Thesis Description

This thesis explores the topic of how financial sponsorship as an EECA may have a role in the development of student startups. The researchers do this by conducting a case study of eight startups at a large Norwegian university.

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Preface

This master's thesis was written by two master students studying at the NTNU School of Entrepreneurship. The thesis aims to investigate how financial sponsorship as an extra-curricular activity may have a role in the development of student startups. The researchers' study TrønderEnergi-bidraget, a pre-seed funding grant available for all students at NTNU.

We would like to thank all the startups that were willing to share their experiences and thoughts regarding this subject. Further, we thank TrønderEnergi for contributing to the student startup ecosystem year after year. We also extend our gratitude to Spark* NTNU who manages the funding grant, for their enthusiasm and for helping us gather data.

Last but not least, we would like to thank our supervisor Dag Håkon Haneberg, for his continuous wisdom, patience and positivity, we could not have done it without you. In addition, we acknowledge Lise Aaboen, who is always available and always knows the correct answer in our times of distress. We thank you all for your assistance.

Trondheim, June 11th

Abstract

A growing demand for new tools to teach entrepreneurship (Schwartz & Malach-Pines, 2009) has caused entrepreneurship based extra-curricular activities (EECAs) to emerge as a significant part of universities' entrepreneurship education. An increasing number of students are finding entrepreneurship to be an exciting career choice (Berggren & Lindholm Dahlstrand, 2010; Fini et al., 2016), which has led to a rising number of student startups throughout the world. In performing a literature review of the field of EECA, the researchers of this thesis have found two research gaps. First, the literature on such activities focuses heavily on the role of extra-curricular activities in increasing individual students' entrepreneurial intent, learning, and motivation. Second, the field's prominent authors mention financial sponsorship as a mean for supporting student startups but are yet to perform targeted studies on the role of such sponsorship. Therefore, this thesis seeks to explore financial sponsorship as an entrepreneurship based extra-curricular activity and its role in the development of student startups.

The researchers have performed an exploratory study of a pre-seed funding grant at a large Norwegian university. Empirical data has been collected by conducting semi-structured interviews with co-founders from eight different student startups that have received funding from the grant. This data is supported by two sources of secondary data that increase the validity of the researchers' findings. To understand financial sponsorship as an EECA, a theoretical framework is created based on EECAs and organizational sponsorship literature, which forms the basis for analyzing the empirical data.

The financial sponsorship plays the roles of providing funding, strategic guidance, entrepreneurial learning, and motivation for student startups. Financial sponsorship may assist in developing student startups by providing context-specific, targeted funding. The sponsorship process aids startups in creating strategies to perform these activities. In doing this, the process facilitates the development of business skills needed to engage in startup development through entrepreneurial learning. In addition, it develops the motivation of student entrepreneurs, so that they continue the startup development process.

Sammendrag

Entreprenørskapets økende viktighet har skapt et behov for nye måter å lære det på (Schwartz & Malach-Pines, 2009). Dette har ført til at utenomfaglige entreprenørskapsaktiviteter (EECAs) har fått økt fokus på universiteter (Claudia, 2014). Et økende antall studenter identifiserer entreprenørskap som en spennende karrierevei (Berggren & Lindholm Dahlstrand, 2010; Fini et al., 2016), et faktum som har ført til vekst i antall oppstartsbedrifter skapt av studenter på verdensbasis. Et litteraturstudie gjennomført av forfatterne har avdekket to områder som er mangelfullt adressert i litteraturen. For det første fokuser litteraturen nesten utelukkende på hvordan slike aktiviteter kan skape læring og motivasjon for individuelle studenter, fremfor studentoppstarter. Feltets fremstående forskere nevner finansiell støtte som en slik aktivitet, men har fortsatt til gode å gjennomføre studier som forstår rollen til slik støtte. Basert på dette, er hensikten med denne oppgaven å undersøke hvilken rolle finansiell støtte som en EECA har på utviklingen av studentoppstarter.

Forfatterne har gjennomført et eksplorativt studium av en finansiell støtteordning i en studentinkubator på et stort norsk universitet. Empirisk data har blitt samlet inn gjennom semi-strukturerte intervjuer med grunnleggerne av åtte ulike bedrifter som har mottatt støtte fra ordningen. Disse dataene komplementeres av to kilder med sekundærdata som støtter opp forfatternes funn. For å forstå finansiell støtte som en EECA har forfatterne skapt et rammeverk bestående av teori fra organizational sponsorship og EECAs som brukes til å analysere dataene.

Finansiell støtte gir finansiering, strategisk veiledning, entreprenøriell læring og motivasjon for studentoppstarter. Finansiell støtte kan bidra til å utvikle studentoppstarter ved å gi de kontekstspesifikk, målrettet finansiering. Prosessen hjelper oppstartsbedriftene å skape strategier for å gjennomføre disse aktivitetene. Ved å gjøre dette fasiliterer den finansielle støtten for utvikling av konkrete ferdigheter som trengs i utviklingen av oppstartsbedrifter, gjennom en entreprenøriell læringsprosess. Videre utvikler prosessen også motivasjon for studententreprenørene, slik at de fortsetter forretningsutviklingsprosessen.

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1.0 Introduction

This master thesis focuses on entrepreneurship based extra-curricular activities (EECAs). The researchers will study financial support as an EECA by using organizational sponsorship as a theoretical lens.

1.1 Importance of Topic

The increased importance of entrepreneurship has incentivized the creation of more tools that enable entrepreneurship to be taught (Schwartz & Malach-Pines, 2009), leading to an increase in the focus on extra-curricular activities (Claudia, 2014). The higher education institutions are a crucial part of this trend, following new demands in terms of innovative and entrepreneurial activities from governments across Europe (McGowan et al., 2008). Students have their careers ahead of them and are considered an important group of potential entrepreneurs (Schwartz & Malach-Pines, 2009). This is underlined by the fact that for every single new company started by university-faculty, there are over twenty new businesses created by former students (Eesley & Roberts, 2011). An increasing number of students are finding entrepreneurship to be a reasonable and exciting career choice (Berggren & Lindholm Dahlstrand, 2010; Fini et al., 2016), and in general, students are far more likely to found new companies than their professors (Astebro et al., 2012). Offering value-adding activities that facilitate and stimulate student entrepreneurship, is one of the biggest challenges for educational institutions (Rae, 2007). In light of these developments, extra-curricular activities have emerged as an important topic, and a significant part of designing the future university-based entrepreneurship ecosystems (Claudia, 2014).

1.2 Entrepreneurship based extra-curricular activities

As introduced above, entrepreneurship based extra-curricular activities (EECAs) have become an essential part of teaching entrepreneurship in universities (Claudia, 2014). EECAs can be defined as any non-curricular, non-accredited activity in a university context, that attract and engage students in a process of learning by doing leading to the creation and development of startups (Claudia, 2014; Pittaway, 2011). This can be activities like competitions, internships, workshops,

incubation, business support, etc. These activities occur both as individual events and as a part of student clubs or societies (Pittaway, 2011). More often than not, these activities are led and facilitated by students, for example, through peer-to-peer mentoring (Gimmon, 2014). EECAs can lead to learning for individual students (Claudia, 2014; Pittaway et al., 2011; Preedy & Jones, 2015), and contribute to progress and resource-acquisition in the startup creation process for the student startups (Watson et al., 2015; Fini et al., 2016; Marques, 2016).

EECAs contributes by teaching and motivating individual students through engaging activities (Claudia, 2014). It can influence individual students' relation to entrepreneurship, by, for example, raising their entrepreneurial identity aspirations (Qureshi et al., 2016). This influence can also increase students' entrepreneurial self-efficacy (Watson et al., 2015; Bosma et al., 2011), mindset (Bell & Bell 2016a; Ridley et al., 2017), and intentions (Qureshi et al., 2016; Watson et al., 2015). In addition to influencing their motivation, EECAs can also help individual students develop entrepreneurial skills (Preedy & Jones, 2015; Wright et al., 2017). These activities can lead to raising competencies that are pivotal in startup development, like communication (Bell & Bell, 2016a; Macy & Walker, 2002), pitching (Watson et al., 2015; Watson et al., 2018), networking (Edwards, 2001; Bell & Bell, 2016b) and teamwork (Bell & Bell, 2016a). Furthermore, they can make students feel more serious about their startup, which causes students to progress with entrepreneurship as a more viable option (Watson et al., 2015).

EECAs can create value for new and existing student startups (Fini et al., 2016), and contribute to the ideation process and help progress already initiated student projects (Watson et al., 2015). Furthermore, activities might help streamline a startups product offering, and even bring in important clients through networking sessions (Slotte-Kock & Coviello 2009; Anderson et al., 2010). Through EECAs, student startups can also acquire resources like financial support (Laud et al., 2015; Watson et al., 2018) and office space (Culkin, 2013; Dahms & Kingkaew, 2016), as well as gain PR opportunities (Watson et al., 2015). In light of the importance of the topic presented in section 1.1, and the nascency of the research on extra-curricular activities, the field is in need of further empirical studies (Robinson et al., 2016; Pittaway et al., 2015). This is, in particular, valid for EECA's influence on student startups, as only a limited part of the literature has focused on its influence (Fini et al., 2016). A focused study of the role and influence of these activities into

student startup development would add value to the field of university enterprise activity more generally (Preedy and Jones, 2015).

Organizational sponsorship

Support provided to student startups and student entrepreneurs as extra-curricular activities could also be understood as organizational sponsorship. Organizational sponsorship is defined as mechanisms and activities that aim to support the development process of startups (Amezcua et al., 2013). Because creating new organizations often entail a certain amount of risk due to suffering from the liability of newness (Stinchcombe, 1965), sponsorship can be expedient to reduce uncertainty (Amezcua et al., 2013; Flynn, 1993a; 1993b). Sponsorship may aid these organizations by bridging them to their environments, or by buffering internal resources to avoid resource dependency from external sources. This can be accomplished by performing activities such as networking, field-building, or providing direct support in the form of office space or financial aid (Amezcua et al., 2013).

Financial Sponsorship

While the literature on EECAs covers a lot of sponsorship activities, financial sponsorship is not covered sufficiently, although it is an important part of the organizational sponsorship literature. In the early stages of a new business, financial aid is often rare to come by, and even small amounts of financial support may be crucial (Laud et al., 2015; Watson et al., 2015; Watson et al., 2018). This can be provided by universities as part of extra-curricular activities like funding grants or business plan competitions (Preedy & Jones, 2015; Watson et al., 2015). Although financial support for new organizations has been mentioned in some regard in the EECA literature (Edwards, 2001; Laud et al., 2015; Watson et al., 2015; Watson et al., 2018; Wright et al., 2017), there is no research focusing solely on this type of sponsorship. However, it is evident that there is a need for this research on the outcomes of financial sponsorship in a university context (Watson et al., 2015). Moreover, previous studies have rarely discussed how sponsorship can influence the development of startups in the context of their relations and integration into the university-based entrepreneurship ecosystems. In light of the increased importance of student entrepreneurship, the need for studies to understand EECAs' influence on student startups, in addition to the lack of research on financial sponsorship, this thesis seeks to address this gap. Therefore, understanding

what role financial sponsorship plays for student startups will be the main focus of this master's thesis.

1.3 Purpose of the Study

As part of extra-curricular activities, student startups gain access to an array of sponsorship activities. How they benefit from these activities and what role they have is interesting because of the increasing importance of student entrepreneurship, and the need for more developed tools for entrepreneurship to be taught. By investigating this phenomenon, this thesis might have implications for policy makers that facilitate EECAs. Because of the lack of research of financial support for student startups in a university context (Watson et al., 2015; Motoyama & Knowlton, 2016), the researchers will investigate how this type of sponsorship activity influences startups founded by students. Thus, the researchers have formulated the following research question:

How may financial sponsorship as an EECA
have a role in the development of student startups?

The subjects of the study will be *student startups* and the key student entrepreneurs in each startup. The study will explore the process of applying for and receiving *financial sponsorship,* and what *role* this type of sponsorship may have on the *development* of *student startups.* In keeping with the exploratory nature of this study, the researchers have chosen to ask *how* sponsorship may play a role in this development. The sponsorship is offered in the context of a student startup incubation process, and the researchers will map a variety of factors connected to this context, to better understand the situation the student startups were in when receiving financial support and to discuss and reflect upon differences between each student startup studied.

1.4 Contribution

Although financial support has been mentioned in some regard in the EECA literature, there is a need for more research on the outcomes of such activities (Watson et al., 2015). Furthermore, there is limited research focusing on the role of EECAs for student startups (Fini et al., 2016), as most researchers in the field focus on the student entrepreneurs that founded the startups. To address this gap, this thesis aims to develop the limited literature on financial sponsorship as an EECA, by focusing on how this type of sponsorship may have a role in the development of student startups. In doing this, the researchers will add to the literature by highlighting what influence this type of activity has in relation to other central EECAs. In addition to the contribution to the literature, this thesis contributes to policy makers at universities, providing them with insights into what the role of financial sponsorship could consist of when aiding in the development of student startups.

1.5 Structure of the thesis

In the next section, a frame of reference is presented, with theoretical concepts from the fields of EECAs and organizational sponsorship. Furthermore, a modified framework based on the literature will be presented. After the introduction and frame of reference, the researchers' method for collecting data is introduced, followed by an overview of the results. These results will then be analyzed based on the theoretical framework. Lastly, the findings are discussed, and practical implications and further research possibilities are presented.

2.0 Frame of Reference

In order to understand how sponsorship may play a role in the development of student startups, the researchers will need to create a framework for investigating financial sponsorship as an extra-curricular activity. To create this framework, a literature review of the current studies on EECAs has been performed. Furthermore, the researchers will explain key concepts in the field of organizational sponsorship, as well as present how these two fields are connected. This frame of reference will be completed by presenting a modified framework based on EECA and organizational sponsorship literature, which forms the basis for analysis and discussion.

2.1 Defining entrepreneurship based extra-curricular activities (EECAs)

The field of entrepreneurship based extra-curricular activities is a relatively new field which has seen an increased focus in the last decade. The field is a part of the literature on entrepreneurship education and more specifically, entrepreneurial learning. Articles about EECAs can often be found in journals such as Entrepreneurship & Regional Development, Industry & Higher Education, and International Small Business Journal. Ninety-one percent of the universities in England offered EECAs in 2010 (Rae et al., 2012), which indicates that it is a well-known mechanism for entrepreneurship education. Compared to the rest of the literature on entrepreneurship education, the field is undeveloped based on the number of articles available in the largest databases.

In table 2.1, the researchers provide an overview of the key studies in the field and explain how the term EECA is defined in each article. The literature was acquired and selected following Petersen et al. (2019) steps in a systematic mapping process. This provided a general overview of the literature on EECAs, which the researchers have compiled into a collection of central articles in the field. The purpose of the table is to comprehend the different perspectives that the authors have of the field have on EECAs, to be able to create a definition that fits this thesis. By gathering a vast understanding of the different viewpoints and formulations, the researchers can establish a frame of reference that is applicable for the study. Therefore, how EECAs are defined, and the characteristics described are the most important part of the table below.

Table 2. 1 - Summary of prominent EECA literature

Research article	Type of study (context + focus)	EECA Definition + Characteristics
Edwards (2001)	*EECAs in the form of an enterprise club.* The author investigates if the enterprise club has helped develop new skills and what the individual students have gained that will help them start a new business.	The article does not mention the word "extra-curricular" explicitly, but the research was performed before the popularization of the term. The enterprise club events take the form of guest speakers, free small business counselling, and free business workshops.
Pittaway et al. (2011)	*EECAs in the form of student entrepreneurship clubs and societies.* The authors explore the impact of how entrepreneurship societies and clubs simulate entrepreneurial learning.	EECAs defined as "informal, non-accredited student-led societies or clubs whose main goal is to attract students who are interested in learning about enterprise and developing enterprising skills to either start their own businesses or to become more enterprising people".
Rae et al. (2012)	*EECAs seen as a part of a university's support provision for teaching entrepreneurship.* The authors study the scope of EECAs and other enterprise support types in the UK, attempting to measure how, where, and how often enterprise learning occurs.	The authors do not provide a definition of EECAs. The overarching categories that are measured that can be considered EECAs are: "support for business idea/planning, business startup support, and startup funds."
Claudia (2014)	*EECAs are the core focus of the article.* The author explores which EECAs are the most common, and the EECAs impact on student learning process, in order to understand the extent to which such activities simulate entrepreneurial learning for the student entrepreneur.	EECAs defined as "informal education, non-accredited students activities like: games, competitions, clubs and societies, summer schools, exchanges, mentoring, job shadowing, internships, workshops, financial support, incubation, business support, simulation case studies in enterprise education, speeches by entrepreneurs and role models, networking events and so on."

Pittaway et al. (2015)	*EECAs in the form of student clubs.* The authors explore student-entrepreneurship clubs, why students engage in them, and what learning benefits they provide.	A student club is defined as "an autonomous group of students who meet regularly with the express aim to enhance their personal learning around a given topic or theme, in this case, entrepreneurship."
Preedy & Jones (2015)	*EECAs seen as enterprise support activities/extra-curricular enterprise activities.* The authors study enterprise support at universities, what is offered, and its effects on enterprise learning.	Defines these activities as "The process of equipping students (or graduates) with an enhanced capacity to generate ideas and the skills to make them happen (QAA, 2012, p. 2)." The activities studied consisted mainly of networking events, business advice sessions, and workshops.
Preedy & Jones (2017)	*EECAs seen as extra-curricular enterprise activities.* The authors study how student entrepreneurs may engage in entrepreneurial learning through participation in extra-curricular enterprise activities and student-led enterprise groups.	The authors criticize Pittaway et al's. (2011) definition, and state that their study examines "formalized groups initiated by students, led by students, for the purpose of fostering entrepreneurial learning, skills, and activity among their members."
Arranz et al. (2017)	*EECAs seen as extra-curricular activities.* The authors examine the effect of curricular and extra-curricular activities on the entrepreneurial motivation and intentions of university students.	EECAs defined as "the support for cognitive, informative/ formative and instrumental actions for the materialization of entrepreneurship intention." They investigate topics like conferences, simulators, entrepreneurship facilities, and entrepreneurial spirit and values.
Buchnik et al. (2018)	*EECAs seen as entrepreneurial activities/entrepreneurship activities.* The authors investigate how students go from entrepreneurial intention to new venture creation through entrepreneurial activities. They attempt to find evidence that these activities take students from intention to skill-building to launching a startup.	EECAs not explicitly mentioned, the authors use the term entrepreneurial/entrepreneurship activities. This includes courses, business competitions, and startup simulations. These activities are both curricular and extra-curricular.

EECA is an umbrella term covering activities such as competitions, internships, workshops, incubation, mentoring, networking, and financial support. The researchers have in this thesis chosen to use entrepreneurship based extra-curricular activities as the terminology for the aforementioned activities, as it seems the most appropriate based on the activities that will be studied.

Types of extra-curricular activities and organizations

There are several types of different EECAs, each with different functions and outcomes. Preedy & Jones (2017) found that networking-events were the most popular extra-curricular activity, followed in turn by guest speaker events; coaching and mentoring activities; competitions and workshops; student-led activities and social events. Preedy & Jones (2015) find similar results, looking mainly at networking events, business advice sessions, and workshops. Edwards (2001) finds that the enterprise club he investigates offers networking, workshops, business plan competitions (BPCs), mentors, and speaker events. Lectures and stories from potential role models play an important role in developing intent and confidence (Buchnik et al., 2018). This coincides well with Claudia's (2014) findings, stating that the activities that included entrepreneurial guest-speakers, workshops, and pitching competitions were especially important. In their large quantitative study, Rae et al. (2012) find that activities like idea generation, business planning, venture creation, and networking events are growing in size and importance in the field. Although many activities are considered effective, Arranz et al. (2017) find that extra-curricular activities were most efficient if they allowed students to search for business opportunities as well as provide suitable support with which to develop them. Preedy & Jones (2015) also highlights the value of support and find that financial sponsorship is preferred in the form of grants instead of loans, but that the most important support comes in the form of mentoring and tailored advice.

EECAs often occur at student entrepreneurship clubs (Pittaway et al., 2011; Pittaway et al., 2015). A student entrepreneurship club is defined as a regular group of students who meet by themselves with the goal of learning more about entrepreneurship. A student club is a typical context where EECAs occur. The students attend out of their own will, to develop entrepreneurial skills in a non-curricular setting. The number of student clubs has risen (Rae, 2012), and Pittaway et al. (2015)

argue that investing in these clubs is money well spent as they produce more entrepreneurial students.

Students' motivation for attending

Students have different motivations to engage in entrepreneurship based extra-curricular activities. Preedy & Jones (2017) found that participants perceived their engagement in the activities as an opportunity to enhance their entrepreneurial learning and a means to advance a current or future startup. The findings of Pittaway et al. (2011) mostly support this, as they found students' motivations for participating to be prepared for starting a business as well, in addition to developing transferable skills, gaining practical experience and enhancing employment. Preedy & Jones (2017) did find some other motivations as well, but the common denominator between the students was the interest in learning how to become an entrepreneur. This motivation was based on underlying assumptions regarding entrepreneurship, such as a need for autonomy, a desire to make money or create value in society.

