion that it is recommended to differentiate between incubators that focus on regional/national innovation systems or technological/sectoral innovation systems (A. Bergek and C.Norman, 2008) When it comes to groups formation, the two incubator categories overlap. As such, it is advisable to treat each form of incubator as a “self-standing” entity until it has been demonstrated through empirical studies which of the mentioned categories fits the description of the specified entity.

## 10 FRAMING.

---

### 10.1 BUSINESS MODEL CANVAS

AAU Entrepreneurship Space is a merged concept, created by aligning the values and objectives of a coworking space with the strategy and model of a University-Business Incubator. While aiming at building a business model canvas for both a coworking and a university business incubator, several models have been tried out. The iteration and previous business models can be found attached in the Appendix.

To acquire a holistic view of the whole business concept, the project displays a business model developed together with its customers, formed by a group of student entrepreneurs with the aim of making use of the incubator once the concept is implemented. The business model consists of five interlocking elements that, taken together, create and deliver value. These are: customer, value proposition, profit formula, key resources and key processes. Because of different definitions of the business model and the various views of people, having a common way to expose and visualize the incubators model brings a qualitative way of discussing and developing a concept that everyone can comprehend. Developed by Alexander Osterwalder, the Business Model Canvas is one of the most used tools for visualizing a business model. The canvas consists of nine building blocks, which include all of the four elements described by Johnson, as well as other elements, all vital for a business model.

Although the canvas is designed to address the customers, it was chosen to address both customers and partners, as the business is dependent on the active participation of all parties.

In the current business model, customers have been identified and separated in three major categories: startups, stakeholders and individuals. These categories are also structured into several sub-categories. For the customer described as startups, the sub-categories have been identified as being: social startups, renewable energy startups and tech-startups (bio-tech, fin-tech, health-tech, Nano-tech), e-commerce, e-news, etc. The major stakeholders have also been mapped out to define the value propositions that address those parties. The ones mentioned are the Regional House and Aalborg University; as the aim of the business incubator is to work together with all relevant parties for a sustainable development.

The individuals are defined as being the existing entrepreneurs, the students with an interest in entrepreneurial activities and also freelancers or individuals aiming at providing their know-hows for potential viable businesses.

The value propositions are separated according to the customer segment. The first values are addressed specifically to startups, even though some of the values apply also for individuals. The values defined as: job creation, talent screening, entrepreneurial awareness, increased attractiveness and increase in the number of students, addresses both the Regional House and Aalborg University, as according to the research developed, have been identified as major stakeholders. And the values mentioned in the business model canvas correspond with the values within their future strategy.

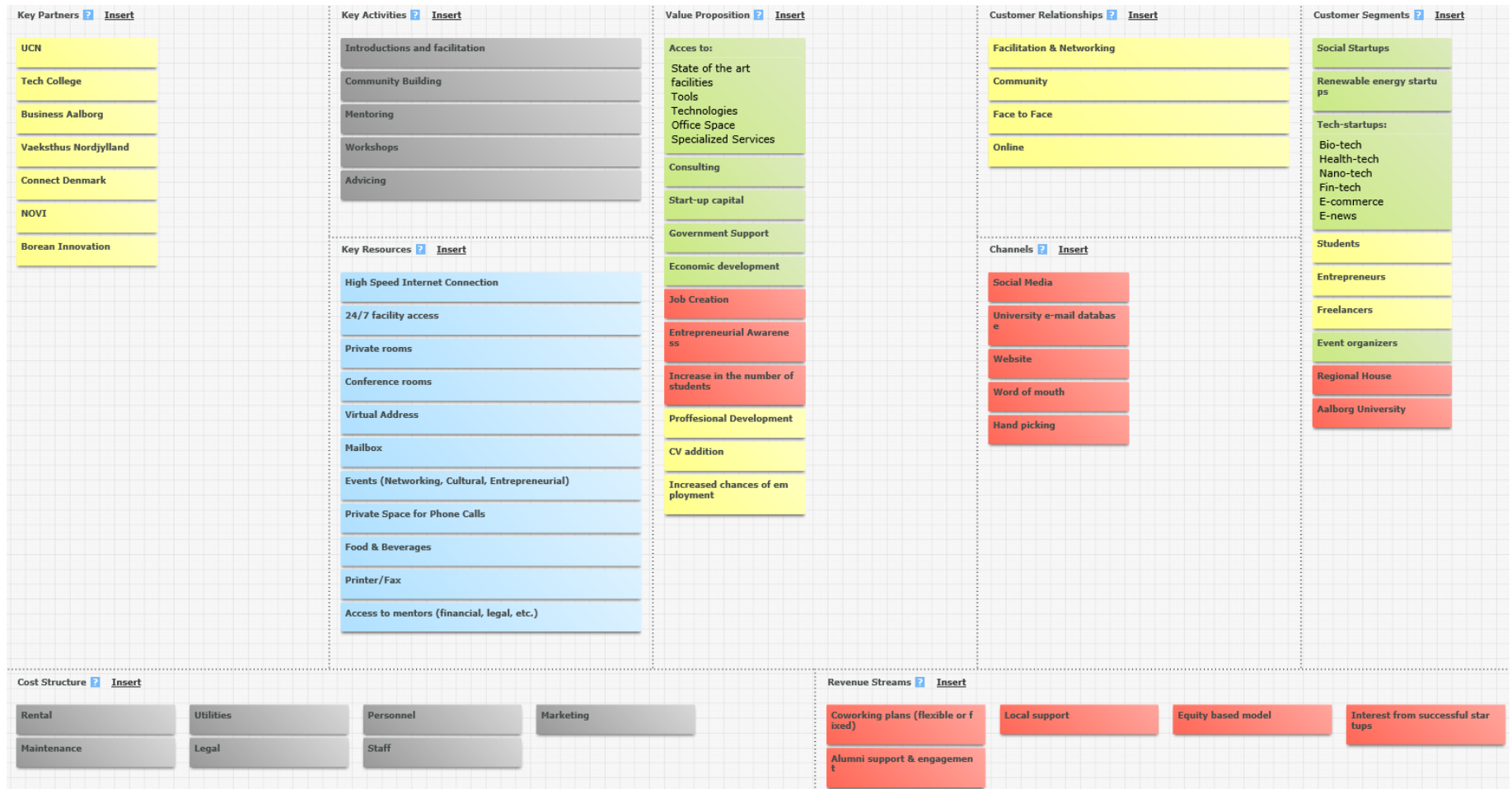


Figure 7 Business Model Canvas - Alexander Osterwalder

When describing the qualified mentorship, AAU Entrepreneurship Space aims at bringing together only qualified personnel coming from all over Denmark and University departments, with experience and background knowledge in all business repertoires, as legal advice, fundraising, business model innovation, business development etc.



The value proposition for individuals has been mapped out as the professional environment and networking possibilities, opportunity to increase productivity and life-work balance.

For students, entrepreneurs, and freelancers, the value propositions identified are the possibilities for professional development, CV addition, increased chances of employment, either in one of the incubated startups, or afterwards in a successful company – on the strength of the hands-on experience gathered during the incubation process. On top of these values AAUES has to offer to its' customers, there is also the transfer of knowledge, which is crucial for start-ups, students, and individuals alike.

Because of customers being the most important part of any business, customer relationships have been developed. Since AAUES is not only a coworking space but also a business incubator facility for bright minded people, the customer relationship was firmly based on facilitating and networking, building and keeping the community feeling, and keeping the community members up to date through social media, online and offline support and a two-way communication using feedback on the concept itself and on the platform.

It was also decided to turn customer data into customer insights, by regularly displaying reports on the website regarding where the customers are placed in the incubation process and how good their development is.

Different channels to reach the customers have been identified, such as social media, university staff and e-mail database, website, press releases, fairs and word of mouth. For start-ups, other means of reaching out are through emails, phone calls and scheduled face-to-face meetings. When mentioning the key activities, AAUES excels in community building and introduction and facilitation of relevant activities, as advising, supervising the development of the startups, mentoring and informative workshops. The first, and probably most important activity that AAUES has to perform, is to raise awareness and attract the first community members; as well as getting as many stakeholders as possible on board.

The main partners were identified as being, UCN that can contribute to the development of the entrepreneurial concept by constantly marketing the possibility of becoming an entrepreneur among their students, and also by providing qualified personnel to train and advice startups and individuals that are part of the incubation process at a moment in time as well as Tech College. Business Aalborg is among the top partners, as through their support, AAU Entrepreneurship Space can become not only the “go-to” place for entrepreneurship but also a movement for the municipality itself, allowing an increase in the number of students choosing Aalborg for its approach on working with entrepreneurship. Moreover, when AAU Entrepreneurship Space contributes to the creation of new companies, translated into more job openings and position, there is growth potential not only for the university but for the region as well.

