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# Applying Social Marketing to Entrepreneurial Education at Aalborg University

- a design-based research



# ABSTRACT

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This inquiry represents the master thesis conducted in the Master of Culture, Communication and Globalization at Aalborg University. The thesis is performed in collaboration with Supporting Entrepreneurship at Aalborg University (SEA).

Aalborg University is spending many resources on supporting student entrepreneurship, but that support is not generating value to a majority of the enrolled students. There is a hidden entrepreneurial community consisting of student enterprises that show great potential for generating value to society. Entrepreneurial education is thus, a focus area of Aalborg University but there is a mismatch between the intentions of the University and the actual outcome. Students are well informed of the beneficial outcome of entrepreneurship, however, little attention is being paid to the entrepreneurial activities offered during education at AAU.

This investigation applies social marketing to promote entrepreneurial activities at AAU for the purpose of changing students behaviour from not engaging in entrepreneurial activities at AAU to actively participating in entrepreneurial education.

The method of procedure is design-based research. This approach allows a creation of a design that incorporates the logic of social marketing. The design consists of three elements that collectively aim at making students participate in entrepreneurial activities during education. Two elements of the design were launched and tested at AAU and additionally reviewed by informants, in semi-structured interviews. The elements were created in close collaboration with SEA as it promoted an event that they hosted during the conduction of the research. The third element was only tested in the context of semi-structured interviews. The approach was validated by the informants' ability to picture the element in the right context, from previous experience. SEA was the distributor of the design.

The researcher found that social marketing is applicable for the purpose of enhancing active behaviour in entrepreneurial education at AAU, with the correct identification of context variables. These are discovered by outlining the systemic workings of AAU as an organisation with its own culture. It was discovered that AAU and the students were lacking a common understanding of what entrepreneurial education is and what the University offer. There will be no change of behaviour without a common understanding of what is expected and what is offered. Thus, the design

completely missed the target which was the inactive students. Successful application of social marketing requires a more profound understanding of the target audience than this investigation reached. However, it is found that personal contact is the way to generate mutual understanding between the University and the students for the enhancement of student engagement in entrepreneurial activities. Behaviour change happens when making a successful connection to the students' feelings and logic of gaining a desirable outcome from entrepreneurship. Influencers play a big part in social marketing as it does in product marketing. They are found in other students and teachers at the University, and they do affect students' choices relating education. Students are motivated to change behaviour by following these suggestions of procedure.

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## 2 PROBLEM FIELD

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The individual's ability to be innovative at every level within an organisation and acquire enterprise skills with the aim of new venture creation is becoming a necessity to manage the knowledge assets, and it is creating an imperative for enterprise education (Hytti & O'Gorman, 2004). We are in the middle of the information economy (Frenkel, et al., 1999; Boisot, 1998; Child & McGrath, 2001) and according to Boisot (1998), this means that knowledge is the key element in securing competitive advantage in the global market. Thus, information and knowledge are economic goods in today's economy (Boisot, 1998). Frenkel et al. (1999) and Child & McGrath (2001) wrote about the impact and changes that the information economy requires from the organisation regarding management and structures. They claimed that we are not capable of managing the knowledge assets. The challenge is to manage an asset that is not physical, and that is unmeasurable (Boisot, 1998). Entrepreneurship is beneficial for society as it successfully brings economic growth, innovation and job creation (Carton, et al., 2004; Gelderen, 2014). Even when it does not bring the expected result, we learn from it, and thereby we can add the experience to our knowledge (Stagars, 2014). This is the reason why educational institutions increasingly support the development of entrepreneurial activities by offering enterprising courses etc. Thus, they encourage students with the drive become entrepreneurs, to create new ventures or innovate within existing companies. Ball (1989) claim:

*"In short, people will need to be creative, rather than passive; capable of self-initiated action rather than dependent; they will need to know how to learn rather than expect to be taught; they will need to be enterprising in their outlook, and not think and act like an "employee" or a "client"."* (p. 30)

Continually, it is argued that students need to be prepared for a reality with much greater uncertainty and complexity in occupation than ever before (Gibb, 1987). Thus, enterprise education keeps on growing all over the world. In the UK, Hannon (2005) claims that the growth has been meteoric and that it has been driven by government policy initiatives. Even though it is argued by several authors that the traditional university culture and values are the antithesis to entrepreneurship (Gibb, 1987; Hannon, 2005; Kirkby, 2006), some of the world's leading research universities are the most successful in producing entrepreneurs based on spin-outs (Kirkby, 2006). Oxford University is an example of a top ranked research university that is successful in creating spin-outs and facilitates the largest student entrepreneurship society in Europe, *Oxford Entrepreneurs* (Oxford, 2017). Oxford University has developed a rewarding entrepreneurial

culture. The aim is to combine the academics and the entrepreneurs to minimise the risks related to creating new ventures. They facilitate the student society and provides supports to student startups (Oxford, 2017).

### *Enterprise education at AAU*

Aalborg University also houses a department devoted to managing enterprise activities and that department is called Supporting Entrepreneurship at AAU (further on referred to as SEA). SEA is a partner and collaborator on this study. Currently, there is a concern about graduates from humanity studies struggling to find a job after graduation (Pedersen, 2017). In the awareness of the lack of job opportunities, and the proclaimed need for entrepreneurs in today's society (Carton, et al., 2004; Gelderen, 2014), increasing engagement in entrepreneurial activities would seem like a natural option of choice for the students of humanities. However, there have been no documentation of the development in the entrepreneurial area at danish educational institutions and no debates on entrepreneurship as a solution to the issue. For this study, the researcher searched for the options of entrepreneurial activities at AAU, and the previous suspicion of unknown offerings at AAU was confirmed. The researcher discovered that the community consists of interesting startup companies located on AAU campus. The discovery of the "hidden" entrepreneurial community and the options of participating in enterprise activities awoke a genuine interest in the researcher, to engage in enterprise activities, as it could, for other students as well.

### *SEA and the purpose of research*

The goal of SEA is to generate spin-out companies from AAU, and thus, they offer entrepreneurial workshops and events to students in the pursuit of that end goal. It is in SEA's interest to evolve the entrepreneurial culture at AAU to increase the opportunity for generating successful spin-outs and thus, they provide the opportunity for this study to test social marketing initiatives with the purpose of changing student behaviour from being inactive in enterprise activities at AAU, to being proactive in enterprise activities and contribute to the evolvement of the current entrepreneurial culture. In the pursuit of evolving the entrepreneurial culture at AAU, the researcher searched for a way to approach the issue from a student aspect, which led to the potential application of *social marketing*.

Social marketing is an approach used to influence behaviour and attitudes of a target group for the greater good of society (Andreasen, 1994). Thus, the purpose of social marketing can be said to



match the purpose of enterprise education of benefitting the society (Ball, 1989; Carton, et al., 2004). The terms will be further investigated in the following literature review.

This research seeks to find out how social marketing can contribute to the evolvement of the entrepreneurial culture at Aalborg University. Enterprise education is providing students with experience, regardless of the outcome, because failing is also learning (e.g. Ariño & de la Torre, 1998; Sitkin, 1992) which emphasises on the relevance of entrepreneurship during education. Continually, failing in the environment of education does not contain the same risk or consequences as opposed to failing on the outside (Kirkby, 2006). That fact contradicts the actor of educational institution's passive attitude towards entrepreneurial education. Kirkby (2006) argue that enterprise behaviour should be an integral part of the organisation's mission and according to Daumard (2001), universities are organisations with their own culture. This research does not aim at changing Aalborg University from an organisational aspect, but to change student behaviour towards a more proactive engaging behaviour in enterprise activities.

A successful application of social marketing to enterprise education at AAU could lead to a more evolved community and increase awareness of the value of engaging in enterprise activities e.g. concerning the development of entrepreneurial skills on managing knowledge and commercializing intellectual property in the creation of spin-out companies. Besides decreasing the unemployment rate of new graduates etc., it can also benefit the university by publicity, acknowledgement and international attention.

### **3 LITERATURE REVIEW**

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This paragraph is an examination of the core elements of investigation, Entrepreneurship; Entrepreneurial culture, Enterprise education, Entrepreneurial motivation and Social marketing. These elements are interdependent and generates a combined understanding of the researchers base of knowledge from which, this research is conducted. The purpose of these phenomena is investigated and discussed from their prior appearance in studies throughout time. When the terms are defined, they are operationalized for the purpose of investigating the use of social marketing to change entrepreneurial behaviour in the situational context of Aalborg University.

### 3.1 DEFINING ENTREPRENEURSHIP

According to Gibb (1987), no clarified definition of “the entrepreneur” has been proposed. In the search of a meaningful definition, he investigated the definition from three affiliations;

*Entrepreneurs are born not made; Everyone has some enterprise; Anyone (almost) can run a small business.* The affiliations are considerable in search of the entrepreneur behaviours. Gibb (1987) argues that it is reasonable to believe that entrepreneurial attributes are developed by experience and stimulated by task structures. This indicates that he believes being an entrepreneur is something that can be taught and thereby excludes the affiliation that entrepreneurs are born and not made although he claims that the first affiliation is the existing entrepreneur’s own belief. Kuratko (2005) supports that statement in his research of enterprise education by stating that the “born entrepreneur” is a myth and he refers to Peter Drucker (1995) who claimed that entrepreneurship is a discipline that can be learned.

Gibb (1987) propose the redefinition of the terms enterprise, entrepreneur, entrepreneurial and entrepreneurial culture which are all interdependent. He emphasises on attributes that may say to be existing within the entrepreneur and thus defines the entrepreneur as “*someone who demonstrates a marked use of enterprising attributes (in a particular task and environmental context — more commonly in commerce or business)*” (p. 11). Thus, the entrepreneurship is defined as “*the marked use of a combination of these attributes in pursuit of a particular task, usually in an industrial or commercial context*” (p. 11).

As it seems, Carton et al. (2004) did not find Gibb’s (1987) definition sufficient either as they made the same claim in their research on operational definitions. Carton et al. (2004) however, aimed their research to the society which must be said to have changed during that period of time, as we went through the industrial economy and into the information economy according to Frenkel et al. (1999), Boisot (1998) and Child & McGrath (2001).

Carton et al. (2004) pointed to “the creation of a new organisation” as the main common denominator in prior definitions of entrepreneurship. Continually, he did not make a distinction between high-potential organisation and low-potential organisations (potential of creating wealth and employment to society) and thereby claimed that they were equal in the definition of entrepreneurship. The research also addresses the distinction between management and entrepreneurship. According to Carton et al. (2004) entrepreneurship is “*the creation of a new independent business*” and “*the creation of a new subsidiary to pursue a new line of business or the*

*creation of a new division to pursue an international market*” (p. 5). Gibb (1987) supports the statement of independence and claims that entrepreneurship focuses on the independence of action, although while focusing more on the individual's characteristics, Carton et al. (2004) identify entrepreneurs from the participation in the process. Carton et al. (2004) refer to Schumpeter's (1934) definitions of “enterprise” and “the entrepreneur”, in which he states that enterprise is “*carrying out new combinations*” and the entrepreneur thereby is “*the one who carry them out*” (p. 74). Thus, Carton et al. (2004) keep three key elements from Schumpeter's (1934) definition which are: the creation of an organization to pursue a discontinuous opportunity; the definition is not limited to new ventures – entrepreneurship is allowed to exist within established organizations; actions determines when someone becomes an entrepreneur; entrepreneurship change to management when the actions of the individual change.

Raymond Kao defined entrepreneurship for the sake of clarification, further research and policy reasons. His article can be said to be rather subjective as he states his own opinion and also, there has been no further investigation, however, the approach is similar to other researchers (Gibb, 1987; Carton, et al., 2004; Kuratko, 2005), as it is based on prior research. Thus, Kao (1993) refers to Stevenson's three-fold definition of entrepreneurship emphasising on “*the process of making changes, doing everything to a greater effect and the pursuit of opportunity beyond the resources under current control*” (p. 69). With the lack of considerations of entrepreneur attributes and limitations of criminal activities, Kao (1993) redefines entrepreneurship as “*a process of making changes; doing something different thus, creating wealth for the individual and adding value to the society*” (pp. 69-70). Thus, the entrepreneur is defined as “*a person who undertakes a wealth-creating and value-adding process through incubating ideas, assembling resources and making things happen*” (p. 69). As this research emphasises on enterprise education, the definition of Kao (1993) is adopted, as the definition focuses on tangible elements what are operational in the teaching environment (Kao, 1993). Continually, the definition of entrepreneurship includes adding value to the society which fulfils the criteria of applying the concept of social marketing.

Gibbs (1987) definition is somewhat intangible and is very specific to his own research as it is made of the attributes he identified. Thereby, the definition becomes rather unsuitable for adoption to other research. However, the attributes Gibb collect from prior research is usable in the pursuit of entrepreneurial behaviour that this research seeks to identify. Both Carton et al. and Kao (1993) empathises on the process. The difference is that Kao (1993) consider the aspect of education in his

definition and makes it operational to any teacher, as there are no requirements of being an actual entrepreneur to teach about entrepreneurship.

### 3.2 ENTREPRENEURIAL CULTURE

Davies (2001) wrote about the entrepreneurial culture in European universities. His focus was not on making students engage in entrepreneurial activities, but to make the university more innovative as an organisation. He points to the following elements as characteristics of entrepreneurial culture; loose operational control, facilitation of individual creativity, commercial and financial awareness, willingness to take risks, experiencing with new initiatives, evaluate ventures and learn from experience, transferring the essence of experience across the organisation (pp. 28-29). It is argued that universities in US and England is known for having a unique enterprising culture (Kirkby, 2006; Hannon, 2005). Ball (1989), Gibb (1987) and Kirkby (2006) defines entrepreneurial culture from a very different perspective. They focus on people as opposed to focusing on the organisation. Ball (1987) points to personal traits and claims that if those are present, the entities can be said to possess entrepreneurial culture. Gibb (1987) agrees that the culture is about values and attributes, however, stating that they should nearly be supportive of the entrepreneurial behaviour in a business context. He fails to determine what kind of attributes and values he believes are specifically supportive. Gibb's (1987) definition is very similar to Kirkby's (2006), as he also focuses on the element of support by claiming that: "*A culture of enterprise is required that both encourages and enables academics and students to commercialise their intellectual property and inventions*" (pp. 602-603). Kirkby's (2006) definition is aimed at universities and still focusses at the university as the main actor to obtain the supportive environment required for the university to gain an enterprising culture, thereby said, that the students do not. Thus, it is argued that Aalborg University already has an entrepreneurial culture, as SEA represents that supportive entity. In that sense, it is not the supporting environment that is missing at AAU, but the engagement from the students as they need to realise that entrepreneurship is a requirement of the future job market and incomparable to the other offers provided by AAU. Transparency and understanding of why AAU put resources into supporting entrepreneurship are not characterising the procedures at AAU, and it is still noticeable that although the university does provide a supporting environment for the entrepreneurial students, they cannot be said to fulfil the requirements of Davies (2001). The university is, however, not the primary focus area of this study. Conversely, it has been established previously that in the case of Oxford University, students are able to create an enterprising culture

themselves through expanding interest and networking (Oxford, 2017). Thus, the question is what motivates entrepreneurs to be proactive in a school setting. In the following paragraph, entrepreneurial motivation is discussed to generate a deeper understanding of the behaviour that this study seeks to “sell” to students.

### **3.3 ENTREPRENEURIAL MOTIVATIONS**

In the examination of the behavioural characteristics of the entrepreneurs, the motivation for being one is essential to the understanding. Thus, this paragraph clarifies the meaning and use of motivational factors from previous studies to the context of social marketing.

In social marketing, the aim is to “sell behaviour” and make people act in a way that benefits the society and doing so, the behaviour must be identified through studies. The previous research on entrepreneurial motivations includes predominant authors as Gibb (1987), Carton et al. (2004) and Segal et al. (2005).

Gibb (1987) discusses the attributes of the entrepreneur found in prior studies and argue that some attributes are more likely demonstrated in some people more than others but also that these can be developed from experiences and circumstances (hereby also referable to the culture of the university). The attributes he collected include initiative, strong persuasive powers, moderate rather than high risk-taking ability, flexibility, creativity, independence, problem-solving ability, need for achievement, imagination, high belief in control of own destiny, leadership and hard work (p. 6). He points to the lack of measurability and evidence of some of the attributes, and thus, they may be said to be nearly suggested as to empirically founded. Carton et al. (2004) also identified traits as characteristics of the entrepreneur in previous studies, similar to the approach used by Gibbs (1987). They also found that the findings are nearly suggested and not proven to influence new venture formations. The traits found by Carton et al. (2004) to be the most commonly cited includes; desire for independence, locus of control, creativity, risk taking propensity, need for achievement, and credible role models. The traits of creativity, risk-taking ability, and independence are repeated in their study, proving that those traits have been perceived as a characteristic of the entrepreneur throughout a long period without significant moderation. Segal et al. (2005) do not support Carton et al. (2004) and Gibb’s (1987) statements, saying that there was no evidence of the traits leading to new ventures, as they claim that it predicts self-employment intentions. Intentions are not the same

as actual actions. Nonetheless, it points in the direction of personal traits as internal motivation that leads to the creation of new ventures.

There is much focus on the internal motivational factors that includes own personal goals and not much is mentioned on influential external factors. Segal et al. (2005) shed light on the difference in needing to be an entrepreneur and wanting to be an entrepreneur by using the logic of the push and pull strategy. Pull strategy is the aspect where people are attracted to becoming entrepreneurs by self-sufficiency, independence, wealth and other desirable outcomes. Push strategy represents the aspect that people become entrepreneurs because of lack of jobs, insufficient salary, job dissatisfactions, etc. It has been established by researchers as Kirkby (2006) that the market requires future employees to be entrepreneurial in one way or the other. With a focus on the requirements of the market and the societal circumstances that generate the need for entrepreneurs, the push strategy is the most reliable approach. It focuses on the external motivational factors of becoming an entrepreneur. The greater good of the society is an essential element in social marketing (Andreasen, 1994), and thereby reliable to the push-strategy however, it does so by focusing on changing behavior and attitudes are highly individual and thus, relates to a pull strategy where the internal factors are motivating the individual to become an entrepreneur.

Segal et al. (2006) claim that research points to the pull strategy as the dominant approach because no one has been able to identify the change in external factors that lead to increased entrepreneurial activity. People might as well just change careers rather than becoming an entrepreneur if they are faced with undesirable changes. As a result, the theory of entrepreneurship builds upon the cognitive approach. Due to this research's focus on social marketing, the push strategy will not be excluded in the investigation, and thus, it is an essential usable approach in the pursuit of enhancing student entrepreneurial behaviour and attitudes.

### **3.4 ENTERPRISE EDUCATION**

The chronological development of entrepreneurship education in the USA begins, according to Professor Jerome Katz at St Louis University, in the late 1940s, when Harvard Business School introduced the first Master of Business Administration (MBA) entrepreneurship course (Hannon, 2005). Entrepreneurship has always been a more widely used and readily accepted as a concept in the US and has inspired other universities to adopt the same approach to enterprise education.

Hytti & O’Gorman (2004), Kirkby (2006), and Hannon (2005) all stress the importance of enterprise education being embedded into the core purpose of the academic university. Yet, they identify the research culture to be the main obstacle for the entrepreneurial culture to emerge inside the universities. Kirkby (2006) identifies the obstacle as the fear of downgrading the research performance at the university by stating, *“Also, most academics see their roles as teachers and researchers and not as entrepreneurs, and many university managers are concerned about the likely negative impact on their institution’s research performance if their leading academics become involved in entrepreneurial activity”* (p. 599). Even though it was determined in the paragraph of defining entrepreneurship that the definition did in fact not affect the teacher, as it did not include requirements to which the existing teacher could not fulfil (Kao, 1993). Kirkby’s (2006) claim is much more comprehensive than whether or not the teachers are able to teach, but it concerns choosing research performance above entrepreneurial activities.

Many scholars have accused the university of not preparing students for employment and only focusing on academic research which is inapplicable to real-life jobs, and the universities have made changes over the years to meet those requirements (e.g. Patton, et al., 1997; Blumenthal, et al., 1996; Fallows & Steven, 2000). Now scholars want the universities to change for the sake of entrepreneurship to meet the needs of the market, and likewise, the universities try to find a balance between keeping the traditional academic focus and embedding the new requirements.

Universities were founded on the basis of research. It is required to produce new knowledge within academia. Thus, the university has to produce researchers as PhD, lectures, associate professors and professors to insure the production of new knowledge. If the university does not produce researchers, no one does, and that is the complexity that creates the clash between the actors of the market and the university. The percentage of students who become researchers represent a small percentage of the total student population, and therefore the majority of students are employed outside academia.

Gibb (1987) claims that the demand for enterprise education stems from the increasing complexity in occupation, which is requiring graduates to be innovative in the way they manage their lives post-graduation. Additionally, Hannon (2005) discusses whether attitudes are influenced by the community of higher education and policy to have entrepreneurship as an embedded part of all programs in the university or if it is considered as an isolated subject of study. SEA provides

entrepreneurial workshops and event that are not emitting ECTS<sup>1</sup> points to students. Thus, the activities are isolated subjects that require students to participate without earning credit as a part of the additional education. This clarifies the challenges of the internal affairs at the universities, and as it has been established that AAU operates from the point of view saying that students are to make active choices themselves, the focus on students for this investigation is justified.