EECAs increase entrepreneurial intent

Entrepreneurship based extra-curricular activities have a clear influence on the fostering of future-entrepreneurs (Preedy & Jones, 2015). Lectures and guest-speakers as EECAs ignite interest in entrepreneurship for students (Buchnik et al., 2018), and being a part of student clubs increases confidence as well as a willingness to become entrepreneurs. (Pittaway et al., 2015). Moreover, students at such clubs can develop ideas in addition to increasing their entrepreneurial intent (Edwards, 2001). The same goes for business plan competitions, as Qureshi et al. (2016) state that the longer the student entrepreneur spend writing a business plan, the more it increases entrepreneurial intentions and identity aspirations. Arranz et al. (2017) argue that intent only gets the student entrepreneur so far and that the main contribution of extra-curricular activities should be transforming intentions into projects.

EECAs increase entrepreneurial self-efficacy

Students can gain confidence by participating in practical entrepreneurship exercises in a university setting (Rae et al., 2012). This is supported by Claudia (2014), who states that experiencing entrepreneurship firsthand increases self-confidence. This outcome can also be achieved by being part of a student club (Pittaway et al., 2011). They find that students have more

confidence in the startup development process and when developing new projects. Furthermore, being part of the club leads to changes in self-efficacy when considering the students' management, presentation, networking, and negotiation skills. Taking part in a business plan competition may also raise self-efficacy, by taking part in experiential learning tasks and following the same project over time (Watson et al., 2015).

EECAs facilitate entrepreneurial learning

EECAs allows for entrepreneurial learning and skill development through extra-curricular activities and practical exercises (Rae et al., 2012). Preedy & Jones (2017) explored the phenomenon of entrepreneurial learning through extra-curricular activities by demonstrating how potential entrepreneurs can accelerate their entrepreneurial learning processes through EECAs. The skills obtained were general development of entrepreneurship skills as well as increased social capital and personal growth. Hands-on experience with entrepreneurship in a low-risk setting is of great benefit when learning entrepreneurship and provides the development of skills needed to engage in new venture creation (Claudia, 2014). This is in line with the findings of Preedy and Jones (2015) who looked at the need for wide-range enterprising skills and experience when starting a business and found that extra-curricular activities aid in developing these skills. This is supported by Buchnik et al. (2018), who find that experiential learning activities develop skills by simulating startup development through events. A way of achieving this type of learning is attending business plan competitions (Bell & Bell, 2016; Watson et al., 2018), as it facilitates learning by doing.

Pittaway et al. (2011) explore student clubs' influence on student learning in order to understand how such activities simulate entrepreneurial learning. They find that clubs and societies have real learning benefits for students, and there is certainly evidence that they develop the requisite skills to engage in startup development. First, 'learning by doing', 'action learning' and gaining experience are all seen to be one of the main benefits that students gain and are often seen by students to be superior forms of learning compared to traditional forms experienced within the curriculum. Second, one of the major benefits that entrepreneurship clubs and societies provide is an opportunity to engage in social learning within a relevant community. Along with Pittaway et al. (2011), Pittaway et al. (2015) conclude that it is not possible to entirely simulate entrepreneurial

learning in any context that does not create financial and emotional exposure. It seems that these aspects of entrepreneurship only really create learning opportunities when experienced firsthand. Edwards (2001) find that in a similar context, an enterprise club, potential, and existing entrepreneurs have a place to share experiences and learn from each other. Through an array of activities, participants in the club develop their skills, knowledge, and connection as entrepreneurs and business individuals.

Summary entrepreneurship based extra-curricular activities

Several different extra-curricular activities have been researched, and the most common seem to be networking and speaker events, mentoring, and competitions. The literature in the field, while fairly new, finds significant evidence that these non-accredited activities facilitate entrepreneurial learning, develop business skills, as well as grow entrepreneurial intent and self-efficacy. It is evident from the literature that the field focuses little on the development of student startups, and rather the individual students that run them or aspire to become entrepreneurs. The connection of the field to startup progress seems to be through the development of the student entrepreneurs that create them rather than through organizational support.

2.2 Organizational sponsorship

Building on the literature from resource dependence theory (Pfeffer & Salancik, 1978), organizational ecology and the liability of newness (Stinchcombe, 1965), organizational sponsorship explains how local resources are important in aiding the survival of new businesses (Amezcua et al., 2013). For startups, resource acquisition is a major source of uncertainty, but organizational sponsorship reduces the level of uncertainty by providing an increased amount of available resources (Amezcua et al., 2013; Flynn, 1993a; 1993b). While searching for articles in the field, the newness of organizational sponsorship has become apparent. The researchers will rely on the key findings of Amezcua et al. (2013) and Flynn (1993a, 1993b) as well as literature on EECAs as support provisions.

2.2.1 Bridging and buffering mechanisms

Amezcua et al. (2013) propose two main mechanisms of organizational sponsorship, buffering and bridging. Sponsorship can buffer new organizations, which means providing them with direct resources that allow them to be less dependent on external resources before being viable (Amezcua et al., 2013; Flynn, 1993a; 1993b). Buffering mechanisms facilitate the development of internal resources, by, for example, subsidizing office-space, product development, or employee training. Receiving this type of sponsorship allows organizations to establish and grow their resource base, effectively minimizing risk when it comes to dependency on external actors. Bridging, as a sponsorship mechanism, aims to supply new organizations with connections to the entrepreneurial environment, and the accompanying resources that are available (Amezcua et al. 2013). In contrast with the buffering mechanisms, bridging allows organizations to expand their network and take advantage of external resources and the opportunities they may provide. Instead of viewing the surroundings as a source of competition and actors that may cause resource dependencies, it is considered to be a collection of potential stakeholders that may contribute with social capital and sources of support. Buffering views external resource dependencies as risky as they may not be reliable over time, whereas bridging mechanisms accept this type of risk and aims to use the environment to perform collaborative value-adding activities.

2.2.2 Sponsorship Activities

According to Amezcua et al. (2013), sponsorship services can be categorized as networking services, field-building services, and direct support services.

Networking Services

Sponsorship for new organizations might often occur in the form of networking services, that aim to bridge the gap between external resource providers and startups that are in need of said resource. McAdam & Marlow (2007) argue that networking creates value for entrepreneurs through four roles. (1) The provision of new ideas that support entrepreneurial activity. (2) Establishing credibility through strategic partnerships with experienced industry stakeholders. (3) Exchanging knowledge and facilitating learning in an ecosystem. (4) The development of business relations which may lead to an increased chance of achieving enterprise goals and growth. Network relations are often facilitated through structured events or programs with the intent of connecting different

stakeholders that may benefit each other, and through these connections' resources, information, and experiences are exchanged. How useful this information is most likely context-dependent (Aldrich & Ruef, 2006, p. 68). Therefore, a diverse network is important as it allows for advantages regardless of what the student entrepreneur might need network connections for.

Field-building Services

Another form of sponsorship that involves connecting with other parts of the entrepreneurial environment is field-building services, which means interacting with similar organizations aiming to share knowledge and collaborate (Amezcua et al., 2013). Because this activity involves organizations that overlap when it comes to technology or industry and often have the same challenges, startups can increase legitimacy (Romanelli, 1991), and share vital knowledge and resources. These types of sponsorship activities can also contribute to creating communities with several similar startups, which lowers the threshold for collaboration between organizations that operate in the same industry or share other similarities (Bollingtoft & Ulhoi, 2005; Brooks, 1986).

Direct Support Services

Services that involve direct support include activities that lead to the direct transfer of knowledge, capital, and labor to new nascent organizations (Amezcua et al., 2013). In the sponsorship literature, direct support is the only type of activity that may help buffer new organizations, by offering support that helps them avoid resource dependencies, such as subsidies of labor, office space or training. Furthermore, direct support may assist new organizations with bridging the gap with its environment, for example, by providing mentorship programs.

2.3 Financial Sponsorship

As mentioned in section 1.2, financial sponsorship is an undeveloped topic in the field of EECAs, but an important part of the direct support provisions explained by the literature on organizational sponsorship. Understanding the sponsorship activity in both the field of EECA as well as organizational sponsorship creates a baseline for the researchers to conduct their study. A common way of sponsoring nascent organizations is providing them with financial aid in the form of subsidies, grants or connections to private funding like venture capitalists (Amezcua et al., 2013;

Flynn, 1993a; Flynn, 1993b). This sponsorship activity can help buffer the internal resources of such an organization or bridge the gap for businesses that need capital and legitimacy. Students participating in EECAs can utilize sponsorship from the entrepreneurial ecosystem to connect with potential funding opportunities, providing direct and indirect support in the form of grants, business plan competitions, and university seed funds (Wright et al., 2017). Some universities also provide seed capital funds to support early stage student startups. Preedy and Jones (2015) found that the most common type of monetary support at universities are grants rather than loans, although some universities offer both.

In the first stages of a startup, the capital needs are comparably low, and the founders can usually fund these costs by their own pockets or from 'friends, family, and fools', and these costs are often related to the development of a business plan or market research (Mitter & Kraus, 2011). At this time, resources are scarce, and even small prizes between 1000 and 5000 euros from business plan competitions are seen as very important for nascent entrepreneurs (Watson et al., 2015; Watson et al., 2018; Laud et al., 2015). In addition to receiving prize money or grants as a part of university extra-curricular activities, entrepreneurs might learn where to obtain funding either at student clubs (Edwards, 2001) or as a part of incubation (Purwaningsih et al., 2017). Furthermore, students may prepare for these funding processes by learning business writing and pitching, in order to be more prepared when needing to look for investments or other funding (Watson et al., 2018).

2.4 Sponsorship as EECAs

While Amezcua et al. (2013) look at sponsorship activities and its influence on the survival rates of new organizations, the aim of this thesis is to investigate the role of these activities as entrepreneurship based extra-curricular activities for student startups in a university context. After reviewing the literature concerning EECAs and organizational sponsorship, the researchers have found several similarities and connections. The biggest difference in the nature of these literary concepts lies in the goal of the activities. When discussing EECAs, prominent authors in the field underline psychological and individual factors like entrepreneurial learning, motivation, and mindset as the goals of the activities (Arranz et al., 2017; Claudia, 2014; Ridley et al., 2017). On the other hand, organizational sponsorship focuses on the survival of organizations, and how

sponsorship can be used to bridge a startups gaps in knowledge, network, and funding (Amezcua et al., 2013). Although the goals are different, there are several activities that are performed that are considered both EECAs and organizational sponsorship activities. In theory, this means that student entrepreneurs can perform sponsorship activities that are also extra-curricular. Figure 2.1 shows how the different fields overlap and which activities are mentioned in which literature.
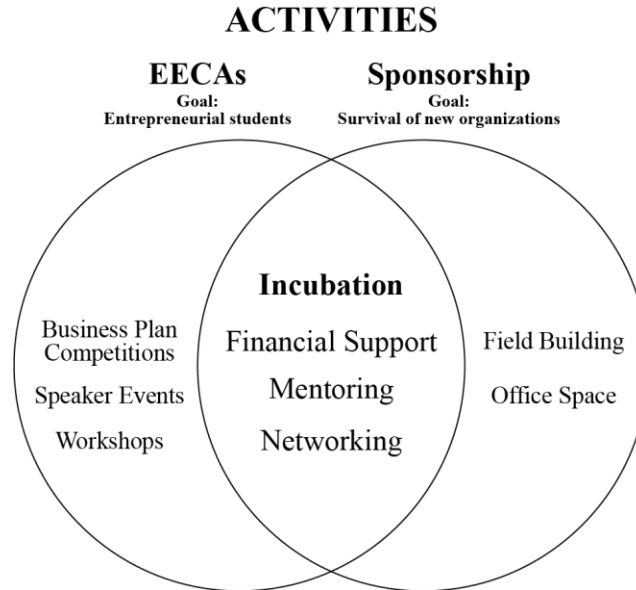
ACTIVITIES

Figure 2. 1 - Venn diagram of EECAs and organizational sponsorship activities

Activities like financial support, networking, and mentoring are mentioned on both sides of the literature. Financial support is described very differently in each field. As a part of the EECA literature, financial support is more often than not mentioned in the context of business plan or pitching competitions. Although some articles discuss grants and some funding mechanisms, none of these papers consider this type of support as extra-curricular activities although they almost always are. The literature speaks to the motivational influence of support, with the support often being the first money student entrepreneurs acquire for their business. In the sponsorship literature, financial support may help diminish resource dependencies by buffering an organization's internal resources. Furthermore, it can increase survival rates and help bridge startups in their environments. Based on the fields' focus on different aspects of what financial support may lead to, the researchers identify that financial sponsorship as an extra-curricular activity might have dual outcomes, both motivating student entrepreneurs, as well as helping reduce risk and support student startup survival and development. The same can be said for networking and mentoring, with the fields seemingly discussing the same types of activities, but with different outcomes.

Networking can occur both in terms of sharing entrepreneurship knowledge to interested students, as well as connect student startups with resource providers or important stakeholders. Mentoring may give student entrepreneurs more motivation and confidence and may contribute to the development of student startups by helping them write applications and helping them develop business skills. It seems evident that these types of activities are intertwined as both learning mechanisms and sponsorship mechanisms in the context of student entrepreneurship. In this thesis, the focus lies on the organizational side of these activities.

Incubation seems to play an important part in both fields. After reviewing both EECA, sponsorship, and incubation literature, it seems that incubation may function as a context for performing both sponsorship activities and extra-curricular activities. Business incubation is a process where an organization supports the foundation and advancement of startups by offering assistance such as office space, financing, networking and mentoring (Amezcua et al., 2013; Mian, 1996). Ollila & Williams Middleton (2011) say that incubation provides essential support and services to the startup. This statement is backed by Sherman (1999), finding that startup failure rate was significantly lower for startups in incubation. Aernoudt (2004) found that the most value-adding mechanisms in an incubation process are very context-specific and dependent on every single startup. This in line with Wright et al. (2017). They argue that because of this, a wide support provision should be offered to be able to offer exactly what the startups need. Wright et al. (2017) identify financial support as an important part of the incubation process. Purwaningsih et al. (2017) agrees with this but argues that the students' motivation is most important, and that funding is less efficient if not complemented by the founders' desire. In addition, in the organizational sponsorship literature, it is seen as the context of field-building activities as well as for providing direct support provisions. As opposed to the physical incubator, an incubation process describes receiving sponsorship to develop a nascent organization. Organizational sponsorship and EECA both use the terms incubator and incubation, but for this thesis, incubation is used as an overarching term that covers several support activities in an extra-curricular setting.

2.5 Theoretical framework

The theoretical framework is created as a tool to understand sponsorship as an EECA in order to explore the purpose of the study. It uses organizational sponsorship as a theoretical lens both in understanding the concept of financial sponsorship, as well as explain the context of which sponsorship is being provided. The researchers use the work of Amezcua et al. (2016) as a baseline for creating the framework and understanding the sponsorship mechanisms. In light of the theoretical similarities and differences between the fields of EECAs and organizational sponsorship, while considering the purpose of the study, the framework combines the two literatures to understand sponsorship as an EECA. The field of EECAs more often than not focus on the student entrepreneur, while organizational sponsorship focuses on the survival of new organizations. The fields are similar in taking the development of the startup into consideration. The researchers highlight the need for understanding the context of which sponsorship is received, to fully comprehend what role financial sponsorship may play for student startup development. Therefore, the study takes other sponsorship activities and the student entrepreneurs' prior experience into consideration. The modified framework aims to explain sponsorship as an extra-curricular activity, how it may influence startup development, and how the context influences this process. The modified framework, as illustrated in figure 2.2 below, works as a tool to analyze the data to address the purpose of the study, stated in section 1.3. Moving forward, the researchers must consider the possible roles of financial sponsorship, but also how contextual factors may influence these roles.
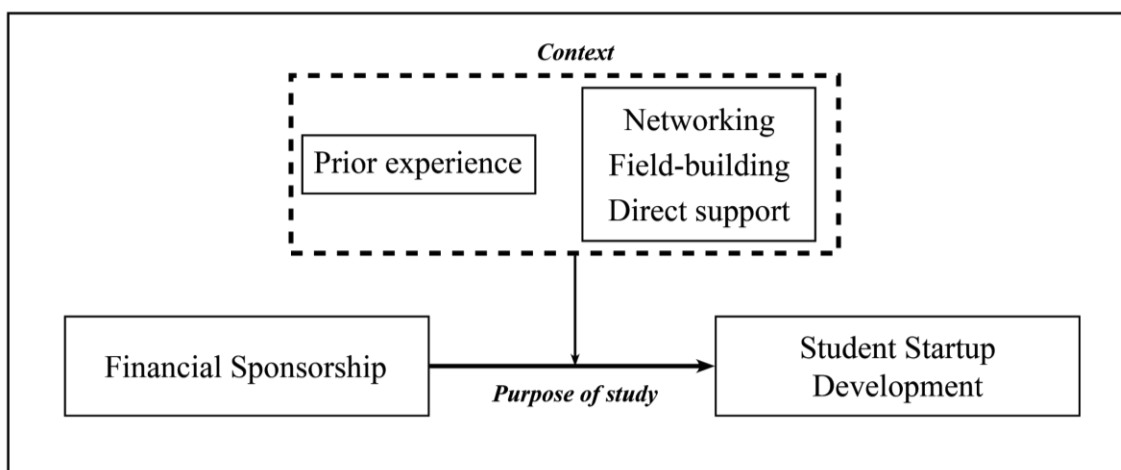

Figure 2. 2 - Theoretical Framework

2.5.1 Purpose of the study

The framework will be used to explore *how financial sponsorship as an EECA may have a role in the development of student startups*. The student entrepreneurs engage in financial sponsorship activities with the aim of developing their student startup. How and why this happens will be examined with an exploratory approach on student startups that have received financial sponsorship as an EECA.

2.5.2 Context

The student entrepreneurs prior experience

Although all the student startups have access to the same sponsorship services, the researchers propose that the student entrepreneurs *prior experience*, namely study program and prior entrepreneurial experience, matters when receiving sponsorship. The student entrepreneurs may take advantage of sponsorship opportunities and perform EECAs differently, based on their prior experience. For instance, a student serial entrepreneur might make better decisions because of their prior experience, or a student entrepreneur with no prior experience may benefit more when utilizing mentorship. In addition, student entrepreneurs may differ in what they spend financial support on, which may influence what role the financial sponsorship has on the development of the student startup. The student entrepreneurs' prior experience is not considered in the organizational sponsorship literature, but what constitutes prior experience is essential in the literature on EECAs. The student's entrepreneurial intent, self-efficacy, skills, and motivation are important when attempting to understand how and why student startups apply for and receive financial sponsorship. The researchers underline that to fully understand the role of sponsorship for the development of the student startup; one must consider the students entrepreneurial intent and experience as well as the sponsorship activities that facilitate startup development.

Sponsorship services

In order to completely understand the phenomenon being studied, the study needs to include the context of what other resources the student startups have available. Some student startups have access to resources like legal mentoring, accounting, office space, and prototyping labs. If this was the case, the student startup would not need to apply for funding to cover such needs. If a sponsor

were to offer all the resources, the student startup would need to become sustainable, financial sponsorship might not be necessary. Therefore, the *sponsorship services* need to be included, because what other resources a student startup has available will most likely influence their capital need in the early stages. As Amezcua et al. (2013) explain, there are several forms of sponsorship activities. Each of the activities offered can be categorized under networking services, field-building services, or direct support services. For instance, the student startup may need to be bridged with networking connections to find customers and key partners or need to be bridged with similar student startups through field-building, in order to share knowledge that is not accessible through other resources. The student startup might need office space, and so the sponsor may buffer the student startup by subsidizing the costs.

3.0 Methodology

3.1 Research Design

The research methodology was chosen in order to gain an in-depth understanding and to investigate *how financial sponsorship as an EECA may have a role in the development of student startups.* The first step of the research method was to conduct the research design of the study. The research design was a single-case study with the use of a qualitative method on eight embedded cases. TrønderEnergi-Bidraget (TEB), a funding grant for student startups, was selected as the single-case study. The eight embedded cases are startups that have been granted financial support from TEB. Because of the exploratory nature of the study, and as the focus was on contemporary events where the researchers had a low degree of control, a case study was conducted and a research question of "how" was used (Yin, 2014).

To gain an in-depth understanding of the phenomenon being studied, the researchers have investigated how the individual startups' participation in the funding grant process influences the development of the student startup. Further, the researchers investigated how additional support activities within organizational sponsorship categories, e.g. networking, field-building and direct-support, are connected to the funding grant process. The case study research could give some indications to the contemporary phenomenon in-depth and within its real-life context, contributing

to the limited research in this field of study. The structure of the research design is illustrated in figure 3.1 below.
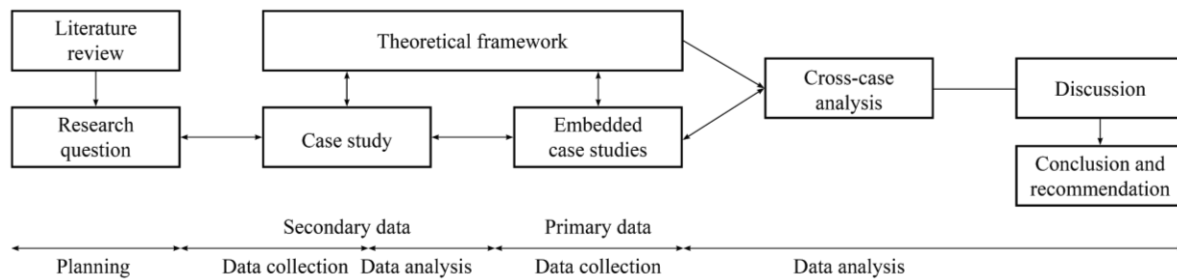
Figure 3. 1 - Structure of Research Design

3.1.1 Selection of TrønderEnergi-Bidraget as case

Case studies are preferable when you need to acquire an in-depth understanding of a social phenomenon (Yin, 2009), such as the role of financial sponsorship in EECAs. The funding grant TrønderEnergi-Bidraget, hereby called TEB, was selected as the single case. The single case has eight embedded cases, consisting of student startups that have been granted financial sponsorship. TEB is intended to be the first financial sponsorship student startups at a large Norwegian University (NTNU) receives. All student startups linked to the university can apply for TEB funding up to the total amount of 2500 euros. The financial sponsorship aims to enable the students to develop their business idea from being just an idea to a real product or service. Through the funding grant process, the startups learn how to proceed when applying for money, how to present in front of a panel, and how to utilize the money at an early stage.