If the mentioned Universities are supporting AAUES, it provides a higher exposure and also increases value through affiliation. Moreover, it will help in reaching the students easier and more reliably. In terms of key resources, AAUES will provide its customers' perks such as, high-speed internet connection, 24/7 access to the facility and possibility to rent private rooms as well as conference rooms. For startups, a great resource would constitute the virtual address and mailbox, offline and online. Some other perks will be private space for phone calls, printer/fax, food and beverages, and last but not least, access to financial and legal advisers.



Marketing, IT development, human resources and space rental are the costs having the biggest ratio in the cost structure of AAU Entrepreneurship Space. As AAU Entrepreneurship Space is meant to be run by student volunteers as well as faculty employees. Most of the development is carried within the company, without having the need to hire additional personnel.

Different pricing strategies have been set up, as following:

For the coworking space:

Space rental and services.

For the business incubator:

1. A percentage of the revenue.
2. A percentage of the equity when company is sold.
3. A percentage of the equity when company goes public.

## 10.2 COWORKING AND NON-FORMAL EDUCATION

Coworking spaces are essentially designed to work for people that are active in different branches. In the era of the Internet, and with the world as a global village, many people, especially freelancers such as software developers, graphics designers, marketers and others, started working remotely from their homes.

While this may initially seem to be a great opportunity, because one can avoid costs and time of transportation, as well as work in a comfortable environment, in a long term perspective, it might bring about some disadvantages.

Notwithstanding the vast amount of distractions, the place is very monotonous and may quite often limit one's creativity as there is simply no one to talk with. Hence, people started seeking other places to work.

Natural and still very popular choices are cafes: but they do not solve the problem completely. Therefore, groups of people began renting places to create their own offices, and with time, the first commercial coworking spaces were opened.

While coworking is all about collaborative learning, the coworking facilities describe how a business or organization dedicates its time to the full coworking concept integration. Coworking spaces aim at forming a critical infrastructure for a fresh and growing workforce of individuals that have their labor where, when, and how they want. On the other hand, the coworking movement is a disperse aggregation of those who value the coworking concept.

Coworking, as a movement, can be addressed in the shape of a wiki, a blog, or a discussion group. While coworking can be associated with non-formal education, in its definition of “any organized educational activity outside the established system”, it can be argued that the coworking environment allows for learning initiatives from certain individuals that tend to have a growth mindset.

By providing individuals with an environment in which non-formal education is promoted, as well as collaborative learning and development fostered, one can argue that coworking spaces will retain and restructure the way the present generations of millennials will acquire new skills and develop the existing ones.

The principle of the reform can be addressed in comparison with the principle of coworking, addressing both the similarities and the differences. On one hand, the non-formal education plays a crucial role in the personal development of individuals. On the other hand, the certificates that resemble one’s learnings, do not give a full picture of the real competencies.

This is a pertinent problem that coworking spaces are not addressing, since there is no need for a certified user to be listened to or acknowledged in a coworking facility, and there are initiatives coming from different organizations, platforms and European institutions that research and develop complex tools that will boost the recognition of the skills and competencies, that were either gathered or further developed through the means of non-formal education and participative coworking.

For certain means, in the following paragraph, the coworking concept is addressed as being a resource of informal learning. The process usually takes place in day-to-day life, at work, during leisure and in the community. While the learnings are not notable, neither immediately visible for one individual, the outcomes of such learning can be made more visible, and hence open to greater recognition.

## 11 FIELD RESEARCH.

---

This section contains the results of the field research developed by the project leader and designed to identify the overall details and characteristics of the market, its dimensions and trends, and all relevant characteristics for AAU Entrepreneurship Space services.

The overall markets include those that conceive SME’s, Startups, Students, Freelancers and Individuals of ages between 18-45 years old. In principle, the research is sought to conceive and characterize trends that have relevance for developing a coworking space together with a University Business Incubator, as well as those that relate with its subsectors.

The paper is focused on the main targeted markets for AAU Entrepreneurship Space – Aalborg and the northern region of Denmark, but also includes research on other concepts of coworking spaces combined with UBIs as well as on other countries.

Upon this research, AAU Entrepreneurship Space compiled and researched relevant trends and technology within its market. The research allowed for gathering information from a broad range of data sources that are known to be relevant to the task objectives. These sources include numerous market research and industry specific database and through commercial gateways, or “portals”.

During this assignment, AAU Entrepreneurship Space expects to gather and process pertinent information extracted from different published reports, but also from the desk research performed by the author itself. The field research was conducted by using the qualitative, as well as quantitative research approaches. As part of gaining relevant insights, one approach was to have a series of interviews with stakeholders, and also with AAU’s employees, to understand their perspective on what would be valuable for the university, and what the University would benefit from building a shared facility.

Even though the role of the interviews was to gain relevant insights and validate the hypothesis that the university conceives as value, the number of companies created during the life-time of the AAU Entrepreneurship Space, and that the return of investment from an entrepreneurship space would be the number of job created, and the rumor that the university can nurture entrepreneurial attitudes as well as mentor and grow successful companies.

The first interview conducted was with Niels Maarbjerg, Innovation Director of AAU Innovation, and took place over the course of one hour. Unfortunately, the audio recording of the interview was not comprehensible enough to be made into a transcript, leading to a far from ideal scenario from a methodological perspective. Thus, on the positive side, notes were taken during the interview, which led to having more than enough data to make an output analysis of the interview.

## 11.1 INTERVIEW WITH NIELS MAARBJERG – INNOVATION DIRECTOR OF AAU INNOVATION

Niels Maarbjerg, the Innovation Director of AAU Innovation, agreed to take one hour of his time to answer a series of questions that were meant to provide an understanding of what the university defines as value, and also what the success metrics for a University Business Incubator would be. The interview with Niels took place to get an understanding of what influencers describe as “value” for the university, to gather information about the policies that the university has in terms of investing time and resources in projects as coworking spaces and UBIs. The desired outcomes of the interview were to get a grasp on what the university would see as “return of investment” coming from an initiative such as an entrepreneurship space.

When asked what he would describe as value for the university, Niels believes that it is important to differentiate general business incubators from UBIs, and for-profit entities from non-profit entities. The difference is huge. And because of the fact that the general business incubators need to generate profit, this acts as an impediment in the way of assuring that the main goal of this entity is respected. Thus, University Business Incubator focus more on the primary goal: that is, “the creation of new innovative companies”, increasing the “openness”, and

allowing for “open innovation” in all the business development stages. However, the differences between general business incubators and UBIs had been discussed earlier in this process report together with the positive and negative aspects that both of them have.

Even though he has a good overall impression about University Business Incubators, and he certainly sees the need for such a facility, when asked about what his expectations would be from an UBI at Aalborg University, he found it hard to describe the exact outcomes. His answer circled the field with fine touches on the history of Aalborg University, together with the evolution of technology; but nothing concrete. He argues that the decision makers from Aalborg University are in general conservative, and are not that open to adopting new ideas without a clear understanding of the concept and the benefits of it.

In 2013, there were a series of events to find out if AAU could start such an initiative across Copenhagen and Aalborg. There was significant interest from many researchers and involvement at both institution and dean level. One of the conclusions of the work was that the university already had a big percentage of all relevant activities. Another, that they were entitled to start small. However, the initiative as it was conceived in the fall of 2013 did not see the green light.

When discussing the initiative that AAU Incubator had started, with the same purpose and objectives in mind that resemble the aims of UBIs, and what the factors were that contributed to the closing of the program, Niels allowed for an understanding that the answer had already been given when he stated that most of the decision makers are conservative; and for that reason, they did not see the initiative as a valuable one or satisfactory in that manner.

## 11.2 INTERVIEW WITH TINE THYGESEN – CO-FOUNDER OF FOUNDERSHOUSE, COPENHAGEN

After a great event held by SEA – Supporting Entrepreneurship at Aalborg University, an interview was conducted with a born entrepreneur, “by profession and by heart”, Tine Thygesen. Tine started her journey in entrepreneurship by opening her first company in a garage in Australia. The reason behind having the interview was not because she had been part of starting Everplaces, or that she has been the CEO of Venture Cup, but because she is deeply involved in building communities and coworking facilities such as Founders House in Copenhagen.

