Katrine Husebye Leine

Co-creation between a Venture Creation Programme and the Base of the Pyramid

A case study of how entrepreneurship students can be driven and enabled to co-create with entrepreneurs from the base of the pyramid

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Submission date: March 2020
Supervisor: Lise Aaboen and Gunn-Berit Neergård

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Aim of the Thesis

The aim of this master's thesis is to investigate how entrepreneurship students can be driven and enabled to co-create with entrepreneurs at the base of the economic pyramid (BoP). This is investigated so that venture creation programs can learn what they should highlight in order for entrepreneurship students to co-create with entrepreneurs from the BoP.

In order to fulfill the aim of the thesis, the following has been completed:

- A review of the current literature.

- A theoretical framework based on the current literature is created.

- An empirical study through conducting twelve semi-structured interviews.

- The empirical findings are presented, analysed, discussed and compared with the theoretical findings.

- The empirical and theoretical findings are combined to make up a conceptual framework.

Preface

This master's thesis is written by Katrine Husebye Leine, as an assignment for the subject TIØ4945 Entrepreneurship. This master's thesis serves as the final assignment for my master's programme at Norwegian University of Science and Technology (NTNU)'s School of Entrepreneurship (NSE).

The goal of this thesis is to understand how entrepreneurship students can be driven and enabled to co-create with entrepreneurs from the base of the economic pyramid. I conducted a literature review and made a plan for this thesis in a project thesis in 2019, which laid the theoretical foundation for this master's thesis.

I travelled to India for the first time in 2017, while I was studying at NTNU School of Entrepreneurship. While I was there, I attended The Festival of Innovation, and met many innovators from the base of the pyramid (BoP). I also met Professor Anil K. Gupta, the founder of an innovation support system at the BoP. The BoP innovators' creativity, extensive knowledge and high degree of innovation, without being completely aware of it themselves, inspired me immensely. This sparked an interest - a great potential and untapped resource for collaboration.

I also wanted to inspire my fellow, and future, students to discover what I had discovered - to see that there was huge potential to make a difference in close collaboration with those that actually experience hardship themselves. I saw that this could lead to many interesting, important and impactful projects, and through collaborating, the students could create something that is actually needed at the base of the pyramid segment. Therefore, I wanted to figure out how I and other students from NTNU School of Entrepreneurship, or other venture creation programmes, could co-create with entrepreneurs at the BoP.

In December, 2018, Vivek Sinha, researcher at NTNU, got an application for the Network for Engaged Entrepreneurship in Developing Countries (NEED) project approved. The NEED project is a cross-cultural collaboration between initiatives at the BoP, NTNU School of Entrepreneurship and other universities and professors. I therefore realised that this research topic was highly relevant and needed.

I would like to thank my supervisors Lise Aaboen and Gunn-Berit Neergård for their support, guidance and feedback throughout the semester. Their support has proven invaluable in my quest for gaining knowledge about a topic I am highly motivated by. I would also like to thank Vivek Sinha and Øystein Widding at NTNU School of Entrepreneurship for introducing me to Professor Anil K. Gupta, his initiatives and the BoP entrepreneurs in India. I am also thankful I got the opportunity to travel to India, thanks to NTNU School of Entrepreneurship, to see India and meet the BoP entrepreneurs in person. Furthermore, I would like to thank my interview subjects that took the time to share invaluable insights, opinions, experiences and ideas - the thesis would not have been possible without you. I would finally like to thank my boyfriend, family and friends for their immense support throughout this process.

Katrine Husebye Leine
March, 2020

Abstract

The Base of the Pyramid (BoP) segment is the most economically deprived group in society. Despite being economically poor, the poverty-stricken are knowledge rich and can contribute with extensive knowledge and experiences. Entrepreneurship is considered crucial for economic development, however, many entrepreneurship programmes targeted at the BoP further trap the poverty-stricken in the poverty cycle. Academic researchers have also been criticised for not sharing the knowledge they produce, as it can have benefits for others and society. In order to overcome these challenges, co-creation is proposed.