The single case embedded study was favorable with regards to the researchers' knowledge of the dynamics within the single setting of one case, which helped eliminate noise that could have occurred if two different cases were studied. The chosen single case also provided an insight into the social phenomenon that further enhanced insight on how the environment, culture, and different criteria within the case influenced the financial sponsorship process (Eisenhardt, 1989).

The single case of TEB is rare by being a funding grant for university students' startups in the early stages of a pre-seed funding phase, making it worth documenting and analyzing (Yin, 2014). The requirements to apply for TEB are considered as low threshold as it allows for all types of

student startups linked to the university to apply for TEB, as long as the startups are in a pre-seed funding phase. TEB was selected as a financial sponsorship case based on the following arguments:

Table 3. 1 - The arguments for selecting the single-case

I.	The grant is considered as financial support as an EECA
II.	The grant is considered as "soft funding", e.g., no direct requirement for return of investment.
III.	The grant allows all types of startups linked to the university to apply
IV.	The grant offers financial support during the startups' pre-seed phase.

3.1.2 Influencing surrounding environments

The funding grant TrønderEnergi-Bidraget (TEB) is facilitated by Spark* NTNU, a support organization for student startups. Spark* NTNU offers guidance and business competence through mentorship and relevant network connections, events, and pre-seed funding grants. Spark* NTNU does not, among others, have office space as part of its incubation process, but is part of a larger university entrepreneurial ecosystem, and assist in bridging the gap between the ecosystem resources and the startups that are in need of such resources. For instance, access to university office-space, makerspace, and labs. Another part of the university entrepreneurial ecosystem is a Venture Creation Program (VCP) that consists of an incubation process with office space and mentorship program for students that are developing their startup as a part of curricular activities.

3.1.3 The researchers' prior knowledge

The researchers theoretical pre-understanding of the field of study was from an academic perspective, very limited. The researchers are students at the master program at the NTNU School of Entrepreneurship and have gained both theoretical and practical knowledge within the field of entrepreneurship and innovation as part of the program.

The researchers have experience as co-founders of different startups and are employed as mentors in Spark* NTNU. The researchers have been mentors for startups applying for the funding grant TEB, in addition to applying for the funding grant with their own startups. The prior knowledge and experiences have provided the researchers with inside information of the funding grant and its

framework. The researchers' relationship with Spark* NTNU has provided access to the secondary data used in this thesis. The prior knowledge has contributed to a better pre-understanding of the theoretical field of study and has contributed to the data collection and data analysis. The researchers' previous experiences and knowledge may have led to better sorting of the data and to identify important common patterns. The disadvantage of the researchers accesses to, and knowledge of the startups was that the researchers asked questions within a topic that they knew and may not have thought to ask questions about an unfamiliar phenomenon. However, the researchers tried to avoid any bias actions and thus created a semi-structured interview guide, discussed choices made among each other, and sought a second opinion from their supervisors. The knowledge was an advantage when trying to prevent misunderstandings between the interviewee and interviewer.

3.2 Selection Process of the embedded cases

The second step of the research method was to select the embedded cases to study. In the process of selecting these embedded cases, the first step was to identify all the startups that have applied for the funding grant TEB. This was done by searching the TEB database, an Excel document with key figures and characteristics of all student startups that have applied for TEB funding. The TEB database listed 353 applications in total; from this, 277 applications were granted funding, applied by 182 individual startups. The researchers decided to select eight embedded cases to study the single-case, as eight cases are enough to explore the purpose of the study with the chosen research design. A further rationale is based on the time that was available as a too time-consuming data collection and analysis process would influence the quality of the study.

Using a maximum variation sampling method

When selecting the embedded cases, a maximum variation sampling method was used. The purpose of investigating diverse variations, that have emerged in the adaption of having different conditions, was to identify important common patterns that cut across the variations and thus identify similarities and differences in the embedded cases (Palinkas et al., 2015). The sampling

method achieves representativeness and comparability and maximizes the diversity relevant to the research question (Teddlie & Yu, 2007).

Clustering based on maximum variation

The next step was to divide the startups into four clusters as they occur naturally in the population. The startups were divided based on how much of the granted funding they had spent and divided based on whether the startup conducted EECAs as part of a curricular activity (VCP) or as an extra-curricular activity (non-VCP).

Table 3. 2 - The cluster sampling of the embedded cases

	High proportion of TEB spent (>95%)	Low proportion of TEB spent (<5%)
VCP startups	Cluster 1 37 startups	Cluster 2 33 startups
Non-VCP startups	Cluster 3 52 startups	Cluster 4 60 startups

The low or high proportion of the funding grant spent can indicate whether or not the startup conducted the activities they applied for and allows for further investigation into why or why not, and its influence on the development of the student startup. The student startups with a high proportion of funding spent had spent 95 percent or higher of the TEB funding grant, while the startups with a low proportion of funding spent had spent only 5 percent or less.

The clustering of VCP and non-VCP was intended to investigate how the diverse variation between the two groups when it came to how conditions of organizational sponsorship may influence the development of student startups. For example, startups in a VCP have a support system to a greater extent than non-VCP startups. The two have TEB in common, this allowed for an investigation of the startups with the same origin, securing that they were operating under the same regulations, and thus making them more applicable for comparison (Yin, 2014).

Simple Random Sampling of clusters

The startups were further selected using simple random sampling of two cases from each of the four clusters, resulting in eight startups. A summary of the selected startups presented in the table below. The startup name is pseudonymized, and the short description of the business concept is anonymized. The table presents which cluster the startup belongs to, how many times the startup applied for the funding grant TEB and the amount of funds granted. The table also presents the number of founders from the beginning of the startup and the startup's timeline period when the startup was founded until the startup bypasses the pre-seed funding phase.

Table 3. 3 - Summary of the selected embedded cases

	Concept	TEB Application(s)	Team	Timeline period
Waste Compactor	Automatic waste compactor with a B2B focus. Includes both hardware and software.	One apls. Total grant 2500 euros Cluster 1	Day 0: two founders Day n: three	7 months August 2017 - March 18
Recruiting Software	Two-sided recruiting platform, with students as users and B2B customers.	Two apls. Total grant 2200 euros Cluster 1	Day 0: two founders Day n: three	10 months. August 2017 - June 2018
Sleep Machine	A non-medical tool to fall asleep faster, hardware with software, B2C focus.	Two granted apls. (two declined). Total grant 1430 euros Cluster 2	Day 0: two founders Day n: two	11 months. February 2018 - January 2019
Seismic Data Software	Artificial intelligence software for seismic data, with a B2B focus.	Four apls. (one declined) Total grant 2260 euros Cluster 2	Day 0: four founders Day n: six	12 months: August 2017 - August 2018.

Portable Cinema	Glasses for a cinematic experience, hardware with a B2B focus.	Two apls. Total grant 2500 euros Cluster 3	Day 0: two founders Day n: two	6 months: January 2016 - July 2016.
Computer Game	Multiplayer computer game, with a B2C focus.	Three granted apls. (two declined) Total grant 2300 euros Cluster 3	Day 0: fifteen founders Day n: nine	2 years and 11 months: September 2014 - October 2017.
Video Game	Multiplayer video game, software with a B2C focus.	One apls. (partially granted) Total grant 550 euros Cluster 4	Day 0: two founders Day n: four	1 year and 2 months: January 2018 - March 2019
Board Game	Strategic board game with a B2C focus.	One apls. Total grant 500 euros Cluster 4	Day 0: one founder Day n: one	4 years and 2 months: March 2015 - May 2019

Selection Process of interviewees within the embedded cases

The interviewees within the embedded cases were chosen based on their involvement in the startup both during and after the funding grant process. This is in line with Dalland (2012), who argues that the interviewees should have hands-on experience from the process being studied. A summary of the selected interviewees within the pseudonymized startups, and the startup participants' role and attribute are listed below.

Table 3. 4 - Summary of the interviewees within the embedded cases

Startup pseudonym	Participants' role	Participants' attribute
"Waste Compactor"	CEO	M.Sc. Technical and business
"Recruiting Software"	CEO	M.Sc. Business
"Sleep Machine"	CEO	M.Sc. Technical and business
"Seismic Data Software"	CMO	M.Sc. Business
"Video Game"	CEO & CTO	M.A. UX design for both
"Board Game"	CEO	B.Sc. Other
"Portable Cinema"	CTO	M.Sc Technical and Business
"Computer Game"	CEO	M.Sc. Business

3.3 Interview process

3.3.1 Semi-structured interview

The third step of the research method was the interview process. The qualitative data was acquired through interviews as it's considered one of the most central tools to obtain case study evidence (Yin, 2009) and allows the researchers to obtain both retrospective and real-time accounts by those experiencing the phenomenon being studied (Gioia et al. 2012). The interviews were constructed in a semi-structured matter, as it also considered an advantage to use semi-structured interviews when the phenomenon being studied has been limited research (Tjora, 2011), which is applicable to this study. The aim of the interview method was to create a situation of informal conversation, consisting of both closed- and open-ended questions, often accompanied by follow-up queries.

The method is often used when the objective is to gain an understanding of the interviewee's experiences, as well as how the interviewees reflect on it (Kvale & Brinkmann, 2009; Tjora, 2011), both required in this case.

3.3.2 Interview Guide

The researchers decided to conduct a test interview before interviewing the selected startups. The test interview made drastic changes to the interview guide and led to the introduction of the timeline (explained below). The revised interview guide (Appendix A) was used, consisting of a list of topics and key questions. The same interview guide was used for all the interviews, as it would make it easier to compare the findings when analyzing the results. For each interview, the questions were asked in an order that felt natural to the individual interviews, in order to maintain an informal conversation style. The interviews were conducted in person when possible, as establishing personal contact can increase the trust between the interviewer and interviewee (Saunders et al., 2012). Two of the interviews were conducted over video conference. During the interviews, each researcher had a role, and one was responsible for asking questions, actively listening and paraphrasing the interviewees, while the other was responsible for the tape recorder and taking notes on a timeline template. Each researcher had the same designated tasks every time, as Saunders et al. (2012) argues that the process is carried out more efficiently and flawlessly that way. The interview guide was divided into three parts, of which the first part consisted of an introduction, signing of the consent form and general questions regarding the background and the startups business idea. The main part were questions related to the purpose of this study, including the timeline sketch. Rounding off with questions related to the direct support of Spark* NTNU and the funding grant. Afterwards, questions were asked to shed light on any misunderstandings. Each interview lasted approximately one hour.

3.3.3 Timeline

In addition to the interview guide, a timeline sketch was created during the interviews. The interviewees were notified that the events they spoke of would be drawn in a timeline template during the interview. The template is illustrated in Figure 3.4 below. The timeline begins at "day zero", which marks the beginning of the startups. What defines the beginning is defined by the interviewees. The timespan of the timeline varies for each startup as it ends when the startup enters

the seed funding phase. The researchers consider it seed funding when the startup receives the approximate amount of 50 000 euros or more. One of the researchers was tasked with drawing the timeline during the interview, placing events in chronological order, noting down the month and year of the event when it's mentioned by the interviewees. As a result, the timeline presents events the startups have highlighted as important for their business. The timeline was reviewed during the interview to ensure that it was drawn properly.
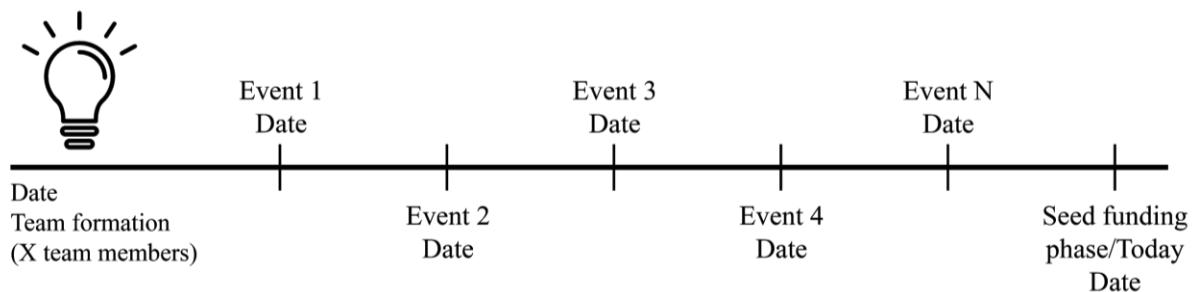
Figure 3. 2 - Timeline template

3.4 Data Collection

After the process of selecting the different projects and interview participants, the fourth step of the research method began. The researchers used a triangulation of methods where their main source of data was the interviews with the participants. The secondary data was used to select the startups as mentioned above, and as documentation that back the participants' statements during the interviews.

3.4.1 Use of secondary data from Spark* NTNU

The funding grant TEB have existed for approximately five years, and in that timeframe, a lot of data has been gathered about the applicants and how the grants have been spent, resulting in multiple data sources. The multiple data sources serve as secondary data for this master thesis and are obtained from its primary source, Spark* NTNU. The secondary data provide insight into the startups' funding grant process and includes data from each step of the grant process, starting with the startups' application process, and ending the startups' request of reimbursement documents. The whole process is documented with key figures and information in an Excel document, hereby

called the TEB database. The multiple data sources include three types of documents representing the process before, during, and after, and is as follows:

Table 3. 5 - Multiple data sources

I.   Three-page application document   II.   TEB database III.   Request of reimbursement document

The funding application process includes a three-page application document and a presentation. The application documents provide insight into the startup, the activities, and the startups' arguments for why the funding should be granted. The presentation lasts ten minutes, where the first five minutes is the presentation in front of a panel, followed by five minutes of questions from the panel. Spark* NTNU have documented all applications in an Excel sheet, i.e., TEB database. The document includes the amount applied for, related activities and amount granted. When the TEB application was only partially granted, the panel's reasoning was noted. Additionally, the document includes when funding has been spent and on what activities it has been spent on. The startups are required to pay the money upfront and then get reimbursed afterwards if they can provide proof, such as receipts, that the applied activities have been carried out. The TEB database was evaluated, and a need for data cleansing was deemed necessary.

3.4.2 Data cleaning process

The TEB database was cleaned, as the integrity of data is critical to ensure high quality data to make decisions upon. The objective of the data cleaning was to fix any data that is incorrect, incomplete, incorrectly formatted, or duplicated. The data cleaning was quality checked by using the associated secondary sources, i.e., three-page application document and reimbursement document. To ensure that the data was consistent across the multiple data sets, the Excel sheet was transformed into a dynamic worksheet and data from other sources were retrieved when there were missing elements to implement. After the cleaning process, the data was approved as reliable, suitable, and adequate to be used in the study.

3.4.3 Data acquisition

The researchers used empirical data from semi-structured in-depth interviews to gather information for the thesis. Data from the interviews were combined with secondary data from Spark* NTNU to increase the likelihood of achieving external validity through analytic generalizations (Yin, 2014). The primary source of data comes from the eight interviews with student startups, including a timeline drawing of highlighted events. The secondary sources of data include documents with information and key figures documented by the funding grants facilitator, Spark* NTNU. Thus, the researchers have collected information from multiple sources, aiming to corroborate the same phenomenon. The use of data triangulation enables a wide variety of evidence, creating a more convincing and accurate case study finding (ibid). The table below summarizes the multiple data sources used, the type of data, and the data' original source.

Table 3. 6 - Summary of the multiple data sources

Data	Category	Source
TEB database	Excel document	Collected from Spark* NTNU
Application document	Documents	Collected from Spark* NTNU
Reimbursement document	Documents	Collected from Spark* NTNU
Semi-structured interviews	Transcription documents	Primary data
Semi-structured interviews	Timeline	Primary data

3.5 Data analysis

The overall data analysis, which was the fifth and final step in the research method, was structured by following a case study approach. As the theory on EECAs was collected, the data was analyzed through subjective interpretations of the startup representatives' perceptions in light of the theory and ending with the collected theory being revised. The interviews were transcribed, coded, and then, together with the timelines, analyzed by examining the findings, categorizing them, and

recombining the evidence. The findings were analyzed in combination with the field of study, presented in the theoretical framework in section 2.5. The chosen method heightened awareness of the startups' unique circumstances while pointing out the particulars of the single-case (TEB) and transferring more conceptual ideas to a broader understanding. The data analysis mostly followed an inductive coding approach, with a cynical analytic process, which consisted of coding, sorting, synthesizing, and theorizing. The data analysis was divided into three phases, first cycle coding method, hybrid method, and second cycle coding method (Saldana, 2013).

3.5.1 Coding the transcripted data (Phase one)

The eight interviews that were verbatim transcribed resulted in 227 pages of transcript. The transcripts were cross examined using other data sources to ensure consistency. This "data overload" was coped with by "coding" the data. The researchers coding strategy is described below, and the computer-aided qualitative data analysis software NVivo was used as a tool to organize and manage the transcribed data. First, a deductive coding approach was chosen to code the transcripts, where the most general codes were determined beforehand to harmonize with the aforementioned framework in section 2.5. The second step was an inductive coding approach, where the coding method was emergent and data driven, providing subcodes, i.e., "a second-order tag assigned after a primary code to detail or enrich the entry" (Saldana, 2013, p.77). The most general code is the "parent" while its subcodes are the "children"; subcodes that share the same parent are "siblings" in a hierarchy (see appendix B for the node hierarchy; Gibbs, 2007 as presented in Saldana, 2013). For the first cycle coding, the selected coding methods were based on the recommended methods for "how" type of research questions (ibid), such as in this study. The chosen methods enable the exploration of participant processes and perceptions found within the data. A set of questions were asked while coding, help to generate the type of answers needed, questions such as *what and why are they trying to accomplish? what assumptions are they making?* or *what is the broader import or significance of this event?* Following by, *what do I see going on here? What surprises or intrigues me?* Other sentences and sections that fell within some predefined topics similar to the search strings in the literature review were also coded.

3.5.2 Recognizing patterns and trends in the transcripted coded data (phase two)

After the first cycle coding of generating initial codes, a hybrid process of the two cycles was conducted. During the hybrid process of coding, the findings for each embedded case and cross-case were noted in a separate document, and highlighted as interesting themes of study, based on the researchers gained knowledge of the literature of study, after conducting a literature review. The hybrid method was used to identify causes, outcomes, and links between the coded data by categorizing the codes and generate themes. When searching for patterns, the first step was to find the relationship between codes, and this was done by asking questions such as *did things happen often or seldom, and how? In a certain order?* Or *did one cause the other?* In addition to registering code frequencies and questioning if there was an underlying meaning among the group of codes (Saldana, 2013). To find the answer, second cycle coding methods were conducted in four steps, described below.

3.5.3 A comparative study on recognized patterns using multiple data sources (phase three)

The first step of the second cycle coding method was pattern coding, used to examine initial codes, identify trends, patterns, relationships, and assigned labels across the startups and the accessible documents. Resulting in classifying and prioritizing of the multiple data sources (Salsana, 2013). The second step was to create a storyline using a theoretical coding method, in combination with the transcripts and timelines. The storyline helped explained the student startup's phenomenon's' in chronological order. It resulted in integrating of the startups' activities and its contexts (ibid). The third step was to conduct a focused coding method. This was done by using NVivo to display code labels in various colors for "at a glance" reference and visual classification. Reviewing similarly color-coded data made it easier to refine First Cycle codes and create new or revised categories. The color-coded data was used to conduct a focused coding method, e.g., to identify the most frequent or significant initial codes, such as "time spent on writing the application" or "*feedback received from the presentation*" and build categories around them, such as "*writing an application*" or "*panels' feedback*". Other data visualizations using NVivo where proven more difficult to use, as most of the data were in Norwegian. For example, the word cloud tool highlighted determinative, conjunctions, and subjunctive words as the most frequently used words in the transcripts. Instead, the second step was coded manually, as the transcripts most frequent or significant initial codes were cross-analyzed and categorize into "*similar to…*" or "*differ from...*".

This led to the identification of the essence of what each theme is about, followed by defining the themes, enabling synthesizing and abstracting (ibid). The fourth step was to conduct an axial coding method to identify core category and related categories and examining the features and the dimensions of these categorize. This was done by determining which codes were dominant and which were less important, by crossing out synonyms, removing redundant codes and select the codes that were representative. This enabled conceptualizing and theory building (ibid). The case analysis was conducted with a combination of data analysis and theory reflection, performed in an iterative process (Eisenhardt, 1989; Yin, 2014), and the results are presented in chapter 4.0.

3.6 Reflection and evaluation of the method

3.6.1 Ethics

The master's thesis follows the ethical and legislative guidelines proposed by the National Resource Ethics Committees and Norsk Senter for Forskningsdata (NSD). The processing of personal data has been reported to, evaluated, and approved by NSD, to be in line with the Privacy Policy Act (GDPR). The researchers conducted the study according to ethical guidelines and handled the data gathered with the highest possible level of care and confidentiality. Interviewees have received information letters and have signed consent forms.