When asked what her thoughts were regarding the initiative of opening a coworking space in Aalborg, she replied that coworking spaces are a great idea. In her experience in creating coworking spaces in Copenhagen, these types of initiatives bring people together. It makes them more passionate about their work, and it really helps them in getting practical about their ideas. She also states that proximity has a lot to do with trust. In order to work with someone to build your startup, you need to know the person in detail, so you can open up and ask for help when it is needed.

When asked why she started Founders House, Tine replied that by being an entrepreneur herself, such a facility would bring people together; and except for making things a lot more engaging, it would also bring a lot of value to the network, by allowing people to collaborate, coordinate and work together on different projects.

Even though Founders House is a great coworking space with a large pool of human resources, the interview went towards digging into the challenges that popped up when trying to make itself sustainable. And the answer to that question was unexpected, as Tine replied that Founders House is not supposed to generate revenue, and that the money that the facility generates is invested back in to grow it even more. Founders House is supposed to help nurture startups and create a cool environment.

The value Tine sees coming from such an initiative is trust. Trusting yourself and the people around you helps in focusing your effort to becoming better than the person you were the day before. “A little bit like a battalion of soldiers [...] you become friends with people working not only for your startup but also for the guy sitting right next to you.”

The output from this interview was that the aim of a coworking facility shouldn't focus on generating revenue, but value to its inhabitants. However, if the facility generates revenue, the profit should be reinvested in making the place an even better version of a coworking environment.

### 11.3 INTERVIEW WITH MORTEN DAHLGAARD – HEAD OF ENTREPRENEURSHIP AT AAU INNOVATION

The interview with Morten Dahlgaard – Head of Entrepreneurship at AAU Innovation was aimed at increasing the comprehensiveness of what would the university threshold be for an entrepreneurship space. Moreover, the interview structure was formulated as follows:

- Opening: 3 minutes
- Providing info: 5-10 minutes
- Gathering info: 15-20 minutes
- Closing: 2 minutes

This structure allows for a better understanding and a model designed for gathering information during the conversation, as the interviewer speaks only 20% of the time allocated while the interviewee speaks 80% of the time. This model allows for open and closed ended questions, as well as debates on certain topics. Thus, in the following interview there is a tendency in only addressing open ended question to have a broader reach and a deeper understanding of the topic discussed, which in this case is “Building an Entrepreneurship Space at Aalborg University”.

When asked what value the university has to gain from his point of view, Morten replied that the university should be a knowledge-creation entity. The main characteristics of a university are knowledge, research, education as knowledge-transfer, and innovation. Moreover, entrepreneurship and collaboration with the industry were also mentioned in his answer. Knowledge was brought into context as, creating a win-win situation for both companies and university. The process of disseminating knowledge allows for a reassurance that companies get qualified labor force and know-how into the process of implementing new technologies in other company settings. Knowledge also translates into monetary values, as the research department works together with the region and with the independent business sector, as a subsidiary process of revenue creation mechanism.

After listening to the definition of value that the university, from Morten's point of view, should apply the mentioned strategies in order to generate knowledge and apply it, the following question relates strictly to the model used by Aalborg University to empower students to develop a good research, while triangulating the data acquired through different techniques.

According to John R. Savery, " *Problem-based learning (PBL) is an instructional approach that has been used successfully for over 30 years, and continues to gain acceptance in multiple disciplines. It is an instructional (and curricular) learner-centered approach that empowers learners to conduct research, integrate theory and practice, and apply knowledge and skills to develop a viable solution to a defined problem.*" (John R. Savery 2006)

When the following question was pointed out, about how knowledge is applied in the approach that the university follows, Morten's answer allowed for different interpretations, as PBL being part of AAU heritage, for both administrative, staff, and students. In his point of view PBL should be implemented in the structure of both decision makers and decision adaptors to allow the knowledge creation mechanism to produce solution to real-world problems.

When discussing what would be the expectations from a University Business Incubator at Aalborg University, the outcome was that the university expects different outcomes, from which, the mentioned ones were strictly related to innovation, faculty/graduate student involvement, research commercialization, increase in the number of successful companies etc.

When mentioning the student involvement, the output was that more students, should start better companies in a more rapid frequency. In supporting an incubator, the university should support knowledge –based companies. Innovation companies that are innovation driven should be supported by the university.

Companies that were produced inside the incubator, startups processes that were initiated through an incubator also pay back to the university as a vehicle for building culture. The university needs to build an environment where startup communities are part of the entrepreneurial environment, where students with a passion for entrepreneurship can nurture their ideas into the process of creating a successful, innovating business.



Moreover, there is a need for a facility where people are actually working with ideas, or even starting their own companies. From Morten's point of view, the university should act as an innovation hub, where students get access to all the resources available in the environment.

Other value worth mentioning is that by having these types of facilities, the students that do not necessarily have an entrepreneurial focused study program can see that entrepreneurs are not "superheroes", but contrarily, they are people that work hard to make their ideas reality. Founders or not, wiser or not, handsome or more outgoing, but all in all, they are regular people that are working on implementing ideas, validating their ideas, and working with the knowledge that they have acquired at the university.

When discussing the model that should be implemented in order to engage all the faculty departments in building an innovative environment, Morten's point of view was that the university should be including relevant stakeholders and all the departments should be engaged in marketing the fact that their students could become entrepreneurs by working with innovation within the facility.

In the process of going from student to entrepreneur, students should be working with different schools. The PBL allows for creating solutions to real, relevant and wicked problems. The university needs to have the PBL model and it should include a section on what are the values created within this solution. This could be translated into creating entrepreneurial semester projects.

All the faculty departments should work together in creating a strategy for supporting entrepreneurship, within their programs or together with other faculty departments/programs. The university should allocate and promote incentives for different faculty departments, to students and researchers, but also to individuals that are interested in becoming entrepreneurs. Morten also states that now, the university has a set of direction, and that the managerial department should make this project a reality.

The next question of the interview was addressed with the aim of understanding why the previous initiative of building a university business incubator stopped, and what the reasons were behind not keeping it functional. When approached, Morten answered that the main reason why the incubator stopped functioning was the lack of resources, as well as a decentralized approach. The people supporting this initiative didn't receive proper support from the management department, as well as no central facility, members, involvement of other departments or knowledge or competencies on how to work with startups.

According to Morten, now the university has the mentioned skills and resources to be working with startups, and what is missing is a central facility, that should be making an impact on the way entrepreneurship is being thought at Aalborg University.

When asked why he believes it took so long for the management department to realize that the university needs these types of facilities, Morten answered that the main reason why the university now perceives the value that can be created by building this facility is that, like mentioned earlier, the university needed the knowledge and expertise to have this project implemented successfully, as well as "maturity" coming from the managerial department, when it comes to entrepreneurship. Now, he believes that the university is mature, located at an inflection point where there are excellent researchers, qualified personnel, and knowledgeable students. He also states that the university is



now good at collaborating with the industry, good at spinning out companies and good at starting out companies, but there are not sufficient resources to help students grow their ideas to business. There is a whole system around Aalborg University that supports innovation creation and entrepreneurship that is trying to focus on startups. What he believes is wrong, is that the focus is only on high growth companies that can start producing revenue from day one. The system around startups is good at growing startups from the SEED phase.

When asked how AAU Incubator would contribute to such an initiative, Morten's answer was somehow inspirational, stating that he has a lot of hopes and dreams for the incubation facility, and he believes that the Entrepreneurship Space will be a vehicle for a lot of things. What he sees from other incubators, in the Northern countries is that they have remarkable facilities, but very under-resourced, which brings them to the point where facilities are drowning in the success of having a lot of students. Managers tend to present the incubator for any visitors at the university, as being the only place where people really work.

SEA was also mentioned during the interviews, as being a key component, at the very early stage business development part, where it will be essential in shifting the focus on technology to customer development type of view. SEA can also provide students and researchers the network from across the entire university. Morten states that the department and the people at SEA have a lot of knowledge in fundraising and in the process of building this. Their ambition is to work with 30 companies per semester, and to make this a reality, they need sufficient manpower.

During the interview, Morten was also asked what he believes as being the success metrics for a university business incubator as well as when does he think that the university will see the incubator as a successful implemented program. At first, as an evident success metric is the number of companies created in the incubator, as well as the number of jobs and the alumni engagement. However, the incubator could have its downfall, as in the increase in the number of dropout as well as its meaningfulness, when it comes to creating a self-sustainable entity.

#### 11.4 INTERVIEW WITH RAZVAN CRACIUNESCU – RESEARCHER AT VOICE, THE ONLINE ACCELERATOR

The interview with Razvan Craciunescu, former researcher at The Faculty of Engineering and Science, Department of Electronic Systems was aimed at increasing the chances of developing a successful revenue model for AAU Entrepreneurship Space by leveraging the services provided in an online environment.