Enterprise education focuses on two terms; Entrepreneurship and Intrapreneurship. Intrapreneurship is defined as entrepreneurial activities performed by a person inside an organisation for the purpose of benefitting the organisation. This definition is made by the researcher and is based on Carton et al.'s (2004) distinction from an entrepreneur *"An intrapreneur is assumed to have not risked personal cash-flow or personal capital, nor placed their career at risk"* (p. 4) and Ball (1989) *"identifying new products, processes and market opportunities through individual and/or team intrapreneurship", thus fostering a spirit* (p. 22). These terms are relevant to this research as it revolves around educational purposes and thus, acknowledge the differences for educational purposes.

### 3.5 THE SCOPE OF SOCIAL MARKETING

Social marketing is, according to Weinreich (2006) and Andreasen (1994), invented by Phillip Kotler and Gerald Zaltman around 1970. Kotler and Zaltman (1971) argue that the same principles that are used to sell products can also be used to sell ideas, attitudes and/or behaviour. They wrote an article discussing whether marketing concepts could be applied to social problems (Kotler & Zaltman, 1971) emphasising on the fact that, *"... Social marketing seeks to influence social behaviors not to benefit the marketer, but to benefit the target audience and the general society"* (Weinreich, 2006, p. 1). They refer to a number of other researchers, e.g. G. D. Wiebe (1952) and Joe McGinniss (1963), who examined the issue and found that the principles of products are successfully applied in a social context. Continually, Kotler & Zaltman (1971) proclaim that social marketing was happening at that time and that it is well established in the US. It is not a matter of "whether to use it" but "how to use it" and that is the essence of Kotler & Zaltman's (1971) research. Andreasen (1994) supports this fact and states that the term is being used by a number of different actors, and among those, universities, from an educational point of view. This project

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<sup>1</sup> European Credit Transfer and Accumulation System



revolves around the application of social marketing on student behaviour and the more knowledge a university has on the workings of social marketing, the less resourceful the implementation.

Kotler & Zaltman (1971) defines social marketing as: *“Social marketing is the design, implementation, and control of programs calculated to influence the acceptability of social ideas and involving considerations of product planning, pricing, communication, distribution, and marketing research.”* (p. 4). As the definition indicates, social marketing includes the same considerations as the 4 P's (marketing mix) and thus, they claim: *“Marketers view the marketing problem as one of developing the right product backed by the right promotion and put in the right place at the right price. These key variables in the marketing mix have been named the four P's by McCarthy”* (p. 6). Kotler & Zaltman (1971) argue that the four P's generates the complete mix of factors that marketers are to describe in the launch of products and thus, they built upon that theory in the development of a bucket list on how to make a social marketing campaign. This list is further described in the paragraph, Theory.

Andreasen (1994) wrote an article discussing the definition and domain of social marketing, and he found Kotler and Zaltman's explanation to be very unclear. First of all, Andreasen (1994) refers to Rangun and Karim (1991) who points to the confusion of social marketing being limited to public and non-profit marketers as social change is only a secondary purpose for private companies, whereas the main purpose is to increase profit. Wienreich (2006) supports that statement. Secondly, he claims that social marketing is more than just ideas, but also attributes and behaviour. Andersen (1994) also question Kotler and Zaltman (1971)'s unclear statements of the legitimate domain of social marketing by asking: *“Is any technique “fair game” to be called social marketing if it helps to achieve social marketing objectives? For example, is the imposition of a government regulation such as a ban on smoking in public buildings a legitimate social marketing strategy?”* (p. 4). To answer the question himself, Andreasen (1994) came up with his own definition of what social marketing is: *“Social marketing is the adaptation of commercial marketing technologies to programs designed to influence the voluntary behaviour of target audiences to improve their personal welfare and that of the society of which they are a part.”* (p. 4).

Thus, Andreasen (1994) and Kotler & Zaltman (1971) agrees on social marketing being an adoption of commercial principles to change or influence ideas, behaviour and attributes. Kotler & Zaltman theorise that statement by suggesting the use of the four P's, which Andreasen (1994) states, is aimed at *production and sales*, which he defines as the objective of the commercial technology that

influences consumer behaviour. Thus, social marketing is to contain an objective if the principals are to be adopted. Thereby, Andreasen (1994) defines the objective of social marketing to be *influencing behaviour*.

This research adopts the definition of Andreasen (1994), which is based on the more delimiting specific focus on behaviour and attitudes. The definition points to welfare both personally and societal welfare, which aligns with the successful result of an enterprise. The literature also provides a base of connecting attitudes with behaviour, however, outlining that the change in behaviour is the primary goal of social marketing. Furthermore, social marketing is, according to Andreasen (1994), more suitable for long-term programs as oppose to campaign-related missions although this research tests the principles with short-term initiatives. Weinreich (2006) also claims that social marketing has been successfully applied to programs in the past. This investigation seeks to discover whether social marketing applies to the area of enterprise at AAU, which is considered as an ongoing process in collaboration with the department of SEA. Social marketing is hereby proven to be highly relevant topic of interest for this department.

Authors argue that social marketing arose for purposes of public health (e.g. Manoff, 1985; Cheng, et al., 2011; Weinreich, 2006) and the investigations made on social marketing repeatedly use examples revolving public health (e.g. Andreasen, 1994; Kotler & Zaltman, 1971) but it does not prevent potential application to the educational sector from the aspect of changing student culture. It seeks to intervene with student's current behaviour and attitudes during education with the goal of making them engage in entrepreneurship.

## 4 PROBLEM STATEMENT

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*How can students be motivated to change behavior by applying social marketing to promote entrepreneurial activities at AAU?*

### 4.1 DESCRIPTION OF THE PROBLEM STATEMENT

The problem formulation is action-oriented (Rienecker, 2014), meaning that it initiate a testing of a subject. The action-oriented problem formulation that investigates the question of “how”, is problem solving and interventional. This problem formulation seeks to discover the outcome of actions by intervention. Thus, the actions consists of applying social marketing to entrepreneurial activities at Aalborg University and intervene with the students’ perception of entrepreneurship in education. Gynther claims “*If you want to change it, you must understand it, and if you want to understand it, you must to change it*” (Gravemeijer & Coop, 2006, p. 17). The logic behind this statement summarises the essence of this investigation. The investigation seeks to discover how student behaviour can be changed through social marketing and in order to do so, an understanding must be generated by qualitative research of the social phenomena.

## 5 METHODOLOGY

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In clarification of the frame in which this research is conducted, this paragraph is dedicated to outlining the epistemological and ontological choices that reflect the researcher's paradigm of belief. The paradigm guides the actions in discipline inquiry (Guba, 1990) and it is grounded in the belief of the individual.

The ontological view which operationalizes the way the world is perceived by the researcher is constructivist, and that is the nature of reality in this inquiry (Guba, 1990). Constructivism relates highly to the social research which is subjectively investigated (Bryman, 2012). Social marketing relates to behaviour and attitudes. These cannot be explained from an objective stance, and therefore the only way to work within this social field is to generate understanding through information gathered from human activity (Guba, 1990). This investigation does not seek to discover the ultimate truth about the workings of social marketing, but nearly to understand how it affects students individually and is thereby not generalisable even though the aim is to reach a large group of people. Behaviour and attitudes can only be said to belong to the individual in today’s

society, and that is why there is no generalisation of that matter (Norbert, 2001), but only consensus of realities within individual statements (Guba, 1990).

The dialectic approach within constructivism is guiding the procedure of data processing. As opposed to the hermeneutic approach, the dialectic approach seeks to compare and contrast individual constructions (Guba, 1990). As social marketing represents an approach that is seeking to change the behaviour and attitudes and, emphasising on “the greater good of the society” the individual is the target, but the overall goal is to affect a larger group of people (Andreasen, 1994). By striving for consensus in the data collection, the strategy of social marketing can be modified to the purpose of the cause. Thus, the investigation is allowed to be concerned with the workings of social marketing on its terms, hence, changing the behaviour of many people. Social marketing can very well be said to contain both subjectivity and objectivity due to the complexity that marketing contains. As a constructivist, it is argued that behaviour and attitudes can only be understood individually, but a positivistic view can generate a general behaviour and attitude that is operationally changeable by the use of social marketing. If we move away from the traditionally B2B and B2C approaches, there is a new requirement from the ever-evolving social and digital world, which is the H2H approach. The H stands for human, and the thought behind H2H is that the approach contains emotion (Kramer, 2014). H2H marketing and its application to this research will be discussed in the following paragraph, Method. This trend indicates that consumers allow no generalisation in communication so why should this social investigation do so?

The constructivist approach is thus established as the foundation of belief, and it will guide further choices of the method as well as the data collection. When digging deeper into the paradigm of constructivism to reach a more topic specific approach of action, the interventionistic view presents itself as the obvious paradigm of choice for this investigation.

## **5.1 DESIGN-BASED RESEARCH - INTERVENTIONISM**

The essence of interventionism is, according to Brown (1992) and Collin (1992), about experimentation and testing the effectiveness and ability of laboratory or institutional studies. Brown (1992) discovered the need for a methodology that allowed the type of research that she was performing, within the field of education (Sandoval & Bell, 2004). The method was used from the aspect of investigating cause and effect, to improve in teaching and learning and it is called design-based research aka interventionism (Brown, 1992; Collins, 1992). Interventionism allows

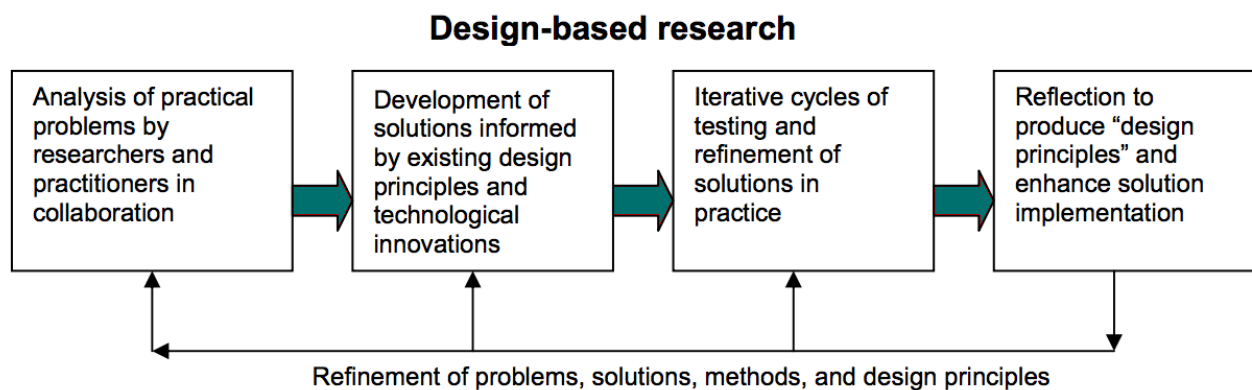
experimentation of designs in a real-life setting (Collin, 2010) which indicates a belief of social constructions consisting of uncontrollable and unpredictable variable which is contradicting to the traditional method of controlled variables that of which researchers work with in laboratories (Collin, 2010). At first eyesight, Collin (1992) and Brown's (1992) design-based research seems to be relating to the paradigm of post-positivism because the development of design was performed in the laboratory, however, acknowledged that real life includes uncontrollable variable (Guba, 1990). The argumentation for design-based research being connected to the paradigm of constructivism is that it also acknowledge the context in which the design is tested (Barab & Squire, 2004). The constructivist paradigm recognises the social construction to consist of unique dynamics and thus, to be ungeneralizable (Guba, 1990) which is relatable to the thoughts within the paradigm of social constructivism. Barab & Squire (2004) recognises this as an issue about replication, and thus, the design-based research is modifying designs to the local dynamics, which calls for thorough descriptions of the environment. Continually, design-based research requires a series of testing and refinement of design (Amiel & Reeves, 2008) and hereby also adopting the abductive approach of reconsiderations as the theoretical account is grounded in the worldview of the population (Bryman, 2012).

This investigation aims at designing and testing a social marketing strategy with the purpose of changing student behaviour towards enterprise offerings at AAU, and thus, the social marketing strategy represents the design. The design-based research is based on theoretical conjectures (Sandoval & Bell, 2004) and so, this research is based on conjecture about social marketing being successfully applied at AAU to enhance the entrepreneurial culture among students at AAU. Sandoval & Bell (2004) refers to Tabak who argues that intangible aspects are a key element of design-based research and "... *contribute to development of theories of contextualization*" (p 200). This development of theory is not with the scope of this research as it mainly occurs after a long-term engagement, and widely testing of several designs. However, it will aim at creating a foundation for further research on the application of social marketing to educational purposes.

## 6 DESIGN-BASED PROCEDURES AND METHOD

The process of conducting a design-based research is illustrated in the inquiries of Gynther's (2011) and Amiel & Reeves (2008). Both illustrates a process containing the same elements. Amiel & Reeves's (2008) model of design-based research (p. 34) is illustrated and adopted into this research.

Figure 1: *Design-based research*



Design-based research is different from traditional research because it emphasises on the iterative cycle. The iterative cycle consists of methods used to test and refine the design in design-based research (Amiel & Reeves, 2008). There is no connection between the iterative cycle and the hermeneutic circle, but it is based on the same logic of refinement of processes to reach a higher quality of result (Berg-Sørensen, 2010). The hermeneutic circle generates knowledge of social phenomena (Gadamer, 2008) whereas the iterative circle generates more effective and adapted designs in a local context (Amiel & Reeves, 2008). A small change in the surrounding variables can change the whole, and in the case of design-based research, this indicates that multiple designs may be created throughout the iterative process and flexibility is a necessity to ensure an effective process. Thus, conducting the design-based research includes an ongoing process that is highly dependent on the context of which the design created, similar to the hermeneutics.

It is noticeable that when design-based research is compared to what the authors call traditional research, it takes the positivistic point of view (Barab & Squire, 2004; Amiel & Reeves, 2008; Gynther, 2011) whereas, no one separates the paradigms within the subjective, constructivist

paradigms. Throughout this paragraph, it is argued that design-based research contains strong traits of social constructivism and hermeneutics and just like positivism, it distinguishes in the iterative aim. Thus, there is no acknowledgement of the fact that design-based research is nearly guided by constructivism and adds the dimension of creating and testing designs.

## 6.1 DESIGN-BASED METHODS

Akker et al. (2006) identified four characteristics of design-based research; *interventionist*, *iterative*, *process oriented*, *utility oriented*, and *theory oriented*. Similar to those characteristics were the ones collected by Gynther (2010) although he also included, collaborative. These characteristics form the frame of procedure for a design-based research. They are operationalised by Barab and Squire (2004), as they made a table in which they compared design-based research to traditional research. The table includes categories that operationalise the procedures of research. Furthermore, they are action-based and thereby guides the conduction of the design-based research. Because this research has no use of the comparison, the table is modified by excluding the characteristics of the physiological experimentation, which is the traditional research methodology (Barab & Squire, 2004, p. 4) and instead, it includes the procedure of this research to outline the method.

Tabel 1: *Characteristics of design based-research*

Categories	Design-based research	Investigation
Location of research	Occurs in the buzzing, blooming confusion of real-life settings where most learning actually occurs.	The investigation takes place at Aalborg university campus.
Complexity of research	Involves multiple dependent variables, including climate variables (e.g., collaboration among learners, available resources), outcome variables (e.g., learning of content, transfer), and system variables (e.g., dissemination, sustainability).	The dependent variables of Aalborg University campus are to be identified by the method of questionnaire
Focus of research	Focuses on characterising the situation in all its complexity, much of which is not now a priori.	Description of the real-life setting of Aalborg University campus based on the dependent variables
Unfolding of procedures	Involves flexible design revision in which there is a tentative initial set that are revised	The revision design (iterative circle) will

	depending on their success in practice.	include the methods of interviews and Observations
Amount of social interaction	Frequently involves complex social interactions with participants sharing ideas, distracting each other, and so on.	Interaction is approached by interviews and observations
Characterising the findings	Involves looking at multiple aspects of the design and developing a profile that characterises the design in practice.	Describing the practical workings of the design
Role of participants	Involves different participants in the design so as to bring their differing expertise into producing and analysing the design.	SEA is the participant who brings experience and knowledge to the production and revision of design

## 6.2 PLAN OF PROCEDURE

The method of procedure is slavishly presented to ensure the relation between them and the guidelines of design-based research. This approach secures coherency and focus of the investigation. This paragraph is a detailed description of the methods presented in table 1.

### 6.2.1 Location of research

The research is conducted at AAU campus. The location is characterised as highly vibrant and dynamic due to the number of students who are on campus daily and also the different activities going on as social gatherings at the Friday bar, guest presentations, sales promotion activities in the cantinas, etc. There are about 20.000 students enrolled at AAU and departments in the cities of Aalborg, Esbjerg, Copenhagen and Aarhus. This investigation is limited to campus in Aalborg, and thus, this is where the design is tested, and this is also where the data is collected.

### 6.2.2 Complexity of research

Design-based research includes multiple dependent variables that are uncontrollable to the researcher. These variables are not manipulated to fit the research (Barab & Squire, 2004), and hereby they have a natural impact on the design when it is tested, and successfully the design generates an impact on the variables. When a design influence variables and the variables are allowed to influence the design, it co-creates a new environment that is either better, worse or unaffected by the design (Barab & Squire, 2004). The goal is to change the environment for the



better, and that goal is reached by modifying the design and insure flexibility in terms of the environment. The variables include, *climate variables*, *outcome variables* and *system variables*. These variables are to be identified by the using the method of questionnaire. The results will generate the key-content for the description of context.

### **6.2.3 Unfolding of procedure**

The unfolding procedure of design-research calls for a systematic testing and revisioning of the design (Barab & Squire, 2004). Following the constructivist approach, the goal is to understand how the design affects the students. The way of gaining understanding is through semi-structured interviews. Semi-structured interviews generate meaning (Bryman, 2012) which is used to describe how the design affects the students. The approach follows Gravemeijer & Coop's (2006) claim that the researchers need to understand in order to change, and the way of reaching understanding is through dialogue (Bryman, 2012). Furthermore, observations are conducted to detect actual actions and response to the design.

### **6.2.4 Amount of social interaction**

The social interaction is an essential part of the investigation both from the perspective of changing behaviour and also to from the perspective of revising the design. The individual students at AAU are the greatest influencer on the design and the more interaction we incorporate into the revision process, the more we can modify the design to fit the context. As mentioned above the method used for this purpose is semi-structured interviews and observations which will be elaborated in the following paragraph, method.

### **6.2.5 Characterising the findings**

The results from the interviews and the observations will determine the aspects of focus when revising the design. The dependent variables can change in the process, and these are identified and described along with the practical workings of the design. The results from the testing will reveal whether the design is working intentionally or generates new purposes.

### **6.2.6 Role of participants**

The researcher is the developer of the design and SEA is the distributor and the producer of the material. Thus, SEA supports the process and validates each element of the design. Likewise, they contribute with expertise within communicating to students and promoting enterprise events.

### 6.3 SUMMARY OF THE RESEARCH DESIGN

In summary, this research includes the development of a social marketing strategy that is tested through SEA, to find out, if social marketing can be used as an approach to change students' behaviour towards being more enterprise active, during education. Social marketing dictates an examination and description of the focus and purpose and context first and foremost. The social marketing strategy represents the design in design-based research. The foundation of knowledge generates grounds on which the design can be developed and tested in the context of AAU campus. The purpose of the design is to enhance student engagement in enterprise activities during education at AAU. It has been established that the entrepreneurship benefits the society, which is also the purpose of social marketing (Andreasen, 1994). Furthermore, the design-based research seeks to contribute to a better learning environment (Gynther, 2011), but in this study, it is applied to allow testing of the design. Social marketing is used to change behaviour and attitudes. Those are according to the constructivist view, individually perceived and can only be understood through dialogue (Bryman, 2012). Design-based research seeks to understand in order to change and to change in order to understand (Gravemeijer & Coop, 2006). Thus, the approach of semi-structured interviews is used to reach an understanding of the effect (or lack of effect) that the social marketing design has on the students who are exposed to it. The results from the interviews and observations are used to improve the social marketing design to generate a greater effect. Thus, the investigation follows the process of design-based research (Amiel & Reeves, 2008; Gynther, 2011).

## 7 METHODS

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It was established in table 1: *Characteristics of design based-research* that the methods used for this investigation include questionnaires, semi-structured interviews and observations. Throughout this paragraph, the use of methods is clarified and described in relation to the purpose of this research.

### 7.1 SELF-COMPLETING QUESTIONNAIRE

This method is used to provide a general overview of the current enterprising behaviour at AAU and the dependent variables of the context. The results will serve as the base of information on which the context is described and the design is created.

The type of questionnaire used for this investigation is Bryman's (2012) *self-completing questionnaire*. The self-completing questionnaire is not biased by an interviewer and it is easily administrated compared to the interview, as it provides an automatic statistic overview. The challenges specifically characterising the self-completing questionnaire include a potential need for elaboration and/or explanation of questions that the respondent does not understand. The interviewer is absent in the process of answering and the answers are thereby given strictly based on the respondent's interpretation (Bryman, 2012).

A questionnaire allows a collection of information from a large group of people, in a short time (Bryman, 2012) as opposed to conducting interviews, due to the limitations of sample size. Generalisation provides grounds to explain the behaviour of the students who are interested in entrepreneurship, which is the method used to operationalize entrepreneurial behaviour. It is important to note that this is not generating an understanding as discussed previously in the methodology. However, it provides a base knowledge used to conduct the first draft of design hence, the design is produced in the laboratory (Brown, 1992; Collin, 2010).