Studies that explore entrepreneurship as a means to alleviate poverty, suggest that some of the challenges that nascent entrepreneurs at the BoP segment experience can be overcome, through working together and learning from each other, through the co-creation of ventures for example. Co-creation has thus been recognised as a way for different groups to create value for local communities at the BoP, and working together could be a method for poverty alleviation.

Entrepreneurship students at action-based entrepreneurship education programmes aim to solve real-life problems through starting a venture. Co-creating with entrepreneurs at the BoP could provide entrepreneurship students with more and different opportunities for learning and form the students' entrepreneurial identity (Jones et al., 2014), which is why Lahikainen et al. (2018) suggest cooperation with outsiders as a fast track to entrepreneurial learning. However, there is no existing research on co-creation between the exact participants venture creation programme students and BoP entrepreneurs.

The purpose of this thesis is therefore *how can entrepreneurship students be driven and enabled to co-create with entrepreneurs at the BoP?* In order to fulfill the purpose, I have broken it down into three research questions, researching which factors drive and enable entrepreneurship students to co-create with entrepreneurs at the BoP, and which factors inhibit entrepreneurship students from co-creating with the BoP.

In order to answer the research questions, a literature review has first been conducted to see what the literature says about drivers, enablers and inhibitors of co-creation. Furthermore, qualitative research, including twelve semi-structured interviews, have been conducted with six currently enrolled students at NTNU School of Entrepreneurship (NSE), three alumni from NSE and three staff members from NSE. The empirical findings are thus analysed and discussed in comparison with the theoretical findings from the literature review.

I found a total of 30 factors, which make up a conceptual framework based on the literature and empirical findings. These have been divided into four pillars of co-creation: perceived benefits, resources, relational norms and external environment. The conceptual framework serves as a tool to assist the participants in the co-creative process in creating a strategy for co-creating and thus becoming more productive, successful and minimise risks. It seems as if co-creation is desirable, beneficial and could be feasible, given that the factors that enable and drive are in place, and that the inhibitors are addressed. If the enablers and drivers are not present, they could become inhibitors for co-creation.

The research topic "co-creation between entrepreneurship students and entrepreneurs at the BoP" is a new research topic and fills a gap in the existing literature. My conceptual

framework therefore advances new theory, which is a novel contribution. Additionally, my research contributes to the Network for Engaged Entrepreneurship in Developing Countries (NEED) project.

I would recommend testing the conceptual framework developed in this thesis through action with the students, through executing the co-creative process and the NEED project. Furthermore, I would recommend conducting the same study with the actors at the BoP, as co-creation is a balanced relationship where both parties need to consider the other. Furthermore, I would recommend multiple and longitudinal case studies for further research to study the nuances of the co-creative process, how it changes over time and the impact it has on the participants, society, education, economic development, entrepreneurship and so forth.

Sammendrag

"Base of the Pyramid" (BoP) segmentet er den mest økonomisk fattige gruppen i samfunnet. Til tross for at de er fattige, er de kunnskaprike, har mange erfaringer og kan bidra med mye. Entreprenørskap anses som kritisk for økonomisk utvikling, men eksisterende entreprenørskapsprogram rettet mot BoP fanger denne gruppen videre i en sirkel av fattigdom. Akademiske forskere har ikke delt all kunnskap de har tilegnet seg, og har blitt kritisert for dette da denne kunnskapen kunne hatt betydning for andre og for samfunnet. For å overkomme disse hindringene, er "co-creation" foreslått.

Studier som forsker på entreprenørskap som en måte å utrydde fattigdom foreslår at noen av utfordringene som vordende entreprenører i BoP segmentet opplever kan overvinnes. Dette foreslår de kan gjøres gjennom samarbeid og å lære av hverandre, gjennom å "co-create" bedrifter, for eksempel. Co-creation har derfor blitt ansett som en måte for ulike grupper å skape verdi for lokalsamfunnet i BoP segmentet på, og å jobbe sammen kan være en måte å utrydde fattigdom.