When asked what is his impression about VOICE, Razvan replied that VOICE is a European Union funded project 2014-2017." *VOICE is a virtual business accelerator for startups. Its uniqueness is that it is globally accessible around the clock, open to anyone with an interesting idea, unlimited in space, open, and practically boundless in providing services, information and practical guidance, in contrast to the traditional – physical – incubators.*" (VOICE, 2015) During the interview, the challenges to build this type of initiatives were also questioned given the fact that VOICE is the first of its kind in Aalborg. Razvan replied that, in that point in time they were trying to differentiate themselves from other virtual/traditional platforms that already activate in that field. Given the fact that incubation & acceleration refers also to the relationships

between the mentee and mentor, the networking possibilities, surroundings and others, the next question was pushing towards finding the disadvantages of having an online accelerator and again, Razvan believes that with today's technology and connectivity, he can't seem to find a downfall of such a project, or it can be the fact that they didn't put as much research into discovering the downfalls of such an initiative. To build an entrepreneurial community, VOICE facilitates business idea formation, development and evaluation; and supports the creation of minimum viable products and solid business models, providing unique and advanced tools and services, and fostering online partnerships and matchmaking with business and product developers. When the next topic was discussed, as for why it was decided on building a virtual accelerator, Razvan argued that a virtual accelerator/incubator has the advantage of gathering together, a large number of persons from different backgrounds and entrepreneurial cultures. *"Thus, based on the very core idea and possibilities of the "crowd" and crowd-based services, VOICE builds upon the knowledge and expertise of its global community: users, entrepreneurs, companies and policy stakeholders that share their ideas, experience and innovations with entrepreneurs from all around the world. Capitalizing on this community-driven approach, the VOICE accelerator hosts, attracts, involves and engages a truly active global entrepreneurial community."* (VOICE, 2015)

To reflect on the discussion and to distension the interview, the next question refers to the name of the virtual accelerator, respectively VOICE and how it was decided on choosing it. Razvan replied shortly, that every startup must have a voice and that every voice must be heard by the world. The next step towards validating the concept is through small scale pilot test, where they will optimize and test the concept through the use of software testing techniques as launching a platform and then receiving feedback from the early adopters.

The customer acquisition strategy for VOICE is, according to Razvan, a task for each of the assigned partner to identify and hand pick from his own network, possible users as early adaptors that fit into the mold required by the accelerator. The users can either be students/staff from the university, customers from the industry or even partners. After this phase, they are planning on making use of social-media, PR, commercials and other marketing materials.

Being a European funded project, VOICE is not yet generating revenue, as for the process of development is yet in the implementation phase. At the end of the project, VOICE is planning on using a fermium revenue model, Razvan said.

When asked who are the major stakeholders, Razvan argued that VOICE is financed by the European Union, the decision makers are the universities and industry companies involved in the project. The project leader is Aalborg University, Center for Teleinfrastruktur and other partners are: AIT (Greece), Univ. Southampton (UK), Univ. Sapienza Roma (Italy), Militos (Greece), INNOVA (Italy), INTRASOFT (Luxemburg), Mazovia Cluster ICT (Poland), University of Technology, Sydney (Australia)

The process behind opening a business accelerator is cumbersome as well as for building a business incubator. Even though the project is being financed by the European Union, and there are multiple stakeholders, the development of such an initiative takes time and dedication coming from all the mentioned parties. Moreover, the revenue model for VOICE, is not yet defined, as for the value proposition is clearly

noticeable. While comparing VOICE with AAU Entrepreneurship Space, the value propositions provided by this type of initiatives is highly noticeable, whereas both entities are not financially sustainable and don't have a well-defined revenue model.

## 11.5 SURVEY ANALYSIS

### 11.5.1 TESTING THE NEED OF A COWORKING FACILITY

Two surveys were designed to address both the coworking space, and the university business incubator, during the development of this process report. The surveys included both closed and open-ended question to allow for a deeper, more qualitative understanding of the customer's needs, experience and satisfaction level. The surveys can be found in Appendix.

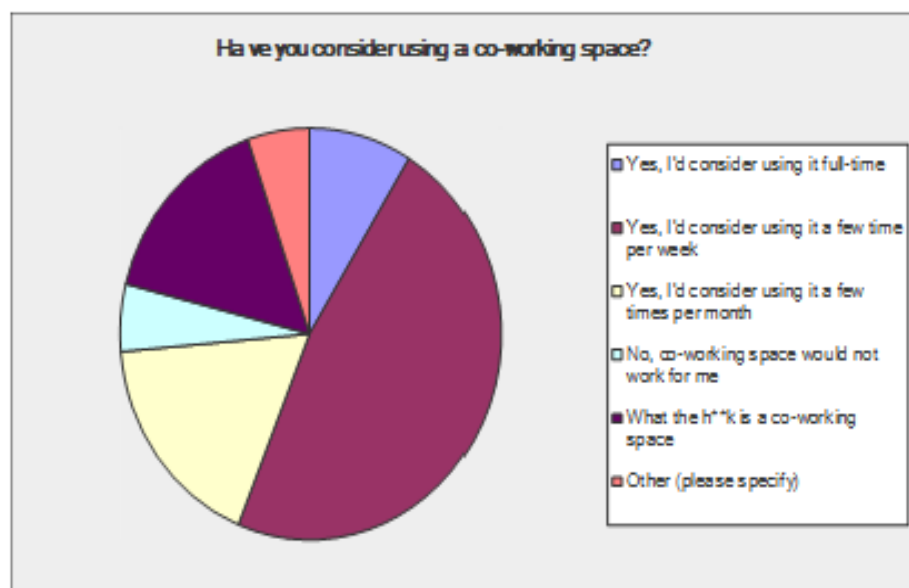


Figure 9 Question 3 - First Survey

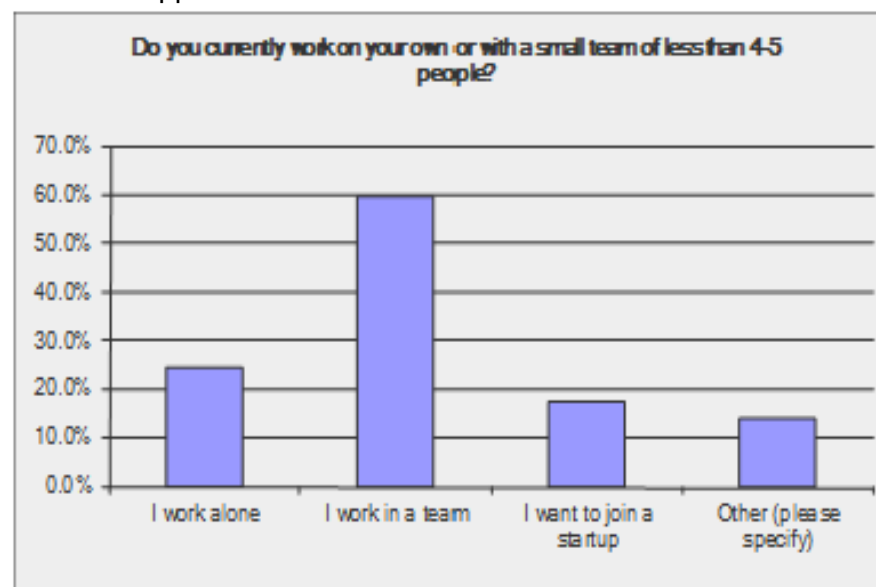


Figure 8 Question 1 - First Survey

When delivering the first survey, the project focus was still on building a coworking facility, while the university business incubator was not yet part of the project structure. The second aim of the project, building the university business incubator was designed after a supervisor meeting, where both parties agreed upon merging the coworking space with the university business incubator to create a more sustainable business model. The first survey addresses the need of a coworking facility and the value perceived by its upcoming inhabitants.

The aim of the first survey was to categorize and understand what the structure and working habits of the perceived customer was, as well as information related to working environment, habits, age, occupation, and the desired resources and services that should be available in a coworking facility.

The trends of working habits show that the majority of the respondents are working within a team (see Fig.7) which secures the hypothesis that a coworking facility would be populated by people interested in working within clusters, according to the highest percentage of answers.