Using a questionnaire to investigate behaviour is according to Bryman (2012) not without challenges. The social aspect becomes distinguished from social interaction and thus, revolves around development and changes in society (Bryman, 2012). The concrete challenges emerging by using questionnaires are considered in this research to be consisting of the following (Bryman, 2012, p. 271):

- Problem of meaning. People may vary in their interpretations of key terms in a question
- Problem of omission. When answering the question, respondents may inadvertently omit key terms in the question (see Thinking deeply 12.1).
- Problem of memory. They may misremember aspects of the occurrence of certain forms of behaviour.
- Social desirability effect. They may exhibit a tendency towards replying in ways that are meant to be consistent with their perceptions of the desirability of certain kinds of answer.
- Question threat. Some questions may appear threatening and result in a failure to provide an honest reply.
- Interviewer characteristics. Aspects of the interviewer may influence the answers provided.
- Gap between stated and actual behavior. How people say they are likely to behave and how they actually behave may be inconsistent

Not all challenges can be avoided in the conduction of questionnaire. But, when designing the questionnaire, they are taken into consideration so that the questionnaire can be designed to meet the challenges.

### 7.1.1 Design of questionnaire

The questions in the developed survey are mostly closed which means that the researcher provides options for the respondent to choose from. The questionnaire also contains a few open questions that either indicates that the list of options would reach an unmanageable length or to gain new knowledge that the researcher lacks in order to create options.

There is no pre intervention method used for the purpose of including the respondent in the process of conducting the response options, and thus, we risk insufficiency in the options provided. That is an ambivalent occurrence; firstly because it forces the respondent to choose the option they feel come closest to the answer they wish to give, and thus, the answers are compatible. Secondly, Foddy (1998) claims that forcing the respondent to answer a question generates invalid and unreliable results. Thirdly, insufficient options can also cause the respondent to leave the questionnaire incomplete. To minimise this risk, and to avoid providing an indifferent option as “I do not know”, which is referred to by Foddy (1998) as “noninformative” (depending on the question), the questionnaire includes the option of “other” in the majority of questions.

When ticking off the “other” option, the respondent can write an answer in a text box. This option allows the respondent to provide his/her own answer that, in the respondent’s opinion, is missing from the list. Not only does this method allow the respondent to expand the variety of options, but it might also provide new knowledge of the issue to the researcher and cover the possibility of an aspect being overlooked. The options in the questionnaire will aim at producing a strictly theoretical outcome allowing new knowledge to emerge. Including the option of “other” is an alternative to the traditional method of conducting interviews (referred to as in-depth probes by Foddy (1998)) prior to conducting the questionnaire, to identify shortcomings in the questions and options. The approach is less time-consuming and can generate new knowledge, but it can also generate challenges in the analysis of the results, as the answers provided by text are incomparable and excluded from the statistical outcome. Furthermore, Foddy (1998) points to the disadvantage of the open question, which is assimilated with the option of “other”. He claims that the respondent’s eagerness to finish the questionnaire detains him/her from writing an answer, instead of simply ticking off a random option. The challenge is met by practising the abductive approach to gain knowledge through research of theory prior to the conduction of the survey. Thus, it is argued, that a thorough research generates enough knowledge to provide the right options for the questions, or at least, generates the same outcome as conducting interviews before the questionnaire.

The questions are conducted on the base of theory and other inquiries. The more knowledge gained prior to conducting the survey, the more likely it is to form the correct questions, as long as the questions are formulated in a way that is easily understandable to the respondents (Bryman, 2012). Foddy (1998) and Bryman (2012) stresses the importance of clear, understandable questions that are easily picked up by the respondent. The more complex the question is, the more likely it becomes that the respondent leaves the questionnaire unfinished (Foddy, 1998; Bryman, 2012). Continually Foddy (1998) states: “... *the fundamental problem that arises when different respondents give different interpretations of a question is that they are, in essence, answering different questions, which in turn means that their answer cannot be sensible compared with one another*” (p. 104). In the absence of the interviewer and thus, lacking explanation of questions, misunderstanding cannot be avoided completely. However, to minimise this risk, the questionnaire has been tested informally by three people, including Marie Fallgaard<sup>2</sup>.

The underlying theory that inspired the construction of the questions is mainly concerned with personal traits of the entrepreneur and thus, includes Ball (1989), Gibb (1987), and Segal et al. (2005). The aim is to discover traits that the active entrepreneurial students at AAU, contain.

### *Layout*

Bryman (2012) stresses that questionnaires should not appear long to the respondent and the layout should be easy on the eye. This questionnaire is conducted using the web-based tool *SurveyXact*. This program contains a function that allows several tracts of questions, uniquely modified to the respondent's answers. This function makes the questionnaire feel shorter. Furthermore, the questionnaire is designed to show one question at a time; however, it includes a bar below that indicates how far along you are. Showing one question at a time generates focus on answering the question instead of reading the next and being overwhelmed by a “full page” of questions. In this way, the questionnaire does not seem comprehensive or time-consuming in any way.

The layout is chosen from the predefined options provided in the program. Bryman (2012) refers to Dillman et al.'s (2009) consideration of layout that will make the respondent answer, and they emphasise dark colours and consistent styles and fonts. Thus, a the dark coloured layout is chosen by the researcher based Dillman et al.'s (2009) recommendations.

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<sup>2</sup> Senior Consultant at Supporting Entrepreneurship at AAU

### 7.1.2 Sample

The survey aims at investigating the students who act on their interest in entrepreneurship at AAU by attending events and/or courses during their education. These active students represent the population of the survey. The sampling follows the overall *purposive sampling* method where the sample is selected on purpose and thus, not on a random basis (Bryman, 2012). SEA is the provider of the list of students who have this common denominator that generates the criterion for attending the survey. This method is a part of the *purposive sampling* and is called *criterion sampling*. It relates to the qualitative research and refers to the goal of the research, specifically, by providing a sample that allows an investigation of the desired active entrepreneurial behaviour.

### 7.1.3 Distribution

SEA is the distributor of the questionnaire, and the survey is distributed by email. The time frame of collecting answers is two days. The limited period is sufficient because there is no opportunity to send a follow-up email and it is unlikely that students receive the survey and wait to give a response.

## 7.2 SEMI-STRUCTURED INTERVIEWS

The primary data for this research is collected by conducting interviews. Through the conduction of interviews, the constructivist idea of multiple realities is embraced (Guba, 1990). Kvale & Brinkman's (2009) personal interviews allow the researcher to engage in an in-depth conversation with a student to gain knowledge about the students' perception of- and reaction to, the design. The interview is conducted by the semi-structured approach (DiCicco-Bloom & Crabtree, 2006) to ensure that it provides the information needed. The semi-structured interview is flexible and may thereby also include spontaneous questions that emerge during the conversation. Thus, the interview-guide may change from one interview to another. The approach allows previous knowledge and perception to change, which provides a more complex collection of data (Bryman, 2012; Guba, 1990).

The data will be proceeded dialectically (Guba, 1990), and thereby discover similarities in the statements which increase the meaning-making of the informants' perception of the design. The challenge of conducting these personal interviews is for the researcher to allow the pre-interpretation to change. In consideration of the pre-interpretation, it is essential that the recipients' opinion is allowed to influence and reconstruct the design. The interviewer's pre-interpretation

stems from own experience of being a student at AAU. A pre-interpretation is unavoidable in any case, and therefore the interviews are only building upon that interpretation and allowing the informant to tell their story without being influenced by the interviewer. The interview guide is designed to meet this challenge by including the following four stages that ensure focus on the informants' narrative and examination of the design: *Current position*, *The new initiatives*, *Suggestions*, *Reflections*. As stated previously, the design of the interview guide and thus, the description of the four stages, is presented after the determination of theory.

### **7.2.1 Description of informants**

In the process of designing the interview guide, it becomes clear that whether the informant has participated in entrepreneurial activities before or not, pose a significant difference in their ability to answer the questions. To reach the desired information, it is thus necessary to acknowledge the informants' previous experience. The informants who have been participating in enterprise events prior to the interviews, hold more knowledge of entrepreneurial activities and are thereby, able to compare existing initiatives with the new initiatives. Informants who are not actively engaging in entrepreneurial activities are able to evaluate the new initiative on whether the initiatives influence their inactive behaviour. Eventhough the aim of the study is to change students behaviour from inactive entrepreneurial behaviour to active entrepreneurial behaviour, the active students' engagement in enterprise activities plays an important part of influencing inactive students and also posing as the entrepreneurial community at AAU. Further on in this research, the students with no previous experience in entrepreneurial activities at AAU will be referred to as *inactive students*, and the students who have participated in entrepreneurial activities at AAU is referred to as *active students*.

## **7.3 FIELD OBSERVATIONS**

The purpose of the observations is twofold; it is primarily an investigation of the practical workings of the design. Secondary, it is a validation of the results from the interviews. It is not possible to validate the informant's statements in their action, as there is no certainty of the informant's presence during the observations, however, it is possible to form a coherent impression of the design. The method of observation is not structured in the sense of Bryman (2012); instead the researcher undertake the role of the participant to generate understanding of thoughts, feelings and actions, in line with Bonner & Tolhurst (2002).

### 7.3.1 The environment of observation

The environment is essential to the conduction and the results of observation. It determines the limitations as well as opportunities to gain relevant results. The observation is performed at the event *Recruitment and Start up* hosted by SEA, Venture Cup and UCN Innovation on May 5<sup>th</sup>, 2017. The event does not only include students from AAU, but also other relevant institutions. Thus, the objects of observation go beyond Aalborg Campus, yet still represents AAU students who have been exposed to the promotion on Campus.

An event is defined as dynamic, active, and social constructed, as it is a staged situation as opposed to naturally occurring (Richards & de Brito, 2013). The people coming to an event has a purpose according to their expectations. The expectation of attending the *Recruitment and Start up* event could be expansion of network by interaction with people of common interest and actors that can help the students achieve future goals. Misener and Mason (2006) states: “*new social networks are being created through participation, planning, volunteering, and often consumption of, events*” (p. 50). Thus, networking is a strong initiator for students to participate in events.

The reason for actors to host a ‘topic specific’ event is to convince someone to consume something. In this case, the actors are trying to convince students to engage in entrepreneurship during education by facilitating interaction among the inactive students and student entrepreneurs. SEA purpose is to encourage students to create teams across study fields and thus, bring different competencies together so that the entrepreneurs have a better chance of succeeding.

The environment in which the observation is conducted can generate challenges such as capturing the participant's reaction to the promoted initiatives. The group of participants does not only consists of students which mean that the participants supposedly have different expectations to the outcome and thus their focus of attention is difficult to capture. If the fundamental expectations are not met and the participant's interest is not caught, the participants have no surplus energy to receive additional messages. Furthermore, the researcher is conducting the observations alone, and the size of the location is compromising the possibility of generating a total impression.

### 7.3.2 Inside, outside observations

Bonner & Tolhurst (2002) talks about the insider and outsider of participant observations. The distinction is, in this case, arguable. The researcher is an insider in the sense of being a student at AAU, but also an outsider, as the researcher is no longer part of the target group of students, who are offered participation in entrepreneurial activities. In the determination of the insider being a part



of the target audience that is studied, the researcher is an insider. Being an insider is a benefit in the sense that the researcher is able to understand the student perspective and the bias of altering the social interaction can be omitted. The challenge of being an insider includes the researcher becoming a participant rather than performing participant observations, as stated by Bonner & Tolhurst (2002). Being an insider generates a greater understanding of the culture, as the observer already have an established intimacy to the participants. Furthermore, there is no altering of the social interaction (Bonner & Tolhurst, 2002). The design aims at “selling” the behaviour of the students who are actively participating in entrepreneurial education and from that perspective, the researcher is an outsider. The collaboration with SEA, conversely generates access to information on entrepreneurial education that otherwise was inaccessible to students, and from that perspective, the researcher becomes an insider. Thus, the researcher benefits from the unique position of being an insider with access to the information that otherwise is only accessible to non-students, hence, the outsider. Still, the information generates an insider position of knowledge about the active students.

### **7.3.3 Structured vs. unstructured observations**

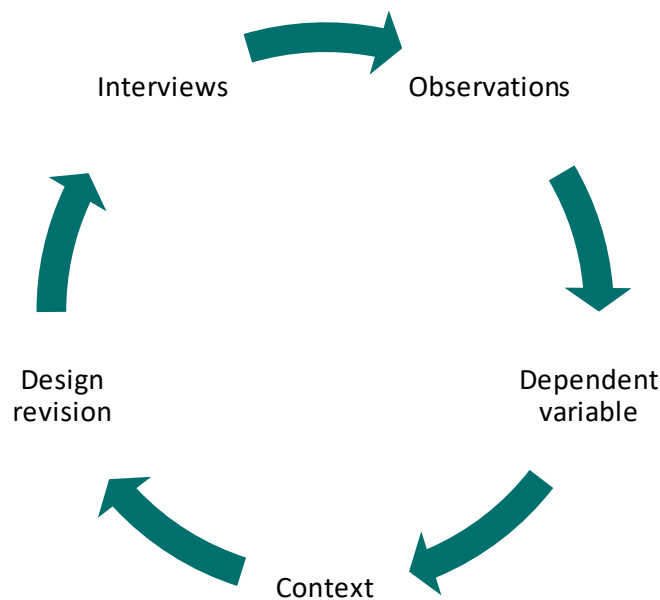
The execution of observation involves looking, listening and asking (Bonner & Tolhurst, 2002). An observation-guide is made with a few points on what to look for, to keep the focus on generating data for this study. The observation guide is presented after theory. Contradictory, the challenges of making a guide includes not being able to go beyond the guidelines and discover other factors that might also be relevant to the investigation. This challenge is to be kept in mind while making the observations.

The observation is neither structured nor unstructured. The guide cannot be said to meet the requirement of Bryman's (2012) structured observation, as the guide does not include categories identified prior to the observation. Continually, the observation does not aim at developing a narrative account of behaviour (Bryman, 2012) but primary to understand the students responds to the design. Thus, it can be argued that the observation is conducted in a semi-structured manner like the interviews.

## 7.4 THE ITERATIVE CYCLE OF TESTING AND REFINEMENT OF THE DESIGN IN PRACTICE

In the model of design based research (Amiel & Reeves, 2008, p. 34) figure 1, the third stage represents the main focus of design based research which is testing and refinement of design. The process of the procedure is established, and as such, this flowing model summarises the established methods selected for the iterative cycle.

Model 1: *Methods inserted in the iterative cycle*



The interviews represent the in depth dialogue between the design creator and the target audience. This step aims at generating an understanding of the practical workings of design. The following step is observation which is to generate a coherent understanding of the results generated in the interviews. People do not always act the way they claim to do. The next steps include a reconsideration of whether the dependent variables and context have changed during testing. If so, these are to be modified and considered in the revision of the design. The determination of the iterative cycle ensures the trustworthiness and authenticity of the research. Thus, the data are flexible and allowed to change over time (Golafshani, 2003).

## 8 THEORY

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This paragraph presents the theory on which this research proceeds. The theories that are utilised to analyse the data collections will be presented according to the procedure illustrated in the previous paragraph.

### 8.1 DESCRIPTION OF CONTEXT

In the previous paragraph, *Method*, Barab & Squire's (2004) characteristics of design-based research were used to ensure the connection between procedure and design-based method (Table 1). Furthermore, Barab & Squire (2004) discuss the description of the naturalistic context in design-based research and stress the importance of this determination in a large systemic context as opposed to the traditional limited context of class rooms. They argue that the boundaries of the context expand from the limited context of "the class room" to a more material, social and cultural context which, however, blurs the boundaries and generates less control. This research takes Barab & Squire's (2004) theory into consideration in the description of context and defines the context from dependent variables discovered through questionnaires.

### 8.2 BACKGROUND KNOWLEDGE FOR CREATING THE DESIGN

In the paragraph, *Literature review* both Gibb (1987) and Carton et al.'s (2004) collections of personality traits and attributes of the entrepreneur were presented. The common traits that were identified from Gibb and Carton et al.'s (2004) investigations included: creativity, risk-taking ability, and independence. This combined theory will be used to make sense of the results from the questionnaire in the pursuit of identifying the active student's behaviour and discover their motivation to engage in entrepreneurial activities during education.

### 8.3 CREATING THE DESIGN

The creation of the design will follow a certain product-oriented process with the purpose of changing behaviour and attitudes. The product-oriented process is the main characteristic of conducting social marketing (Weinreich, 2006; Cheng, et al., 2011). The design of this study is a social marketing strategy with the purpose of making students engage in entrepreneurial activities during education. To create the design, Lee & Kotler's (2011) theory on developing a social media campaign is utilised along with Kotler and Zaltman's (1971) approach to planned social change.

### **8.3.1 Lee & Kotler's (2011) theory on developing a social marketing campaign**

Lee & Kotler (2011) presents a 10-step list of procedure on how to develop a social marketing campaign. The steps include:

*Step 1: Define the problem, purpose and focus*

*Step 2: Conduct a situational analysis*

*Step 3: Select a target audience*

*Step 4: Set marketing objective and goals*

*Step 5: Identify factors influencing behavior adoption*

*Step 6: Positioning statement*

*Step 7: Develop marketing mix strategies: the 4 P's*

*Step 8: Outline a plan for monitoring and evaluation*

*Step 9: Establish budgets and find funding sources*

*Step 10: Complete the plan for campaign implementation and management*

This theory includes elements that are important to create a design that fits the context of this investigation hence, the problem formulation. Furthermore, following a list of procedure, the researcher avoid omitting relevant steps that ensure a well-justified design and clarify the process for the reader. All steps are considered in the development of the design, however, the purpose of this research is not to make a campaign, but to nearly to test the workings of a social marketing strategy in a student environment. The scope of the investigation does not allow a creation and testing of a complete campaign. As such, step nine and ten are excluded from this study but may be considered in a further investigation. Following the design-based research, there is no telling when a design is complete and entirely successful as it adapts to the ever-changing environment of context, in which it is implemented (Collin, 2010). The process is flexible and thereby, cannot follow this normative model of implementation without modification, although, the relevance of each step is acknowledged in the design-creation and thus, utilised to create the first draft.

### **8.3.2 Kotler and Zaltman's approach to planned social change**

Kotler & Zaltman (1971) are adopting McCarthy's (1968) four P's, in the pursuit of applying the process of selling products to social issues. The four P's is step number seven on Lee & Kotler's (2011) list and represents the direct application of the product-oriented procedure. The normative approach is very characteristic for Kotler's work which has been criticised by authors as Andreasen

(1994). The four P's generate the variables that Kotler and Zaltman (1971) believe must be controlled to communicate the social change successfully. Andreasen (1994) questions whether four controlled variables and attitude-alteration really influences behaviour. By conducting observations and adding objectives to the design, this study is following up on that question in the discovery of whether the gestalt of procedures can be said to affect the students to change behaviour.

Utilising the four P's for social change calls for modification, and the following section presents Kotler & Zaltman's (1971) proposal to the application. The description of each parameter is a conjunction and rewritten version of Kotler & Zaltman's (1971) more thorough description. Furthermore, it is described in relation to the purpose of this research.

### **8.3.3 Conversion of the 4 P's**

*Product:* You study the target audience and then you *"package" the social idea in a manner which their target audiences find desirable and are willing to purchase* (Kotler & Zaltman, 1971, p. 6). The product is to be buyable to the target audience.

*Promotion:* The purpose of the promotion is to make "the product" familiar, acceptable and desirable to the target audience. Advertising, personal selling, publicity and sales promotion are the main activities of promotion. Not all of these activities have to be included in the marketing plan as it depends on the composition and purpose of design. Thus, the design is to include a plan of promotion to make students familiar, acceptable and desirable towards participating in entrepreneurial activities.

*Place:* "... providing adequate and compatible distribution and response channels" (Kotler & Zaltman, 1971, p. 7) the "product" should be obtainable to the buyer. This study hopes to generate action on behalf of the students and such, the 'action outlets', as named by Kotler and Zaltman (1971), is to be described. When the student has the desire to adopt that behaviour, he/she must be made aware of what actions to make, and where to make them. In this case, it means including action-outlets to the entrepreneurial activities.

*Price:* "... the costs that the buyer must accept in order to obtain the product" (Kotler & Zaltman, 1971, p. 8). Price is not considered as money in social marketing, even if there are financial costs connected to the adoption of behaviour. Thus, the price represents opportunity cost, energy cost, psychic costs, etc.

After creating the design, the design is to be tested in the real-life context and revised with the new knowledge of the practical workings. It was established in the paragraph, *Method* that the revision was based on semi-structured interviews and the results will be analysed by using Segal et al.'s (2005) theory of motivation to become an entrepreneur.

#### **8.4 SEAGAL ET AL. (2005) THE MOTIVATION TO BECOME AN ENTREPRENEUR**

In the realisation of the fact that this study is operating with two target audiences of students, the active students and the inactive students, the design must acknowledge the needs of both audiences. Successfully, the design enhances the active students' engagement in entrepreneurial activities and makes the inactive students active. The students' engagement is the most valuable asset in enhancing the entrepreneurial culture at AAU. Thus, the analysis of the interviews is conducted by utilising the theory of Segal et al. (2005) to discover whether the design motivates the students to become entrepreneurs.