3.6.2 Quality of the data

The study is generalizable to theoretical propositions, not to populations. The aim is to expand and generalize theories (analytic generalization), where the theory in chapter 2.0 will help to identify the other cases of which the results are generalizable. Thus, the use of theory will increase external validity. The data triangulation lowers the potential problem of construct validity, as the multiple sources of evidence essentially provide multiple measures of the same phenomenon, contributing to a higher quality to the study (Yin, 2014). The research has been conducted in a limited timeframe where the conduction of the empirical study and the analysis of the collected data occurred from February 2019 to May 2019. This has limited the study's extensiveness and may have led to some interpretations by the researchers that leads to a decreased trustworthiness of the study. Lincoln

and Guba (1985) outlined four questions about the credibility, transferability, dependability, and confirmability of a study that helped the researchers to assure the quality of their study.

Credibility

The researchers have tried to minimize the objective interpretations of the theory by reading articles from all the major researchers within the field of EECAs and organizational sponsorship (Lincoln & Guba, 1985), such as Pittaway et al., Preedy & Jones, Flynn, and Amezcua et al. The researchers have used a triangulation of methods of data collection, and by using multiple sources of data, the researchers had less room for interpretations (ibid). The authors also minimized their interpretations by having the interviewees check for any misinterpretations on the timeline sketch or from the transcriptions. Lastly, the researchers checked each other's work through the entire process, and have double checked every code, finding, and analysis to ensure that they have stayed within the context of the collected data.

Transferability

The researchers have tried to present the results by describing the events studied, as detailed as possible, based on the collected data (Dalland, 2012). To collect the necessary data, the researchers have interviewed eight representatives of the single embedded case, resulting in a detailed description of the case study, and having tried to gain insight that goes beyond the specific cases of this study, which other researchers can transfer to their preferred context. The findings presented in the thesis may be interesting for policy makers who wish to offer EECAs that contribute to the development of student startups, specifically when considering offering financial sponsorship. Furthermore, it could provide insights into the role of activities like networking, field-building, and direct support, so that universities may consider offering such activities to students.

Dependability

The researchers tried to increase the dependability by having completed an iterative analysis process where the work was reviewed. Further, the data analysis was combined with theory reflection (Lincoln & Guba, 1989). The researchers have tried to prevent the interviewees from ameliorating or alleviating the truth by trying to create a safe environment during the interviews. Examples of such preventive actions were to conduct individual interviews or to reassure the interviewees that they can look through the thesis before it was presented to others.

Confirmability

The researchers tried to facilitate easy tracing of the data back to its original source, by storing the collected data in a database and marking the data during transcription and coding of the interviews (Erlandson et al., 1993). The researchers tried to make it easier by presenting the findings of the eight cases, the eight interview rounds, as well as different codes. The researchers have used citations to substantiate the findings in the thesis, besides being directly translated from Norwegian to English, the citations are original quotes, the use of citations should make it easier to trace every step all the way from the analysis back to the transcribed interviews.

3.6.3 Limitations

The embedded startups were selected from the TEB database, which had some limitations. First, it only contains student startups from one university in Norway. Therefore, the findings may not be applicable in other countries than Norway. The funding grant TEB is in its infancy, as it was established five years ago, and only startups that had been granted funding were included in the database. Thereby the number of applications from individual startups in the database is limited to only 113 startups. At the same time, the database captures the whole population of student startups in a pre-seed funding grant as an EECA in Norway. This gives us a complete overview of financial sponsorship as EECAs in Norway.

4.0 Results

4.1 The startups during their pre-seed funding phase.
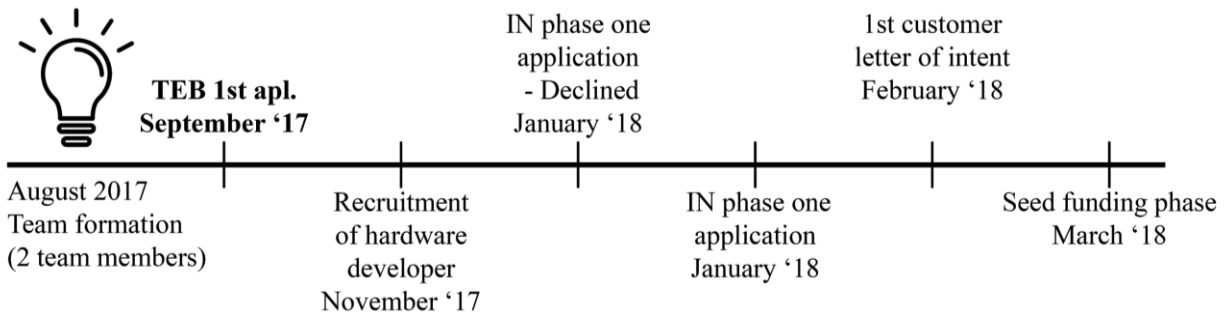
4.1.1 Waste Compactor

Figure 4. 1 - Timeline of Waste Compactor

Waste Compactor's business idea was inspired by a similar business case discovered during an entrepreneurship summer program in 2017. The two founders formed a team and started working in August 2017. In September 2017, one month after initiation, *Waste Compactor* applied for TEB funding grant of 2500 euros to develop a prototype. The strategy was to apply for funding to perform prototyping activities from TEB, and funds to perform market research from the governmental funding grant IN phase one. The application to TEB was granted and thus enabled *Waste Compactor* to begin developing the first prototype. The aim of the prototype was to test the compression technology to map out potential technical challenges and weaknesses in the design. In addition to basic pilot testing by potential users for feedback on user experience and design. The total cost of the prototype was estimated at 3100 euros, and *Waste Compactor* were to self-finance the remaining costs. *Waste Compactor* saw the need to recruit a second hardware developer and decided to expand the team in November 2017. *Waste Compactor* used their university network when recruiting a new engineer as the new team member used to be a fellow student. At the same time, *Waste Compactor* were supported with office space in a university incubation process where the team could sit together. "We gained access to an office when he [the new hardware developer] joined the team, which was great because we didn't live with him and couldn't, therefore, continue working from home," says *Waste Compactor.* The university also contributed with access to university labs and makerspaces, where the team could use the materials purchased with the granted funding, to develop the prototype using university equipment. University incubation

cultivated field-building activities for *Waste Compactor,* as they were actively sharing knowledge with similarly focused startups. The sharing of knowledge involved anything from business, technology, or specific activities where someone had experience. The questions asked and discussed by *Waste Compactor* span from funding options and accounting, to supply chain and manufacturing partners. As part of the incubation, *Waste Compactor* were assigned a mentor. However, the support wasn't actively used, and the relationship with their assigned mentor became more about delivering updates every three months than actually receiving advice from the mentor. The need for discussions and advice was fulfilled by the field-building activities provided indirectly through incubation. Additionally, *Waste Compactor* used the VCP alumni network to connect with other startups or entrepreneurs with specific knowledge. *Waste Compactors'* application to the governmental funding grant IN phase one was declined, as the level of innovation was considered too low. The plan to perform market research had to chang, and *Waste Compactor* chose to conduct a short survey to test the product-market fit for their target market instead. *Waste Compactor* used their network of family and acquaintances to send out the survey through social media channels as the respondents from this network would fit the target group. However, after five months, the team decided to pivot both technology and market. According to the CEO, the technology proved to be more complex than expected, and findings from the market survey indicated that the interest for the product was neutral and the willingness to pay was medium to low. What also influenced the choice of pivoting was the rejected application from Innovation Norway. The team realized that Innovation Norway's reason for rejecting the application could be residual refusal grounds in future applications as well. Combined, it became clear that the team should look for alternative technological solution and markets. The team had spent approximately half of the TEB funding grant and could still use some of the material and equipment purchased. The remaining amount went into developing the second prototype. Less than a month later, the team had pivoted both product solution and market. The new solution included more innovative technology, which decreased the number of competitors and strengthened the uniqueness of the value proposition. The second application to the funding grant IN phase one was accepted, and the team received 10 000 euros to further develop prototypes and perform the market research, now on a new target market. One month later, in February 2018, *Waste Compactor* signed a letter of intent with its first customer. The customer was the university the startup belonged to, and the internal network connection was essential in getting this agreement. In March 2018, seven months

after initiation, *Waste Compactor* entered the seed funding phase, by receiving 10 000 euros from the Norwegian Research Council.
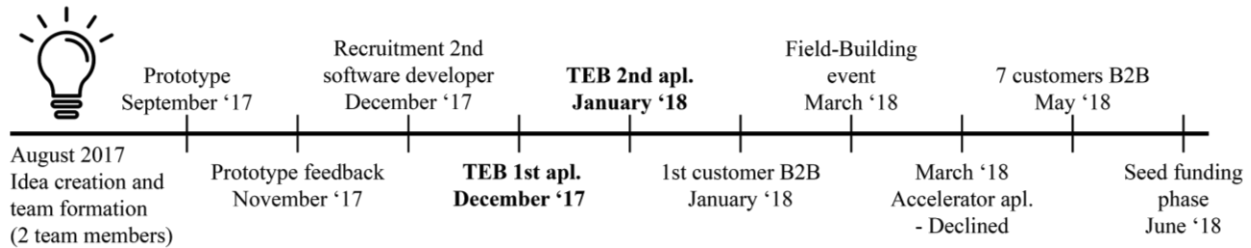
4.1.2 Recruiting Software

Figure 4. 2 - Timeline of Recruiting Software

Recruiting Softwares' idea creation and team formation was simultaneously established during a conversation between the founders and their friends in August 2017. The business idea was a solution to a problem experienced by the founders when working for an organization who connected businesses with students as a part of a university-wide employment fair. Having experienced the problem as students, they reached out to their network to validate that the businesses also recognized the problem. One month after initiation, *Recruiting Software* started developing the software prototype, and it would only take another month until *Recruiting Software* had established a relation to potential customers which could provide feedback during the software development process. *Recruiting Software* decided to expand the team, and in December 2017, a back-end software developer was recruited, by using the university network. The same month, an application to the funding grant TEB was sent, applying for 1450 euros for parts of their software solution and to visit customers in the form of travel expenses. This was followed by another application the next month, where they applied for 750 euros to further their product. Both applications were granted. *Recruiting Software* were supported with office space as a part of university incubation. As part of this incubation, they were assigned a mentor but did not use this resource. Instead, *Recruiting Software* reached out to startups belonging to the same incubation process and startups in the VCP's alumni network to discuss strategy and different business models. To research potential B2B customers, *Recruiting Software* used their network within their university to be referred by acquaintances to the company's decision makers. The contacts gained by using their personal network, however, provided several customers in the first few months. In

January 2018, the first B2B customer signed up for a monthly subscription, and during the next four months, an additional seven B2B customers came aboard. The second group of users in *Recruiting Softwares*' two-sided platform was university students, which provided an opportunity to use networking activities within their own university actively. *Recruiting Software* did so by attending student events, connected with the academic societies, aiming to create word of mouth marketing at the university. From these activities, approximately five hundred students were using the service. In March 2018, *Recruiting Software* attended a field-building event spent with VCP alumni students that provided mentoring, challenged decisions, and offered advice. Around the same time, *Recruiting Software* learned that an accelerator application was declined. The two events, in March 2018, led to a change of strategy, as the business model changed from a SaaS solution to a two-sided platform. This change allowed the student users to become members and create a profile and resulted in an increase in customers and number of users (post timeline). In June 2018, ten months after initiation, *Recruiting Software* entered the seed funding phase by receiving substantial funding from Innovation Norway.

4.1.3 Sleep machine
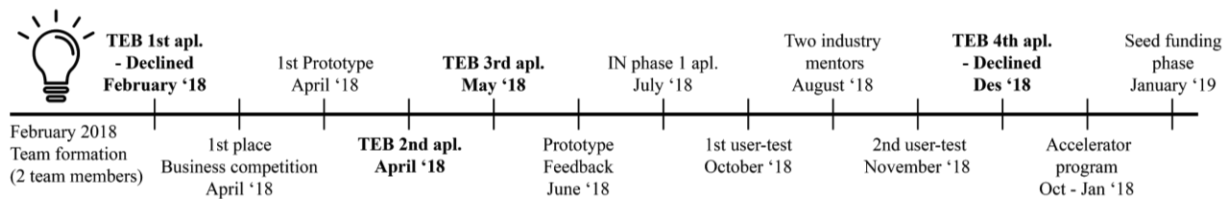
Figure 4. 3 - Timeline of Sleep Machine

The *Sleep Machine* team, with its two founders, formed in February 2018. During the same month, the team sent an application to the funding grant TEB, however, the application was declined, and it would take another two months before *Sleep Machine* would receive financial capital. In April 2018, *Sleep Machine* won a money-price of 1000 euros in a business competition, and it was enough money to start developing a prototype. *Sleep machine* were provided an office space through university incubation and used the office space as an arena for field-building activities with other startups. The need for more financing increased as the prototype developed, and the second application to TEB was handed in. This time, in April 2018, the application was granted, and the money went to more product development, resulting in a device that enabled testing on

end-users. *Sleep Machine*'s next goal was to get feedback on their prototype. The third application to the funding grant TEB was, in May 2018, partially approved, and *Sleep Machine* could now travel to meet industry specialists and present the prototype. This resulted in gaining feedback from their target market and an industry mentor. In June 2018, the prototype was demonstrated in a room full of specialists, feedback was given, and two months later, one of these specialists would end up as a key mentor for the startup. The declined activity was a workshop to gain insight into customers need, an activity that was implemented without capital, and which resulted in a pivot on who the target customer is. The customer focus went from B2B to B2C. The team found a second industry mentor in a professor at their university. *Sleep Machine* used, in addition to these mentors, startups from their VCP alumni network for field-building activities. In between the two events in July 2018, *Sleep Machine* applied for and was granted IN phase one, providing enough funding to arrange user-tests. Over a two-month period, two rounds of user-testing were conducted, providing insight into the users, and now customers' need. *Sleep Machine* conducted tests using university labs. The CEO attended an acceleration program during the fall of 2018, the program had a business-focus, and business decisions such as the business model were challenged. The need for further market research led to the fourth application to the funding grant TEB. The activities applied for were related to marketing and sales, activities that are in violation of the funding grant's terms, and the application was therefore declined. The startup nevertheless got its capital need covered during the same month, by receiving a large amount of funding from Innovation Norway, resulting in *Sleep Machine* reaching the seed-funding phase.

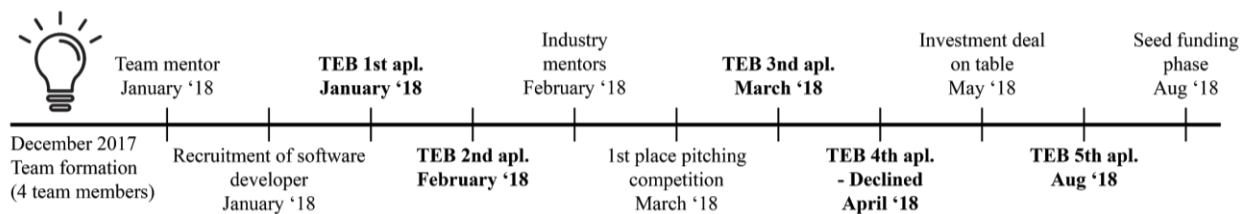### 4.1.4 Seismic Data Software

Figure 4. 4 - Timeline of Seismic Data Software

Seismic Data Software formed in December 2018. However, the software that laid the foundation of the business idea was created during a summer internship in 2017 by one of the founders. When the team formed in December 2017, the development of the software was restarted, but this time

with a commercialization focus. In January 2018, *Seismic Data Software* received a team mentor, with industry knowledge, providing advice on both business and teamwork. *Seismic Data Software* have actively used networking activities at their university, to recruit new team members and position themselves as an attractive and interesting employer to make future recruitment easier. *Seismic Data Software* explains "there is tough competition among companies to recruit the best software developers, by promoting *Seismic Data Software* at student events, during lecture breaks and so on, we hope it is beneficial when the time comes for the students to make a choice about where they want to work". *Seismic Data Software* recruited a software developer in January 2018, and in that regard, applied for TEB funding for software related cost and travel expenses. The following month, the team applied for more funding, this time in relation to more traveling costs, aiming to visit potential customers, the funds were granted, but the meetings never took place. The two mentoring relationships that were established in February 2018 were both found through networking, one of the mentors was a professor from their university, the second, an alumni-student, connected after a field-building event held by the university. *Seismic Data Software* were provided both an office space and a mentor by the university, the mentor is an industry specialist within the same field, and *Seismic Data Software* have benefited from the mentors' professional network. A member of the TEB panel was an industry specialist and ended up as an informal mentor, providing *Seismic Data Software* with advice and network contacts. They have also used field-building activities with startups in the same incubation process belonging to the VCP, to assist them with administrative tasks such as accounting and financing. *Seismic Data Software* entered a business competition in March 2018, they ended up in first place and received a cash prize of 1000 euros. In the same month, the third application to the funding grant TEB was handed in; *Seismic Data Software* applied for funding to a workshop with a company that would later offer them an investment deal. In April 2018, *Seismic Data Software* applied for the fourth time to the funding grant TEB. However, the application was declined. The fifth and last application was meant to cover traveling expenses to meet potential customers in August 2018. Shortly afterwards, *Seismic Data Software* entered the seed funding phase by signing the aforementioned investment deal proposal.
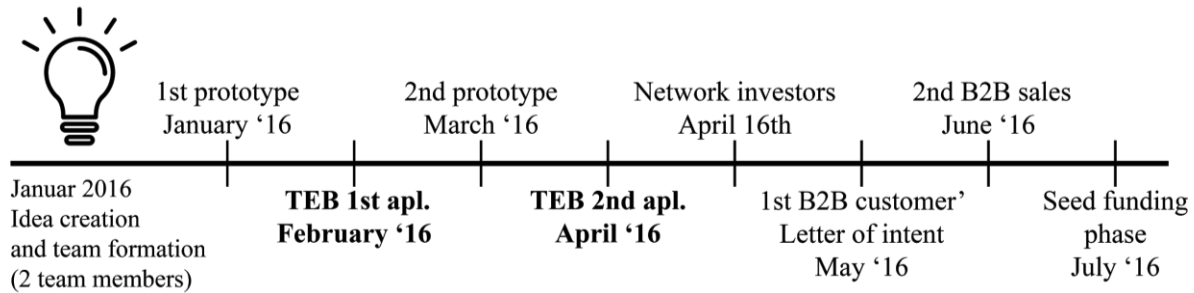
4.1.5 Portable Cinema

Figure 4. 5 - Timeline of Portable Cinema

The team formed in January 2016, and it would only take four days before the first prototype was created. In the first few months, *Portable Cinema* used field-building activities actively, taking advantage of resources available in a VCP incubation process, even though they were not a VCP startup. After a few months, the need to seek advice from other startups decreased, and the team only used field-building activities when sharing resources such as documents, templates, and so on. *Portable Cinema* were advised to use the university network, and did so strategically, resulting in a meeting with network investors. *Portable Cinema* considered an investment deal where they would sell two or three percent of their company shares for access to network connections and industry knowledge from the investors. However, before signing a deal, the investors expressed a need for a higher quality prototype, if the product where to be presented in front of potential clients. In February 2016, *Portable Cinema* applied for the funding grant TEB and was granted 2200 euros to produce a second prototype. The investors provided access to a company that was crucial to the quality of the second prototype. The second prototype was developed at labs and a makerspace provided by the university, and was almost finalized in March 2016, but needed a few improvements. Additional funding of 300 euros from TEB was granted in April 2016, and *Portable Cinema* could finalize the prototype. The quality was considered to be significantly improved, and *Portable Cinema* signed the investor agreement. The investors proceeded by providing access to multiple B2B companies that were considered potential customers. In May 2016, *Portable Cinema* signed a letter of intent with their first B2B customer, and in June 2016, they sold half of their prototypes to several B2B customers. The network investors would provide contact to most of their B2B customers in the future. The investors also contributed with legal work, which resulted in *Portable Cinema* obtaining a patent for the improved prototype solution. *Portable Cinema* entered the seed-funding phase in July 2016.
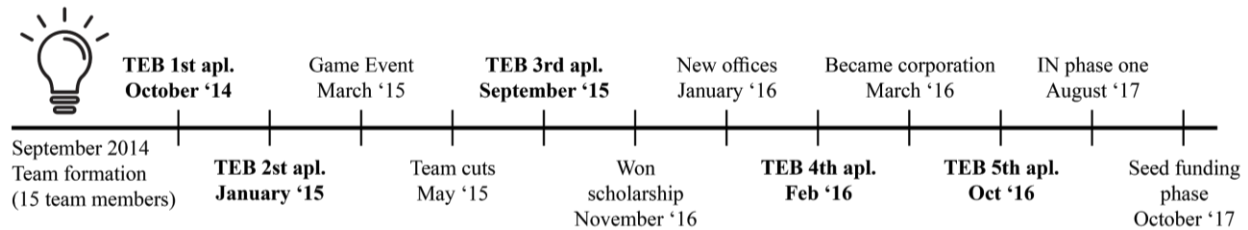
4.1.6 Computer game

Figure 4. 6 - Timeline of Computer Game

Computer Game formed in September 2014 as one of the founders joined a networking event for game developers, and the game idea arose. He pitched the idea, and a lot of the audience expressed an interest in joining the team. The team formed, with a total of fifteen founders. *Computer Game* were assigned a Spark* NTNU mentor and used this mentor actively. In October 2014, the first application to the funding grant TEB was sent, applying for funding to attend a game event to conduct market research. The application was declined, based on the lack of arguments as to why the activities were considered value-adding. The second application was approved, still applying for funding to conduct market research, but the requested amount was decreased as *Computer Game* planned to carry out additional market research activities that were less expensive. *Computer Game* used several university networking events as opportunities to promote their game. In March 2015, *Computer Game* spent the granted funding on the same game event that had formed the idea and team in September the year before. The goal this time was to get feedback on their prototype from other game developers but ended up winning second place in the category "gamers choice". *Computer Game* made some changes to the team in May 2015, they recruited a new CEO as the former CEO went to study abroad, and the number of founders decreased from fifteen to nine. The third application was sent in September 2015, applying for funding to the same game event they had previously been declined. Also, this time, the application was declined. In November 2015, *Computer Game* won a scholarship of 2000 euros by the local bank. *Computer Game* spent the funds on renting office space as part of an incubation process for startups in the gaming industry. *Computer Game* expressed a desire to use field-building activities and were looking for similar startups in the university and the game developer environment. However, it would turn out that the similar startups had less business knowledge and could not provide any advice or share knowledge that was considered valuable to *Computer Game*. The next critical need was a powerful computer for further developments of the game, and in February 2016, an

application was granted, funding *Computer Game* with 1800 euros to purchase such a computer. The prototype had improved, and *Computer Game* wanted to promote the game. In October 2016, the fifth and last application was sent, applying for funding to create a website for marketing purposes. Approximately one year later, *Computer Game* received funding from IN phase one, signed investor agreements and launched a successful crowdfunding campaign, thus entering the seed-funding phase.