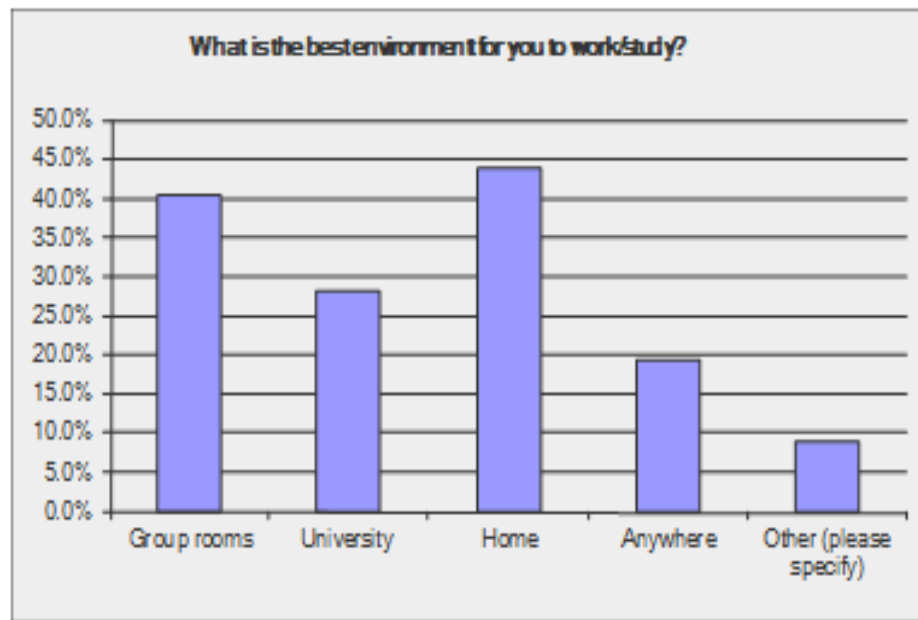


Figure 10 Question 2 - First Survey

Academic literature also presents the coworking space as a flexible, shared work setting, that brings back the social into the workspace (coworking in the city - Ephemera - theory & politics in organizations (122 -123). - Janet Merkel. As for addressing the environment, the trends show that the majority of the respondents prefer working/studying from home as their first choice with 43.9%, followed by group rooms where the percentage shows 40.4%. (see Fig.9)

Moreover, to test the hypothesis that the targeted group perceives the value within a coworking facility, the following question allows for getting an understanding of what the percentage is of people using the facility and for what amount of time. The percentage of people using it more than one time per week is 47% (see Fig.8). That translates into 27 customers willing to use this type of facility, making from the coworking facility a valuable resource for the community.

To understand the demographics of the targeted group, they were asked to provide their age, as the majority is in between the group range of 20 to 29 years old with more than 86% of the answers. (See [Appendix](#)) This allows for the development of a more concise marketing strategy and customer-acquisition strategy.

As a follow up, the group was asked to provide information related to their professional development, their occupation, type of business or study program they are currently pursuing. In order to present the answers in fewer lines, a structure was implemented as well as some categorization. The trends show that the coworking space would benefit from having inhabitants with knowledge in: Business, Design, Engineering, Politics, Music Production, Art & Technology, Acting, Electronics and IT, Finance, Chemistry, Psychology etc.

To quantify the results, the respondents were asked to provide their e-mail addresses, in order to be provided with further information related to the future steps and development of the facility. More than 50% of the respondents chose to fill in their e-mail address. This allows for interpretation, as the group is willing to be part of such a facility when the implementation phase is finished.

To sum up, the following question addresses the elements, as the resources and services that should be available in this type of facility. The participants were given a list with resources and services to select from, and they were also allowed to provide additional answers complementary to the provided list.

The results show that people’s main interest is into having internet access as well as access to mentors, followed closely by the perks of having the facility open 24/7.

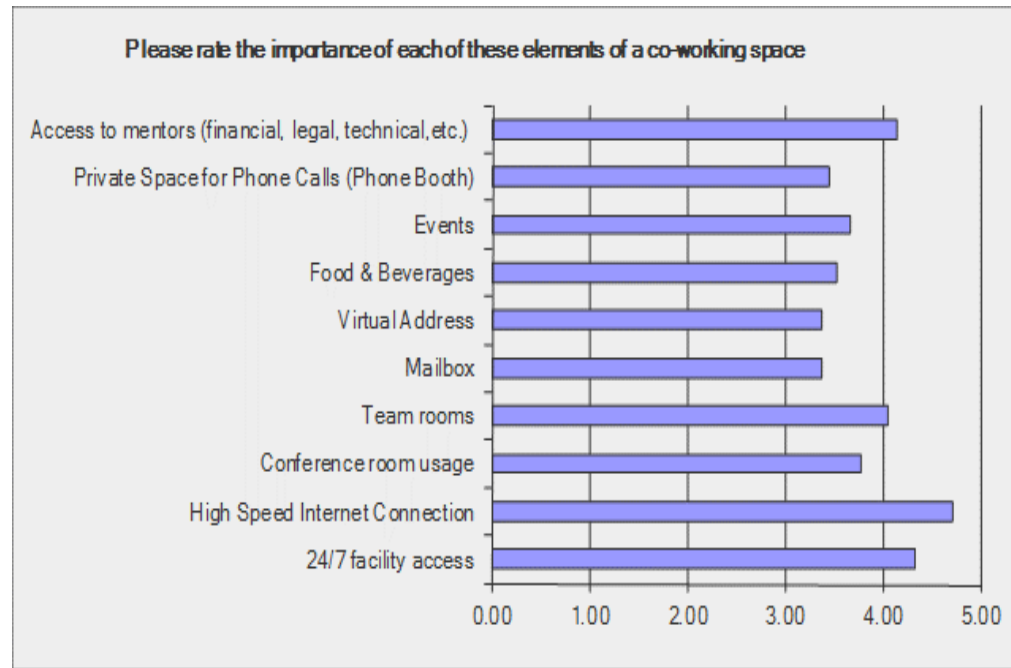


Figure 11 Question 7 - First Survey

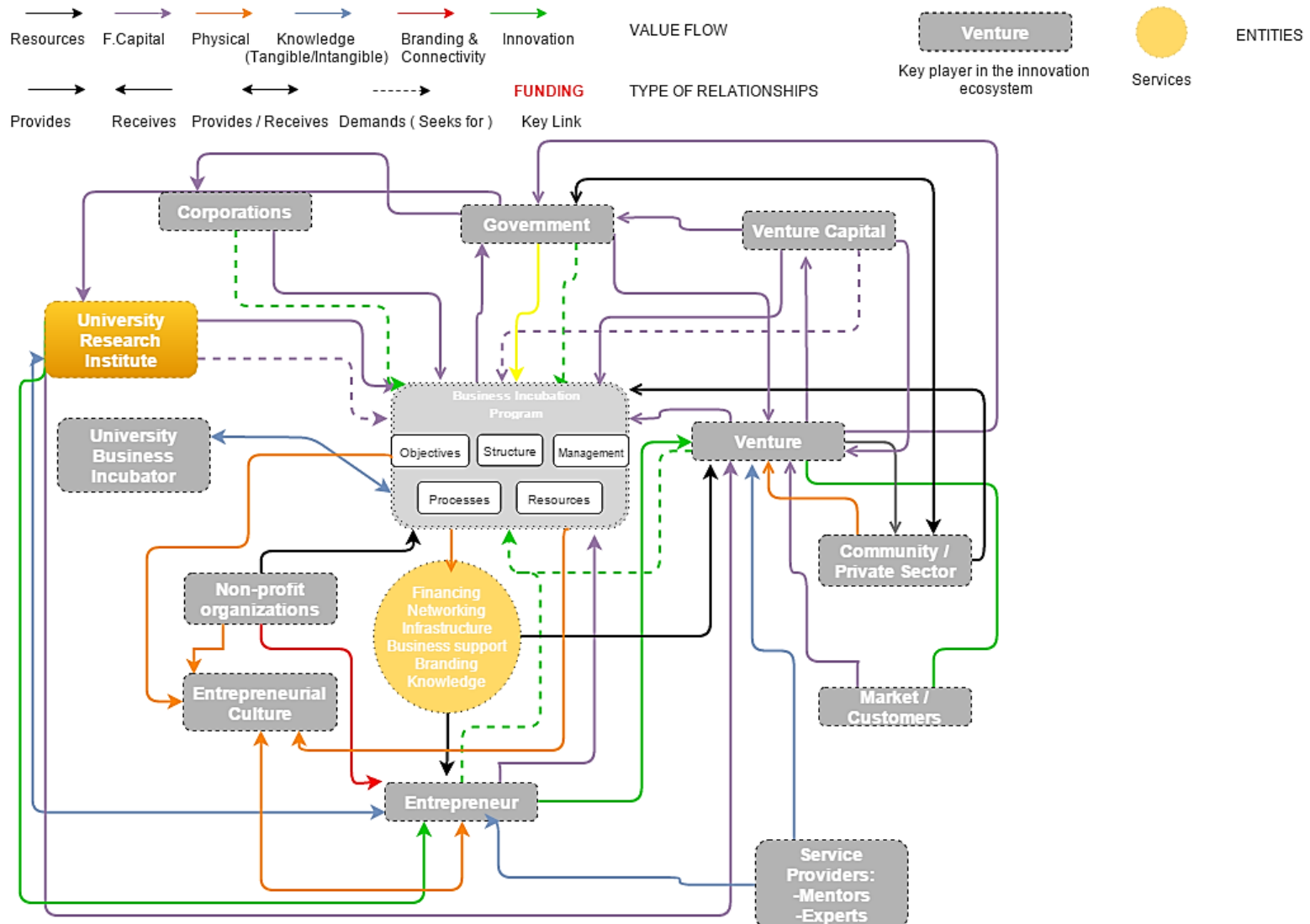
While the coworking facility is aiming at having a common workspace, the results of the survey push at having separate rooms for dedicated teams.