In the paragraph, *Defining entrepreneurship* we talked about two distinctive aspects from which the term could be defined which were individual characteristics (Gibb, 1987) and by participations in the process (Carton, et al., 2004). Segal et al. (2005) claim that prior theoretical models that predict entrepreneurial intentions are process-oriented cognitive models with a focus on attitudes and beliefs. He argues that the new venture initiation is a result of people's cognitive processes. The cognitive process is described by Segal et al. (2005) as, picturing possible future outcome and deciding which of these are most desirable and feasible to pursue with the goal of attaining the desirable outcome. Thus, they refer to Gilad and Levine (1986)'s 'push theory' and 'pull theory' as the two main motivators of entrepreneurship. The push theory and pull theory is defined by Segal et al. (2005):

*"The "push" theory argues that individuals are pushed into entrepreneurship by negative external forces, such as job dissatisfaction, difficulty finding employment, insufficient salary, or inflexible work schedule" (p. 44)*

*"The "pull" theory contends that individuals are attracted into entrepreneurial activities seeking independence, self-fulfillment, wealth, and other desirable outcomes" (p. 44).*

These two strategies are considered in relation to the target audiences. In the examination of previous inquiries, the entrepreneur is described from internal factors that relate to the pull strategy (Carton, et al., 2004; Gibb, 1987). In consideration to Gibb's hypotheses; *Entrepreneurs are born,*

*not made; Everyone has some enterprise; Anyone (almost) can run a small business*, the first statement relates to internal factors that Gibb (1987) and Carton et al. (2004) found to be the characteristics of the established entrepreneurs. Furthermore, established entrepreneurs also favour the first statement because it brings a certain uniqueness to the profession. The second and third statement indicates that entrepreneurship is teachable and thus, influenced by external factors which relate to the push strategy. This theory is included in the development of design by incorporating the thoughts behind the pull strategy to reach the active students and the thoughts behind the push strategy to reach the inactive student.

## **8.5 TESTING AND REVISING THE DESIGN**

Segal et al. (2005) have been reviewing other entrepreneurial motivating models in the pursuit of building their own model of entrepreneurial motivation. As mentioned in the previous paragraph Segal et al. (2005) argue that people are going through a cognitive process of picturing possible future outcome of becoming an entrepreneur. The individual decides which one of these are most desirable and feasible to pursue and attain. Segal et al. (2005) are hereby adopting the ideas behind Vroom's (1964) model of work and motivation, which also provides cognitive variables that reflect individual differences in work motivation. Segal et al.'s (2005) theory consist of a three-part process which represents the process of deciding between a career of self-employment and working for others (p. 47):

- 1. Individuals compare the desirability of self-employment with the desirability of working for others.*
- 2. Individuals assess whether they possess the requisite knowledge, skills, and abilities to perform the tasks and activities necessary to become an entrepreneur.*
- 3. Individuals determine whether they are willing to accept the inherent risk of entrepreneurial activity.*

The data collected through interviews will be analysed by using Segal et al.'s (2005) cognitive process. Thus, it determines what elements of the design makes students enter the cognitive process. It is argued that making student consider the possibility of self-employment for a future career, generates more participation in entrepreneurial activities during education.

This theory is considered in the development of the interview-guide. Although this study does not see entrepreneurship only as becoming self-employed as Segal et al.'s (2005) theory does, the cognitive aspect of the model allows it to be modified to this study, to students cognitive process of choosing a future career.

## 9 INTERVIEW GUIDES AND OBSERVATION GUIDE

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### 9.1 PRESENTATION OF THE INTERVIEW GUIDES

As previously established, the two groups of informants, hence, the active students and the inactive students, will be approached differently in acknowledgement of previous experiences with entrepreneurial activities at AAU. Thus, two different interview-guides are conducted. The interview-guides consists of four stages: *Current position*, *The new initiatives*, *Suggestions* and *Reflection*. Both guides follow the same structure of stages. The guide which is designed for the active students, focus on determining the students' current position in Segal et al.'s (2005) cognitive process whereas the guide designed for the inactive students determines whether the design influence the students to enter the cognitive process. Furthermore, both interview-guides includes a concrete examination of the design to collect operationalised data for the revision. The interview guide for the active students is presented in Appendix 2, *Interview guide (Active students)* and the interview guide for the inactive students is presented in Appendix 3, *Interview guide (Inactive students)*. The questions that are marked with a colour represents the questions that generate the difference between the two guides.

The following paragraph contains a description and argumentation for each of the four stages stage of the interview guides. The design was created before developing the interview guides for the purpose of revision, however, it is presented before the design due to the structure of outlining the procedure prior to the core investigation. Furthermore, it clarifies the connection between methodology, method and theory.



## **9.2 DESCRIPTION OF INTERVIEW GUIDES**

### **9.2.1 Current position**

The first stage is called *Current position*, and it determines the informant's current experience with entrepreneurial activities at AAU. Furthermore, provides insight into whether the informant has thought about the possibility of engaging in entrepreneurship, hence, the cognitive process. This stage opens the conversation about the entrepreneurial context, and the informant is forced to state an opinion on the current entrepreneurial culture at AAU which leads to thoughts, feelings and experiences that the informants have had. The questions that are asked in this stage do not differ in the two interview guides.

### **9.2.2 New initiatives**

The second stage, *New initiatives* are designed specifically for the purpose of revising the design. Given the time timescale available to test the design, it cannot be expected that the informants have seen the design in the natural context, and therefore, the interviewer will expose the design to the informant at the beginning of this stage. This approach will generate bias to the method because the interview is a staged scene and thereby, an unnatural context. Thus, the context in which the design is tested is changed from a natural exposure at AAU campus to the context of an interview. In order to minimise the bias, the informants are asked to picture the design in the natural context. The approach is sufficient for this investigation because the design will be built on a concept that is familiar to the informants. Furthermore, testing the design is an ongoing process, and this investigation only contains the first round of testing. The questions are partly differentiated between the interview guides. The active informants are asked to make a comparison of the design to other existing promotional initiatives at AAU, that they are familiar with. The inactive informants are asked whether the design has the potential to influence the choices of a future career.

### **9.2.3 Suggestions**

The suggestions allow the informants to express his/her's suggestions of changes to the design. This stage is in line with the guidelines of testing the design by allowing the informants' suggestions and opinion to impact the revision of the design (Lee & Kotler, 2011). The approach is very directly focused on the workings of the design, and the questions differ as active students are asked to consider the design in relation to previous experience and also to express dissatisfaction with the current entrepreneurial situation at AAU. The inactive students are asked what it would take for them to consider entrepreneurship as a part of their studies.

#### **9.2.4 Reflection**

*Reflection* is the last stage of the questionnaire. It calls for a reflection on the things that the informant have done during education to form a future career and what outcome they pursue. This reflection relates to whether the individual has been through the process of comparing desirability of self-employment to working for others (Segal, et al., 2005).

The reflecting stage of the questionnaire differs a lot in the interview guides. The active students are asked about whether they are afraid of failing which relates to the theory of being willing to take a risk (Segal, et al., 2005). Continually, they are asked if they believe that they have gained unique competencies by participating in entrepreneurial activities at AAU and thus if they acquire the knowledge, skills and ability to perform the tasks necessary to become an entrepreneur. The inactive students are asked if they are afraid of not getting a job which leads to Segal et al.'s (2005) theory of the push strategy. The approach detects whether push factors are affecting the thoughts of the informant. Furthermore, it provides knowledge of the informants' confidence of own abilities.

### **9.3 THE OBSERVATION GUIDE**

The observation guide consists of guidelines that will ensure a collection of data that provides knowledge of the workings of the design. The data will not be analysed by theory but compliments the results from the interviews and will be used to describe the practical workings of the design. However, the observation guide also relates to Segal et al.'s (2005) theory of the cognitive process. The guide includes a few questions that provides a more thorough understanding of the participants' actions. The observation guide is presented in Appendix 4, *Observation guide*.

## **10 FOUNDATION OF DESIGN CREATION**

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After outlining the research design, the design is created. When following Lee & Kotler's (2011) steps of developing a social marketing strategy the first plan of action is to determine the foundation of design creation. The plan includes:

*Step 1: Describing the background purpose and focus*

*Step 2: Situational analysis and description of context in which the design will be tested*

*Step 3: Selecting a target audience*

A modification of the theory is done to fit the purpose of this research and thus, the steps are operationalized by the following paragraphs:

- Result of questionnaire
- Description of context and identification of dependent variables
- Selection of target audience

The creation of the design is according to the theory, made “inside the laboratory” (Brown, 1992; Collin, 2010). In this research, the creation of design is based on an examination of the desired active students’ behaviour. The desired behaviour is detected by the results of the questionnaire.

### **10.1 RESULT OF QUESTIONNAIRE (*DESCRIBING THE BACKGROUND PURPOSE AND FOCUS*)**

Kotler and Zaltman (1971) presents four types of behaviour changes and according to their theory, a social marketing campaign aims at generating one of those four changes. The purpose of this research is to make students accept a new behaviour. The questionnaire is, as such, a pre intervention that generates knowledge about that behaviour. Kotler & Zaltman (1971) presents health as a well-known area where social marketing is used, for instance, to make people stop smoking. Everyone can be characterised as either smoking or non-smoking. The behaviour of being an active student is more complex and depends on definition. Thus, the questionnaire accounts for the behaviour that is the active students and investigates the respondent's motivation to be so. Secondly, it identifies the variables that will be used to describe the context in the following paragraph. The analysis of the results of the questionnaire is presented in Appendix 6, *Analysis of the results of the questionnaire*.

### **10.2 THE ACTIVE STUDENTS’ BEHAVIOUR**

First and foremost, the respondents are all acknowledged as active students because they either have been participating in entrepreneurial activities, or is participating. The results generated two main groups of active students hence, the students who want to start a business and the students who do not. The respondents who want to start a business is by far the most dominant group, and thus, the active students’ ambition is to start a business. They are happy with the offerings at AAU, and they find the information they need about entrepreneurship at AAU online. The goal is to pursue ideas and add value to society which represents the desired outcome for the active students. The actions

make the entrepreneur, and thus, learning about entrepreneurship does not make you an entrepreneur. The active students believe that learning about entrepreneurship enhances the chance of becoming an intrapreneur. Networking and collaborations are important to the active student, and it is highly preferable to interact with other students. Thus, they thrive on the entrepreneurial community at AAU and finds it valuable. Furthermore, the main motivator is like-minded people and success stories from established successful entrepreneurs. They believe that they gain valuable experience from entrepreneurship, and furthermore, they feel that AAU provides a supportive environment to explore entrepreneurship. The active students are convinced that entrepreneurship is teachable in the educational context and that the university is a beneficial place for engaging in entrepreneurship. In conclusion, they characterise themselves as creative and innovative problem solvers.

### **10.3 DESCRIPTION OF CONTEXT AND IDENTIFICATION OF DEPENDENT VARIABLES**

Barab & Squire (2004) stress the importance of describing the context in which the design is tested. In this case, the context is described from the situational and cultural aspect. The context determines the development of the design. If the design were to be applied in another context, it would require an adjustment to the new context.

The location of testing is AAU's campus in Aalborg. Barab & Squires (2004) categorise dependent variables of context as *System variables*, *Climate variables* and *Outcome variables*. These categories are used to structure the variables identified in the results of the questionnaire and thus, are presents as:

- *Climate variables*: Student diversity; Collaboration among students; Available resources (SEA)
- *System variables*: Dissemination, Focus of study (academic)
- *Outcome variables*: Experience

Other than the dependent variables, one independent variable was prominent in the results of the questionnaire:

- *Independent variable*: Time

Time is not dependent on the additional variables as it is individually perceived and managed, however, it poses as a common consideration for the respondents in the educational context.

### 10.3.1 Climate variables

AAU is a multicultural environment and with approximately 16,54 % international students at Aalborg campus (Aalborg University, 2016). The university provides studies that are taught exclusively in English to include international students and also, to offer Danish students an international oriented education. These offers attract students from all over the world, and the multiple nationalities at the university contribute to a dynamic environment. The universities are thus, a base for educational purposes, but also a social gathering base for international students as well as Danish. The interaction is constantly encouraged by professors for educational purposes, and other initiators for social purposes. Student collaboration is a focus point especially identified with AAU as they teach from the problem-based learning method (Aalborg University, 2016). One of the main points in problem-based learning is working in teams to solve problems. Student projects are mainly done in groups, and several studies are encouraging collaborations across different fields of studies. Thus, there is a collaborative culture at AAU originally initiated by the University. Furthermore, AAU collaborates with other European universities under the ERASMUS program, which also enables the international environment (Aalborg University, 2016). Internationalization and collaborations in main characteristics of the context that forms the environment at AAU.

#### *The entrepreneurial environment*

SEA is acknowledged as an *available resource* as it provides profound support to entrepreneurship at AAU. SEA initiate events, workshops, guidance and the AAU Incubator Partner Pack (SEA Aalborg University, 2016). SEA's services are offered to all AAU students and graduates. They allow students to explore entrepreneurship and start a business in an educational environment where the risks are minimised. The students are only required to invest time in entrepreneurship and SEA guides students through the first phase of starting an enterprise. If graduates are accepted into the start up program, they are assigned an office space at the university. SEA is, as a climate variable, dependent on student engagement, and the collaborative variable to function as a concurrent education.

### 10.3.2 System variables

The primary tool of dissemination between university administration and the students are student emails and the online student platform Moodle. AAU prioritises online communication at Aalborg campus. Each faculty has its own dedicated secretariat that controls the administrative content

online. AAU utilises digital solutions for standard procedures. The digitalization can be said to inhibit the university's connection to the students and their everyday life at the university. Any communication between the administrators and the students is initiated by the students. Otherwise, the communication consists of standardised emails from the secretary to students concerning the study program.

Universities mainly focus on academic research (Kirkby, 2006). All students are taught in methods and methodology, and often the university is associated with heavy books and filled study rooms. As discussed in the literature review, the universities have been under review regarding the focus of study as some people believe that it lacks a sense of reality with the labour market where a majority of students will end up (Kirkby, 2006). Several initiatives have been done at AAU to ensure a connection between studies and the job market. One initiative is students collaborating with companies on projects. Companies often express willingness to collaborate with students on problems that they face. As the students at AAU are working with *Problem Based Learning*, it is relevant for them to analyse real-life challenge and come up with solutions. This collaboration enhances students' network and provides job-related experience. Traditionally, the students are required to make contact with a company themselves. The opportunity is thus, not provided by the university. Collaborations between students and companies do not exclude the requirement from the university of conducting academic research which can generate unmet expectations between the company and the students. Thus, the students face challenges of combining the requirements of the companies with the requirements of the university. The university always favours the academic aspect in student projects.

### **10.3.3 Outcome variables**

The outcome variable includes gains from engaging in entrepreneurship during education. SEA does not accentuate the outcome of entrepreneurship in their market communication because they attempt to avoid unserious attention from students without ambition of becoming entrepreneurs. Nonetheless, the results from the questionnaire point to "experience" as the main outcome of engaging in entrepreneurship. In connection to the focus of academia and thereby lack of experience during education, entrepreneurship provides a source of gaining experience. It is commonly known that university students take on part time jobs that are relevant to the field of study to gain experience. Many student priorities a part-time job during education even though it, in some cases, takes time away from studying.

#### **10.3.4 Time (Independent variable)**

The time students spend on their studies is individually perceived. When some students feel overloaded with studies, other students feel free to prioritise other activities because of the independent aspect of studying. Students at AAU are free to manage their own time as long as deadlines and additional requirements are fulfilled. AAU offers full-time studies and part-time studies. A full-time study provides a workload of 37 hours a week on preparing for lessons, participating in lessons and conducting assignments. Providing a workload of 37 hours a week does not mean that students spend that time on studying. Some students spend more, and some students spend less. It depends on ambition, ability and other individual circumstances.

#### **10.3.5 Summary**

The design is to address these systemic issues at AAU (Barab & Squire, 2004). Thus, the context consists of a dynamic international environment with solid supportive resources within entrepreneurship. The *Problem Based Learning* method enables entrepreneurial activities and enhances collaboration across study areas, as well as collaborations between students and external actors. Experience is a focus area of outcome that is challenged by the academic requirements. Time is an independent variable and considered relevant in all aspects of education, especially towards entrepreneurial activities.

### **10.4 SELECTION OF THE TARGET AUDIENCE**

The purpose of selecting a target audience is to develop a design that contains the right elements of appeal. The target audience includes the active students and the inactive students. These audiences are described individually in the following sections. The active students already contain the behaviour that the design is to “sell” and as such, the aim is to maintain the behaviour throughout the entire education and to enhance the behaviour to generate proactiveness. The division of target audiences is important to recognise and accept into the development of the design, as it is essential for the angel of communication. However, the two audiences have a common variable that applies for both which is that they are students at AAU and studies at Aalborg Campus. In the context of being students at Aalborg campus, another division is considered; international students and Danish students. The results from the questionnaire showed that a majority of the active students are international students. This acknowledgement is included in the following descriptions.

The first part of the description includes the commonalities of the target audiences such as demographic and geographic factors. Lee & Kotler's (2011) behaviour objectives are included in this description of the target audience hence, the behaviour objective for the active students and the behaviour objectives for the inactive students.

#### **10.4.1 Commonalities of the target audiences**

The average age of students enrolled in a higher education is between 20-30 (forskningsministeriet, 2015). The questionnaire identified the average respondent to be between 24-29. Most international students come from eastern Europe (Schou Lauridsen, 2016).

The most popular study among students at AAU in the *social sciences*, and for international students exclusively the most popular study is *engineering and science* (Aalborg-universitet, 2016).

In 2016, there were 16.636 full-time students submitted at Aalborg campus and 20.506 students in total (Aalborg-universitet, 2016). These numbers represent the size of the market. Aalborg campus is thus the most representative campus for this study, regarding the number of students.

#### **10.4.2 Active students**

The results of the questionnaire presented a majority of Eastern European respondents, and international students are proactively engaged in entrepreneurial activities at AAU compared to Danish students.

The active students form a community at AAU. SEA collect contact information on the active students for promotional purposes. Within this community, the students have a shared interest in entrepreneurship, and thus, an interest of expanding their network within the entrepreneurial community. The possibility of a group of students becoming successful with a start up business awake other active students' interest.

#### *Secondary target audience*

The secondary target audience to the active students is potential investors. Students who start a business during education are expected to find investors on their own, however, SEA supports the process by generating access to a wide network of potential investors. The secondary target audience is considered in the creation of design as it generates value to the active student. Success stories of other students can influence the inactive students to engage in entrepreneurial activities.



### *Behaviour objectives and goals*

Behaviour objectives the goals of targeting the active students include sustaining and enhancing (or modifying) an already existing behaviour (Lee & Kotler, 2011). These students are already accepting enterprise offerings at AAU, but by encouraging proactive behaviour, the active students may become primary influencers to the inactive students.

#### **10.4.3 Inactive students**

Some of the inactive students have possibly already thought about engaging in entrepreneurship. Furthermore, some of them have made a choice not to participate in enterprise activities at AAU. There is no documentation of the students' awareness of the entrepreneurial activities at AAU. The only known factor is that SEA promotes entrepreneurial activities to the inactive students through posters. For the creation of the design the inactive student are considered as being unaware of the opportunities within entrepreneurial activities and the potential of gaining a valuable outcome. It is unlikely to believe that the inactive students have ambitions of becoming entrepreneurs and thus, the benefits of the outcome must contain more than what is related to starting a business which it does according to e.g. Ball (1989), Carton et al. (2004) and Kirkby (2006).

### *Secondary target audience*

The secondary target audience to the inactive students is teachers. In the process of catching the attention of the inactive students, the teachers are a relevant secondary audience because they are able to influence the inactive students' choices of engaging in entrepreneurial activities. The teachers influence the students in the lectures, and they are naturally providing information of relevant educational offers at AAU. If the teachers learn about entrepreneurial activities at AAU and promote a desirable outcome to students and they will motivate more students to participate in the activities.

### *Behaviour objectives and goals*

Behaviour objective and goals include knowledge objective. The goal is to inform the students about what entrepreneurial activities at AAU includes and how it can be tied to any line of study. Furthermore, the goal is to convince the students about how entrepreneurship can benefit their future career by providing them with unique skills and abilities to manage knowledge.

# 11 CREATION OF THE DESIGN

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In the establishment of the context and the target audience, the design can be developed. This paragraph presents the complete design and the process of the development. The development of the design is structured by Segal et al.'s (2005) push and pull strategies as they ensure the targeting of both audiences in the design. Furthermore, the process consists of a description of the design by using McCarthy (1968) four P's, also known as the marketing mix which, traditionally, is used to market products. In the pursuit of making social changes, these four parameters support the design-based research approach, and they are slightly modified by Kotler & Zaltman (1971) to fit the social context. These descriptions are presented in Appendix 7, *Description of the push strategy* and Appendix 10, *Description of the pull strategy*.

## 11.1 THE DESIGN

With two main target audiences, two strategies are conducted with the same overall goal of enhancing the entrepreneurial culture at AAU from the student behaviour perspective. These strategies are representing Segal et al.'s (2005) theory of the push and pull strategies. The push strategy is targeting the inactive students with external motivational factors. It is argued that if the inactive students contain internal entrepreneurial factors, they would have engaged in entrepreneurial activities and thus, they can only be motivated by push factors. It was established in the results of the questionnaire that the active students contain traditional entrepreneurial traits that motivate their engagement and thus, they respond to pull factors. Segal et al. (2004) claims that some people would become entrepreneurs no matter what environment they were surrounded by. Others might be originally motivated by outside factors but have adopted entrepreneurial personality traits.