Entreprenørskapsstudenter ved "action-based entrepreneurship education programmes" har som mål å løse reelle problemer gjennom å starte en bedrift. Å "co-create" med entreprenører i BoP segmentet kan gi entreprenørskapsstudenter flere og andre typer muligheter for læring, og forme deres entreprørielle identitet (Jones et al., 2014). Derfor foreslår Lahikainen et al. (2018) at samarbeid med utenforstående som en snarvei til entreprørielle læring. På den annen side finnes det ikke noe eksisterende forskning på co-creation mellom akkurat disse aktørene, nemlig studenter fra et "venture creation programme" og BoP entreprenører.

Målet med denne oppgaven er derfor *hvordan kan entreprenørskapsstudenter bli drevet og muliggjort til å co-create med entreprenører fra BoP segmentet?* For å finne svar på dette, har jeg brutt ned målet i tre forskningspørsmål, der jeg har undersøkt hvilke faktorer muliggjør og driver entreprenørskapsstudenter til å co-create med BoP entreprenører, og hvilke faktorer hindrer entreprenørskapsstudenter fra å co-create med BoP segmentet.

For å svare på forskningsspørsmålene, har jeg gjennomført et litteraturstudie for å se hva litteraturen sier om drivere, hva som muliggjør og hindringer av co-creation. Videre, har jeg gjennomført kvalitativ forskning i form av tolv semi-strukturerte intervju med seks nåværende studenter ved NTNU's Entreprenørskole (NSE), tre alumni fra NSE og tre ansatte ved NSE. De empiriske funnene har videre blitt analysert og diskutert med bakgrunn i de teoretiske funnene fra litteraturstudiet.

Jeg fant totalt 30 faktorer, som utgjør et rammeverk basert på litteraturen og de empiriske funnene. Disse har blitt delt inn i fire søyler av co-creation: oppfattet fordeler, ressurser, relasjonelle normer og eksterne omgivelser. Dette rammeverket kan brukes som et verktøy for å bistå de som deltar i den co-creative prosessen for å utarbeide en strategi for co-creation, og dermed bli mer produktiv, suksessful og for å minimere risiko. Det virker som om co-creation kan være ønskelig, fordelaktig og mulig, gitt at faktorene som driver og muliggjør er tilstede, og at hindringene blir tatt hensyn til. Hvis faktorene som driver og muliggjør ikke er tilstede, kan de bli hindringer for co-creation.

Forskningsemnet "co-creation mellom entreprenørskapsstudenter og BoP entreprenører" er et nytt forskningsemne og dekker et behov i eksisterende litteratur. Mitt rammeverk frem-

mer ny teori og er et nytt bidrag til forskningen. I tillegg, bidrar min forskning til "Network for Engaged Entrepreneurship in Developing Countries" (NEED) prosjektet.

Jeg anbefaler å teste rammeverket jeg har utviklet i praksis med studentene, gjennom å utføre den co-creative prosessen og NEED prosjektet. Videre, anbefaler jeg å gjennomføre samme studie med entreprenører fra BoP, da co-creation er et balansert forhold der begge parter må ta hensyn til den andre. I tillegg, anbefaler jeg å gjennomføre "multiple" og "longitudinal" case studier for videre forskning for å studere nyansene av co-creation, hvordan det endrer seg over tid, og hvilken forskjell co-creation har for de som deltar, samfunnet, utdanning, økonomisk utvikling, entreprenørskap, osv.