4.1.7 Video game
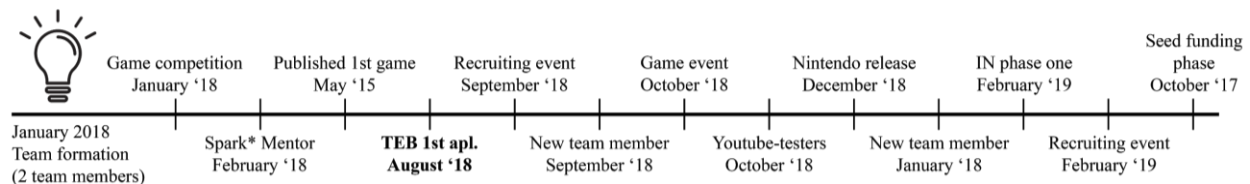
Figure 4. 7 - Timeline of Video Game

The game was gradually developed as part of the founders' master's thesis in the field of game design, during the fall of 2017. *Video Game* presented the game at a game event, in January 2018, of which they won an award. The founders decided to work on the game as a business idea, and in February 2018, *Video Game* received a mentor from Spark* NTNU. The game was made available for purchase in May 2018, providing feedback from game enthusiasts. In August 2018, the university provided *Video Game* with an office space as a part of an incubation process. and access to computer labs for prototype development by their university. Their professor in game development courses was considered a crucial resource during the development of the game, according to *Video Game*. Additionally, the sensor on their master's thesis ultimately became their mentor. *Video Game* had a desire to publish their game on Nintendo Switch and applied for funding to cover the cost of a development kit. They were granted funding. However, they did not have a licence to develop and were unsure of how to proceed. They contacted other startups in the same field and asked for advice, which led to a license to develop the game on Nintendo Switch. Additionally, *Video Game* applied for funding to spent on a music designer. However, this activity was declined. In September 2018, *Video Game* participated in a Spark* NTNU event called *Join a Startup Night*, and as a result, the team recruited their first business developer. Their Spark* NTNU mentor had emphasized the need for more business focus and suggested that *Video Game* could use the event as an opportunity for recruitments. This also caused the startup to become more

focused on user testing, allowing the original founders to focus on their game design expertise. The new addition to the team led to *Video Game* performing their first user-tests, in October 2018. *Video Game* used the student ecosystem to perform many product tests by attending events with the sole purpose of getting feedback from unknown students. At the same time, some game enthusiasts recorded themselves playing the game and published the video on YouTube, which created a massive PR promotion of the game. *Video Game* registered as a corporation in November 2018, in order to apply for IN phase one. In January 2018, *Video Game* attended a Nordic game competition and won third place. The game was not complete without music and sound effects, and *Video Game* eventually found a music designer that would join the team. In February 2019, The IN phase one application was granted. As the need to recruit more team members arose, *Video Game* decided to attend the Spark* NTNU *Join a Startup Night* again, in order to recruit a head of marketing. *Video Game* entered the seed-funding phase in March 2019, by receiving 100 000 euros by the Norwegian Research Council.

4.1.8 Board game
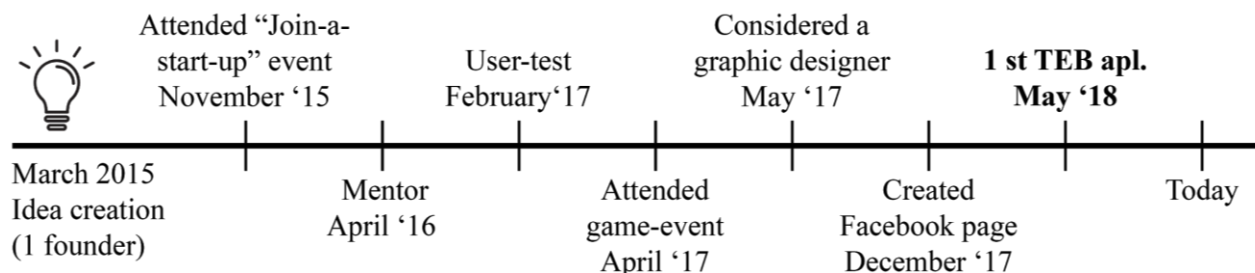
Figure 4. 8 - Timeline of Board Game

The idea creation of *Board Game* was in March 2015 during the founder's military service, and in August the same year, the founder would begin his first year of a five years master's degree. Spark* NTNU hosted a *Join a Startup Night*, and the event gave the founder the idea that the game could be something more and he proceeded to work on the game as a business idea. *Board Game* developed his startup very slowly and still considered the startup as a hobby. Five months later, *Board Game* was assigned a mentor from Spark* NTNU. The mentor provided insight into business development activities, and *Board Game* decided to do user-tests to get feedback on the game. *Board Game* has found networking activities to be essential in testing the game prototype and have used both acquaintances and meeting unknowns at "game bars" to get feedback, the latter

being advised by *Board Game*'s mentor. The first user test was in February 2017, followed by a game-event two months later, where *Board Game* encouraged unknowns to test his game. The feedback led to the decision to produce thirty prototypes, but first, the rulebook needed graphic design. *Board Game*'s mentor provided network contact to a graphic designer that he could use, but *Board Game* ultimately decided to do the work himself, explaining himself as being "excessively perfectionist". During a game event, *Board Game* met with another game developer, which became a rapid tester of the game, providing feedback and advice on business development. *Board Game* mentioned that the same game developer had created a Facebook group for local game developers, and *Board Game* though of this to be a great arena to give and get feedback. However, he has not made use of the field-building activity, as he explains it "I've wanted to use the group for a long time, to give and get feedback […] but I haven't used it, I guess I'm not good at taking initiative". Instead, *Board Game* decided to create a Facebook page to promote the game, in December 2017, with the idea in mind that he would soon have more than one prototype ready for testing. In May 2018, the application to the funding grant TEB was sent, applying for 500 euros to produce prototypes. The application was granted, but *Board Game* has not executed this activity a year after the funding was obtained. The status as of April 2019, is that *Board Game* has not produced the prototypes yet, wanting to complete the graphics on the rulebook before sending the game to a protolab for production.

4.2 Cross-case findings from the financial sponsorship process

The process of the pre-seed funding grant TEB as an EECA can be divided into three sections, pre-application, the application process, and post-application. The pre-application section provides context to how the startups exploit the funding grant. The pre-application section studies the student startups' decision making and explains the context they were in when they applied and how this influenced the application process. The application section studies how the startups conducted the application process and how each step of the process may have influenced the student startup and its development. The post-application section studies how the funding grant may have influenced the startups developments after the funding was received, and how the activities they performed using the funding may have played a role in developing the startups.

4.2.1 Pre-application

For the student startups, the first step of the application process is the decision to apply for the funding grant. Why the startups decide to apply varies, as several factors may influence the decision. The startups' decision to apply may be influenced by an urgent need of capital that is necessary for startup growth or simply to raise capital in order to make sure funds are available when the need arises. The decision might be based on the need to finance the next critical milestone, it might be part of a strategy, or the startup may have applied just because the mentor recommended so. The decisions made before, during, and after the application process is influenced by entrepreneurs' prior entrepreneurial experience.

Why student startups apply for funding

The reason startups apply for funding can be divided into three approaches. (1) Some startups identify an activity that they wish to accomplish and apply for funding to perform that activity. (2) Others recognize that the funding grant exists and create a need for capital just because the money is available, and it seems easily attainable. (3) A combination of the two aforementioned approaches.

(1) Activity first

Waste Compactor, Recruiting Software, and *Portable Cinema* had a clear plan on which activity they were to execute and then found TEB as a source to finance that activity. *Recruiting software* emphasize this by adding a statement that you shouldn't apply for funding grants "just because you can", but instead focus on value-adding activities. For startups, resource acquisition is a major source of uncertainty. Even though organizational sponsorship reduces the level of uncertainty by providing an increased amount of available resources (Amezcua et al., 2013; Flynn, 1993a; 1993b), the startups still need to continuously reflect on how to utilize the resources in order to create value and growth. This is in line with *Computer Game*, who emphasize that the purpose of TEB is to overcome the critical milestone the startup is facing right now. For some, such as *Portable Cinema* and *Waste Compactor*, applying for funding was planned ahead with a clear purpose in mind. The intent behind the funding application for both *Portable Cinema* and *Waste Compactor* was to reach potential customers by first developing a prototype. *Portable Cinema* decided to apply when an

opportunity to meet a great market actor arised, which required a higher quality prototype, while *Waste Compactor* created a prototype to test the technology.

(2) Funding first

Opposite to *Waste Compactor, Recruiting Software* and *Portable Cinema* was *Board Game*, who didn't think of applying before it being suggested by his mentor. It's not unusual that the mentors help the students in startups to reflect on what is happening when in the development process and strategize the next steps moving forward (Cope, 2000). Deakins et al. (1998) found that the startups benefit the most if the mentors take a proactive role in promoting networking activities, events, and external sources of financing. *Board Game* emphasizes the value of this by saying "Mentors see solutions, they have much more experience in business than I have, so they know better the next step and what I should focus on." By utilizing his mentor, *Board Game* was able to identify what to might spend the funding on.

(3) Combination

As there are two approaches to applying for the funding grant, a combination of the two was also observed. *Seismic Data Software* applied for funding to have capital available when the need arose, the activity was already decided, but the uncertainty was to when the activity was to be executed. TEB allows for revised budgets, making it possible for *Seismic Data Software* to apply for an activity and revise on the date of execution, as see fit. For startups like this, which have a target market consisting of big industry actors, the ability to schedule meetings at short notice can be crucial to the startup, thus making the flexibility of TEB deemed a necessity. In addition to travel cost, *Seismic Data Software* applied for website cost, a capital need that would not have existed had it not been for the availability of the funding grant. *Seismic Data Software* even explains that the decision wasn't particularly thought through. *Video Game* also applied for website costs. Although Video Game applied for this as part of their strategy. Neither of the two startups ended up needing or spending the funding on that activity as they found alternative activities that were free-of-charge. *Video Game* also used a combination of approaches when applying, starting with applying for product development costs that were crucial to their progress. They also attempted to apply for the cost of music development for their game, but this was turned down. *Video Game* explains this as understandable, as they didn't make a strong argument for it, and applied ''because

we could''. Both related to the website costs and music development, the alternatives could have been thought through before applying for the additional funds. This strengthens the argument of applying for activities related to the critical milestone the startup is facing right now and utilizing the scarce resources strategically. Once the critical milestones are covered, only then, should the startup apply for 'unnecessary' activities that "up the quality" of the business, according to *Recruiting Software.*

The findings show that students startups that apply for funding after they have identified an activity that they wish to accomplish and use the funding as a means to perform that activity, conduct overall more value-adding activities than those who apply for funding first. The explanation can be found in the degree of strategy implemented in the decisions, as to which extent the startups decide activities based on objectives and long-term goals.

Financial strategies may influence decision making

The student startups strategy may influence decision making, as indicated above. Part of the strategy may be how the startup finances business and product development. For several of the startups, the funding grant TEB was part of a bigger funding strategy, as startups planned for some combination of the funding grants TEB and IN phase one. *Portable Cinema* and *Waste Compactor* planned to use TEB funding on prototyping activities and apply for IN phase one to fund their market research. While others, such as *Seismic Data Software* planned funding strategy in two steps, first receiving maximum funding amount from TEB on multiple activities, before applying for IN phase one. They considered IN phase one as the "next financial phase" and add that "if it wasn't for TEB, we would still have searched for other financial sources before applying IN, such as business competitions". The reasoning being that they wanted to exploit all available financial support before moving on to the next phase of the startup. In summation, the funding grant is often part of a larger financial strategy for startups with a business background. This strategic thought process was found to be non-existent for student entrepreneurs without a business background.

Financial alternatives may influence decision making

The access to other financial means may influence the student startups' decision to apply for the funding grant TEB. Mitter & Kraus (2011) highlights that in the first stages of a startup, the capital needs are comparably low, and the founders can usually fund these costs by their own pockets or from 'friends, family, and fools'. And while the findings support that the capital need for the student startups is low, all of the startups find other means to fund the startups costs. Startups mention other soft funding grants as alternatives to TEB. Only *Seismic Data Software* and *Video Game* mentioned part-time jobs, but both argued this as too time consuming and reject it as an option. *Board game* differed from everyone else, as he was considerably more comfortable with using his savings than applying for the funding grant. This can be explained by how he looks at the startup more as a hobby, of which the financial support can complicate how he relates to the startup. *Video Game* decided not to apply for IN as their impression was that it required too much work, taking time away from product development, though their assumptions were based on their own opinions without having examined the requirements further. *Waste Compactor* agrees that IN phase one requires more business work, and adds administrative work to the list, as the grant fund requires the startup to register as a corporation. Several of the startups described TEB as a "low-barrier" funding grant and as suitable for being the grant you apply for for the very first time. The findings show that student startups would try for other soft funding financial means before using their own pockets or from 'friends, family, and fools'. Additionally, TEB appears to be a favorable financing grant to apply for, among the accessible soft funding grants for startups in the first stages of development. This can be explained by TEB being described as achievable and a safe option for first time applicants.

Prior experience may influence the decision making

Although all the student startups have the same conditions in the TEB process, the entrepreneurs' background, namely study program and prior entrepreneurial experience may influence how a startup utilizes the sponsorship activities. For some, the decision of applying is performed with the business plan and strategy taken into consideration, while for others, the focus lies on only one aspect of the startup. *Board Game* is highly product focused and did not mention any business aspect when discussing the startup, while *Recruiting Software* can state all the strategic reasons for the decisions they make. *Board Game* and *Recruiting Software* are on each end of the spectrum,

while most of the startups lay somewhere close to the middle. Although the startups have different perspectives, all of them have a focus on the customer's needs when developing their solution. To what extent varies, as some, such as *Recruiting Software* and *Portable Cinema* think about 'customer needs' all the way, while others, such as *Video Game* and *Board Game* have been led in this direction by their mentor.

The VCP startup *Recruiting software* and the non-VCP startup *Portable Cinema* originates from the same study program before *Recruiting Software* entered the VCP. Approximately half of the study program's courses were business related, providing both startups with similar business knowledge. The startups are similar in their decision-making process by considering strategy, reflecting, and justifying their decisions. In contrast to these startups, there is *Video Game* and *Board Game.* Neither startups have any business courses or prior experience. The startups rarely factor in business when making decisions, and both have received suggestions from their mentor about recruiting someone with business understanding into the team. *Board Game* did not want to follow the advice, but *Video game* recruited a business developer with business knowledge. *Video game* talks of how the startup changed once the business developer came aboard, and the founders could once again focus on what they did best, developing the game. The granted funding from TEB had yet to be used, and all user-testing and market research was conducted by the business developer. *Video Game* also highlights how it influences how they utilize the mentoring sponsorship; *Video Game* says "She [the business developer] knows what questions to ask and [*Video game*] get more value from using the mentor now than we did before."

The findings show that the value of participating in a Venture Creation Programs (VCP) is the business knowledge that the student entrepreneurs gets from both the curriculum and experiencing how to run a startup. However, business knowledge can be obtained through other study programs or past experiences. What influences how the startups utilize sponsorship activities, is not if they are VCP startups and non-VCP startups, but rather the student entrepreneur's degree of business understanding. The student startups with a high degree of business understanding implement strategy into the decision making and thus, activities. The student startups that have taken business subjects base their decisions on the startup as a whole to a greater extent than those without any business courses.

A summary of pre-application factors which influence the application process

Before the application process, student startups either consider their own capital need and apply for activities based on this, and/or realizes that funding is available and create a capital need based on this. What other funding the startup has available also influences what the startups apply for. TEB is often used as a part of a larger project, where the financial sponsorship covers either product development costs, market research costs, or other networking activities. In addition, the students' prior experience influences this process heavily. What degree of business understanding the startups have dictated how strategically the startups approach the funding grant.

4.2.2 Application process

Once the decision to apply is made, the next step is to enter the application process by writing an application. The application is first handed to the startups mentor for feedback, following a formal hand-in of the application. If the application is accepted onto the next phase, the startup is asked to hold a presentation in front of a panel and answer questions relevant to the case. Afterwards, the startup will receive an email with information on whether or not their application was granted, partially granted or declined.

The startups' different views of the TEB process

The various backgrounds, industries, and types of business causes the student startups to view the TEB process differently. When talking about the experience of applying for the funding grant TEB, *Seismic Data Software, Portable Cinema,* and *Video Game* all said it felt like 'high stakes'. *Waste Compactor* agrees and adds that since it felt very important at the time, it led them to spend time on the process. *Recruiting Software* and *Board Game* did not feel like it was "high stakes", quite the opposite as *Board Game* uses the word "chill" to describe his attitude of TEB. *Recruiting Software* explains that TEB is considered a "low-barrier" grant fund by the startups in his VCP, and so they expect their application to be granted. Still, *Recruiting Software* spent a lot of time on the process, thinking out strategic reasons to all decisions and spending time on improving the application and presentation. The same was true for *Waste Compactor* and *Video Game.* For *Seismic Data Software,* a lot of time was spent on the first application, but this gradually decreased for each application. Startups with more experience and with business backgrounds generally took the application process more seriously, although it was considered an easy way to fund important

activities for the startup. Startups without business experience spent less time and viewed the process as pretty easy as well.

Writing the application influences startup development

The first step of the application process is to write the three-page application, which contains what the startup does, the startup's objectives, what must be done to achieve the objectives and why a grant from TEB is necessary to perform what needs to be done. All of the startups express that writing the application was neither comprehensive nor time consuming. *Board Game* and *Sleep Machine* spent a couple of hours writing the application, whereas *Waste Compactor, Recruiting Software, Seismic Data Software,* and *Video Game* spent a few days. Still, the majority were positive to the experience of writing the application. Both *Recruiting Software* and *Video Game* emphasize how the application criteria force the startup to reflect more in order to justify the decisions. *Video Game* explains that "formulating on paper has been a good exercise for everyone involved because we have to reflect on why we are applying for the activities, how it fits in to the objectives and long-term goals". The findings indicate that the process of writing the funding grant application forces the startups to reflect, as the application requires that the startups provide information and well-reasoned arguments for what and why the startups need funding.

Application feedback from a mentor influences startup development

Before submitting the application, the startups received feedback from their mentor on their written application, to ensure that the application remained within the guidelines and maintain a certain standard. *Computer Game* and *Board Game* mentioned that the feedback from their mentor concerned minor adjustments, such as sentence structure and grammar. *Computer Game* state that the feedback from rejected applications was extensive and thus useful, as opposed to the applications that were accepted. *Recruiting software* could not remember receiving feedback from their mentor but executed a field-building activity using a similar startup from their common VCP program to get feedback. The student startups received little benefit from receiving feedback from their mentors, mainly because the feedback was characterized by focusing on guidelines rather than cultivating value-creating content.

The presentation influences startup development

As part of the application process, the startups were asked to hold a presentation in front of a panel and answer questions relevant to the case. Most of the startups' highlight this experience as highly positive, and those who do not appear neutral. While preparing for the presentation, most of the non-VCP startups rehearsed their presentation with their mentor before presenting in front of the panel. This differed from the VCP startups, which deemed it as unnecessary since pitching practice was part of their curriculum, giving them the sense of having mastered the presentation techniques. All startups gained experience by presenting, but the startups with the least experience benefited the most from the process.

Feedback from the panel influences startup development

The presentation was rounded off by the startup being questioned and receiving feedback from the panel. The panel consists of experienced student entrepreneurs and corporate sponsors. For *Seismic Data Software, Portable Cinema* and *Computer Game,* the feedback resulted in a change of decisions, new activities, and/or strategic planning. *Computer Game* explains that the panel asked critical questions on their strategy and questioned why they decided as they did, which forced *Computer Game* to reflect in order to justify the choices made. This led the team to implement the same iterative process in all decision making to come. *Video Game* emphasize this by saying that TEB "forced us to think next level". They explain this as thinking more like a business, but in an environment that facilitated learning through trial and error. *Waste Compactor, Portable Cinema,* and *Board Game* are all eager while explaining the response they received from the panel, finding it motivating to have someone believe in the startup. *Seismic Data Software* says, "it's not necessarily the money that is of the highest value, but the feeling it gives that you were granted the money. Being granted the money, it feels like you're on your way to succeeding, regardless of the amount". *Portable Cinema* supports this with the statement "in retrospect, the grant fund isn't that much money, but at that time it felt like, and was, an infinite amount of money". In summation, the panel's feedback had a motivational influence on the student startups. The feedback also cultivated the startups in need of more business strategy, to focus more on business development.