The procedure of developing the design includes Lee & Kotler's (2011) following steps:

*Step 4: Set marketing objective and goals*

*Step 5: Identify factors influencing behavior adoption*

*Step 6: Positioning statement*

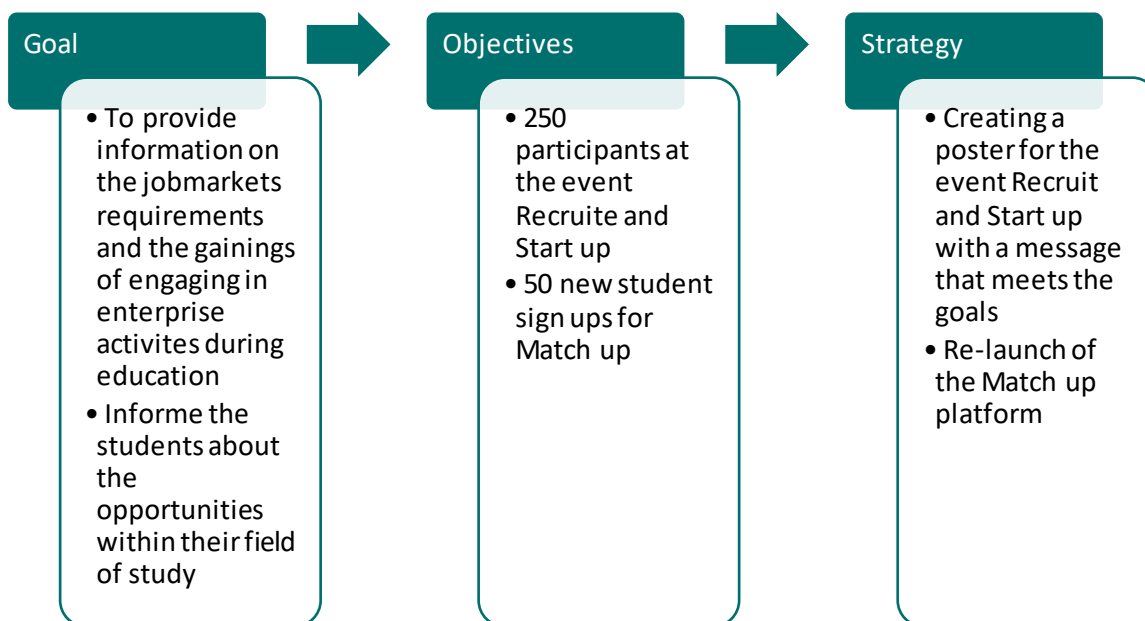
*Step 7: Develop marketing mix strategies: the 4 P's*

The following procedure generates step four and five. The establishment of context and target audience generates *goals* and measurable *objectives* which represent the first steps in the development of the design. The determination of goals and objectives are converted into a strategy of procedure that generates the first part of the design. The factors influencing behaviour adoption is identified after the presentation of goals, objectives and strategy.

### 11.1.1 Development of the push strategy

The push strategy will be applied to existing initiatives provided by SEA. The first initiative chosen for the application of the social marketing strategy is an event hosted by SEA called Recruiting and Start up. This event represents the obvious situation of testing a push strategy as attendance can be measured, and field observations can be conducted. The event is concerning student entrepreneurs recruiting fellow students to start up enterprises. Furthermore, this strategy also includes SEA's online platform Match up. Match up is an online forum where students can sign up for the purpose of either joining other student enterprises or recruiting students to an enterprise.

Model 2: *The push strategy*



As presented below the strategy tap in Model 2, the strategy consists of creating a poster for the Recruiting and Start up event. The poster is presented in Appendix 8, *Recruiting and Start up*. Additionally, the Match up platform will be re-launched by promoting the platform by creating a

physical roll-up banner. The banner can be used for sales promotion at the university and be exposed to events. In this case. The banner will be exposed in the Recruiting and Start up event where the observation is conducted. The banner is presented in Appendix 9, *Match up Roll-up*. Appendix 7, *Description of the push strategy*, constitutes a thorough examination of the development of the poster and the banner structured by the marketing mix.

#### 11.1.1.1 *Identification of factors influencing behaviour adoption*

##### *The Recruiting and Start up poster*

The poster relates to the desire of gaining experience by providing the opportunity of applying theoretical skills to an enterprise. It speaks to students feeling of an opportunity to become more than the classmates. Furthermore, it generates a feeling of an opportunity to become a part of a successful start up company. Getting ahead of other students are the main generator, and it is also expressed by the attendance of external companies that can help you on the way to success. Networking is a motivator to participate in the event and the chance of getting to know business people who influence branches outside the university can generate a job opportunity later on and ensure a successful start of any type of career. Choosing not to participate in this event means that you have missed an opportunity of becoming successful. The poster also generates a feeling that it applies to the most professional and serious students at AAU.

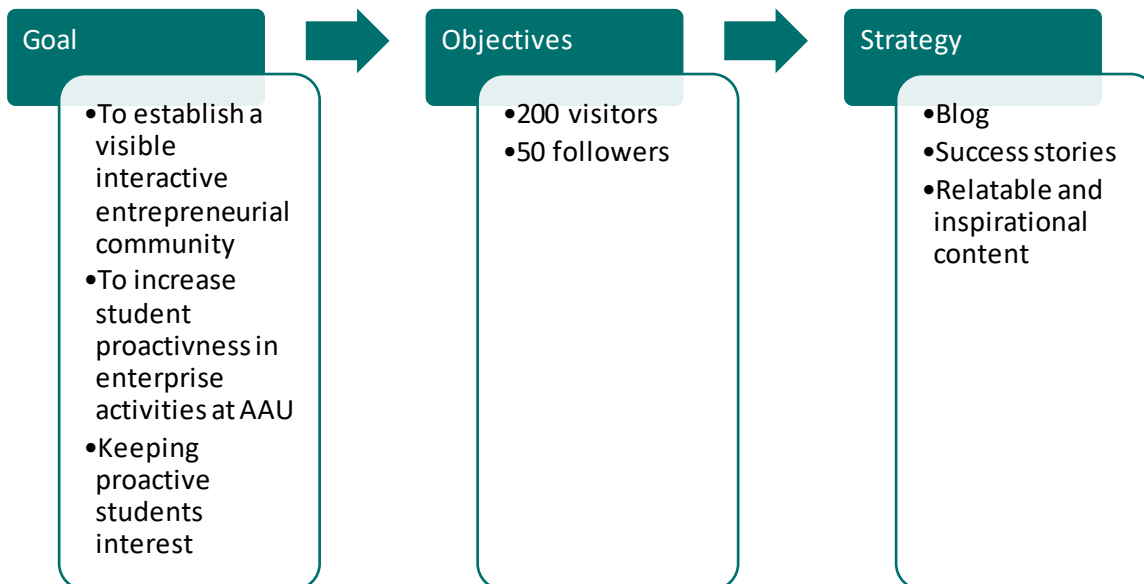
##### *The Match up banner*

The Match up banner enables a connection to an entrepreneurial network that goes beyond any other obtainable network. It generates the feeling of potentially obtaining once-in-a-lifetime opportunities that only becomes available through this platform. If you do not sign up for Match up, you have no future in the world of enterprise and thus, you limit a future career to the slavery it is to be employed. The opportunity is in your reach to join an adventure of starting a business and make your dreams come true.

### 11.1.2 Development of the pull strategy

In contrary to the push strategy, the pull strategy consists of a new initiative. The goal is to create a visible entrepreneurial community to keep the active students from losing interest and continue to generate a proactive behaviour within entrepreneurship. The new initiative is an online blog. The blog is to fulfil the values that the active students pointed out in the questionnaire which is networking. Furthermore, it incorporates the main motivator which is success stories of other entrepreneurs. The goal is established in the section of the target audience. The blog is described in Appendix 10, *Description of pull strategy*.

Model 3: *The pull strategy*



#### 11.1.2.1 Identification of factors influencing behaviour adoption

The blog is primarily generating a visible, accessible entrepreneurial community that is open to all students at AAU. It brings a sense of fellowship to the active students. Becoming a part of a larger community brings students together and provides professionalism to entrepreneurship at AAU. With access to knowledge about other active student entrepreneurs, other students become motivated to do the same as it becomes doable when you can see fellow student progress and ambitions. Furthermore, the blog generates public interest, and thus, the entrepreneurs writing posts on the blog become well-known in the enterprise community in- and outside of the university. The

other student will look up to the student's entrepreneurs and envy the abilities and know-how they have obtained through entrepreneurship. Teachers can also follow the processes of the entrepreneurs on the blog, and they will understand the importance of spending time on an enterprise with serious prospects to becoming successful. Even the enterprise fails, you will be well-known around AAU through the exposition on the blog, and other companies will be looking for people with those particular skills that no other student attain.

## 12 ANALYSIS

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The researchers search for a formation of meaning among the answers from the informants in the analysis. The first step in the analysis is structuring the data collection by dividing them into categories and themes. The process of choosing themes is operationalised by discovering similarities in the statements and thereby dividing the comments into categories. The themes provide the structure of further analysis and thereby clarifies how these may be utilised in the test of the design. It clarifies the pattern of statements that the researchers found to be continuous in the interviews. The patterns in the interviews are illustrated by tables in Appendix 11, *Themes and Categories* that shows the connections between themes, categories and comments. The tables nearly provide a sample of commentary from a variety of informants.

The analysis is exclusively focusing on the results of testing the design by the data collected in the interviews. The interview is divided into a group of active students and a group of inactive students. The students' perspectives and requisites to answer the questions provide different perspectives to the analysis. Both interview guides examine the three elements of the designs separately. In the analysis, the data will be proceeded by considering partial assessments of the three elements to an overall assessment of the design. The analysis is to generate an understanding of the designs influence on the audiences from the perspective of Segal et al.'s (2005) theory and whether it reaches both audiences as intended. The results of both analyses are followed by a description and discussion of how the design works in practice, from an overall point of view.

### 12.1 IDENTIFICATION OF THEMES

The themes selected for the analysis includes: *Personal considerations about entrepreneurship*, *Pros of the design*, *Cons of the design*. The themes are described and followed by a table that demonstrates the determination of categories from a selection of commentary from the informants.

### **12.1.1 Theme 1: Personal considerations about entrepreneurship**

This theme generates knowledge about the informants experience with entrepreneurial activities at AAU and the position in the consideration process of entrepreneurship. Regarding the design, the theme focuses on discovering the informants' needs and how the design meets those needs. The categories identified in the theme, *Personal considerations about entrepreneurship* are:

- Ambitions
- Collaboration among students
- Inspiration
- Reasons to be an entrepreneur and reasons not to be an entrepreneur
- Reason not to be an entrepreneur
- AAU supporting entrepreneurship

### **12.1.2 Theme 2: Pros of the design**

The pros of the design detect the elements that generate value to the active students. In the revision of the design these findings generate the strengths of the design and in contrast, helps to illuminate the cons. The categories identified in the theme, *Pros of the design* are:

- Help
- Target audiences
- Trustworthiness
- The good idea
- Inspiration
- Potential engagement

### **12.1.3 Theme 3: Cons of the design**

The cons of the design detect the elements of the design that does not generate any value to the active students and the parts of the design that are unclear. The findings provide grounds for the revision of the design. The categories identified in the theme, *Cons of the design* are:

- Lack of certain skills
- Misunderstanding
- Channel of communication
- Direct contact

## 12.2 ANALYSIS OF THE RESULTS FROM THE INTERVIEWS

Segal et al.'s (2005) theory of the cognitive process guides the analysis in search of discovering whether the design generates adoption of the active behaviour. The theory is recalled to clarify the process and it consists of the following stages that generate the cognitive process:

- 1. Individuals compare the desirability of self-employment with the desirability of working for others.*
- 2. Individuals assess whether they possess the requisite knowledge, skills, and abilities to perform the tasks and activities necessary to become an entrepreneur.*
- 3. Individuals determine whether they are willing to accept the inherent risk of entrepreneurial activity.*

### 12.2.1 Theme 1: Personal considerations about entrepreneurship

Besides an assessment of the design, the informants includes personal considerations about entrepreneurship that affects their perspective of the design.

#### 12.2.1.1 Ambitions

The informants have professional ambitions that they hope to reach and those ambitions have been a focus point for a majority of the informants. Ambitions motivates the choices that the informants make during education, thus also the choice of engaging in entrepreneurship. Linn expresses her ambitions by stating, *"I made the choice of taking my degree in English and thereby I think that I will have some kind of international career, and I am really happy about that choice. Also, I chose the marketing specialization which I also think point me in a certain direction of future career"* (Appendix 14, Linn). Nic also express how his ambition affects the choices he makes by stating, *"I believe my choices have been right for me so far. I have done some things in my life that I knew could benefit me later in life. I am not afraid per se. I know I can always get a job but I am afraid that I won't find a job that I like"* (Appendix 16, Nic). Nic does, however, not entirely know what the choices he makes are going to lead to and neither does Linn. Nic starts *"I cannot define it so that makes it difficult to create"* (Appendix 16, Nic) and Linn claims *"I really have a hard time pointing to something specific but I would like to be able to use some of the skills I have gained from my education, even though I am not really sure what that is (...)"* (Appendix 14, Linn). In contrary, our active informants are very determined on entrepreneurship as a career path and agree on what potential outcome they desire, Jonas stats *"I would like to be an entrepreneur and continue*



*with the business that I have now. I really like the atmosphere and coming up with ideas and solutions, I think that is the career path want to go on. Before I was kind of leaning toward being a politician or governmental work but starting businesses is what I would like to do*” (Appendix 13, Jonas) and Cate states, *“I just wanted a job but now that I got the opportunity with the Incubator I want to start a business myself. Me and a couple or people from my study are talking about starting a business after graduation”* (Appendix 15, Cate). The outcome includes independence and freedom as pointed out by Jonas and Edward, Jonas states, *“Independence and variety where every day is a bit different”* (Appendix 13, Jonas) and Edward claims, *“What I have experienced is that entrepreneurship teaches you to do everything by yourself and with the help of people around you and being independent of other market traditions and norms where you apply for a job and hope for a raise in five years time. You can impact the world however you want by doing the work yourself (...)”* (Appendix 17, Edward). Even though Nic and Linn is not engaging in entrepreneurship, they do see the freedom and independence as an attractive outcome of entrepreneurship, Nic states, *“Both situations have challenges. Working for yourself, you have a lot of independence and working for an employee is more safe because you know where your paycheck comes from every month. The freedom of entrepreneurship is speaking to me”* (Appendix 16, Nic) and Linn supports the statement but also recognize the responsibility that comes with freedom, se states, *“Being self-employed brings more freedom but also more responsibility and I am not really ready for that”* (Appendix 14, Linn). Thus, both the active informants and the inactive informants has been comparing the desirability of self-employment with the desirability of working for others (Segal, et al., 2005). For Linn the desirability of working for others are however, more desirable at this stage in her life. When Linn is asked if the poster of Recruiting and Start up generates an feeling of opportunity for her, she states, *“Maybe when I am done with my education but right now I don’t think that I have the motivation to engage in entrepreneurship so that is why I think it doesn’t catch my attention”* (Appendix 14, Linn). Nic distinguish being an entrepreneur to participating in activities during education when saying, *“No, not if it is just participating in activities, but I do think being an entrepreneur is a full time job and I think that would be difficult to do with a full time study”* (Appendix 16, Nic), but by this statement he implies that he does not find value in participating in entrepreneurial events during education, unless you are serious about starting a business. However, Nic does see value in learning entrepreneurial skills for other reasons than starting a business, he states, *“I think the entrepreneurs who makes a start up is extremely inspirational because it takes so much effort and they learned it the hard way and that inspires me.*

*I am interested in entrepreneurship because you can use it in your own life. You don't have to make a start up in your daily worklife you can use a lot of the things they have experienced"* (Appendix 16, Nic). He claims that he finds the inspiration in movies and his social circle rather than being taught entrepreneurial skills in an educational context, he states, *"(...) I am also inspired by movies. I think the entrepreneurs who makes a start up is extremely inspirational because it takes so much effort and they learned it the hard way and that inspires me. I am interested in entrepreneurship because you can use it in your own life. You don't have to make a start up in your daily work life you can use a lot of the things they have experienced. So, when I see other well-known entrepreneurs I get inspired and I start thinking about my options. Also when my friends talk to each other about thinks we could do together. I always feel that my friends have good ideas for a start up company but we don't do anything about it. I think that many people think about it but don't dare to take the step."* (Appendix 16, Nic). In the latter part of Nic's statement, he talk about his friends influence and participation in his decision making. The following part of the analysis revolve around the collaboration among students and how this influence the informants cognitive process.

#### **12.2.1.2 Collaboration among students**

Collaborations among students is of great value, both from an inspirational aspect as well as in venture creation. Cate states, *"(...) we want to start a game company and if we probably need one or two programmers because we are all artists so it is going to be a bit difficult to build a company with all artists (...)"* (Appendix 15, Cate), also John believes that student collaborations is of great value to a new venture, *"I could use it to reach out for help and also to be connected to other students running a business like me"* (Appendix 12, John) and *"(...) I do lack certain skills that could help me on the way"* (Appendix 12, John). When Jonas was asked about his participation in the entrepreneurial workshop WOFIE, he express how working on entrepreneurship across studies motivated him, he states, *"I think it is the idea of being able to use the skills in a practical way and it said, we want people from all different kinds of studies so I guess sometimes with international development I just feel like it is only theory and not much practical so the ability to feel like I have something to contribute with, that was what got me to sign up"* (Appendix 13, Jonas). Cate supports that collaborations is motivating and strengthening by stating, *"(...) I am just creative. Some group members were good at speaking and how to construct and be presentative so we all complemented each other really well and that was very nice and the programmer that is just networking. I think networking can be a bit difficult, reaching out to people from other study areas when you can't*

*meet them at event like game jams (...)*” (Appendix 15, Cate). Cate finds it difficult to reach out to students from other studies and so does John and Edward, John states *“(...) I needed help on promotion but I can’t find a way to approach the option (...)*” (Appendix 12, John) and when Edward is asked about how he would reach out to students from other study areas than his own he states, *“I wouldn’t reach out”* (Appendix 17, Edward), however, when he is asked whether he expects students who are interested in his business, to come to him, he changes his mind and states, *“(...) if the opportunity presented itself and the circumstances was right. If I meet someone with incredible talent, then I would reach out, but only to hear more”* (Appendix 17, Edward). Edward is not the only informants to point out the circumstances of meeting students from other study areas. Nic states, *“Yes. However, personally I would only participate in an enterprise if I knew the people behind or if there is a social connection of any kind. I actually don’t think that I would actually take the first step and reach out to a start up”* (Appendix 16, Nic). Personal connections are important to the informants and Linn points to social gatherings, where students can meet each other, as a potential motivator, she state, *“(...) maybe if they turn it into a social thing they could maybe attract people in that way, but I think it is about changing the whole idea about what entrepreneurship is and maybe letting people know that it does not require all of your spare time (...)*” (Appendix 14, Linn). Cate also emphasizes on the fact that, for her, workshop event as WOFIE generates that motivation of collaboration, and also, in general, functions as an eye opener to entrepreneurship, she states, *“I think it is a good gateway because a least I got more interested in it afterwards. Before WOFIE I thought it could be fun to make a game company instead of finding a job, but after WOFIE it became much more possible”* (Appendix 15, Cate), and also the personal contact is considered valuable to Cate as she states, *“(...) I think that WOFIE is a very good opportunity to bring students with different backgrounds together (...)*” (Appendix 15, Cate). Thus, all the informants are aware of the value in collaborations especially in relation to venture creation. The inactive students could be motivated to participate in an enterprise if they became a part of a group with a common purpose and the active student finds value in the acquiring knowledge, skills and abilities to perform the tasks and activities necessary to become an entrepreneur (Segal, et al., 2005).

### 12.2.1.3 Inspiration

It has been established that social connections motivates the informants to engage in entrepreneurship but besides the social aspect the informants are inspired by family as well as successful entrepreneurs. Inspiration is a driver for the informants to either keep following the

dream of becoming an established entrepreneur or to consider the option of entrepreneurship as a career path. The design should address and hold the inspiration aspect as inspiration can generate actions both in relation to the push strategy as well as the pull strategy. Both Nic, Edward and Jonas has a parent who is an entrepreneur. Nic *"I am inspired by my step dad, he is an entrepreneur"* (Appendix 16, Nic) and Edward tells, *"My dad (...)" "He came to Denmark at 19. He studied and he was refused a lot for job even though he was qualified and that made him start his own business and now he owns a seven branches and is doing really well for himself"* (Appendix 17, Edward). Jonas has been working with his father on a start up business, he claims, *"I have done a little bit that could be considered entrepreneurial activity with my dad. He works down in Mexico, we both worked down in Mexico, that is why I study international development. I want to work with developing countries (...)"* (Appendix 13, Jonas). Jonas was introduced to enterprise study at AAU when he was invited to WOFIE. Like Cate, Jonas was also inspired from doing the WOFIE workshop course, he states *"I have never really given it a thought that entrepreneurship was an area of study kind of before. In the state it is not as scientific an area of study that there is a whole way that you can study entrepreneurship, it is more just a kind of a culture if you just get an idea and go do it. There is no training in the way to ... like the business model canvas, there is a path that can help you to come to success so I think it is cool that there is an actual area of study that is a possibility here at AAU"* (Appendix 13, Jonas). For Cate and Jonas, the workshop WOFIE made them compare the desirability of self-employment with the desirability of working for others (Segal, et al., 2005). Edward is drawn to entrepreneurship by his father's success story. He is thus, willing to accept the risk of entrepreneurial activities based on that inspiration, however, it is argued that Edward might experience less of a risk based on his father's knowledge, skills and abilities to perform the tasks of an entrepreneur (Segal, et al., 2005). Besides being inspired by parents and the activities at AAU, Edward and Nic are also inspired by well-known successful entrepreneurs. When Edward is asked about who inspires his entrepreneurial way of thinking, he states, *"My dad, Steve Jobs and other major well-known entrepreneurs"* (Appendix 17, Edward) supporting Nic's statement *"(...)" when I see other well-known entrepreneurs I get inspired and I start thinking about my options (...)"* (Appendix 16, Nic). AAU have had successful entrepreneurs give talks to student about the way to their success for inspirational purposes and the attendance for these talks are high. The abilities that these talk have is presenting the opportunity for everyone to become an entrepreneur and for the audience to understand that money and status in today's society is no obstacle for starting a business. Thus, these inspirational talks from successful relatable

entrepreneurs also starts the audience cognitive process of comparing desirability of self-employment with the desirability of working for others (Segal, et al., 2005).