Acronyms

BoP Bottom or Base of the (economic) Pyramid

B2B Business to Business

HBN The Honey Bee Network

NEED Network for Engaged Entrepreneurship in Developing Countries

NGO Non-governmental Organisation

NSE NTNU School of Entrepreneurship

NTNU Norwegian University of Science and Technology

RQ Research Question

VCP Venture Creation Programme

Table of Contents

Chapter 1

Introduction

Consisting of more than four billion people, the Base of the (economic) Pyramid (BoP) segment is the most economically deprived group in society (Kirchgeorg and Winn, 2014; London and Hart, 2011). The BoP segment earns less than USD2 per day (Rahman et al., 2015; London and Hart, 2011). Entrepreneurship is widely recognised as a key mechanism for employment generation and socio-economic development, in addition to increasing welfare and productivity worldwide (Baumol and Strom, 2007; Clock and Mazzarol, 2015; Rahman et al., 2015). Thus, entrepreneurship is considered a panacea for poverty alleviation.

Collaboration and entrepreneurial stakeholder networks are important for entrepreneurs' success at the BoP segment (Shams and Kaufmann, 2016), making co-creation a central principle of the BoP. Despite being economically poor, the poverty-stricken are knowledge rich (Gupta, 2016). In order to work with the BoP segment, we need to have respect for them as individuals (London and Hart, 2011). Furthermore, London and Hart (2011) go on to say that "new and creative approaches are needed to convert poverty into an opportunity for all concerned." This means that co-creation with the BoP could be, what the Inter-American Development Bank call "opportunity for the majority" or, as Academy of Management calls it, "business for the benefit of all" (London and Hart, 2011). Therefore, there is a great need for the encouragement of innovation in business models and corporate strategies that will facilitate co-creation between different actors, such as academic institutions or companies, and local communities in order to create opportunities for sustainable livelihoods and enhance natural capital (London and Hart, 2011). Academics, such as action-based entrepreneurship programmes and venture creation programmes could therefore play a crucial role in the development of a more equitable and inclusive society.

However, there is lacking research on how academia, such as action-based entrepreneurship education programmes and venture creation programmes, can co-create with the BoP. Additionally, there is no existing research implying if co-creation is even desirable, beneficial or feasible between participants from the BoP and students from an action-based entrepreneurship programme or venture creation programme (VCP). What is meant by a venture creation programme will be elaborated on in section 1.1.3. Thereby, the purpose of this master's thesis is *How can entrepreneurship students be driven and enabled to co-create with entrepreneurs at the BoP?*

1.1 Importance of the Topic

The literature I have focused on primarily in this thesis is co-creation. Co-creation will therefore be fully elaborated on in chapter 3. This section thus serves as a short introduction to the impact and importance of co-creation. Moreover, this thesis' focus is on co-creation aimed at, and between, individuals at a venture creation programme (VCP) and at the BoP. Therefore, in this thesis, a VCP and the BoP are two contexts for co-creation to take place. The remaining two sections in this introduction chapter will therefore take a closer look at these two contexts.

1.1.1 Co-Creation

Co-creation propels innovation, according to Shams and Kaufmann (2016). However, there is an urgent need for the entrepreneurial co-creation concept to materialise, as this will contribute to the success of stakeholders and entrepreneurs (Shams and Kaufmann, 2016). In order to gain proper insight into the perspective of the BoP and the problems they face, it is crucial to engage in co-production (Antonacopoulou, 2010; Bartunek, 2007; Simba and Ojong, 2017). Entrepreneurship therefore needs to build on this; integrative knowledge production in order to collaboratively develop solutions with the BoP (Simba and Ojong, 2017). Furthermore, consolidating all parties' views in a creation process and during knowledge development is important as it contributes to increasing its relevance, legitimacy and applicability, according to Simba and Ojong (2017). High importance is placed on interrelationships here, as they balance out the views of the different parties (Simba and Ojong, 2017).

Existing research shows that a culture's local and academic well-being is substantially enhanced when scholars and practitioners speak and listen carefully to each other (Macintosh et al., 2012). When two worlds come together, a transactional process can take place. This is because the parties are given the chance to exchange unique stories and seek to create something collectively, rather than individually (Macintosh et al., 2012). Furthermore, producing knowledge collectively can lead to the development of deep partnerships, and in turn, result in high quality research while adding value to society (Simba and Ojong, 2017).