### 11.5.2 TESTING THE NEED FOR A UNIVERSITY BUSINESS INCUBATOR (UBI)

The second survey was aimed at gathering information related to the potential people see in this type of initiatives and also to consider delivering the services that people would find as necessary for a university business incubator. Due to the limited amount of time, the second survey didn’t reach the threshold aimed, and only got five answers which counts as 5% of the people targeted, which are the previous incubates at AAU Inkubator.

Considering this percentage, the decision taken was to leave the possibility to fill in the survey further on, until it reaches all the previous incubates. However, the outcome of the survey will not be described as it has little to no sustainability.

### 11.6 STAKEHOLDER ANALYSIS



**Figure 12** Process model of external environment, Business Incubation Program and Entrepreneur (Demand and Supply Graph in the Innovation Ecosystem) (Ryzhonkov V.Ryzhonkov, 2014) – Self Adaptation

The aim of the designed structure is to provide a holistic overview for the process of innovation in the external ecosystem. (V.Ryzhonkov, 2014) The model also allows for a comprehensible way to describe the relationships between different entities, as well as presenting the flow of technology between enterprises and institutions, money, information and knowledge among people that make the innovation ecosystem. (V.Ryzhonkov, 2014) The elements present in the model define the concept of innovation system, together with the relationships which interact in the production, diffusion and use of new, economically useful, knowledge which are either located within, or rooted inside the borders of a region or nation state respectively. (Lundvall 1992) (V.Ryzhonkov, 2014)

The model allows for a clear picture of the stakeholder's goals within an innovative and incubation framework, describing the interactions & value flows as well as their relationships. (V.Ryzhonkov, 2014)

One of the main functions for the identified stakeholders would be represented by the interaction between each other via value flow. The system could be connected by leveraging the demand and supply. While the government allocates resources for the growth of the region and the creation of jobs, investing in a business incubator would certainly facilitate the growth of the region and also produce inventions and technologies. Universities, as stakeholders receive the same grants from the government, while working with the same goals and mindset as the government. By encouraging universities to build business incubators, the government should support the creation of new physical facilities, dedicated to those aims, as well as allocating grants and financial support. The university could also be considered as being the entity that delivers entrepreneurs together with the community or to encourage self-made entrepreneurs to dig into the process of building scalable businesses inside of a university business incubator.

The inputs and outputs are generated and combined in the entrepreneurial environment through the process of value adding services to other stakeholders. The value flows could be considered as being the resources, financial capital, knowledge, branding and connectivity as well as innovation.

The stakeholders are aiming at receiving capital while delivering value and satisfying their demands. Demand and supply is the main driver for which innovation occurs. Therefore, the business incubator must fulfill the demands coming from the stakeholders as well as those proposed by the entrepreneurial environment.

The demand for content creation, knowledge transfer, research and development as well as innovation and creation of value drives the incubation process. However, for an incubator to be successful, there must be a fulfilling demand- delivery from all the mentioned stakeholders. The predilections of the leading stakeholders influence the incubation process and goals.

Stakeholder	Desired goals
Government	Economic development, diversification, job creation, poverty alleviation, <b>taxes.</b>
Corporations	Innovations, technologies and problem solutions, bright talent, new sources of revenues
Venture capital	Winning enterprises, high portfolio returns, investment opportunities, equity
University / Research institute	Innovation, faculty/graduate student involvement, research commercialization
Public/Private Partnership / Market	Investment, employment, other social goods, profits, revenues, patents, spin-offs, equity in client, goods & services
Entrepreneur/ Freelancer	Knowledge, connections, finance, credibility, team, safe environment, revenues

*Table 4 Innovation Ecosystem Stakeholder's Goals (V.Ryzhonkov, 2014)*



In the previous model, the innovation ecosystem as well as the stakeholder's goals are being mapped out. The model aims at providing an overview of the process and structure of the innovation ecosystem by picturing the flow of technology, knowledge, money and information.

The success of incubators highly correlates with the possibility of incubators to meet the requirements and demand coming from government, corporations, investors, and community.

## 12 VALIDATION.

---

### 12.1 VALIDATION BOARD

As the importance and the outcome of valuable validation become increasingly important in the startup community, the tools and methods used become important factors in determining the value of a business. This project makes use of a comprehensive model entitled Validation Board. The tool was developed by Javelin and is essentially a souped-up whiteboard divided in sections for important stages in the testing process. After starting to work with this model, another model was being developed, called the Experiment Board. The Experiment Board is, according to Trevor Owens, the CEO at Lean Startup Machine, “an important marketing tool and education tool for the [Javelin] software.” (Weissman) To add to its further development, Eric Ries, the developer of the “Lean Startup” book, assumes that “*the board is used to record and quantify the process of validation so everyone involved in the business development process can remain in the loop*”.

The tool consists of four elements: hypothesis, riskiest assumptions, and method and minimum success criteria. The board was used as a framework to design the experiments and track progress while referring and restructuring the assumptions. (Grace Ng, 2014)

Every experiment starts with a hypothesis, and this project hypothesis started with the customer and problem hypothesis. (Grace Ng, 2014) With AAU Entrepreneurship Space, the hypothesis changed during the design experiment phase because some of the experiments were inconclusive, and the processes of setting a hypothesis and assumption according to the Business Model Canvas were influenced by the change.

After developing the customer problem hypothesis, the riskiest assumptions have been extracted, ready to be tested. These were the assumptions that are central to the viability of AAUES. The assumptions are thought about as the action, mentality or as the behavior that needs to be validated in order to test the hypothesis. (Grace Ng, 2014) For AAUES, the method chosen was exploration, since there were high amounts of uncertainties regarding potential customers and the lack of resources to promote this initiative. However, this method was used together with the pitch and concierge methods because of the schedule, the restrictive timeline and potential customers available for the

project disposal. The concierge method was modeled according to the customers' needs, to get early adopters on board, and the pitch method implied having a fee for AAUES customers that come out of the incubator. Due to the limitations, the approaches could not have been taken in turn. The process resulted in the need for a more detailed and specifically designed process towards validating potential customers. The minimum criterion for success was the weakest outcome accepted to continue allocating resources and pursuing the solution. (Grace Ng, 2014)

The factors taken into consideration were the budget, the opportunity cost, the size of the market, the business metrics and the level of demand. In this manner, it was defined as converting at least 20% of all the approached customers, which are part of the target group, into 'paying' customers. If by approaching and using a large amount of tools and methods like exploration, concierge and pitch to validate a rate of at least 20% of the customers, which cannot be obtained, it is assumed that no matter what efforts in the scaling process, there will be a much lower conversion rate when the approach is out of the equation.

Once these elements are defined, the experiment can start. The next step implies the formatting of the tool, according to gained customer insights. The experiment provided the basis for having first pivoting material, in terms of the main hypothesis regarding the problem, customer, and solution. After testing the riskiest assumptions, a new set of assumptions are to be determined and structured if the project is turned into reality.

The process is an ongoing methodology and is to be repeated so that a set of a new core assumption are validated or invalidated, which can result in pivoting or reaching a minimum amount of success factors. To sum up, the validation board had a significant role in working with assumptions and testing them while following the learning plan and development plan. The model can be visualized in [Appendix](#).