#### 12.2.1.4 *Reasons to become and entrepreneur and reasons not to become an entrepreneur*

The informants have all been expressing their own reasons to be an entrepreneur as well as reasons not to be entrepreneurs. These statements made by the informants provides knowledge about whether the design enlighten the reasons to be an entrepreneur and alleviates the reasons not to be an entrepreneur. Time seems to be the biggest obstacle when the informants are to rationalize why not to be an entrepreneur. Nic states, *“Time I think. We study different things and we are too busy. Someone has a girlfriend and the other one have work etc. I think time is a crucial point in this type of thing”* (Appendix 16, Nic) and Linn also implies that she is caught up with studies during the masters degree when stating *“Not at this point in my education. Maybe when I am done with my education but right now I don’t think that I have the motivation to engage in entrepreneurship so that is why I think it doesn’t catch my attention”* (Appendix?, Linn). John and Jonas supports Linn’s statement of the current time not being the right for them, John claims *“If I had the time to be a part of a start up or apply my knowledge to a start up, I would be very interested but because I have small children at home and already are trying to run a small business on the side, I don’t have the time to engage in these activities. It is not relevant for me now but a few years ago it would have been interesting for me”* (Appendix 12, John) and Jonas claims *“(…) that could be very interesting but I think it also have to be during a time where I didn’t also have to write my mater thesis so it would be, if we could get our start up to get in a new gear and that was what we were actually living of, then I think definitely if I was doing more full time with entrepreneurship”* (Appendix 12, John). John also emphasizes on the dedication that it requires to even be called an entrepreneur as he sees it, he states, *“You have to be more dedicated than I am and believe that some day you will be successful and generate value to you community. An entrepreneur is more dedicated to making an established business than I am. Entrepreneurship is a mindset. Starting my own business does not make me an entrepreneur”* (Appendix 12, John). John does not believe that he has the mindset to become an entrepreneur. When Nic states *“(…) Working for yourself you have a lot of independence and working for an employee is more safe because you know where your paycheck comes from every month. The freedom of entrepreneurship is speaking to me”* (Appendix 16, Nic) he is in the cognitive process of considering the outcome of being an entrepreneur. The beneficial outcome for Nic is freedom, however, he also believes that freedom can be gained as an employees, he states *“I hope to get a job where I can affect my work. That to me is also freedom. I also want to*

*have influence and be able to discuss things with a boss*” (Appendix 16, Nic). Thus, Nic sees entrepreneurship as a reachable opportunity for him to pursue, however, for now the most desirable outcome lies within employment and not entrepreneurship. For Edward and Jones, entrepreneurship provides an outcome that employment cannot provide. Edward states, *“It is not about the money but the self-respect you get. You prove something to yourself by doing this and it is not about proving yourself to others”* and *“(…) I could never find my dream job working for others”* (Appendix 17, Edward). He is driven by internal factors to be an entrepreneur and when he is asked if shutting down a business would change his desire to become an entrepreneur, he states *“No. it would change my perspective but not the drive to be an entrepreneur”* (Appendix 17, Edward). Jonas do not either find employment desirable. When he is asked if he can see himself as an employee he states, *“In a way I kind of hope not. I am not so good with a daily routine. I like it more up in the air”* and *“I am getting more that way because I realize that this is what I want to do”* (Appendix 13, Jonas). Jonas and Nic are both in the cognitive process and Jonas has, so far, found entrepreneurship most desirable whereas Nic went in the opposite direction and found more value in working for others at the moment. Cate’s reason to become an entrepreneur is connected to her team winning the enterprise award at WOFIE, she states, *“I probably would not have been as hooked on it as I am now, I would possibly still just be toying with the idea and I am now more like, I am going to do this so I think that it helped that we won”* (Appendix 15, Cate). Thus, the competition made Cate feel like entrepreneurship was an option within her grasp because her team won. When Cate is asked about what she want from a future career she states, *“I want to make something new. I would like to make something innovative. Maybe something people haven’t thought about before”* (Appendix 15, Cate) Cates desires can be fulfilled from intrapreneurship but she sees entrepreneurship as a more obvious path now. The circumstances of that happening for her was brought by AAU.

#### **12.2.1.5 AAU supporting entrepreneurship**

The majority of informants express that AAU provides supports and encouragement to student entrepreneurship. This reinterpretation of AAU can have an effect on how the informants perceives the design and thus, enhance the understanding of the statements provided in the following themes. Cate believes that AAU provides a supportive engaging entrepreneurial environment, she states, *“I think it is very good. I think there are a lot of opportunities and that the university is doing a lot to try to engage student to starting their own businesses and making start ups when they are done. Especially with this WOFIE we were at. At my bachelors I did not really get a feeling of it at all, but now, at my masters, I get a lot of it. Like our lectors are talking about it a lot in the lectures and we*

*have all of these opportunities and I also have some friends from my earlier study that have started their own business and I also know a couple of other students in the Incubator and at WOFIE I was a part of the team who won so we actually won access to the Incubator"* (Appendix 15, Cate). Jonas and Cate are expressing gratitude towards AAU for the opportunities they get, Jonas states, *"(...)* It's definitely a safe place because you have access to all of there people who knows what they are talking. Founding for my business came through a meeting at the university so..." and *"I think it helped of course that we had Kristian and Peter to validate us and let them know that we are a group that do our homework and we got a good grade on our final project, I think that helps. Also that we were able to use the university facilities for meetings etc."* (Appendix 13, Jonas). Cate and Jonas believes that AAU take away some of the risks of starting a business and that makes them more keen on proceeding during education, Cate states: *"(...)* that was at least my thought after WOFIE, that it was not so dangerous to take a chance. A lot of the speeches that was given were very motivational. I have always been a cautious person but I feel like ever since in the media I have been more daring, at least from that aspect. Like meeting new people and talking to new people about doing stuff which I would not have done 3 years ago" (Appendix 15, Cate). Thus, they become willing to accept the inherent risk of entrepreneurial activity (Segal, et al., 2005). John and Linn express satisfaction with the environment on a very mellow level, John states, *"I feel that AAU is open minded for helping us students becoming entrepreneurs"* (Appendix 12, John) and Linn states, *"I am sure that there is opportunities but because I am not really interested in entrepreneurship I haven't thought that much about it"* (Appendix 14, Linn), whereas, Edward and Nic are dissatisfied with the current situation. Nic states, *"I haven't god the feeling that AAU is interested in students starting a business at all. They just want you to get a job"* (Appendix 16, Nic) and even though John seams overall satisfied, he is actually inclined to support that statement when claiming, *"(...)* AAU does make the effort to communicate to our area that we are more than welcome to start a business but on the other side, the teachers always talk from the perspective of being hired by a big company after graduation. They don't even talk about us getting hired in a small company, it is always a big company" (Appendix 12, John). Edward's dissatisfaction comes from experience. He claims, *"I tried the incubator. There was a whole start up day where they presented the opportunity to sign up in the incubator program. I think nine people signed up and 4 of them was my team. It was extreamly bad orchestrated and organized. Our hopes was that we could get an academic view points or insight into our business and we still hope for that"* and *"It dull and old school. It needs a new face and a new approach. At least a new approach on how they*

*approach other people and how you present yourself to others”* (Appendix 17, Edward). However, he recognize the initiative and the effort AAU puts into supporting entrepreneurship as he states, *“I feel that the intentions are good but the execution is bad to say it mildly. There is too much bureaucracy going on, there are too much planning and not so much practical knowledge and information given”* (Appendix 17, Edward). For Edward, AAU has not taken away any risks or made it more easy for him to accept it, but it has not stopped him from continuing with engaging in entrepreneurial activities which he claims to proactively find himself when stating *“I am also very proactive in discovering new opportunities but I don’t think that other people, at least the ones I know, would take notice of these initiative”*. Nic does not feel that AAU has encouraged him to start a business and has not provided him with the information about how they can support a new venture and that can contribute to why Nic has not been actively engaged in entrepreneurial activities at AAU.

#### **12.2.1.6 Partial conclusion**

The informant’s ambition are controlling their choices of study activities. In the discovery of own ambitions, some of the informants compare the desirability of self-employment with the desirability of working for others. These ambitions are based in the desirable outcome of a future career. The most desirable outcome of self-employment for both active and inactive students are independence and freedom. The inactive students, however, identifies safety, more manageable responsibility and more spare time as desirable outcomes of employment. The active students does not seem to consider a potential desirable outcome of employment, as they identify employment with undesirable monotonous work. The informants are motivated by team work and the active students consider collaborations very important in venture creation. Through collaboration they acquire the knowledge, skills and abilities to perform the tasks to make an enterprise. WOFIE has been a source of inspiration to the active informants and thus, workshops are considered a most favorable way of getting into entrepreneurship. The reason may be that the workshops facilitates a safe but serious environment where the students can build a start up company and the experience allows the participants to discover the potential of entrepreneurship in reality. Furthermore, the informants are inspired by family members and successful entrepreneurs. Having a family member who is an entrepreneur can generate a sort of leverage and advantage for one informant whereas another informant identify the more undesirable elements of entrepreneurship up close. The inactive informants do not find their education as being the right time to go all-in with entrepreneurship. Several informants studying their master’s degree find it difficult to put time into entrepreneurship.



A majority of students experience AAU support as risk relieving while others feel AAU is absent in their pursuit.

### 12.2.2 Theme 2: Pros

The main purpose of the interviews is to discover the pros and the cons of the design. In the examination of pros the informants are pointing out needs and how the needs are met by the functions of the design. The circumstances of the test environment compromises the answers given in the interview, however, the designs flexibility and the this stage in the processes verify the use of information.

#### 12.2.2.1 Good idea

All informants express at some point in the interview that one or several elements of the design is a good idea. A good idea is a good starting point for the elements of the design, however, it entails an expectation about the design being fully functional and that it lives up to the potential, thus saying very little about the practicality. In acceptance of the circumstances of the investigation, the good idea provide a solid ground to work on, from the first testing period of the design. The informants does point out that the execution of the elements have to been in order for it work, Jonas stats that fact about the Match up platform, he states, *“Yes but it depends on how well the platform is run of course but it is a really good idea. Especially the university is a great environment that is meant for this kind of interdisciplinary that they try to go after. During the NVC semester it was cool to work with all the different people from the different semesters and see what skills they have so, if there is a platform that people go and use then it is definitely a better idea than to go down to Cassiopia and slap a poster on the wall then this is a better idea because you have two groups of people who are interested in the same thing. I think that we will definitely go and check this out maybe in the next couple of days to see because this is exactly what we need”* (Appendix 13, Jonas). Jonas compare the option of using this platform to a manual approach he used before and thus, express a need for the platform as well as a willingness to actually consume it. Cate feels the same way and as Jonas, she express the active informants need for a common platform to get in contact with likeminded students, she states *“(...) You can meet someone and they say that they want to be a part of it but when it comes down to doing the work, they really don’t. With this kind of platform you can maybe find more serious students who really want to participate. It is really interesting and I think I am going to sign up, also maybe to join in on someone else’s start up project”* (Appendix 15, Cate). As an inactive student, Nic also recognizes the same value in the platform, he states, *“Yes, I think*

*that it is very interesting because why recruit students who want to participate, and who wants the experience. Continually, you have the same desire to work with entrepreneurship. I believe this match-up platform is more focused and serious than the event*” (Appendix 16, Nic). Edward could also use it for his start up and sees the option of him offering internships at his company to other students, he states *“I would love that if we had a platform where we could sign up for free or small amount and people could read about our vision and the core value of our start up and people could apply for an internship, I would love that. I love working with people”* (Appendix 17, Edward). Cate both sees the opportunity for her to acquire skills for a start up of her own but also the value in working for someone else’s start up company and as do Linn. However, Linn is supporting Edwards idea of internships, and emphasizes on her participating in her studies, she states, *“I think that is a great idea because the thing is that starting up your own business or participating in other kinds of entrepreneurial activities but I just don’t think that I have the time to do it. If I could make it a part of my study time by writing projects on this, that would be great”* (Appendix 14, Linn). It is thus argued that if students got the option to engage in other student’s start ups, they would be considering the desirability of self-employment more seriously if they tried working for a start up (Segal, et al., 2005). By offering positions up as internships and/or potential school projects, the issue of spending spare time, is eliminated.

Nic compares the Match up platform to the event, Recruiting and Start up and states that he believes that the platform is a better idea than the event, for this purpose, he state, *“I believe this match-up platform is more focused and serious than the event”* (Appendix 16, Nic). Jonas agree with that statement when he is asked if he thinks that the platform is more easy to use than going to an event he states, *“Yes (...) it would be a lot nicer to say okay, we need so and so and then have people come to us if that was possible”* (Appendix 13, Jonas). The poster for the Recruiting and Start up event does not generate the same excitement with the informants as the Match up platform. The value that Edward sees on the poster is networking, he states, *“Networking first of all, and recruiting. When I say networking I mean getting to know people and getting into that community when going to event regularly. That is what you hope to gain when going to these events”* (Appendix 17, Edward) however, he implies that the value does not come from participating in this event alone, but to continue going to event to get to know people. Jonas sees the same value as recruiting students to his start up, as he did with the Match up banner, he states, *“Because we have a start up right now, so it could be interesting to go and see what kind of people are there. We are looking for electrical engineers for our start up right now and possible an IT engineer in a few*

*months. It could be interesting to go and see because, we actually just came from a meeting where we are trying to make a add to hang up in Cassiopia so this event would be a much better environment compared to putting a poster up, because people actually attend this event for this purpose”* (Appendix 13, Jonas) however, for Jonas, the Match Up platform also contains the persistent interdisciplinary aspect which is accessible at all times. For the informants the Match up platform is capable of containing knowledge, skills and abilities that they themselves, lack and that are necessary to run their type of business (Segal, et al., 2005).

#### 12.2.2.2 Help/Inspiration

In the examinations of the design the informants point to the assistance of the initiatives and thus, how it could help them in the pursuit of entrepreneurship and how student can inspire each other in entrepreneurial processes and share ideas and thoughts. When Edward is asked about whether he finds value in reading about other entrepreneurs on a blog he states, *“Yes, I would love to read about other students experiences. Maybe we are going through the same things and can help each other out”* (Appendix 17, Edward). John sees how the event Recruiting and Start up can help him with his enterprise, he states, *“(... ) I do lack certain skills that could help me on the way”* and *“Yes. I am fairly unaware of what is going on and I would like to find inspiration on how I could make my company better or get help. That is valuable for me. I could use it to reach out for help and also to be connected to other students running a business like me”* (Appendix 12, John). Cate supports Edward and John statement and she pictures a post and the function of the blog when stating, *“(...) Like, what should I do when I am in that situation. I know that Phillip from Tunnel Vision is very good at pitching and I think he could make some great inspirational posts on the blog and maybe give tricks and tips for other people who also want to start up, like what should you think about for a pitch, what should you think about when going out to find investors and stuff like that. I think that would be very nice”* (Appendix 15, Cate). Both John and Cate sees the potential of interaction going on, on the blog. The inspiration and the help require that the blog consist of the right content as pointed out by Linn, she states, *“It depends on the content of the blog. I also think that they would have to brand this blog in the right way to catch my attention. As I said before, I am not really into entrepreneurship but I might become interested if they give me a reason to”* (Appendix 14, Linn). Cate also indicates the importance of the content that revolves around her area of interest and when she is asked whether she would want to read blog posts, she states, *“Yes. At least when it is companies that I am interested in. Especially whit the tunnel vision company and Stone Plant because I know people from those companies and I want to see their processes and how*

*they are doing so I could be inspired by it and see what I could do similarly when I am done (...)*" (Appendix 15, Cate). The informant sees the value in sharing information from the aspect of venture creation. The blog as an information channel provides the option for students to assess whether they possess the requisite knowledge, skills and abilities to perform the tasks necessary to become an entrepreneur (Segal, et al., 2005). That is why Cate seeks information within the area of which she hopes to start a business. This category is mostly connected to the initiative of the blog. The inactive informants do not agree on the value of being inspired by other student entrepreneurs. Linn is excited about the idea however, does not explain why that is. When she is asked about if she finds value in reading about student entrepreneurs at AAU she says *"Yes, definitely"* (Appendix?, Linn) however, she is potentially seeking other information and options than starting a business as she states *"(...) I am not interested in starting a business so that is not interesting for me, and therefore I need to become aware of other opportunities within entrepreneurship"* (Appendix 14, Linn). Nic express that he is not inspired by student entrepreneurs. When he is asked if he would be interested in reading about student entrepreneurs he states, *"Honestly no. I follow many entrepreneurs on social media and I like listening to them talk about their businesses but that has nothing to do with AAU"* and *"The successful entrepreneurs has proven their skills"* (Appendix 16, Nic). A majority of student finds value in reading about other students due to option of acquiring usable information about being a student entrepreneur. It is also argued that when students share information with each other and generates a common ground of enterprise, they feel stronger to accept the inherent risk of entrepreneurial activity (Segal, et al., 2005).

#### 12.2.2.3 Potential engagement

The initiatives are dependent on student engagement so even though the initiatives are made to make the student become proactive in the entrepreneurial activities, they have no function without students doing so. The interviews showed enthusiasm and willingness to engage in the initiatives. In the previous section it was already pointed out that all of the informants was more than willing to engage in the Match up platform, Cate states, *"(...) It is really interesting and I think I am going to sign up, also maybe to join in on someone else's start up project"* (Appendix 15, Cate). Jonas states, *"(...)I think that we will definitely go and check this out maybe in the next couple of days to see because this is exactly what we need"* (Appendix 13, Jonas) and Edward states, *"I would love that if we had a platform where we could sign up for free or small amount and people could read about our vision and the core value of our start up and people could apply for an internship, I would love that. I love working with people"* (Appendix 17, Edward). John sees the idea in signing

up for Match up but he also expresses that the time consumed in the engagement, keeps him from actually doing it, as he states, *“Making a profile is easy but I think it does require work if you want to be noticed by other students. It would also require engagement. I am maybe afraid that I don’t want to make the effort of making myself interesting by the profile and “keeping it alive”* (Appendix 12, John). First and foremost, the blog requires student entrepreneurs to write posts for the blog and Edward when Edward is asked if he, as a student entrepreneur, is interested in doing that he states, *“Yes, I would”* and *“I think it would make me feel like a part of the community. I would like to share my knowledge and skills. It would also be a great way of marketing myself”* (Appendix 17, Edward). He acknowledges the value in enhancement of the entrepreneurial community and want to be a proactive member of the community. The secondary function of the blog is that students should be able to debate entrepreneurial matters concerning the situation on AAU and Edward recognize the challenges from own experiences, of that function by stating, *“I really hate debating on the internet but I love debating face to face so I would rather meet up but I would definitely read it. People on the internet only cares about being right and then it is not really a debate”* (Appendix 17, Edward). Cate would be inclined to interact and contribute with her own experiences and knowledge on the blog if she could gain more knowledge herself in her journey of entrepreneurship, she states, *“(…) Like if I had a question about something specific, or if I wanted something more clear I think I would like a specific think. I think I would”* and *“Yes, I would. I actually like to engage in stuff like that. If it was something like finding sponsors and I found something else, then I would be inclined to link that in a comment section or something like that. If I felt that I could contribute to anything, I would do it”* (Appendix 15, Cate). Similarly to the potential outcome of Match up, the value of the blog would be to acquire knowledge, skills and abilities to perform the tasks of entrepreneurship and learn about the activities required to become one (Segal, et al., 2005). Furthermore, it subconsciously downgrade the risks of entrepreneurial activities by generating awareness about the processes you go through as a student entrepreneur. John and Jonas are both interested in reading about other entrepreneurs however, they do not feel that they have enough to offer to write posts for the blog, Jonas states, *“Yes, that could be very interesting but I think it also have to be during a time where I didn’t also have to write my mater thesis so it would be, if we could get our start up to get in a new gear and that was what we were actually living of, then I think definitely if I was doing more full time with entrepreneurship”* (Appendix 13, Jonas) and John supports that statement that claiming, *“No. I do not believe that my company is interesting enough because a need some professionalism in my company. I don’t think that people are interested in*

*hearing about a small company that has no success to show yet. For me, the company is just a spare time job*” (Appendix 12, John), however, it is implied that John could be convinced to write a post for the blog if someone told him the value of his work. When he is asked whether he thinks he is inspiring as an entrepreneur and if there are students that have the same thought about starting a business in their spare time, he states, “(...) *Maybe someone would find it inspiring to hear about how easy it is to start a company*” and “*Yes I know for a fact that there is people like me out there (...)*” (Appendix 12, John).