Learning as an outcome of the TEB process

The funding grant TEB facilitates for learning for the startups, especially since TEB was their first experience with soft funding applications. The full process facilitated learning, spanning from writing applications, conducting market research, presentations, and taking feedback into consideration. What's valuable is that the process is learned "in a safe environment", according to *Computer Game,* as this lowers the barrier for startups to apply. *Recruiting Software* states that "running a startup is like taking a master's degree in writing applications", and that TEB is a great place for startups to have their first-time funding application experience. This is supported by the other startups, as they have written other applications later on and felt that they gained experience with business writing as a part of the process. Some students, not part of a VCP, also highlighted the presentation as a positive learning experience when it came to pitching. This is considered an advantage as Watson et al. (2018) suggest that students should prepare for funding processes by learning business writing and pitching, in order to be more ready when needing to look for investments or other funding in the future.

Seismic Data Software and *Computer Game* also highlight the learning outcome of declined applications, as both felt like the panel's reasons were understandable and learned from it. *Seismic Data Software*, which spent a lot of time on their first application, had gradually decreased the amount of time spent on each application. "The declined application was almost copy-paste of old applications", *Seismic Data Software* says, "of course it was declined, we didn't take the process so lightly after that". For *Computer Game*, the application was declined, and the panel justified the decision based on the lack of explanation to why the activities were considered important. The same feedback was given during a presentation, and *Computer Game* decided to take action, implementing a routine of expressing what and why, when discussing and making decisions. After being declined funding for market research, they managed to find cheaper alternatives and covered the costs with money from a scholarship and self-financing, the alternative activities fulfilled the same purpose as initial activities intended. This differs from *Sleep Machine*, which partly decided not to go through with the activity after being declined funding. However, this was not true for all activities. Workshops with customers as an activity was declined by TEB but were performed anyway. The activities that were declined and not performed were related to marketing and

branding, implying that they only applied for these activities because of the availability of the funds.

The findings show that student entrepreneurs develop business writing skills and pitching as a part of the application process, although students with less experience appreciate the presentation format more. Furthermore, startups may develop skills in how to perform market research, and to deviate from the original plan when new information arises. By having applications rejected, startups had to reconsider their plan, and some changed while others didn't. Startups with less business experience changed their plans more easily than the more experienced VCP startups.

The TEB process compared to other funding grants

For all of the startups, the funding grant TEB was their first experience with applying for soft funding grants. Afterwards, *Waste Compactor, Seismic Data Software, Video Game,* and *Computer Game* have experienced several soft funding processes. After having written many funding applications since TEB, *Recruiting Software* appreciated how great the TEB process was as a first-time application. *Waste Compactor, Recruiting software* and *Video Game* expresses that it felt like high stakes at the time, but feel differently in retrospect, "looking back it was peanuts" says *Waste Compactor. Seismic Data Software* states that the TEB process is very straightforward compared to other soft funding grants. *Portable Cinema* agrees by explaining that applications have questions that the startups are required to answer, however, a lot of these questions are non-value-adding to the startups, and it's time consuming to provide an answer. *Portable Cinema* add that "TEB on the other hand, has the highest score of value-adding processes, in my opinion". The application questions are inspired by the one-pager template often used when pitching for investors. What also distinguishes the TEB process from other soft funding grants are the number of pages in the application document. TEB consisted of a three-page application; most soft funding applications consisted of approximately ten pages. The findings show that the application writing process of TEB was suitable as a first-time experience, and for preparing the startups for future application writing.

A summary of the application process' influence on startup development

The student startups consider TEB to be a great place for startups to have their first-time funding application experience. The funding grant seemed like "high stakes", causing the startups to spend time on the process, and thus, gain positive outcomes from each step of the process. The startups considered writing the application as positive but gained little from the process. The influence of feedback from mentors on applications was limited, but the presentation process brought pitching experience for the startups, especially for non-business students. The feedback from the panel was highlighted as a positive note for several startups and had a motivational influence. Through the application process, the startups learned business writing, and to some degree, how to perform market research.

4.2.3 Post-application

After the application process is complete, and the startup has been granted funding, they go on to execute the activities. After having been through the whole TEB process, the startups hold opinions on how the funding grant plays a role in their startup's development.

Financial sponsorship may influence the speed of startup development

Speed was a recurring theme with the startups when it came to what role the funding itself played. Seismic Data Software highlights speed as the most important value created by the TEB process. If they hadn't received the funding, the execution would have been slower. They state that "maybe it created a domino effect that if it had taken more time, this or that wouldn't have happened, and so on. Maybe we would have been delayed like one year, or something". Some of the startups, such as *Computer Game, Video Game* and *Waste Compactor,* points out that without the soft funding, they would not be able to conduct the necessary market research or produce the prototype that gave insight into the customers need. *Portable Cinema* emphasize this by saying "In fact, TEB was one of the most important funding grants we have received because it had a significant impact". *Recruiting software* says that if it wasn't for TEB, they still would have done the same activities, but that they would not have executed as fast. While *Computer Game* says that without TEB, they would not even be able to conduct the same activities, instead they would likely go bankrupt before finding other financial means. For some, such as *Computer Game*, the granted funds were essential to their core operations, while for others, such as *Recruiting Software*, the

funds provided supplemental activities that were non-defining on their business. *Recruiting Software, Waste Compactor, Video Game,* and *Portable Cinema* stated that TEB lowers the barrier to execute and reduces the threshold for trial and error. All startups highlighted the value of speed caused by the available funds in some way or another. How necessary the funding was, differs from startup to startup, but the influence of funding on the developmental speed is evident in the startups' opinion.

Financial sponsorship may influence student attitude to startup development

For startups that generally had lower ambitions than others, financial sponsorship played a role in contributing to how the startups felt about their own project. *Video Game* and *Board Game* felt like they became more "serious" after receiving the funding grant, and *Board Game* started spending more time working on the startup as well. *Portable Cinema* and *Seismic Data Software* noted that receiving funding was a ''good feeling'', and the latter highlighted that the process ''felt like a win for the team and provided a boost''. However, the startups with less business experience appreciated the motivational side of the funding more than the student entrepreneurs with a business background. Additionally, *Video Game* and *Board Game* stated that their projects felt more like a business after going through the process, and they realized that they should consider the business side of things to a larger extent in the future. In essence, the financial sponsorship process felt motivating after it was completed, and the process influenced startups without a business background by adjusting their mindset to be more business minded.

Financial sponsorship may cause a false sense of security

Although financial sponsorship aims to aid in the development of startups and create entrepreneurial students, external validation may not always be warranted. Unlike the other startups, *Sleep Machine* argue that startups should consider not applying for soft funding grants as the entrepreneurs should learn to be more comfortable with taking risk. *Sleep Machine* goes on by explaining that for some, being granted funding can be interpreted as validation, and thus create a false sense of security. This is in line with Flynn (1993a), who highlights that the influence of sponsorship might be misguided, as being placed in a safe environment might lead the startups to feel a false sense of security and leave the startups unable to device efficient strategies and manage uncertainty. There's an indication of this in the phrasing of some of the startups as well, as *Seismic*

Data Software, Waste Compactor, Portable Cinema, and *Board game* stated that the granted funding felt like confirmation from the panel, that "they believed in" the startup. However, this feeling didn't prevent any of the startups from conducting market research and or communicating with their target market, activities that deal with the false sense of security by examining the validity of the startup in the target market. In summation, external validation from a panel that does not know the industry well enough may be dangerous when not combined with enough market research, but startups solve this problem by keeping in dialogue with their potential customers.

A summary of the post-application process' influence on startup development

TEB does not offer a large amount of funding money, but because it's in such an early phase of the startups' lifetime, the funds are spent on very valuable activities that are considered critical for the startups' next steps. *Recruiting Software* emphasize this by saying, "TEB got us all the resources we needed during that phase". The startups highlight the influence of the funding on the speed of development, stating that it allows for more freedom in an early stage without personal risk. *Waste Compactor* explains this by stating that "there is less risk when experimenting because even though it's a small amount of money, we would hesitate more if it were to come from our own pockets". Startups gain motivation from the entire process and the funding itself, although to different extents, as startups without a business background seem to be influenced to a larger degree than others. Lastly, receiving funding and gaining external validation through the sponsorship process may cause a false sense of security for startups, as the validation may be provided on a wrongful basis.

05 Analysis

In this chapter, the results will be analyzed using the theoretical framework in section 2.5 as a lens, in order to explore how financial sponsorship as an EECA may play a role in the development of student startups, and the context that influences these roles. Therefore, the researchers focus on the contextual sponsorship activities in dedicated sections, in addition to shedding light on the role of the prior experience of students. In each section, student startups' available resources outside of the financial sponsorship are highlighted, as well as the influence of the application process and post-application process of financial sponsorship. Next, these findings are summarized, and

alterations are made to the framework, ultimately leading to the emergence of four roles for financial sponsorship.

5.1 Networking Services

The funding grant often engages in bridging efforts that assist the student startups in developing network connections that provide access to external resources. The funding grant's ability to bridge student startups with networking activities is essential as a mechanism of organizational sponsorship (Amezcua et al., 2013). The funding grant can substitute other networking services, or enable the student startup to conduct networking activities, by funding the activity.

The networking services available to student startups

The startups have access to an array of sponsorship activities as part of their university, and the funding grant TEB is just one of them. When it comes to networking services, several startups benefit from their study program and the networking opportunities that arise from there. This can mean recruiting fellow classmates that they already know, as *Waste Compactor* and *Sleep Machine* have, or using the network connections of their university, to meet investors or key industry stakeholders like *Portable Cinema* did. Most of the networking activities performed by the student startups include recruiting key competencies to the team, using the university access to pitch in lectures or to distribute posters around campus. These activities seem to be the same regardless of the student entrepreneurs background, but VCP-startups seem more active in recruiting. When analyzing the networking services the student startups had available, it seems that the networking activities were limited to recruitment.

The application process substitutes for other networking services

The funding grant has bridged the student startups with external networking connections during the application process, as the panel provided networking connections directly through their own network. The funding grant's panel consists of experienced student entrepreneurs and corporate sponsors and are able to use their prior experience and network to contribute to the student startups. This is evident through the case of *Computer Game*, which applied for funding to participate in a networking event. The application was rejected, but the panel connected the student startup with

external resources through their own network. An experienced student entrepreneur within the same field as *Computer Game* was a part of this panel and contributed with his own network. *Computer Game* was assisted in connecting with an industry ecosystem, resulting in further networking activities and field-building opportunities for the student startup. The funding grant had rejected the *Computer Game* application of funding networking activities based on the existence of similar activities that would fulfill the same purpose to reduced costs. They argued that in the phase *Computer Game* was in, there were more expedient ways of accomplishing the same goal. By receiving this feedback, the startup completed other networking activities than originally planned, developing faster and cheaper as well as learning new ways to connect to potential customers and users. The advice also led the student startup to implement strategic thinking in their decision-making process, attempting only to conduct value-adding activities that would contribute to the startup's strategy objectives. In this case, the funding grant also had a mentoring role and influenced the development of the student startup by advising them to perform user tests locally rather than travel to achieve the same goal. Another example is the case of *Seismic Data Software*, where the panel provided an important network connection in the form of an industry expert (McAdam & Marlow, 2007). An experienced corporate employee was a part of this panel and connected *Seismic Data Software* with a software lab that specialized in the type of technology used by the student startup. Furthermore, the network connection with the software lab allowed for the student startup to have master's thesis' written about their startup, which provided value to their product development process. In addition, the network connection also worked as a platform for recruitment. The network connection, provided through the panel, became a connection the student startup strategically utilized during hires and product development. As shown with the two exemplary cases of *Computer Game* and *Seismic Data Software*, the panel assumed the role of mentors and provided networking as a service, supporting the startup with both advice and connections that could further their student startup development. It is evident that the funding grant can substitute other networking services.

The financial support enables other networking activities

Student startups rely on several external stakeholders outside of financial support. In the role as sponsors, the funding grant can enable these networking activities by providing access to these resources (Venkatamaran, 2002). The funding grant supports the students indirectly by funding

expenses related to the networking activities. By funding networking activities instead of sponsoring networking activities directly, the sponsor enables the student startups to conduct more context-specific networking activities. The student startups apply for funding for networking activities, such as travel expenses. The financial sponsorship funded networking activities for *Sleep Machine*, *Seismic Data Software*, *Recruiting Software,* and *Portable Data*. The funds were allocated to cover travel expenses to meet with external resources such as potential customers, potential investors, and potential partners. For *Sleep Machine* and *Portable Cinema*, the funding helped bridge the student startups with external resources in the form of industry specialists. For *Sleep Machine*, the industry specialist eventually became the startup's mentor. The industry mentor provided the student startup with greater resources, knowledge, and network connections, which were deemed critical to the development of the student startup. For *Portable Cinema*, accessing the industry specialist resulted in further networking connections, these connections would provide external resources critical to the quality of the prototype. As a result of the improved quality, *Portable Cinema* signed a deal with new investors, as well as using their network to connect with multiple potential customers. *Seismic Data Software* spent most of the granted funding on travel expenses, with the goal of reaching out to potential customers and investors, as well as key stakeholders in the industry. The networking activities led to seed-funding investors, which were critical for the development of the student startup. The funding grant in these cases enabled the student startups to perform valuable networking activities through funding, resulting in further development of the student startups. The student entrepreneurs reported that the funding played an essential role in these activities.

5.2 Field-Building Services

Student startups engage in field-building efforts to learn and exchange resources with other similar startups. For the entrepreneurs to gain mutual benefits from sharing information and knowledge with each other, Romanelli (1991) highlights the need for collaborating in field-building with startups who intersect in terms of technology or market. This is supported by Amezcua et al. (2013), who state that one of the roles of a sponsor is to connect new organizations with similar organizations to create an opportunity for collaboration, knowledge sharing, and ultimately

legitimacy. The funding grant engages, to some extent, in bridging activities that assist the student startups in developing field-building connections.

The field-building services available to the student startup

Field-building seems like an important activity for several startups, as they note that they have engaged in field-building with some type of similar startup during the first stages of their development. The VCP-startups have access to field-building services through the incubation process provided by their study program, and the student startups are actively using this activity to bridge knowledge gaps about technology, administration, and sales. The non-VCP startups also engage in field-building activities, but they have to step outside of the university, more often, to do so. Independent of the study program, the student startups often have to engage with startups outside of their university context to find startups that are similar on more than one front, e.g., both business market and technology. Considering the field-building services, the student startups have available; there is not a demand for more field-building services.

The application process substitutes for other field-building services

The funding grant has, to a small extent, provided field-building services during the application process. The panel is not selected to match the applicant's business field, and therefore rarely have distinct connections to the startups' industries. This does, however, happen occasionally, by chance, which has been the case for *Seismic Data Software* and for *Video Game*. For *Seismic Data Software*, the aforementioned industry expert was a part of the panel and ended up becoming a mentor for the team after the funding grant process. The mentor's knowledge of the industry provided them with connections to similar companies outside of the university context, which they used to exchange knowledge and resources. For *Video Game*, a CEO of another gaming startup was a part of the panel and gave advice connected to hiring strategies. *Video Game* originally wanted to hire an external actor to create music for their game, but the panel advised them to hire a musician as a part of the team instead, this because it would benefit them long-term. He recognized the need for a long-term solution as his own startup had previously been in the same situation. Based on this experience, he could recommend the alternative solution that suited a more long-term need. Specifically, because a part of the panel had experienced the same need in a similar stage of startup development, this field-building interaction was a highly effective learning

process. The funding grant panel sheds light on how sponsorship can contribute to creating this rare, yet important, learning opportunity for student entrepreneurs. The funding grant in these cases was able to provide the student startups with valuable field-building activities, resulting in further development of the student startups. However, these two cases are the only recognized cases where the funding grant substitutes other field-building services.

The financial support enables other field-building activities

The funding grant can support the student startups indirectly by funding expenses related to field-building activities. The funding grant provided *Sleep Machine* with funding to conduct field-building activities with an external industry stakeholder. *Sleep Machine* reports that the funding grant assisted with connecting the student startup with two industry ecosystems that enabled the student startup to participate in field-building activities with more similar startups actively. The field-building activities have led to the sharing of information and knowledge, contributing to the development of the student startup. For *Video Game*, the student startup had been granted funded to purchase a Nintendo Switch development kit before they had been granted a license to develop. After being granted the funds, *Video Game* had to figure out how to obtain the license, so that they could take advantage of the funding. This led to the student startup performing field-building activities by contacting different game development studios around the country. Because of the funding grant, the startup gained new connections that were valuable at a later stage, in addition to bridging a knowledge gap when it came to launching their product. This field-building activity also led to the startup acquiring essential equipment for product development. The funding grant enabled student startups to perform valuable networking activities through funding, resulting in further development of student startups. Student startups also engage in field-building activities as an indirect outcome of the funding grant, but this type of activity has a limited influence on development.

5.3 Direct support Services

Financial sponsorship as a direct support service offered to student startups assisted in increasing the student startups internal resources, as well as to provide funding to achieve important activities that bridge them to their environments. According to Amezcua et al. (2013), direct support might

bridge startups, for instance, through mentorship programs, or buffer startups to avoid external resource dependencies, by subsidizing office space or equipment.

The direct support services available to the student startup

The student startups reported that in order to conduct key activities that would develop the startup, they needed office space and funding. While none of the student startups had received funding prior to TEB, the student startups had access to office space through their university. As for the VCP-startups, they had easy access to office space through their university incubation as a part of their study program. The other startups either worked from university group study rooms, home, paid for office space themselves or gained access through other available university incubation offers. The startups had access to mentors but used these to various degrees. Some startups, like *Computer Game* and *Board Game*, used the mentors actively and their startup development was heavily influenced by the mentors. While others, like *Recruiting Software* and *Waste Compactor*, did not get much value out the mentors and stopped using them. It is evident that there is a difference between VCP-startups and others when it comes to the availability and utilization of direct support services.

The application process substitutes for other direct support services

The funding grant has provided direct support services during the application process, as the panel have acted in the role of mentors for the student startups. In this regard, the panel can substitute mentoring programs by taking a proactive role in reducing the knowledge gaps of the startups (Cope, 2000). For *Video Game*, this was the case when they applied for funds to cover hiring costs, but the application was rejected. As mentioned, an experienced student entrepreneur from the panel suggested that *Video Game* recruited the said resource to the team instead. *Video Game* conducted the suggested activity, which led to the student startups internal resources being strengthened and buffered them from being dependent on external resources. This mechanism worked exactly as advised by the panel, as the panel's arguments were based on being in control of the resource over time. It's not unusual that the mentors assist the students in startups to reflect on what is happening in the startup development process and strategize the next steps moving forward (ibid). As shown in these cases, the panel assumed the role of mentors and thus provided direct support as a service.

The provision of mentoring has assisted the startup with knowledge that could further their student startup development. It is evident that the funding grant can substitute other mentorship programs.

The financial support enables other direct support activities

Financial support may aid startups in the development of internal resources or provide direct support that assists startups in gathering resources from their environment. This is evident in the case where the funding grant assisted *Computer Game* in developing internal resources that buffered them from external resource providers. *Computer Game* needed two resources that were critical to the development of their startup. Since the team consisted of fifteen members, the student startup could not utilize the university as office space, like most other student startups in the same environment. Additionally, they needed a computer for game development as some of the development required more powerful computers than the student's entrepreneurs' laptops. *Computer Game* gathered funding to cover office space through industry incubation but were in dire need of more financial support, a need covered by the funding grant TEB. *Computer Game* says that "we had emptied our pockets to afford office space and was desperate for a computer. We would probably not have been here today if it wasn't for TEB". This shows that direct support services that help buffer internal resources can increase survival rates of startups (Amezcua et al., 2013). Several other startups benefited from buffering mechanisms as part of receiving sponsorship in the form of direct support. Startups that performed prototyping or product development activities all developed their internal resources by receiving funding from TEB. This was true for *Waste Compactor*, *Recruiting Software*, *Sleep Machine*, *Video Game*, *Portable Cinema, and Computer Game*, who all improved their prototype or product offering by spending funding received from the funding grant (Slotte-Kock & Coviello 2009). By developing their product, they attempt to increase the number of unique assets the startup holds, which is not reliant on external factors. The funding grant buffered the student startups to avoid dependencies related to external resource providers, resulting in further development of the student startups. Student entrepreneurs consider the role of the granted funding essential in developing their internal resources.

5.4 The student entrepreneurs prior experience

The student entrepreneurs prior experience influences financial sponsorship

The student entrepreneurs may take advantage of sponsorship opportunities and perform EECAs differently, based on their prior experience. The funding grant bridged and buffered the student startups via sponsorship, which assisted the student startups in generating internal resources and accessing external resources (Amezcua et al., 2013). However, sometimes, the sponsorship services have limited influences on the development of the student startup. This is recognized as a case for VCP-startup *Recruiting Software*, due to the prior experience of the student entrepreneur. While it is evident that the financial sponsorship process was influential in the execution of value-adding activities for the less experienced startups, this was not the case for the more experienced student startups. *Recruiting Software* reported that the granted funding was "nice-to-have" and that the activities would be conducted regardless of the financial sponsorship. In this case, the level of involvement made by the funding grant was non-influential. This implies that when startups are more experienced and ambitious, such small amounts of funding matters less. When development is slower, and startups have smaller capital needs, they value the funding more. However, this may also be based on the type of startup, as *Portable Cinema* had the same amount of experience, but valued the funding to a larger extent than *Recruiting Software*. *Portable Cinema* creates a hardware product, and the product development phase was more costly than in the case of *Recruiting Software*. When considering the influence of the funding, one should, therefore, consider the type of startup in addition to the student entrepreneurs' prior experience.