## 12.2 MINIMUM VIABLE PRODUCT

In order to have a reliable validation of the different hypotheses from AAUES business model, a Minimum Viable Product (MVP) had to be

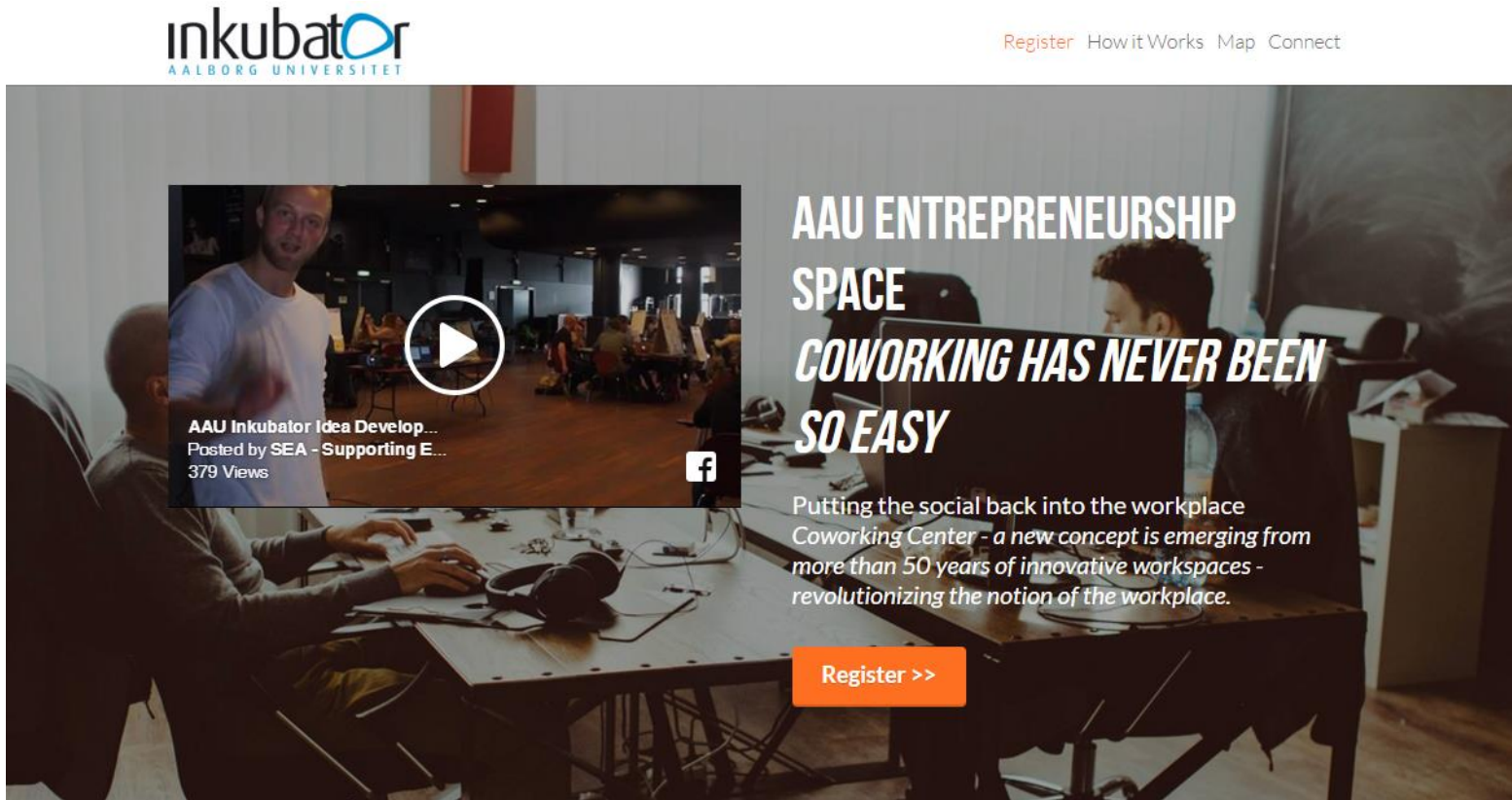


Figure 13 MVP - Website Screenshot 1

developed. This is a more dynamic tool and it is a closer representation of how AAUES will work following an official product roll-out.

An initial MVP was developed during the validation phase. The MVP was connected with a survey aimed at gathering information from the people interested in joining such an initiative without a pushing strategy. The MVP also got a short video presenting what the activity is that

Create access to shared and private workspaces; designed to foster connections among worker members.

Flexibility and Choice, Technology, Economics, Community, Sustainability and so on are few of the perks available for you to learn while working with our team of mentors.

The impact on the way we work and live, the way employers engage with staff, and the way we use workspaces could be far-reaching and positive.



### The Movement

AAUES is a COMMUNITY. We aren't just a free coworking space. We are about more than shared space. We are about SHARED VISION.



### The Place

We are a collaborative WORKSPACE. We have EVENTS and MEETING SPACES available as well as drop in workspace.



### The Business

AAUES is a place to DO business, LEARN from other entrepreneurs, and GROW your business.

Figure 14 MVP - Website Screenshot 2

AAU Incubator is currently having and how it could look in the closest future. Although it generated a 10% conversion from student visitors to signups (without having any services displayed), the MVP was designed to serve as an introduction of what is yet to become AAUES.

## CONCLUSIONS.

---

In summary, the objective of this paper was to develop a viable framework that could serve as a basis and index for identifying the best practices for university business incubator models. (A.Bergek and C.Norrman, 2008) Nevertheless, two challenges were identified by reviewing previous incubator assessment literature. Firstly, there has been a tendency on the part of researchers to measure outcome instead of performance. This is as a result of the fact that, while previous researchers have been largely successful in identifying the proper outcome indicators, they have neglected to include in their analyses the goal differences between incubators. The conclusion of this process report therefore, is that comparisons should only be made between incubators that have the same goal(s) and that outcome indicators should be chosen carefully as to correspond to these goals. (A.Bergek and C.Norrman, 2008)

Secondly, issues regarding the mode of providing incubator support, i.e. which incubator models are used, as well as how incubators differ in this respect, are usually neglected. (A.Bergek and C.Norrman, 2008) In order to resolve this issue, a tripartite framework has been developed according to which the distinct incubators may be differentiated. This framework describes three incubator model components: selection, business support and mediation. (A.Bergek and C.Norrman, 2008) As pertaining to selection, another model was developed, consisting of the following strategies: “picking-the-winners and idea”, “picking-the-winners and entrepreneur”, “survival- of-the-fittest and idea” and “survival-of-the-fittest and entrepreneur”. (A.Bergek and C.Norrman, 2008) It has likewise been suggested that business support strategies may be positioned on a scale from “strong intervention” to “laissez-faire”. (A.Bergek and C.Norrman, 2008)

The framework proposed in this paper, therefore, presents a tool to describe the incubation models of different incubators. (A.Bergek and C.Norrman, 2008) When combined with the appropriate outcome indicators, it can be useful in identifying best practice models or distinguishing between different models that are equally effective in achieving certain goals (A.Bergek and C.Norrman, 2008). Both these results would help policy makers decide which incubators to support, as well as provide guidance for incubator managers in their strategic work. (A.Bergek and C.Norrman, 2008) Additionally, considering that it is likely that certain kind of incubator models are more attractive than others, depending on the preferences of the entrepreneurs, the latter result ought to be of interest to the ventures applying to different incubators. (A.Bergek and C.Norrman, 2008) For instance, some entrepreneurs are opposed to sharing ownership, whereas others see this as a major benefit of incubation. (A.Bergek and C.Norrman, 2008)

## 13 APPENDIXES.

---

*Business Model Canvas Development* - <https://canvanizer.com/canvas/wlh5NnO2TtU> (play canvas history for insights)

*Interview with Niels Maarbjerg* - <https://youtu.be/yRREv2vSBJM>

*Interview with Tine Thygesen* - <https://youtu.be/nJ3mAcQKbiQ>

*Interview with Morten Dahlggaard* – <https://youtu.be/hlaQnAiBaQY>

*Interview with Razvan Craciunescu* – Transcript

Can you tell me a bit about the VOICE project?

VOICE is a European Union funded project 2014-2017. VOICE is a virtual business accelerator for startups. Its uniqueness is that it is globally accessible around the clock, open to anyone with an interesting idea, unlimited in space, open, and practically boundless in providing services, information and practical guidance, in contrast to the traditional – physical – incubators. (VOICE, 2015)

What are the main challenges you are currently facing?

At this point we are trying to differentiate ourselves from other virtual/traditional platforms that already exist.

What are the disadvantages of having an online accelerator?

These days when everybody is online, I don't know what could be the downfalls of such a project. What I think, is that feeling of meeting your mentor's/team members in person.

What is the value you are providing for the entrepreneurial community?

VOICE facilitates business idea formation, development and evaluation; and supports the creation of minimum viable products and solid business models, providing unique and advanced tools and services, and fostering online partnerships and matchmaking with business and product developers.