#### 12.2.2.4 Trustworthiness

Trustworthiness provides liability to the initiatives and the informants consider trustworthiness in the assessment of the entrepreneurial activities. John states, “*Yes, I think the option is there but it is also because I can see the hosting departments of the university behind the event. It provides trustworthiness. If I couldn't see the hosts of the event I would think it was beer and snacks and small talk*” (Appendix 12, John). Cate's rely on her teachers to present her to the most important events, she states, “*I think it is because it is an email directly from the lectors and that is kind of feels more important when it is recommended by a lector (...)*” (Appendix 15, Cate). Thus, Cate makes the effort to attend events recommended by her teachers and when she is asked is the Recruiting and Start up is less interesting for her because it was not recommended from a teacher, she states “*I feel a bit like it is not applying to my study and it is not very specific and targets everyone almost. A least for me, if it more interesting if it was for game companies only and then I would go (...)*” (Appendix 15, Cate). For Edward, the credibility comes from other students. If he sees that a lot of other students go to an event, or sign up for Match up, he would be willing to do it himself, he states, “*From my experiences, I haven't had a “wow” experience yet by signing up to these things but if I see the platform and I feel that I can use it or I see that other people sign up then definitely I will use it*” (Appendix ?, Ward), however, to Edward, pervious experiences has not met his expectations and that is his general view of the activities arranged by AAU. When Edward is asked what he thinks about the current entrepreneurial culture at AAU he states, “*It dull and old school. It needs a new face and a new approach. At least a new approach on how they approach other people and how you present yourself to others*” (Appendix 17, Edward). Linn and Cate both compare the Recruiting and Start up event to the biannual career day at hosted by AAU. Cate states, “*(...) It almost feels like headhunting, I feels like it is something you should prepare for. Something that takes time and something where you have to sell yourself. Almost like the career days at AAU*” (Appendix 15, Cate) and Linn supports that statement by saying, “*I don't think so because I think...*

*we get a lot of mails, for instance for “karriere dag” that claims to provide the ultimate opportunity to get an internship or a job but the thing is that usually it is not for everyone and you have to have certain skills to be relevant for the companies who are participating so I don’t think it applies to me”* (Appendix 14, Linn). Both Linn and Cate’s experience with the career day is that they are spending time on something that is not quite worth it, and the comparison provides low reliability to the Recruiting and Start up event. The informants do not agree on what generates trustworthiness in these initiatives, however, they agree on the importance of it and points out how this affects their choices of action.

#### 12.2.2.5 Target audience

The target audience is determined in the development of the design, however, the interviews provides the informants aspect of target audience.

Jonas and Edward is first of all pointing to the more general understanding of the skills they believe are required to participate in the entrepreneurial activities. When Jonas is asked what message he gets from the Recruiting and Start up poster he states, *“It feels like it is targeted to engineers or people with skills who want to develop something interesting, something more local if they do not want to be a part of the big corporate world but that there is an opportunity for jobs or students projects or something a little bit smaller and more personal”* (Appendix 13, Jonas). Linn supports that statement when saying *“(…) the thing is that usually it is not for everyone and you have to have certain skills to be relevant for the companies who are participating so I don’t think it applies to me”* and furthermore, she feels that the poster’s target audience is existing entrepreneurs, she states, *“If I was looking for an opportunity to be a part of a start up I would be intrigued by the headline. Of course it tries to reach people who are looking for a job or an opportunity of this sort and I believe it tries to reach a wide target audience but to get the message require that you read the whole text to really understand this as an option for students who does not have a start up company yet”* (Appendix 14, Linn). Edward John and Nic are supporting that statement, Edward states, *“It depend on what the goal is. Right now you don’t attract people who want to hear about start ups. You attract people who are already in the start up business and wants better contact or recruit other people and you get a very monotonic group of people who look like each other but if you want to attract people who might be interested in start up and generate that drive to become entrepreneurs and actually engage people in the start up community then the university needs to be more proactive themselves by meeting people first hand and be more visible and engaged than they*

*are now*” (Appendix 17, Edward). John are well informed in the entrepreneurial are and he express his opinion in a more theoretical manner as he states, *“There are two kinds of entrepreneurs; those who are born and those who are made. The born entrepreneurs see their study as a way of acquiring skills to start a business. The other type of entrepreneurs are only starting a small business that they run in their spare time to generate an income and maybe they will end up working full time on that business but if not it is okay. If you are focusing these initiatives on future career you are only reaching the born entrepreneurs”* (Appendix 12, John) and Nic states, *“The match-up poster is a great initiative. The poster I don’t think is targeted at me but to other entrepreneurs”* (Appendix 16, Nic). Both Edward and John include the drive to become an entrepreneur into their comments and thus, implies that the initiatives does not generate any drive to inactive students. They do not see how the initiatives makes students go through the cognitive process of choosing whether or not, to become an entrepreneur (Segal, et al., 2005).

During the interviews, the conversation included elaboration of the meaning of the design and furthermore, the informants were asked to read the text on the poster and the Match Up banner. This process enhanced the informants understanding of the design. Linn states her fist impression of the poster by saying, *“I think it is interesting but the thing is because I am not really into entrepreneurship it does not catch my attention. If you are interested in entrepreneurship I think it is interesting. The textbox does interest me when I read it but I wouldn’t in the context of it hanging at an information board at AAU”* (Appendix 14, Linn). During the interview John discover himself as an entrepreneur who could benefit from the offerings. When he is asked if he have considered recruiting students to his company, he states, *“I haven’t thought about it from that perspective. I totally missed that point. It could definitely be relevant for me. I do lack certain skills that could help me on the way”* (Appendix 12, John). Reading the entire text on the Match Up banner Jonas sees that the poster tries to target student with and idea for a start up and students without an idea of a start up, he states, *“Bring your idea to life, so if you have an idea of working in a start up and being heard then you can do that and if you need certain skills for your start up and you have the idea on the other hand. Now that I read it, I can see both sides of the argument”* (Appendix 13, Jonas)

The Match Up banner speaks to the active students as mentioned previously, thus, they feel like the target audience because it meets the needs of Jonas and Cate, however, Cate points to the challenge of targeting a broad range of people as it gets too unspecific for her, she states, *“I feel a bit like it is not applying to my study and it is not very specific and targets everyone almost. A least for me, if it*



*more interesting if it was for game companies only and then I would go (...)*" (Appendix 15, Cate). The informants are focusing on whether the initiatives targets their specific field of study. It has been established that Edward is very motivated entrepreneur and thus, he is asked if he understand how some people does not find a connection of entrepreneurial activities to their field of study he states, *"Yes. Maybe sociologists, people who study medicine. Engineers know that they can become entrepreneurs but other people could still be valuable in the entrepreneurial relation. I would love to meet a sociologist or a psychologist e.g. because they can provide insight in areas you did not know about"* (Appendix 17, Edward). To Edward and Jonas the engineers are the obvious entrepreneurs with their practical skills to make new products, however, being an engineer, John does not see himself as a part of the target audience, he states, *"The first poster is targeting both audiences because start up is not definitive, but I did not get that I, as a business owner, could offer something. That could be more clear. The second one is clearly targeting the born entrepreneur because you are focusing on entrepreneurship as a career choice and not the "project opportunity". It is not defined how long time this profile-making takes and it implies that it is a definitive career choice that require 100 % engagement and not do in your spare time"* (Appendix 12, John). John lacks the aspect of spare time entrepreneurship because that is the audience he feels that he is a part of. This section cannot be characterized as a pro and neither a con. From the aspect of the pull strategy, the design reaches the audience, however, it does not perform satisfactory as a push strategy.

#### 12.2.2.6 Partial conclusion

The informants agree that the design is built on a good foundation and with the right execution, it will generate the desired outcome. The examination of the designs cons exploit some suggestions for the revision and development of the design, proposed by the informants. Thus, the informants points to workshops as an obvious motivator and initiation of considering the option of actively engaging in entrepreneurship. The value in the workshops is defined by the informants as a "try out" of entrepreneurship which generates a more serious consideration of Segal et al.'s three step theory. Furthermore, the informants are motivated in thought, to engage in the initiatives of the design, however, the informants' potential engagement is motivated by the engagement of other students. Thus, the design lacks an initiative that is independent of the engagement to generate more liability. The informants suggest to include more personal, direct and clearly focused promotion.

Internships and school projects is an option that could be a selling point of the Match up platform to eliminate the issue of students who feel that they have too little time to engage in entrepreneurship. Workshops can also be characterized as time consuming and this option of spending time of study appeals to the informants. Students are motivated and inspired by other students and the heard behaviour is supported by the Match up platform and most of all, the blog. The forces of the bog is that it generates transparency in the entrepreneurial activates at AAU which allows students to learn from each other and, most importantly in this case, to influence each other to be proactive within the entrepreneurial community at AAU.

### 12.2.3 Theme 3: Cons

The cons of the design is expressed in the informant's considerations of how the functions will work in their favor.

#### 12.2.3.1 Lack of practical skills

Previously it was established that the informants were focused on entrepreneurship applying to engineers due to their abilities and practical skills. This way of thought generate an obstacle for the design to get through to the students of other study areas. The main issue being that the design is too weak in communicating how entrepreneurship embraces diversity and function regardless of study area. When Linn is asked if she believes that there is an opportunity for her to find a job or an internship at the Recruiting and Start up event, she claims *"I don't think so because I think... we get a lot of mails, for instance for "karriere dag" that claims to provide the ultimate opportunity to get an internship or a job but the thing is that usually it is not for everyone and you have to have certain skills to be relevant for the companies who are participating so I don't think it applies to me"* (Appendix 14, Linn). Jonas first impression of the Recruiting and Start up poster is that it is targeting people who have the skills to develop a product, he states, *"It feels like it is targeted to engineers or people with skills who want to develop something interesting, something more local if they do not want to be a part of the big corporate world but that there is an opportunity for jobs or students projects or something a little bit smaller and more personal"* (Appendix 13, Jonas). Jonas specifically points to the text saying, "apply you skills" and that message is received as being practical skills which Jonas claims not to possess, he states, *"Ehmmm, apply your skills, yearh, I don't know. At least in my studies international development I don't have... it is one of the downsides, I like what I study but I don't feel that I have many skills, practical skills that can be applied. Maybe some project planning but that's about it"* (Appendix 13, Jonas). Both Jonas and

Linn implies not to be taught practical skills in their studies and thus, they don't have any contributing factors. When Jonas is asked if he consider knowledge to be a skill, he state, *"Definitely, but I guess in the world of start ups you think it has to be a certain kind of technical knowledge or regulation knowledge or something that can be applied"* (Appendix 13, Jonas). Contradictory, Jonas also states that he gained process oriented skills from the course New Venture Creation, he states *"Maybe I do after being on the NVC semester, I would say that now I have some entrepreneurial skills and I have been through the business model canvas and been through the process so now I would think that I could actual apply some skills"* (Appendix 13, Jonas). As an engineer, John sees how he could apply his practical skills to a start up, he states, *"Yes if I could make something "work better" for someone I would reach out and offer my skills to the project. I would see it as an option to look for potential projects"* (Appendix 12, John).

The purpose of the design is not only to find ways of applying skills but also for the audience to gain skills that can be used for employment as well, however, that aspect is not received by Nic as he states, *" (...) I don't think that you can use entrepreneurial skills at an established company. I think it is much different skills that are needed in an established company"* (Appendix 16, Nic). Linn has not thought about gaining entrepreneurial skills for employment, however, when she is asked whether that could be interesting for her to engage actively in entrepreneurship for networking purposes and skill gaining purposes she states *"Yes, absolutely"* (Appendix 14, Linn), however, Linn does not see the Recruiting and Start up event is applying to all studies and when she is told that it is, she states *"Okay, I don't think that is clear in the poster"* (Appendix 14, Linn). After Linn has become aware that she can acquire skills from entrepreneurship than can be used for other purposes than starting a business she emphasizes on that aspect being communicated throughout the whole design, she states, *"I don't have a natural interest in entrepreneurship so the people behind the blog would have to change my idea about entrepreneurship. I am not interested in starting a business so that is not interesting for me, and therefore I need to become aware of other opportunities within entrepreneurship"* (Appendix 14, Linn). Theoretically, John understand that student's perspective differs depending on internal drive to become an entrepreneur, he states, *" (...) The born entrepreneurs see their study as a way of acquiring skills to start a business. The other type of entrepreneurs are only starting a small business that they run in their spare time to generate an income and maybe they will end up working full time on that business but if not it is okay (...) "* (Appendix 12, John). Students has no drive to engage in entrepreneurial activities if they already in the stage of education feels that they do not possess the requisite knowledge, skills and

abilities to perform the tasks and activities necessary to become an entrepreneur (Segal, et al., 2005). The examination detects lack of understanding of the potential functions that generates value that the students can gain from engaging in entrepreneurship.

### 12.2.3.2 Misunderstanding

Previously it was mentioned that the evolving dialog enhanced the students understanding of the functions of the design. John express his misunderstanding by stating, *“I haven’t thought about it from that perspective. I totally missed that point. It could definitely be relevant for me. I do lack certain skills”* (Appendix 12, John). John first impression of the poster was that it was networking and people who were looking for opportunities to become a part of a start up as he states, *“The message is to make facilities for networking between people who want to make a start up and people who want to be a part of a start up”* (Appendix 12, John). Continually, he does not understand his position as an observer. Even though John is an inactive student, he is also a business owner, but as an inactive student without the time to engage in other students start ups as he states, *“If I was looking for an opportunity to be a part of a start up I would be intrigued by the headline. Of course it tries to reach people who are looking for a job or an opportunity of this sort and I believe it tries to reach a wide target audience but to get the message require that you read the whole text to really understand this as an option for students who does not have a start up company yet”* and *“The first poster is targeting both audiences because start up is not definitive. But I did not get that I, as a business owner, could offer something. That could be more clear”* (Appendix 12, John). Nic does not either get the message targeted towards inactive students as himself, on the Match up banner, he states, *“The match-up poster is a great initiative. The poster I don’t think is targeted at me but to other entrepreneurs”* (Appendix 16, Nic). Cate also expresses a misunderstanding of the Match up banner as she does not understand Match Up as an online platform, but as an event like Recruiting and Start up, she states, *“The name match up makes me think that it is more like an actual place that a website so, I don’t know why but the name makes me feel that this is an event rather than online. I like the graphics though, I think that it is very clear with the connections”* (Appendix 15, Cate). This misunderstanding means that Cate could not actively go in and sign up for the platform, which she actually was keen to do, because based on the banner alone, she had no idea about what it was. John also supports the misleading message by pointing to the lack of understanding that the banner provides alone, he states, *“The second one is clearly targeting the born entrepreneur because you are focusing on entrepreneurship as a career choice and not the “project opportunity”. It is not defined how long time this profile-making takes*

*and it implies that it is a definitive career choice that require 100 % engagement and not do in your spare time*” (Appendix 12, John). The misunderstandings are happening when there are no dialog and supporting personal contact between the sender and the audience. This is also a focus point of the informants, which leads to the lack of direct contact.

### 12.2.3.3 Direct contact

The informants agree on the missing element in the design. Edward can be defined as the born entrepreneur who is internally driven and to him, entrepreneurship is personally, he states, *“For someone to explain it to them. Make it personal, because it is personal. You give all of yourself to entrepreneurship and the product you want to make. Talk to people about why they focus on looking for a job and why they don’t see the opportunity to make their own job”* (Appendix 17, Edward). Thus Edward is not convinced that the initiatives are going to have an effect if the personal contact is excluded from the design, he states, *“I don’t think that these initiatives are groundbreaking. I am actually interested but I am also very proactive in discovering new opportunities but I don’t think that other people, at least the ones I know, would take notice of these initiatives”* (Appendix 17, Edward). He is so dedicated to entrepreneurship and understands entrepreneurship as an option everybody should consider strongly *“Yes. I would love for everyone to engage in entrepreneurship. I hate everything that is traditional and old school”* (Appendix 17, Edward) and he proposes that someone comes out and converse about entrepreneurship on a more personal level than it is now, he states, *“(…) meeting student in classrooms. Offering coffee, we love coffee”* (Appendix 17, Edward). Cate supports that suggestions as she states, *“Yes, I think that it contributes to a more aggressive approach but I would also like for someone to come out and talk to the student about entrepreneurship. If we can see that emails for example has been sent out to everyone then I am not that interested, but if someone came out and gave a five minute talk about new initiatives then much more people would be inclined to come. At least I would because then it would give a better impression”* (Appendix 15, Cate). Cate became interested in entrepreneurship from an experience on a study trip and also suggest that as a contributing, more personal approach to getting students engaged in entrepreneurship, she states, *“We went on a study trip to visit all of these different firms to talk about internships and stuff and then we saw a lot of these small companies that just started up a couple of years ago and that made us realize that we could also do the maybe, if we got the right people. The fact that we actually got that opportunity to go on that study trip was very nice. We wouldn’t have had that idea otherwise. At my bachelors, we did not even have a study trip but we did not have to do an internship at that point either but they could have done it. I think, or at*

*least that is my assumption, that more people would have thought about starting a business on the bachelors if we had a trip like that. It is very interesting. Also I think that they told us that we could just try it and if it doesn't work, so what? It is not going to be the end of the world if your start up business does not succeed, it is just experience"* (Appendix 15, Cate). Cates experience is, however, based on her abilities to create a product herself, which is as established, not the case for other areas of study. Non the less, Cate signed up for WOFIE after a teacher talked about in class, she states, *"Someone came and made a small speech about it. I think it was Claus from my education who talked about it and also it was because one of our other lectors who said that it would be very relevant for us students who wanted to go to another event, a 8 semester event where you make games instead for taking an internship, also because there is a lot about project management and working in teams"* (Appendix 15, Cate). The purpose of the blog is to collect and visualize the whole entrepreneurial community at AAU but when Edward is asked whether he believes that the blog could fulfill that purpose he states, *"Yes but mostly I miss personal contact"* (Appendix 17, Edward). Cate shares that view of suggestion with Edward when she is asked if the initiative will have an impact, she states, *"Yes, I think that it contributes to a more aggressive approach but I would also like for someone to come out and talk to the student about entrepreneurship. If we can see that emails for example has been sent out to everyone then I am not that interested, but if someone came out and gave a five minute talk about new initiatives then much more people would be inclined to come. At least I would because then it would give a better impression"* (Appendix 15, Cate).

Personal contact and social event influence and motivates the engagement of activities during education. Furthermore, Nic express that he is very focused on personal contact when he builds network, he states *"I think it is very important to know people so I spend a lot of time talking to people whom I believe can help me and I make an effort to be in places where I know that people how can help me, are. I am very focused on networking for my career"* (Appendix 16, Nic) and Linn is also suggesting the social aspect as the obvious missing elements and states, *"It is hard to say, but maybe if they turn it into a social thing they could maybe attract people in that way, but I think it is about changing the whole idea about what entrepreneurship is and maybe letting people know that it does not require all of your spare time"* (Appendix 14, Linn).

#### 12.2.3.4 Channel of communication

The communicative platforms incorporated in the design is the online platform hence the blog and the Match Up platform and the Recruiting and Start up poster.

It has been established that the informants does see the potential difficulties with some of the functions of the online initiatives, however, the overall feeling is that those initiatives can become successful and contribute to changes that it was designed to generate. The poster is not generating the same response of potentially contributing to changes, Linn states, *“I think it is interesting but the thing is because I am not really into entrepreneurship it does not catch my attention. If you are interested in entrepreneurship I think it is interesting. The textbox does interest me when I read it but it wouldn’t in the context of it hanging at an information board at AAU. Edward states”*

(Appendix 14, Linn). Considering the context of which the design is to function in, the poster as a communication channel is not strong enough in Linn’s opinion and Nic supports that statement when he is asked if the message speaks to him *“No, not really. Maybe if I was interested in starting my own business, it would catch my attention but I think that there are so many posters at the university that you don’t even notice any of them. It is difficult to become aware of these things when they drown in the setting of all the other posters”* (Appendix 16, Nic). As an active student Edward claims that he does occasionally read the posters on the board, however, he’s is convinced that the inactive students does not, as he states, *“Yes. Sometimes I read it but people in general do not. Sometimes I look for new opportunities there but my experience is that people generally do not look for opportunities, they hope for them”* (Appendix 17, Edward). Jonas expresses his lack of trust in the workings of posters for the purpose of recruiting students to his start up which can be related to attempting to reach inactive student to the event, he states, *“Yes I does. Because we have a start up right now, so it could be interesting to go and see what kind of people are there. We are looking for electrical engineers for our start up right now and possible an IT engineer in a few months. It could be interesting to go and see because, we actually just came from a meeting where we are trying to make a add to hang up in Cassiopia so this event would be a much better environment compared to putting a poster up, because people actually attend this event for this purpose”* (Appendix 13, Jonas). Edward suggests that SEA makes use of the leads they have and target the students in their database directly, he states, *“Something I don’t understand is that you guys (SEA) have the biggest group of leads with students mails so why not contact them directly?”* (Appendix 17, Edward). SEA already make use of the leads they have and are contacting students directly by email, however, due to the lack of targeted and personal feel of the emails, Edward does

not read them, he states, *“I have, and sometimes they are in English, and sometimes it feels like spam mails. Change the format. Do something to catch my attention – “be a start up”* (Appendix 17, Edward). Thus, the poster as a communicating channel is inexpedient for this purpose as the context of environment are unfit and only reaches a very limited audience who already is proactive within entrepreneurship. Furthermore, the results also emphasise the informants need for the personal aspect.

#### **12.2.3.5 Partial conclusion**

The design does not reach the communicational level of including the inactive student and the aspect of engaging in entrepreneurship to gain skills for employment. The general understanding is that the active students and students who learn practical skills in their study are the only ones who benefit from the Recruiting and Start up event and the Match Up platform. The informants' suggestion to strengthen the message on the Match Up banner to reach the inactive students is, to focus on the option of working for students start ups in internships and school projects which require an enhanced connection between academia and entrepreneurial education. The born entrepreneur looks for opportunities and will always discover the options of entrepreneurial education, however, the inactive students are recognising the value of engaging in entrepreneurship but are deselecting the options on printed ads in their minds because they feel untargeted by previous experience in the educational context. Furthermore, the inactive students are very focused on their studies and the skills and options that it brings. The prejudiced assumptions and previous experience with AAU enterprise offerings lead to misunderstanding in the coding of the messages on the printed ads. However, engaging in dialogue about the options enhances interest and curiosity with the inactive informants and it indicates that dialouge and personal contact is the gateway to get the inactive students to consider entrepreneurship seriously and compare the opportunity of self-employment to employment.