The financial sponsorship as an EECA develops student entrepreneurs' experience

The application process that the student startups undergo while applying for the funding grant adds new experiences to the student entrepreneurs. For *Video Game*, this was the case when they applied for funds to cover hiring costs, but the application was rejected. The case is mentioned above, explaining how the panel suggested that *Video Game* recruited a musician to the team, to strengthen the internal resource instead of being dependent on external resources. The student startups reported that the panel's feedback and the act of granting the funding functioned as constructive criticism and advice, and provided motivational support, which are mechanisms associated with mentoring of startups (ibid). Thus, the funding grant process provided motivation

and entrepreneurial learning to the student entrepreneurs, which added to the student entrepreneurs experience. When it came to the rejected applications, *Computer Game* reported that they learned from the incident and implemented this learning in future processes. This way, the financial sponsorship provided mentoring, which led to value-adding networking activities and learning for the startup. In addition, learning and performing the new type of networking activity gave confidence and felt motivating for the startup. Thus, the funding grant process developed the experience of the student entrepreneurs.

5.5 Summary of sponsorship activities for student startups

The analyzed findings in this thesis indicate that the funding grant is not only linked to direct support services but to other sponsorship services and activities as well. The financial sponsorship activities can substitute for other sponsorships or enable students to conduct more context-specific sponsorship activities. The funding grant provided networking services by connecting student startups with external resource providers. Startups were supported in creating strategies for how to network, as well as gaining important network connections through the panel's network. Additionally, by funding networking activities, the student startups conducted more context-specific networking activities, such as travelling to meet with potential customers and potential investors. The funding grant had limited field-building services for student startups and their environment. Field-building is an important activity for startups as it allows for context-specific knowledge sharing and collaboration, but most field-building happened as part of incubation that is independent of TEB. The funding grant did prove valuable for the student startups that were in need of field-building activities but did not have similar startups present in the local ecosystem. Financial sponsorship as direct support service filled the roles as both funding and mentoring efforts. The student startups had access to some form of office space prior to the funding grant process. The funding grant filled the role of mentoring through the panel's feedback, which influenced motivation and learning for the student entrepreneurs. The funding buffered the student startups with internal resources, which directly supported the student startups' product development. The most attractive form of provision was funding as it filled the role of, or enabled several other sponsorship activities.

5.6 Alteration of the theoretical framework

Initially, financial sponsorship was an activity only connected to direct support as a sponsorship service (Amezcua et al., 2013). However, it is evident that financial sponsorship as an EECA may act as several other sponsorship activities as part of the process. In light of this analysis, the researchers have altered the theoretical framework. The modifications highlight how financial sponsorship as an EECA function as an iterative process. Each of the factors, i.e., financial sponsorship, context and student startup development, influences each other, as illustrated in table 5.1 and table 5.2 below.

Table 5. 1 - The relationship between financial sponsorship and sponsorship context

Financial sponsorship and other sponsorship activities
I. Financial sponsorship may act as other sponsorship activities for the startup and,
II. other sponsorship activities may influence how the startup utilizes the financial sponsorship.
Financial sponsorship and prior experience
I. The student entrepreneur's prior knowledge may influence how the financial sponsorship as an EECA influences the student startup development and,
II. utilizing financial sponsorship as an EECA may add new experience to the student entrepreneur.

Table 5. 2 - The relationship between startup development and sponsorship context

Startup development and other sponsorship activities
I. The development of the student startup is influenced by which sponsorship activities there is available and,
II. how the student startup utilizes these sponsorship activities influences the student startup development.
Startup development and prior experience

| I. | The student entrepreneurs prior experience influences the startup development and, |
| II. | The development of student startup adds new experience to the student entrepreneur |

The alteration shows that the financial sponsorship process is less rigid than first anticipated, and that the context can change once a startup takes part in a financial sponsorship process. As shown in Figure 5.1, financial sponsorship and student startup development both may influence the context of which sponsorship is received, causing later applications and sponsorship activities to be performed with a different basis than the initial application.
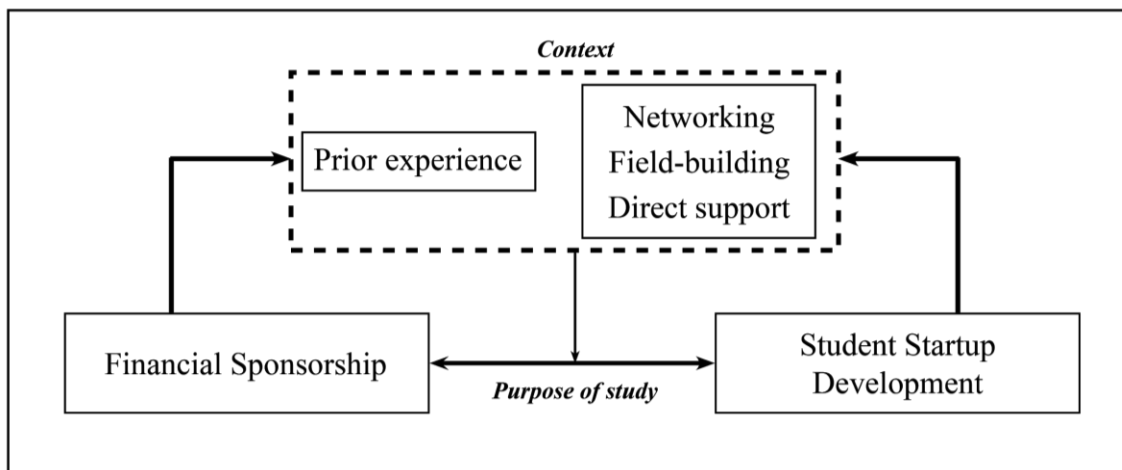

Figure 5. 1 - Alteration of the theoretical framework

The relationship between financial sponsorship and sponsorship context

Financial sponsorship may substitute other sponsorship services, or it may enable student startups to conduct context-specific activities that further startup development. Financial sponsorship works as networking and field-building activities naturally by taking student startups through the application process. For example, taking part in a financial sponsorship process might change how a startup conducts market research before it actually contributes to startup development. This was the case for *Computer Game*, which shows how the modifications work in practice. *Computer Game* applied for funding to perform networking activities to develop their startup, but the application was declined. In this manner, the financial sponsorship influenced the context, as *Computer Game* altered the networking activity they planned, as well as adding to their prior experience by learning a new way to do networking. These alterations led *Computer Game* to apply for financial sponsorship once more, this time with an altered context in the form om new

activities and more experience. This led to the development of their startup. This indicates that financial sponsorship influences the context in which sponsorship is received, in addition to the context influencing the role of financial sponsorship for student startup development. The financial sponsorship process also influences the prior experience of student entrepreneurs, increasing the internal competencies of the startups. By going through the application process, students develop strategic thinking and learn how to write applications and to present ideas. By developing the student entrepreneurs, the context changes and how much time and effort startups use is altered based on their experience. This can be exemplified by *Seismic Data Software*, who stated that the application process developed their business writing skills, causing them to be more prepared to apply for other sponsorship later in their development.

The relationship between student startup development and sponsorship context

Student startup development influences the context in the form of sponsorship activities. Performing activities specific to their startup provides student entrepreneurs with more experience when performing similar activities later. This applies to activities in general but can also be seen as specific to the types of sponsorship activities highlighted by Amezcua et al. (2013). By performing, e.g., networking activities, the startup develops an understanding as to what strategies works well when connecting with the external environment. By developing and going through with the new strategies that are created, startups learn more about their industry and face new challenges, which further requires more strategic thinking and development. *Sleep Machine* developed their startup by building a prototype with funding from TEB. This led to the startup performing networking activities to show off the prototype to industry experts. When this activity was complete, they had gained a new mentor and more industry knowledge, showing an alteration of the context for *Sleep Machine*. Within the new context, *Sleep Machine* applied for more funding to perform a workshop to test the prototype with the new mentor and other industry stakeholders. By having grown their knowledge of the technology and the industry, the startup was now able to perform a workshop that would provide value and develop the startup further. This shows the iterative nature of, and the relationship between financial sponsorship, networking activities, and startup development, as illustrated in the modified framework. Startup development may also influence the startups' prior experience by developing their competencies when it comes to key activities. Performing activities that develop the startup may influence the experience that student

entrepreneurs have with regards to, e.g., market research or product development. Furthermore, this influences how startups approach funding at a later stage.

5.7 The role of financial sponsorship as an EECA in light of the modified framework

Based on the analysis of the findings in light of the modified theoretical framework, the researchers identify the roles of financial sponsorship to be providing *funding, strategic guidance, entrepreneurial learning,* and *motivation*. The roles of funding and strategic guidance are founded in the organizational sponsorship literature, and are direct, targeted outcomes from the financial sponsorship process. This means that it was the intention of the financial sponsorship for the process to perform these roles, as shown in the analysis. The roles of entrepreneurial learning and motivation are indirect effects of the process and are less prominent when analyzing the data in light of the framework. *Funding* is offered to buffer the internal resources of startups as well as bridge them with their environments, in order to aid them in performing networking, field-building, and product development. This funding allows startups to accomplish important activities, which they would not otherwise have received sponsorship to achieve at their stage. In addition, financial sponsorship offers *strategic guidance* to startups to ensure that these activities are value-adding and well thought out. This guidance is provided through sponsorship activities that influence how startups make decisions, as well as through the startups having to consider their own strategy before applying. Although financial sponsorship offers other types of activities, as stated in this section, funding and strategic guidance are the most unique and are more difficult to obtain through other sponsorship sources. *Entrepreneurial learning* for the startups is obtained both directly and indirectly through the sponsorship mechanisms. The startups increased their competencies by learning new market research methods and learned about their industry through networking and field-building efforts. Through the financial sponsorship panel functioning as mentors, student startups also gained *motivation*. This was accomplished by the panel providing positive reinforcement, influencing the confidence that the student entrepreneurs had their ability to develop the startup. The explanations of the roles of entrepreneurial learning and motivation are limited by the nature of the organization sponsorship literature, and its focus on startup development rather than student development. Therefore, it needs to be considered in light of the literature on EECAs to be fully understood as financial sponsorship roles.

6.0 Discussion

This chapter will discuss the role of financial sponsorship in developing student startups and how this may contribute to the literature on EECAs. Through data collection and analysis, the researchers have identified that financial sponsorship plays the role of providing funding, strategic guidance, entrepreneurial learning, and motivation. These roles help contribute to the development of student startups in a university context.

6.1 Financial Sponsorship provides funding

Financial sponsorship in its purest form is the offering of monetary aid to a startup so that they can perform important activities that allow students to develop their startup. Funding at such an early stage can prove crucial for student projects, and even 2500 euros might be very valuable when resources are scarce in the early stages (Laud et al., 2015; Watson et al., 2015; Watson et al., 2018). The goal of financial sponsorship for its recipients is to cover a capital need and develop their startup, as they may not have the funding to perform essential activities for the startup. The role of providing funding from the facilitator's perspective is to attract students to work on their startup. This will hopefully lead to them creating value for society through a new business, or become more entrepreneurial by developing their startup and contributing with entrepreneurial skills elsewhere. The role of financial sponsorship as an EECA to fund student startups adds to the existing but limited research on financial support as an extra-curricular activity. By offering targeted funds through a comprehensive process, this type of EECA can shed light on how funding can be used to develop student startups, which may lead to more learning, increased motivation, and more developed entrepreneurial skills. Furthermore, the attainment of these attributes might make students even more inclined to continue their entrepreneurial journey and keep learning and developing their startup as well as their entrepreneurial skills.

Risk and experimentation

Financial sponsorship may offer funding so that student startups can perform vital tasks for development without personal risk. Startups are often associated with risk and uncertainty (Amezcua et al., 2013), and sponsorship can help minimize these risks (Baum & Oliver, 1991). The ability to experiment in the very early stages of startup development is identified as important

by student entrepreneurs, an activity which some startups highlight as unreasonable to personally fund. By granting students the freedom to explore different possibilities for their startup, they develop faster and reach pivotal milestones earlier. The pace that the funding provides may have positive consequences because it causes startups to develop faster and thereby learn more about the industry and their own business opportunity. Although the activities that are performed often are described as activities the startups would perform regardless of receiving funding, most perform them earlier because of the existence of the fund. The funding role is most important for startups that need to develop fast and have real capital needs. This adds to the scarce literature on the influence of EECAs on student startup development, by showing that university funding grants can play a positive role in the development of student startups through increased speed and experimentation.

Funding in EECAs

Apart from funding grants, business plan competitions are the most widespread mean of requiring funding in the current literature on EECAs. Business plan competitions are often time consuming but might offer a larger amount of funding. Funding grants such as TEB is a more efficient way of providing financial support to student startups, providing universities have the ability to do so financially. The process is more low-demanding, meaning that more students take part with the intention of raising the first money for their startup. Business plan competitions demand long term planning and detailed plans, whereas low-demanding funding grants only requires students to identify the next essential steps in their development. This can be argued to lower the bar for students to develop startups, especially those students who don't have a business background. By encouraging students to take incremental steps into creating a startup, rather than to create an entire business plan at once, it is easier for more students to explore the option of entrepreneurship. The researchers identify that the amount of funding doesn't really matter in these early stages, as startups only need small amounts of resources to test their crucial product concepts and perform market research, before moving on to larger funding grants outside of the university when they are ready. In relation to business plan competitions, financial sponsorship in the form of funding grants adds to the literature by highlighting another viable alternative to how EECAs may help fund startup development.

Financial sponsorship as networking

Financial sponsorship enables student startups to bridge to their environments, by providing funding for networking activities like covering travel expenses to interact with key stakeholders. In the EECA literature, these are outcomes usually associated with networking events and shows that the same outcomes can be achieved by performing financial sponsorship activities. While networking events may be more efficient in terms of the number of students that engage in an entrepreneurial environment at the same time, financial support allows for a more context-specific type of networking. Because startups initiate the process of performing networking activities, it comes with a concrete plan of attack and most likely creates more value-adding outcomes. Networking events as an EECA have in the literature been found to create intent and motivation for nascent student entrepreneurs, while financial sponsorship contributes to the startups with concrete connections that have been considered vital to their development. The sponsorship does this both through the network connections provided by the panel of the funding grant, as well as through providing funding which enables startups to connect to investors, customers, and other industry stakeholders. This adds to the literature on networking by highlighting an alternative way of achieving network effects indirectly through financial support. Networking activities are not the sole goal of financial support but may provide more efficient connections because it is tied to a specific project that has concrete problems that need solving.

Summary funding

In summation, financial sponsorship as funding provides students with monetary aid to perform essential activities that move their startup forward. Although these activities could have been performed without funding, startups are allowed to experiment more and develop faster with no personal risk. Furthermore, the role of funding may cause more students to develop startups, as it lowers the bar relative to alternative extra-curricular activities that provide funding. These findings expand the limited literature on funding as EECAs, as shown in chapter 1.0 and 2.0. Lastly, funding provides startups with the opportunity to perform context-specific networking activities. By identifying this, the researchers found that financial sponsorship may fulfill the same purpose as networking events and business plan competitions in the development of student startups.

6.2 Financial sponsorship provides strategic guidance

Strategic planning

Financial sponsorship plays a role in the strategic planning of startups when the sponsorship requires an application process. By applying for funding, student entrepreneurs must identify the next essential steps for their startups. This forces them to consider their own strategies and their reasoning, as well as encourage them to do more research about their industry, market size, and competitors. When startups are required to provide well-rounded arguments for the activities that they want to perform with the funding, students are challenged with regards to business strategy and planning. This business planning takes place prior to and during writing an application and works as a natural way for the students to engage in developing the next steps in moving their startup further in the best possible way.

Feedback process

A feedback process with a panel is shown to be influential. Regardless of the student entrepreneur's prior knowledge, being evaluated by a panel with more experience helps student entrepreneurs consider their own strategies and argumentation. Panels may substitute the role of mentors in this regard. Feedback provides an outside perspective, and startups appreciate the option to have their strategies evaluated. Although deemed important by startups, the mentoring rarely creates changes in the student startups' strategy, and what they want to accomplish with the financial sponsorship. The mentors rather ask questions of the argumentation behind the funding application, which helps students strengthen their case for receiving sponsorship. The mentoring associated with financial sponsorship is not unique, and mentoring as an EECA is one of the most prominent types of activities in creating entrepreneurial students. Mentors may provide strategic guidance outside of the context of financial sponsorship, and there is no evidence to support that mentoring as a part of financial sponsorship play a bigger role for strategic guidance than other mentorship programs would. It may, however, fill the same role as mentoring would when it is not available through other arrangements.

Creating new strategies

For students that focus heavily on product development rather than business, the financial sponsorship process can aid in creating strategies. Student startups can take advantage of mentors and other stakeholders in the ecosystem to be encouraged to apply for financial support. For startups that aren't aware of the availability of the funding grant, mentors may inform them of the opportunities. This leads to having to create a strategy for how much and what the startup should apply for. Mentors are ultimately responsible for this outcome, but the financial sponsorship process creates the opportunity to think more like an entrepreneur.

Summary of strategic guidance

In summation, financial sponsorship acts as strategic guidance by forcing startups to evaluate their current position and consider what their next essential steps are. The application process contributes to startup development by helping design short-term strategies. Financial sponsorship may also aid in developing strategies by providing mentoring that gives an outside perspective on business planning. Some student entrepreneurs may also create strategies together with a mentor after being made aware of the grant fund. Although this is considered important by startups, the researchers argue that this type of mentoring does not provide additional value in relation to other mentorship programs.

6.3 Financial sponsorship provides entrepreneurial learning

Entrepreneurial skills

Financial sponsorship can facilitate for developing entrepreneurial skills for student entrepreneurs through different learning opportunities. The funding grant application process leads to the development of skills like business writing, pitching, or learning how to market research. The students' background influences the learning outcomes, but students do not find the writing process challenging. Nevertheless, it was a valuable activity to formulate the details of the business in writing. Several students point to the fact that the funding grant application was the first in a long line of funding applications and that the funding grant process functioned well as a first time experience. This is in line with Watson et al. (2018), which states that developing business writing

skills through learning in an early stage will be proven useful when applying for funding later. In that matter, it is the beginning of a longer iterative process. In consonance with Claudia (2014), the practical experience with entrepreneurship in a low-risk context played a big role in developing skills needed when developing a startup. Financial sponsorship confirms the current findings in the field of EECAs, by showing that it facilitates for the development of entrepreneurial skills through experiential learning (Bell & Bell, 2016; Buchnik et al., 2018; Claudia, 2014; Edwards, 2001; Preedy & Jones, 2017; Rae et al., 2012). It adds to these findings by highlighting the use of financial sponsorship mechanisms to develop these skills, a type of activity that has not been shown to have this influence in the field yet.

Learning from failure

When applying for funding, there is no guarantee that the funding will be granted, and this may provide a learning experience for students. Some startups that have applications rejected learn more by getting turned down, and some have an equal learning outcome. The only negative outcome from rejected applications is a change of attitude towards the funding grant as a phenomenon, with no negative outcomes for the startups that are rejected. By having the proposed activities deemed as not essential, students learn how to achieve the same results with activities that required less investment of time and money. This implies that when the panel of a grant fund decides that the activities aren't worth funding, startups are able to generate the same developmental outcome as they intended without the funding. It is unclear if the activities that were originally suggested would have created more value for startups, but it seems that it frees up more of the available funds to spend elsewhere. This highlights an interesting addition to the field of EECAs, indicating that denying students the opportunity to perform extra-curricular they deem as important could actually increase their learning outcome. If a more experienced panel consider there to be a more expedient way of achieving the same results, they may be right, and the students learn a better way of doing things. This is by no means applicable for all applications but considering whether or not students are experienced enough to choose the right activity may be key in deciding the best way to help develop the startup and the student entrepreneurs.

Developing skills also taught by other EECAs

The goal of a large part of the EECA literature is facilitating activities that create entrepreneurial learning for students. The financial sponsorship process enables entrepreneurial learning mostly through the development of skills like business writing, strategy, and pitching. The closest extra-curricular activity in regard to learning outcomes is business plan or pitching competitions, where students learn business writing and pitching (Watson et al., 2018). However, students did not develop practical skills like teamwork, marketing, or sales as part of BPCs, whereas financial sponsorship encourages startup teams to work on tasks that develop these skills. In addition, financial sponsorship allows students to choose their own activities, which facilitates context-specific learning that further a startup. Business plan competitions, while often tied to a student project, offers very narrow learning. This was evidenced by Watson et al., (2018), who found that the learning outcomes related to competitions was limited to the competition itself and not transferable. The flexibility of the funding grant process means that each student performs relevant activities and thereby develops skills that are useful for their context. Financial sponsorship as a mean for entrepreneurial learning adds to the literature, by being a low-demanding and less time-consuming alternative for students to existing ways of learning business writing and pitching. In addition, it provides indirect learning from the activities that startups perform with the funding they receive. This could be experience in customer interaction, sales, market research, or product development.