Why was it decided to build a virtual accelerator?

A virtual accelerator/incubator has the advantage of gathering together, a large number of persons from different backgrounds and entrepreneurial cultures. Thus, based on the very core idea and possibilities of the “crowd” and crowd-based services, VOICE builds upon the knowledge and expertise of its global community: users, entrepreneurs, companies and policy stakeholders that share their ideas, experience and innovations with entrepreneurs from all around the world. Capitalizing on this community-driven approach, the VOICE accelerator hosts, attracts, involves and engages a truly active global entrepreneurial community.



Why would an accelerator suit Aalborg and the entrepreneurial community?

An online accelerator/incubator can suit every start-up community that is located in one geographical region, because the idea/business can be heard by a very large community and can be expanded faster to other regions. Sky is the limit. :)

Why VOICE?

If this refers to the title, the idea is that every start-up must have a voice and that voice must be heard by the world.

How do you plan on validating the concept?

We will have small scale pilots where we will test/optimize and validate the concept.

How would you attract customers?

First of all, each partner has a network of possible users (students/staff from their own university/other partner universities, customers from the industry partners etc.). After this first step, we are planning to expand using social-media, commercials, press releases, etc.

How are you generating revenue?

At this moment in time, we are not generating revenue. We are still in the implementation phase/finding users phase. The project is funded by the European Union. After the end of the project, the platform will use a fermium model to generate revenue.

Who are the major stakeholders?

As this project is financed by the European Union, the decision makers are the universities and industry companies involved in the project. The project leader is Aalborg University, Center for Teleinfrastruktur. Other partners are: AIT (Greece), Univ. Southampton (UK), Univ. Sapienza Roma (Italy), Militos (Greece), INNOVA (Italy), INTRASOFT (Luxemburg), Mazovia Cluster ICT (Poland), University of Technology, Sydney (Australia)

Who are the decision makers?

At this point in time, all the partners listed in the above question, are the decision makers.

Who is financing the research?

The research is financed by the European Union, as this is an EU project.

*First survey – Addressing the need of a coworking facility – <https://www.surveymonkey.com/r/6XR9XQ8>*

*Second survey – Addressing the need of a university business incubator - <https://www.surveymonkey.com/r/97H8H5D>*

*Validation Board - [https://docs.google.com/drawings/d/1XkfvouSJKKeQJLS7lgUYBwZDEO\\_VIkExeNIKSZ4b5WA/edit](https://docs.google.com/drawings/d/1XkfvouSJKKeQJLS7lgUYBwZDEO_VIkExeNIKSZ4b5WA/edit)*

## 14 FIGURE LIST.

---

<b>Figure 1 Business Incubator model proposed by Smilor (1987)</b>	<b>12</b>
<b>Figure 2 Customer Identification Model – “The Four Steps to the Epiphany” by Steve Blank – Self Adaptation</b>	<b>16</b>
<b>Figure 3 Customer Development Model – “The Four Steps to the Epiphany” by Steve Blank.</b>	<b>16</b>
<b>Figure 4 Archetypes of incubation</b>	<b>24</b>
<b>Figure 5 Incubator Model Components (A. Bergek and C.Norman, 2008)</b>	<b>27</b>
<b>Figure 6 Selection Strategies (A. Bergek and C.Norman, 2008)</b>	<b>28</b>
<b>Figure 7 Business Model Canvas - Alexander Osterwalder</b>	<b>32</b>
<b>Figure 8 Question 1 - First Survey</b>	<b>43</b>
<b>Figure 9 Question 3 - First Survey</b>	<b>43</b>
<b>Figure 10 Question 2 - First Survey</b>	<b>44</b>
<b>Figure 11 Question 7 - First Survey</b>	<b>45</b>
<b>Figure 12 Process model of external environment, Business Incubation Program and Entrepreneur (Demand and Supply Graph in the Innovation Ecosystem) (Ryzhonkov V.Ryzhonkov, 2014) – Self Adaptation</b>	<b>46</b>
<b>Figure 13 MVP - Website Screenshot 1</b>	<b>51</b>
<b>Figure 14 MVP - Website Screenshot 2</b>	<b>52</b>



## 15 REFERENCES.

---

- 2005, Grimaldi R. & Grandi A. "Business Incubators and new venture creation: an assesment of incubating models." *Technovation*, 25 2005: 111-121.
- 2015, Aalborg University - August. "[http://www.intern.aau.dk/digitalAssets/98/98338\\_draft-aau-strategy-2016-21.pdf](http://www.intern.aau.dk/digitalAssets/98/98338_draft-aau-strategy-2016-21.pdf)." August 2015. 21 September 2015.
- Anna Bergek\*, Charlotte Norrman. "Incubator best practice: A framework." *Technovation* 28 2008: 20-28.
- Blank, Steve G. "The Four Steps to the Epiphany." Blank, Steve G. *The Four Steps to the Epiphany*. 2006. 15-27.
- Dollinger, M. J.(2003). "Entrepreneurship: Strategies and Resources, 3rd edition." (*Pearson Education, Inc., 2003*) 2003.
- Eisenhardt M. & Graebner . "Theory building from cases: Opportunities and challenges." *Academy of Management Journal* 2007: 25-32.
- Esterberg, K.G. "Qualitative methods in social research." (2002): 83-114.
- Hackett, S.M., Dilts, D.M. "Journal of Technology Transfer 29(1)." *A systematic review of business incubation research* 2004: 55-82.  
<http://www.voice-project.eu/>. 1 12 2015. 1 12 2015.
- Huffman.D & Quigley, J.M.(2002). "The role of the university in attracting high tech entrepreneurship: A Silicon Valley tale." *The Annals of Regional Science* 2002: 403-419.
- Kommune, Aalborg. "www.sustainablecities.eu." 2013.  
[http://www.sustainablecities.eu/fileadmin/content/Aalborg\\_small\\_version\\_of\\_sustainability\\_strategy.pdf](http://www.sustainablecities.eu/fileadmin/content/Aalborg_small_version_of_sustainability_strategy.pdf). 2015.
- Lundvall, Bengt-Åke. "NATIONAL INNOVATION SYSTEMS - ANALYTICAL CONCEPT AND DEVELOPMENT TOOL ." *DYNAMICS OF INDUSTRY AND INNOVATION: ORGANIZATIONS, NETWORKS AND SYSTEMS* 29 November 2004.
- Malcom, Hanoku B. & Manisha K. &. "The Role of University-Based Incubators in Emerging Economies." *Working Paper No.22* December 2011.
- Mathison Sandra. "Why Triangulate." *Educational Research vol. 27* (1988): 13-17.



- Mian, S.A. (1996). "The University Business Incubator: A strategy for developing new Research/technology-based firms." *Journal of High Technology Management Research*, 7(2) 1996: 191-208.
- Mian, S.A. "Assessing value-added contributions of university." *Research Policy* 25(3) 1996: 325-335.
- . "US University sponsored technology incubator: An overview of management, policies, and performance." *Technovation* 14(8) 1994: 515-529.
- National business Incubation Association (NBIA) . [http://nbia.org/resource\\_library/what\\_is/index.php](http://nbia.org/resource_library/what_is/index.php). 2009. 21 september 2015.
- Ng, Grace. <http://www.smashingmagazine.com/2014/04/a-guide-to-validating-product-ideas-with-quick-and-simple-experiments/>. 10 April 2014. 3 September 2015.
- Organisation., Technology Incubators: Nurturing Small Firms. "http://www.oecd.org." 1997. <http://www.oecd.org/dataoecd/35/11/2101121.pdf>.
- RYZHONKOV, VASILY. <https://worldbusinessincubation.wordpress.com/2013/03/22/426/>. 22 03 2013. 21 09 2015.
- Ryzhonkov, Vasily. <https://worldbusinessincubation.wordpress.com/2014/06/04/generic-business-incubation-model-systems-engineering-view-part-4/>. 4 June 2014. 18 September 2015.
- Savery, John R. "Overview of Problem-based Learning: Definitions and Distinctions." *Interdisciplinary Journal of Problem-Based Learning* 22 5 2006: 2-3.
- Stinchcombe, A.L. (1965). "Social Structure and Organizations." *Handbook of Organizations*. : Rand McNally & Company March 1965: 142 - 193.
- Weissman, Cale Guthrie. 18 march 2014. <<http://pando.com/2014/03/18/javelin-launches-its-latest-lean-startup-product-experiment-board/>>.
- Yin, Robert K. *Case Study Research - Design and Methods*. Thousand Oaks, California: SAGE Publications, Inc., 2009.