## 13 THE PRACTICAL WORKINGS OF THE DESIGN (CONCLUSION OF THE ANALYSIS)

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This paragraph concludes on the findings of the analysis with the purpose of describing the practical workings of the design. This paragraph represents Lee & Kotler's (2011) step 8, *Monitoring and evaluation*. The long termed objectives that were made in the paragraph, *Creation of design* are measured to fit the purpose of the design. The researcher made observations throughout the Recruiting and Start up event and these observations will be included in this description.

### 13.1 SITUATIONAL VARIABLES AND THE WORKINGS OF THE DESIGN

The dependent variables in the context of the testing environment were identified prior to the creation of the design. Those were identified as *Climate variables*, *System variables*, *Outcome variables* and the independent variable, *Time*. The results of the interviews showed a strong connection between the respondents' statements and variables, which verifies those as the right considerable factors in the creation of the design.

The first theme of the analysis enlightened the students' ambitions as a motivator of educational choices. Those ambitions are connected to the informants' most desirable outcome of a future career. In the description of context *experience* was identified as the desirable outcome variable of engaging in entrepreneurship. The interviews, however, took the perspective of the outcome of owning a business and thus, identifies the desirable outcome as independence and freedom. Both desirable outcomes can be communicated through the design, however, acknowledging that independence and freedom are very long term desires that require the criteria of becoming successful with an enterprise. The outcome of experience is a short term outcome that is reachable during education. It is argued that most students would be more intrigued by the outcome of experience in advertising because it is provided by the university and because most students are inactive students who are not born entrepreneurs. The variable relates to the push strategy as a starting point for students entering in the cognitive process of becoming an entrepreneur (Segal, et al., 2005).

The climate variable and the system variables included online communication, academic research and teamwork. The system variables identified by the informants include teamwork and the enterprise workshops offered by the university. The workshops also incorporate the element of

collaboration because they facilitate collaborations across study areas. This collaborative system is influencing students to engage in enterprise activities. The design does include this collaborative aspect by initiating and facilitating meet-ups in the Recruiting and Start up event and the online communication through Match up and the blog. The online platform is well-known by the students as a source of information and thus, provides a natural acceptance by the informants, however, lacking the personal contact. Direct contact is not included in the design, however, generates an essential climate variable in this context. Observing students and other participants at the Recruiting and Start up event, the students do not generate interaction by own initiative. Workshops force students to form teams and work together on specific assignments provided by the facilitators, and that alleviates the retaining behaviour of the participants that was observed. Continually, the issue of not having the skill set to be a part of a start up was also observed at the event as an obstacle for students to engage. Lacking skills and the feeling of not being a part of the targeted audience is generating the reluctant attitude. The system variable, SEA was found to be of great value to the active students as it alleviates the risks of starting a business.

Time is an highly considered factor in the decision of whether or not to engage in enterprise activities regardless of the level of study, hence the bachelor's degree and the master's degree. However, even though the Bachelor seems like the obvious time to try out enterprise activities, the informants experience that the entrepreneurial activities are restrained to the master where the informants claim to be busy with their studies.

### **13.2 ACHIEVEMENT OF THE OBJECTIVES**

The prospects of reaching the objectives are low without including the personal contact to the additional initiative. The objective of the poster and the Match up platform was far from reached which calls for a completely different strategy. It is clear from the interviews that the design is unable to reach the inactive students even though it was intended differently. The poster is not a preferable channel of communication for the purpose of the design and the content of the Recruiting and Start up event generated no value of including students in enterprise activities and neither did it contribute to an expansion of the community. The Match up platform has the potential of contributing to the purpose of the design and has received enough positive feedback in the test to continue as an initiative in the design. Furthermore, the results show great potential for the blog being a motivator of engagement and contribution to visibility, entity and proximity to the

entrepreneurial community at AAU. Overall, the design did not reach the social level of affecting students feelings enough to change behaviour.

## **14 DISCUSSION OF APPLICATION OF SOCIAL MARKETING - REVISION OF DESIGN**

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The analysis has brought an understanding of the overall workings of the design. This discussion includes a revision of the design. The revision of the design is not determining the discussion of the application of social marketing to entrepreneurial education at AAU. In completion of the design-based research, the design is revised for the purpose of SEA continuing the application of social marketing to enhance student engagement in entrepreneurship. The revision of the design is followed by a more overall discussion of how the researcher experienced the application throughout this research and how the general idea of social marketing contributes to the educational environment at AAU.

### **14.1 REVISION OF THE DESIGN**

The revision includes a modification of the elements to ensure a better fit between the design and the context. The design consists of one element that did not bring any value to the purpose, and that element is the Recruiting and Start up poster. Thus, the initiative of changing the message on the poster proved to be ineffective in the situational context. The social culture at AAU prevent the students of detecting opportunities like this on poster boards. Even though, SEA does occasionally use this information channel to promote events, it has no effect on the inactive students' behaviour. It can be argued that printed adds as the poster, generates little to no effect without other supportive initiatives, however, it was not complemented by the additional elements of the design, and thus, it should be excluded entirely from the design. The Recruiting and Start up event was intended to support the message of the Match up banner, however, the message never reached the audience at all. The audience that showed up for the Recruiting and Start up event was not motivated to engage in the present activities and opportunities and fairly unaware of the whole purpose of event until it was presented by the host. The Match up platform was exposed by the banner at the event but was not supported by a presentation and the banner generated no action at all before and after the event.

For the design to include three initiatives whereas the poster and the Match up platform supported one another and a third initiative that has a different purpose did not provide an acceptable result. The personal contact has been illuminated throughout the analysis and have presented itself as an unavoidable variable necessary to generate awareness of value in enterprise activities at AAU. Thus, the proposed action is to exclude the poster initiative from the design and instead add another initiative that supports the Match up platform. It could be a personal appearance of SEA representatives who reaches students in the canteen and in class rooms (as far as possible) to engage the students in a dialog about their options to engage in entrepreneurship at AAU and thus, generate immediate action by getting sign ups on the Match up platform during these meetings. After a meeting the banner could remain a couple of days and function as a reminder of the meeting and give the students who did not participate in the meeting, a chance to discover it. Secondary, to extend the students memory of the meeting and hopefully generate mouth to mouth promotion. This initiative could easily be applied to promotion of the blog when it launches and modified with the sales promotion including appearance of the active students who have written posts on the blog. Furthermore, the design could include promoting these initiatives to the teachers of particular faculties that SEA finds most relevant concerning prospects of starting businesses or a faculty who generates most publicity though out the whole university. Teachers, lectors and professors act as gatekeepers to the students as they hold a position of motivating influencers who connects study area to entrepreneurship. If the SEA representatives focus on letting the student know that student start ups can offer internships and student projects, which makes it possible for other students to participate entirely without claiming all of their time, they include inactive students into the initiatives and makes it relevant and possible for them to participate. This may generate pro activeness in the long run and it enhances collaboration across study areas.

The design is challenged by the current entrepreneurial culture at AAU. The students do not feel the presence of the department of SEA and they are fairly unaware of the extent of support they can get. Some informants even had bad experiences with enterprise activities and that opinion takes a lot of effort and successful results to change. The co-dependency of the initiative of the design and the students are to be met and accepted by the design to change the current passive dynamic between the two.

## 14.2 APPLICATION OF SOCIAL MARKETING AND METHOD OF PROCEDURE

The general idea of social marketing is to use the approach of selling product to make people change their behaviour. The approach is used for the purpose of investigating the workings of social marketing for the purpose of changing student behaviour at AAU. The procedure follows Lee & Kotler (201)'s narrative steps of developing a social marketing campaign. The procedure has been comprehensive, however, generated usable knowledge of background, focus and situation, which is in line with the design-based research method that allowed the testing and revision of the design.

SEA's promotional procedures are based on experience. Allowing a new design into their strategy generated limitations in the creation of the design. The procedure, however, includes a revision of the design and flexible elements that can be modified to the context. Social marketing is planned social change, according to Kotler & Zaltman (1971) and if the change is to happen, the plan of procedure must be persistent and ongoing. SEA generates profit from spin-out companies, so the main purpose of the institute is to help students develop their enterprises to generate profit after graduation. There is a complete lack of focus on the potential of students enterprises walking the halls of AAU and holding a great amount of knowledge. Social marketing is an obvious approach to change students behaviour during education to a more entrepreneurial active behaviour, however, the challenges include the focus on academia and the students' freedom to choose. Thus, the change is more profound than the examples from the health sector. Changing student behaviour is not minor "everyday behaviour", but changes in the way students think about their choices of future career. Students choose an area of study and picture the outcome of some sort of career. On top of that, we push students to consider the option of being self-employed. The thought is intangible to most students. In this study, it is argued that making all student consider the option of self-employment generates more active student behaviour in entrepreneurial education. Participating in workshops and other activities provides a realistic insight into what it means to be an entrepreneur. Thus, it provides a realistic chance for students to assess whether they possess the knowledge, skills and ability to perform the tasks necessary to become an entrepreneur, or at least, how to recruit those. A result of this investigation showed that active students sometimes need to try things out before realising that they have the skills and abilities to perform necessary tasks. Furthermore, it becomes unlikely to think that the students consider the desirability of self-employment to the desirability of working for others before even acquiring practical skills and abilities. They have little to no grasp on what it means to be employed and not least self-employed. This questions the use of Segal et al.'s (2005) theory of the cognitive process and whether it applies to the student

context. It is argued that the analysis proves to be generating relevant data for the purpose of this research, however, the data is limited to the extent of the informants understanding and experience which characterises the constructivist paradigm. In a further modification of theory, it could be relevant to add a fourth element in the students' cognitive process which is desirability of the outcome of focusing on the courses provided by the University, to the outcome of engaging in entrepreneurial activities on own initiative.

With these considerations, SEA would benefit from the application of social marketing using the design-based method to own purposes in notification of the fact that that the design is changeable and it is the quality of the process that generates the outcome.

## 15 CONCLUSION

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Social marketing is not only applicable to the health sector but also to enterprise education. An involvement of the entrepreneurial community at AAU require a longer process of investigation and intervention, however, this research discover how students are motivated to change behaviour in the context of entrepreneurial education at AAU. It is emphasised that the results should be further investigated by SEA and it is recommended that the procedure follows the same design-based approach that was used throughout this investigation in the development a new design that overcomes the challenges that were found.

Students are motivated to change behaviour by considering the following findings:

### *Realization and profound understanding of the dependent variables*

The dependent variables are determinating for the creation of the design. There is a miscommunication between the students and the University that generate a context with no common understanding of what entrepreneurial education is and what is expected of the students who participate in it. From the students' perspective, the misunderstanding leads to reluctant behaviour towards engaging in entrepreneurial activities at AAU. By generating a common understanding of SEA's offerings from a perspective that contains more than just starting a student enterprise, the students are in a better position of making a well-based decision of whether to engage in entrepreneurship during education.

### *Communicate that the outcome makes it worth the time*

SEA is dependent on student participation. Their most popular activity is workshops that depend entirely on student participation to generate groups. The outcome of workshops was found to include first and foremost a realisation of own abilities and skills. Suddenly entrepreneurship becomes doable for everyone in collaboration among students. The outcome includes a professional network both in- and outside of the University. The understanding of what entrepreneurship actually require, makes it reachable to students and generate engagement in the realisation of the possibilities it brings and makes it worth the time.

### *Initiate personal contact*

Personal contact was omitted from the design in this research. It was, however, found to be the most important factor in motivating students to change behaviour. The culture that generates the context of AAU contradicted the intention of the design. The communicational channels chosen for the design was too easily rejected by the students. The students' first choice of channel is personal contact, and they require an emotional investment from the sender to ensure professionalism and desirable outcome from the entrepreneurial offerings.

### *Activate influencers*

The University is filled with influencers and the most predominant was found to be other students and teachers. These actors proved to have motivated students to make educational choices before. Furthermore, teachers are able to connect any line of study to entrepreneurial education, which was a connection many students struggled to make themselves, however, essential for the motivation of changing behaviour.

This investigation identified the challenges of the current situation and the elements of motivation for students to become engaged in entrepreneurship by applying the approach of social marketing which is proved to be beneficial with the right procedure of continually discovering of the dependent variable.



## 16 BIBLIOGRAPHY

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Akker, J. v. d., Gravemeijer, K. M. S. & Nieveen, N., 2006. *Educational design research*. s.l.:Routledge.

Amiel, T. & Reeves, T. C., 2008. Design-Based Research and educational technology: Rethinking technology and the research agenda. *Journal of Educational Technology & Society*, October, 11(4), pp. 29-40.

Andreasen, A. R., 1994. Social Marketing: Its Definition and Domain. *Journal of Public Policy & Marketing*, 13(1), pp. 108-114.

Anon., 2016. *Aalborg university*. [Online]

Available at: <http://www.en.aau.dk/about-aau/figures-facts/students/>

Ariño, A. & de la Torre, J., 1998. Learning from Failure: Towards an Evolutionary Model of Collaborative Ventures. *Managing Partnerships and Strategic Alliances*, May - Jun, 9(3), pp. 306-325.

Ball, C., 1989. *Towards an 'enterprising' culture: a challenge for education and training*. s.l.:OECD.

Barab, S. & Squire, K., 2004. Design-Based eesearch: Putting a stake in the ground. *Journal of the Learning Sciences*, 13(1), pp. 1-14.

Berg-Sørensen, A., 2010. Hermeneutik og fænomenologi. *Videnskabsteori i statskundskab, sociologi og forvaltning*, pp. 147-167.

Blumenthal, D., Causino, N. & Campbell, E., 1996. Relationships between acedemic institutions and industry in the life science - an industry survey. *The new England journal of medicine*, February , 334(6), pp. 368-373.

Boisot, M. H., 1998. *Knowledge Assets: Securing Competitive Advantage in the Information Economy*. New York: Oxford University Press.

Bonner, A. & Tolhurst, G., 2002. Insider-outsider perspectives of participant observation. *Nurse researcher*, 9(4), pp. 7-19.

- Brown, A. L., 1992. Design experiments: Teoretical and methodological challendes in creating complex interventions in classroom settings. *Journal of the learning science*, 2(2), pp. 141-178.
- Bryman, A., 2012. *Social research methods*. 4 red. s.l.:Oxford university press.
- Carton, R. B., Hofer, C. W. & Meeks, M. D., 2004. The entrepreneur and entrepreneurship: operational definitions of their role in society. *The University of Georgia*, May.
- Cheng, H., Kotler, P. & Lee, N. R., 2011. *Social marketing for public health. Global trends success stories*. s.l.:Jons and Bartlett Publisher .
- Child, J. & McGrath, R. G., 2001. Organizations unfettered: Organiational form in an information-intensive economy. *Academy of Management Journal*, December, 44(6), pp. 1135-1148.
- Collin, 2010. Design Experiments.
- Collins, A., 1992. Toward a design science of education. *New directions in educational technology*, pp. 15-22.
- Daumard, P., 2001. Enterprise culture and university culture. *Higher Education Management*, 13(2), pp. 3-131.
- Davies, J. L., 2001. The Emergence of Entrepreneurial Cultures in European Universities. *Journal of the Programme*, 13(2), pp. 24-43.
- DiCicco-Bloom, B. & Crabtree, B. F., 2006. The qualitative research interview. *Medical education*, 40(4), pp. 314-321.
- Dillman, D. A. J. D. S. a. L. M. C., 2009. *Internet, Mail, and Mixed Mode Survey: The Tailored Design Method*. 3 red. Hoboken: John Wiley and Sons, Inc..
- Fallows, S. & Steven, C., 2000. Building employability skills into the higher education curriculum: A university-wide initiative. *Education+ training*, 42(2), pp. 75-83.
- Foddy, 1998. An Emperical Evaluation of In Depth Probes Used to Pretest Survey Questions. *Sociological methods and research* , August, 27(1), pp. 103-133.
- forskningsministeriet, U. o., 2015. *Uddannelse og forskningsministeriet*. [Online]  
Available at: <http://ufm.dk/uddannelse-og-institutioner/statistik-og-analyser/sogning-og-optag-pa-videregaende-uddannelser/grundtal-om-sogning-og-optag/ansogere-og-optagne-fordelet-pa-kon->

alder-og-adgangsgrundlag

[Senest hentet eller vist den 29 07 17].

Frenkel, S. J., Korczynski, M., Shire, K. A. & Tam, M., 1999. *On the Front Line: Organization of Work in the Information Economy*. Ithaca and London: Cornell University Press.

Gadamer, H.-G., 2008. *Philosophical hermeneutics*. s.l.:Univ of California Pres.

Gelderen, M. v., 2014. Empowerment through enterprising competencies. A research based developmental program. *Manuscript published at [www.enterprisingcompetencies.com](http://www.enterprisingcompetencies.com)*.

Gibb, A. A., 1987. Enterprise Culture — Its Meaning and Implications for Education and Training. *Journal of European Industrial Training*, Årgang 2, pp. 2-38.

Golafshani, N., 2003. Understanding reliability and validity in qualitative research. *The Qualitative Report*, 8(4), p. 597–.

Gravemeijer, K. & Coop, P., 2006. Design research from a learning design perspective. I: *Educational design research* . s.l.:Routledge, pp. 17-51.

Guba, E. G., 1990. *The paradigm dialog*. s.l.:Sage Publications.

Gynther, K., 2011. Design-based research: en introduktion.

Hannon, P. D., 2005. Philosophies of enterprise and entrepreneurship education and challenges for higher education in the UK. *ENTREPRENEURSHIP AND INNOVATION*, May, pp. 105-114.

Hytti, U. & O'Gorman, C., 2004. What is “enterprise education”? An analysis of the objectives and methods of enterprise. *Education + Training*, Årgang 1, pp. 11-23.

Kao, R. W., 1993. Defining Entrepreneurship: Past, Present and?. *Creativity and innovation management*, 2(1), p. 69–70.

Kirkby, D. A., 2006. Creating Entrepreneurial Universities in the UK Applying Entrepreneurship Theory to Practice. *Journal of Technology Transfer*, Årgang 31, p. 599–603.

Kotler, P. & Zaltman, G., 1971. Social Marketing: An Approach to Planned Social Change. *Journal of Marketing*, July, 35(3), pp. 3-12.

Kramer, B., 2014. *There is No B2B or B2C: It's Human to Human: #H2H*. s.l.:PureMatter.

- Kuratko, D. F., 2005. The Emergence of Entrepreneurship Education: Development, Trends, and Challenges. *Entrepreneurship theory and practice*, 29(5), p. 577–598.
- Kvale, S. & Brinkmann, S., 2009. *Interview: introduktion til et håndværk*. 2 red. s.l.:Hans Reitzels.
- Lee, N. R. & Kotler, P., 2011. *Social marketing: Influencing behaviors for good*. 4 red. s.l.:Sage publications.
- Manoff, R. K., 1985. *Social marketing: New imperative for public health*. s.l.:Praeger Publishers Inc .
- Misener, L. & Mason, D., 2006. Creating community networks: Can sporting events offer meaningful sources of social capital?. *Managing leisure*, 11(1), pp. 39-56.
- Norbert, E., 2001. *Society of individuals*. s.l.:Bloomsbury Publishing.
- Oxford, U. o., 2017. <https://www.ox.ac.uk>. [Online]  
Available at: <https://www.ox.ac.uk/research/support-researchers/using-research-engage/start-a-company?wssl=1>  
[Senest hentet eller vist den 17 07 2017].
- Patton, J. R., Cronin, M. E., Bassett, D. S. & Koppel, A. E., 1997. A Life Skills Approach to Mathematics Instruction: Preparing Students with Learning Disabilities for the Real-Life Math Demands of Adulthood. *Journal of learning disabilities*, March, 30(10), pp. 178-187.
- Pedersen, S. M., 2017. Arbejdsløshed rammer nyuddannede: Disse faggrupper har flest ledige. *TV2 News*, 30 January.
- Richards, G. & de Brito, M. P., 2013. The future of event as a social phenomenon. *Exploring the social impact of events*.
- Rienecker, L., 2014. *Den gode opgave*. s.l.:Samfundslitteratur.
- Sandoval, W. A. & Bell, P., 2004. Design-Based Research Methods for Studying Learning in Context: Introduction. 39(4), pp. 199-201.
- Schou Lauridsen, N., 2016. *Sruderende fra andre EU lande er en god forretning*, s.l.: Tænk tanken Europa.
- Schumpeter, J. A., 1934. *The Theory of Economic Development*. s.l.:Oxford University Press.

- Segal, G., Borgia, D. & Schoenfeld, J., 2005. The motivation to become an entrepreneur. *International Journal of Entrepreneurial Behavior & Research*, 11(1), pp. 42-57.
- Sitkin, S. B., 1992. Learning through failure: The strategy of small losses. *Research in Organizational behavior*, Årgang 14, pp. 231-266.
- Stagars, M., 2014. *University Startups and Spin-offs: Guide for Entrepreneurs in Academia*. s.l.:Apress.
- University, A., u.d. *Sea AAU*. [Online]  
Available at: <http://www.sea.aau.dk/inkubator/>
- Weinreich, N. K., 2006. What is social marketing. *Weinreich Communications*, Årgang 10.
- Williams, C. C., 2006. *The hidden enterprise culture. Entrepreneurship in the underground economy*. s.l.:Edward Elgar Publishing Limited.
- Aalborg-universitet, 2016. *Aalborg University*. [Online]  
Available at: <http://www.aau.dk/om-aau/aau-i-tal/studerende/>  
[Senest hentet eller vist den 29 07 17].