Summary of entrepreneurial learning

The role of financial sponsorship for entrepreneurial learning is to teach valuable skills for student entrepreneurs, that enable them to continue applying for more funding when developing their startup. Further, the low-risk setting allows for trial and error in a safe way for the startups, evidenced by the fact that students managed to achieve essential activities even though they had applications rejected. Lastly, financial sponsorship compares favorably to other EECAs that aim to facilitate entrepreneurial learning, by creating opportunities for quick and effective learning in an application process and through performing essential activities that lead to startup development.

6.4 Financial sponsorship provides motivation

Financial sponsorship plays a role in motivating students to become more entrepreneurial. Students highlight the role funding has on their motivation to carry on with their startup. 2500 euros is a small amount of funding if the goal of the startup is to grow into a sustainable business. Nevertheless, it has an encouraging influence on student entrepreneurs. The funding itself is not necessarily the largest motivating factor, but rather the fact that someone believes in them and support that their choices are correct. The results indicate that funding at such an early stage of development contributed to encouraging the startups to continue on and work harder and providing them with a small win created a boost for the team. There is some difference between startups with a business background or not, but even the more ambitious startups feel inspired after receiving funding. The uncertainty of entrepreneurship can be daunting for anyone, especially students, and giving the students positive reinforcement very early can create positive consequences when the startup develops further.

Entrepreneurial mindset

Financial sponsorship can help create or increase entrepreneurial mindsets by guiding them through a funding grant process. This is in line with Pittaway et al. (2015) and Ridley et al. (2017). Funding can make startups feel more real for the student entrepreneurs (Watson et al., 2015). By requiring the students to answer serious questions about their startup, they force the students that don't have business backgrounds to adopt an entrepreneurial mindset. Furthermore, the fact that the startups receive funding increases their work rate and contribute to them being more business oriented. For students that don't have a close relationship to how startup funding and business works, low-demanding funding grants can provide a safe introduction to the world of startup financing. The process of developing an entrepreneurial mindset is often abstract, but financial sponsorship is a mean to begin this process and experience the business side of development for students that aren't familiar with it. This confirms the previous research of the relationship between extra-curricular activities and entrepreneurial mindsets and adds to it by showing that financial sponsorship as an EECA can have the same influence as other EECAs.

From intent to startup creation to startup development

For some startups without a business background, motivation from the financial support process was one of the reasons that they continued with their startup. Creating motivation through funding can lead to students working on their startup longer. The increased level of self-efficacy causes students to attack greater challenges related to funding, market research, product development, networking and business strategy, and planning. EECAs often has an influence on creating entrepreneurial intent with students (Buchnik et al., 2018; Preedy & Jones, 2015), but students that apply for financial sponsorship have already shown intent. By initiating the process of startup development and financial support, students turn intent into projects, which is also considered one of the goals of EECAs (Arranz et al., 2017; Buchnik et al., 2018). Financial support can help motivate students to develop these projects and lets other sponsorship activities continue to develop the entrepreneurs afterwards. This expands upon the EECA literature, by highlighting an extra-curricular activity that continues the development after students have turned their intentions into concrete projects. The motivation enables students to reach key milestones which provide them with motivation and more opportunities for learning. Essentially, the motivational influence of funding can be the start of a longer process of continuous sources of new learning opportunities and new motivation, that evolve student entrepreneurs through startup development.

Motivation compared to other EECAs

Other EECAs like mentoring, networking events, guest speaker events, and business plan competitions could also have the influence of motivating students to become more entrepreneurial. Although a variety of these activities increase entrepreneurial intent, gain self-efficacy, and motivate possible student entrepreneurs, few activities do this as a part of a larger project. The activities mentioned often aim to create a general initial motivation and inspiration for entrepreneurship, while financial support creates motivation connected to a specific project. This implies that some activities have the goal of turning regular students into entrepreneurial ones, whereas financial sponsorship turns entrepreneurial students into more motivated student entrepreneurs already engaging in startup development. When considering other activities that achieve this, mentoring seems the most applicable, as mentoring is relevant at all stages of startup development. In addition, business competitions may cause the same outcome when winning, but the availability of the funding grant makes it able to motivate far more students.

Summary motivation

In summation, financial sponsorship plays a role in motivating student entrepreneurs. It isn't necessarily the funding itself that motivates, but the feeling of having achieved something. Students without a business background can increase their entrepreneurial mindset and be motivated to continue on with their project through this type of sponsorship. Furthermore, it can provide an easy introduction to startup financing, in a way that encourages students to apply for more funding later. As an EECA, financial sponsorship provides motivation for students that already have an established entrepreneurial intent. It can play the same role as mentoring does in the startup development process and could simulate the motivational outcome of winning a business competition.

6.5 Broader influence of financial sponsorship

Financial sponsorship provides funding, strategic guidance, entrepreneurial learning, and motivation to new student entrepreneurs and their startups. This sponsorship influences development during the preparation for applying, through the application process, and after receiving funding. After students have completed the process, they attempt to use the funding and their newfound skills and motivation, on performing activities that develop their startup. This starts an iterative process where each new activity that furthers startup development creates a new outcome. This is illustrated in figure 6.1. Today there is a lack of literature that indicates that this type of sponsorship activity has broader influence. By completing these activities, students gain experience and develop new skills. In addition, developing their startup might cause them to gain more motivation, as they see it grow. Growing the business and developing entrepreneurial skills might cause students to apply for more funding and develop new strategies. Furthermore, receiving more funding might create new learning opportunities, develop new strategies, and increase motivation even more. The longer the iterative process lasts, the longer students work on their startup and develop their entrepreneurial skills.
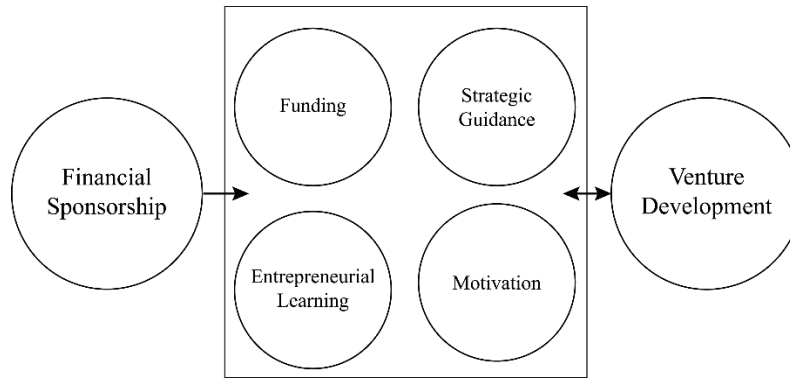
Figure 6. 1 - Financial sponsorship's broader influence

7.0 Conclusion

This study aims to answer the research question *how may financial sponsorship as an EECA have a role in the development of student startups?* By analyzing the startups' experience with the funding grant process, the researchers have identified its possible roles in developing student startups.

Financial sponsorship may assist in developing student startups by providing context-specific, targeted funding in a way that has not previously been covered in the literature. Unlike other extra-curricular funding mechanisms, financial sponsorship allows students to obtain funding to execute essential activities quickly. By allowing startups to almost single-handedly choose how to spend the money, the funding facilitates for value-adding activities that allow for faster student startup growth without personal risk for the student. This process also allows financial sponsorship to assume the role of strategic guidance for the students' startup development. Because the power is in the hands of the students, it requires them to consider what is the right decision to move the startup forward. An application feedback process furthers this role, and mentoring plays an important role in challenging the students' strategies and providing feedback on their choices when they need it. As opposed to similar EECAs that contribute to student startup strategy, financial sponsorship offers help in designing short-term strategies in early stage development.

Financial sponsorship plays a role in facilitating entrepreneurial learning for nascent student entrepreneurs. The sponsorship process develops valuable entrepreneurial skills like business

writing and pitching, as well as learning by trial and error. Furthermore, performing activities that are funded by financial sponsorship develops context-specific skills that are relevant to student startups. Financial sponsorship may contribute to entrepreneurial learning in the same way as business plan competitions, and mentoring does, but offers a more rapid and targeted process. This learning contributes to startup development as student entrepreneurs develop skills that are applicable when developing their startup. Financial sponsorship can also motivate students to continue working on their startup and increase their entrepreneurial interest. Receiving funding can create a boost for the startup team, mostly based on the confidence they feel after receiving positive feedback from more experienced entrepreneurs. Furthermore, financial sponsorship can create more entrepreneurial mindsets for students without business backgrounds, and help student entrepreneurs to gain the motivation they need to take the next important steps in the development of their startup. Financial sponsorship may have the same influence as mentoring, networking events, guest speaker events, and business plan competitions, but does this connected to a single project. The sponsorship uses something students are already invested in and has the interest to develop, and provides them with the motivation and tools they need to perform entrepreneurial activities. Lastly, financial sponsorship in an early stage student startup progress can kick off a longer process of learning, motivation, funding, and strategy development. This process continues evolving iteratively, facilitating for the development of students' entrepreneurial career.

7.1 Contribution

This thesis adds to the EECA literature by highlighting that financial sponsorship plays four roles in the development of student startups. It develops the limited research on financial support as an EECA (Bell & Bell., 2016; Laud et al., 2015; Watson et al., 2015; Watson et al., 2018), by showing how funding can play a role in the development of student startups. By offering financial sponsorship through an application process, students can obtain funding more efficiently than a business plan competition. In applying for funding, the researchers confirm Cope's (2000) findings that mentors may help students develop strategies, but add to this statement by establishing it in the context of financial support. Financial sponsorship also adds to the literature on entrepreneurship education (Bell & Bell, 2016; Buchnik et al., 2018; Claudia, 2014; Edwards, 2001; Preedy & Jones, 2017; Rae et al., 2012), by highlighting a new context where important

business skills are developed through an application process and learned by performing essential activities that develop their startup. The researchers also found that this learning is similar to that of BPCs, but indicate that the funding grant process allows for more context-specific learning because it is tied to a project that students already have shown intent to develop. In addition, the learning is more practical and fast paced. It may cause networking effects that are context-specific as well, as students more often than not use the funding to bridge their startup to their environment through traveling and meeting industry stakeholders and customers. Lastly, this thesis indicates that completing the funding grant application process motivates students to continue developing their startup, and creates more developed entrepreneurial mindsets for students without business backgrounds. This complements the findings of Arranz et al. (2017) and Ridley et al. (2017) by showing that financial sponsorship can increase the entrepreneurial mindsets of students.

7.2 Policy implications

Policy makers at entrepreneurial universities should offer funding grants to students that already have shown entrepreneurial intent by taking initiative and applying, and are willing to continue working on their startups provided they receive funding. Facilitators should create an application process that requires the students to define their product, key customers, market size, and action plan for the next few weeks. It is important that the questions that are asked in the application process are relevant, and cultivates activities that are advantageous for the startups' development. A three page application document works well, and students should also be required to do a presentation of their idea. There should be a panel of experienced entrepreneurs that decide whether or not the students should receive funding, but they should facilitate a low-demanding process. Funding should be tied to a specific activity that students argue is the next essential step in development. Although they should demand argumentation, the funding grant should be open to all students that want to apply, as long as they have a specific startup idea. Students that don't have a business background should be assigned a mentor; first, that can discuss the business idea and possible activities before applying. The process of facilitating the application process and communicating with student entrepreneurs should be organized by students, so to make it feel more attainable for students who discover entrepreneurship. The university or corporate sponsors should cover the most demanding administrative responsibilities. An ideal situation would be to

offer the grant as a part of a student club, in an ecosystem where there exists somewhat experienced student entrepreneurs. In addition, this student club should have a representative from the university staff that handles administrative tasks. This makes it easier to gather the resources needed to establish the grant.

The funding grant requires large amounts of funding, and the researchers recommend a corporate sponsor to cover these costs. This way, local companies can help create the entrepreneurs of tomorrow and promote themselves towards some of the most engaging and hard working students at a university. Companies that value innovation should be prioritized. Companies should consider the different roles financial sponsorship has, and evaluate if the roles in some way contribute to their mission. Sponsoring such a funding grant might help create better candidates for hire, and might help companies improve how their brand is perceived with students.

7.3 Limitations and further research

The researchers have in this study taken an exploratory approach to understand the role of financial sponsorship for student startups. The researchers have recognized limitations that in some cases, open up further possibilities for future research on the topic of financial sponsorship. For instance, further empirical research is needed to assess whether the findings from this thesis are applicable to a general range of financial sponsorship, or whether the funding grant process varies in its execution. The funding grant process can vary based on the context of the financial sponsorship, especially in regard to other sponsorship services available in the entrepreneurial ecosystem.

The study's' primary data is limited as the data collection was conducted after the funding grant process. The student startups recollection of the situation might have changed over time. A longitudinal cohort study is suggested to study the same student startups over a period consisting of before, during, and after the funding grant process. The participants changing perception of the situation may provide insight into the student entrepreneurs impressions, experience, and reflections that would otherwise be difficult to obtain. These insights might provide new perspectives on how the role of financial sponsorship as an EECA influences both the student startup and the student entrepreneur.

The researchers have studied the funding grants role towards student startups development. As the findings show, the student entrepreneurs prior experience influences the role of the financial sponsorship have on startup development. With this, the researchers suggest further research on the role of financial sponsorships as an EECA towards the student entrepreneur, to substantiate this thesis' contribution to the literature. By performing a similar study but focusing solely on the development of entrepreneurial students, it would be possible to understand the entrepreneurial learning effects of financial sponsorship to a larger extent.

Finally, the study examines a Norwegian funding grant. One distinct attribute of Norway is the assess to governmental sponsorship services, such as Innovation Norway and the Norwegian Research Council. Nations differ in how they provide sponsorship to student startups, which may influence how the financial sponsorship role has on the development of student startups. Thereby these drivers are to some extent, dependent on the funding grants nation of origin. Evidently, the student startups in this study are influenced by the context of other sponsorship services provided by the government. This makes it difficult to generalize the findings of this thesis to international funding grants. Hence, further research on financial sponsorship in different markets or with a global perspective is suggested to substantiate this thesis' contribution to the literature and uncover nuances or similarities amongst this type of funding grants internationally.

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Appendix A – Interview Guide

Fase 1: Rammesetting (5min)
a.   Vi forklarer litt om temaet for samtalen (Masteroppgave som skal se på ulike aktiviteter innenfor en student oppstart.)
b.   Vi går gjennom samtykkeskjema og signerer.
c.   Opptak?
d.   Er noe uklart? Har du noen spørsmål?

Fase 2 Bakgrunnsinformasjon (kontroll faktor):
a.   Personens utdanningsløp // teammedlemmer i fasen dag 0 til idag/fase 2?
b.   Personens erfaringer relevant til start-up // teammedlemmer?

Fase 3 Tidslinje fra dag 0 til idag:
a.   Kan du fortelle om selskapets milepæler (store hendelser/ prosjekter) fra dag 0 til idag/fase 2?

- Utvikling
- Kundekontakt
- Penger/søknader
- Rekruttering

b.   Er det noen andre strategiske valg og hendelser du også vil trekke frem?

Andre buffering/bridging spørsmål:
OBS: i tidlig fase

- Kan du fortelle litt om teamet i fasen og hvordan det utviklet seg?
- Hvem var med på å ta avgjørelsene i teamet?
- Hvor satt teamet når dere jobbet? (lokasjon - sammen/ikke sammen)
- Gangen i selskapet - arbeidsfordelinger, hvor ofte jobber dere? (kun når dere er sammen? Faste arbeidsdager eller tider?)
- Viktige verktøy for samarbeid?

Oppfølgingsspørsmål til alle spm: Har det alltid vært sånn eller har det endret seg? En spesiell begivenhet?

Networking

- Hvilken betydning har nettverksbygging hatt for deres bedrift i tidlig fase?
  - Om viktig: Hvordan har dere gått fram for å bygge dette nettverket og å finne nøkkelpersoner?
  - Hvordan har dere gått fram for å utnytte dette nettverket?
    - I hvor stor grad får dere utnyttet de kontaktene som deres skaper?
- Er det noen personer i nettverk som har vært spesielt viktig?
- Noe nettverksarrangement som har vært viktig?

Field-building
- Eksisterer det lignende/konkurrerende bedrifter av dere i innovasjonsmiljøet i Norge?
- Hvordan hørte dere om disse?
- Har dere hatt noe kontakt med disse?
  - Hvorfor/hvorfor ikke? Hvorfor ikke mer?
    - Kontinuerlig? Engangs-kontakt?
  - Har dere lært noe?
    - Hva er den viktigste lærdommen?
- Har dere kontakt med andre oppstarter i miljøet? (trenger ikke være lignende)
  - Hvilken betydning har dette?
  - Har dere lært noe?

Direct support (Annen støtte enn Spark / støtte fra Spark)
- Hvilke ressurser har det vært mest behov for i tidlig fase?
  - Hvordan gikk dere frem for å hente ressursene?
- Kan dere nevne alle steder dere har/eller forsøkt å hentet finansiell støtte fra?
- Har dere benyttet noen ressurser fra NTNU (Lab, professorer, veiledning, annet)?
- Har dere benyttet andre ressurser fra innovasjonsmiljøet i Trondheim eller andre steder i Norge?
  - Hva har vært betydningen av disse?

Spark
- Hva slags erfaringer har du med Spark* NTNU
- Hvilke fasiliteter som Spark tilbyr har dere tatt i bruk?
  - Har dere benyttet veiledning? (Spark eller andre?)
  - Har dere benyttet verkstedet til Spark?
  - Har dere benyttet TEB?
  - Deltatt på? JASUN; Thirsty thursday; Fuck-up night, annet?
  - Andre ting?
- Nettverk
- Field-building
- Direct support
Stemmer tidslinje?

Fase 4 TEB
1: Åpent
- Kan du fortelle meg om ditt, og ditt selskaps forhold til TEB?
Oppfølging
- Hvor mange ganger? Hvor mye?

2: Søknad
Før:
- Når fant dere ut at dere skulle søke TEB?
- Hvilke aktiviteter ønsket dere å gjennomføre?
  - Hvorfor akkurat disse?

- Vurderte dere noen andre?
- Hvordan vurderte dere at dette var de mest hensiktsmessige aktivitetene?
  - Hvem var med i vurderingen?
- Hadde dere andre sentrale aktiviteter på dette punktet?
- På det punktet, hvor viktig føltes det å søke om pengene dere skulle søke om?

Under:
- Hvor omfattende var det å skrive søknaden?
- Hvor lang tid brukte dere?
- Hvordan var feedback-prosessen?
- Førte det til noen endringer i budsjett, aktiviteter eller annet?

3: Presentasjon
- Hvordan var forberedelsene til presentasjonen?
  - Brukte dere mye tid? Hvem presenterte?
- Hvilke tilbakemeldinger fikk dere fra panelet? Noen minneverdige spørsmål/tips?

4: Etter penger innvilget
- Når brukte dere pengene?
- Brukte dere pengene på det som var planlagt?
  - Spesifisere per formål om det er flere
- Gjennomførte dere alle aktivitetene som var planlagt?
- Hva betydde disse aktivitetene for selskapet?

5: Div
- Hva mener du at TEB hadde å si for dere i den fasen dere var i?
- Om dere ikke hadde fått innvilget penger, ville dere fortsatt gjennomført de samme aktivitetene?
  - Hvorfor/hvorfor ikke?
- Har TEB støtten ført til at selskapet har anskaffet nye ressurser?
  - Har TEB støttet ført til at dere har fått andre ting enn penger?
- Hvis du ser på bedriften før og etter TEB, er det noen forskjeller?
  - Har dere ny informasjon eller andre ressurser?
  - Har det skapt nye oppgaver?
  - Har det påvirket teamdynamikken?
  - Har det påvirket ting som ambisjon og daglig drift?
- Om du skulle vektlagt en verdi i TEB-prosessen, hva ville det vært?
  - **Er det noe du vil legge til?**

Avsluttende fase: Oppsummering

Oppsummere funn - Har jeg forstått deg riktig?

Kan vi kontakte deg igjen for oppfølgingsspørsmål?

Kan vi beholde tegningen og bruke den i oppgaven?

Appendix B

01 Bakgrunn [Kontrollvariabel]

02 Timeline
Utvikling
Kundekontakt
Penger/søknader
Rekruttering
Team og arbeidsforhold
      Arbeidsdynamikk
      Lokasjon [kontorplass, inkubator e.l.]

03 Networking, field-building and direct support.
Networking (N)
      N Dir
            NDir1
            NDir2
      N InDir
            NInDir1
            NInDir2
      N Independent
            NIndep~~enden~~t1
            NIndep~~endent~~2
Field-Building (F-B)
      F-B Dir
            F-B Dir1
            F-B Dir2
      F-B InDir
            F-B InDir1
            F-B InDir2
      F-B Independent
            F-B Independent1
            F-B Independent2
Direct Support (DS)
      DS Dir
            DS Dir1
            DS Dir2
      DS InDir
            DS InDir1
            DS InDir2
      DS Independent
            DS Independent1
            DS Independent2
Annet (Plassering kan diskuteres)

04 Spark [Annet relevant materiale tilknyttet Spark som ikke passer i 03]

05 TEB
Fakta
Søknad
        Søknad objektiv effekt [før, under og etter]
        Søknad opplevd effekt [før, under og etter]
Presentasjon
        Presentasjon objektiv effekt [før, under og etter]
        Presentasjon opplevd effekt [før, under og etter]
Aktiviteter etter støtten ble innvilget
Betydningen av TEB
        Opplevd betydning av TEB
        Objektiv betydning av TEB [før og etter TEB]