Co-creation is a critical vehicle for delivering sustainability driven business models, according to Biloslavo et al. (2018). Previously, value was created by firms acting autonomously (Biloslavo et al., 2018; Beattie and Smith, 2013). Now, however, value is co-created by firms or actors through joint action and formal and informal alliances (Biloslavo et al., 2018; Beattie and Smith, 2013).

To sum up, co-creation is important with regards to sustainable business models, high quality research, to gain an insight into the perspectives of others in order to develop solutions suited to the needs of others, and in order to create value - both for business and society. Thus, co-creation has various areas of application, which includes having an impact.

1.1.2 The Base of the Pyramid

The BoP segment is often defined as "the population of the world that is generally excluded from the current system of global capitalism" (London and Hart, 2011).

The History of the Base of the Pyramid Approach

Previously, multinational corporations have had the goal of directly targeting the BoP as a means for earning profit (Prahalad and Hart, 2002), while eradicating poverty and increasing the poverty-stricken's wealth (Crabtree, 2007; Karnani, 2006, 2007b; Munir et al., 2010). Considering the poverty-stricken as "consumers" was first described and developed by Prahalad and Hart in 2002 (Nahi, 2016), and was considered a new wave of thinking (Karnani, 2006; Rahman et al., 2015). However, this lead to critics expressing a great fear that large, profit-oriented companies would further exploit the poverty-stricken (Karnani, 2007b, 2006). They also doubted that corporate businesses could serve the basic needs of the poverty-stricken (Munir et al., 2010). Furthermore, Karnani (2006) expressed that multinational corporations viewing the poverty-stricken as consumers could hinder local entrepreneurs from emerging.

Therefore, Crabtree (2007) and Karnani (2007b) started considering the poverty-stricken as "producers" instead. London and Hart (2011) suggested that future BoP development initiatives would be about "creating a fortune *with* the BoP" rather than "finding a fortune *at* the BoP". This lead to a new approach that works towards the creation of a more inclusive eco-system for the entire BoP, aiming to integrate the BoP in multiple roles in the global value chain (Gupta and Khilji, 2013). Creating a fortune with the BoP, argues Rahman et al. (2015), would generate income opportunities for the BoP segment, while creating entrepreneurial businesses through mobilising local resources. Karnani (2006) argue that multinational corporations, for example must invest in upgrading the poverty-stricken's skills and productivity in order to create more employment opportunities. They say that this is the best way for multinational corporations to help eradicate poverty. In this manner, the goal is to include the poverty-stricken in the current system of global capitalism (London and Hart, 2011). This approach also contributes to making the poverty-stricken become active and valuable participants in socio-economic development, rather than donations or aids deeming them redundant (London and Hart, 2011).

Working with the Base of the Pyramid

Another definition of the BoP is "the low-income socio-economic segment that is not well-integrated into the formal economy" (London and Hart, 2011). Most BoP businesses are in both the formal and informal economies, making it a challenge to bring these two together in a mutually beneficial manner (London and Hart, 2011). The goal of BoP businesses is therefore combining the formal economy's resources and technological capacity with the informal sector's local embeddedness and indigenous knowledge (London and Hart, 2011). Other characteristics of BoP ventures are that they often involve partnerships across different sectors and cross traditional industry boundaries in order to be successful (London and Hart, 2011). This thesis is therefore focused on co-creation targeted towards the BoP, through working *with* the BoP.

1.1.3 Entrepreneurship Education and Venture Creation Programmes

Definitions

Action-based entrepreneurship education is an education where students aim to solve real-life problems through starting a new venture. Ollila and Middleton (2011) mention that

entrepreneurial education focusing on venture creation has a goal of contributing to future economic development originating from new innovations.

A "Venture Creation Programme" (VCP) is a type of action-based entrepreneurship education, where students start, develop and run their own startups as an integrated part of their studies (Lackéus and Middleton, 2015). This entrepreneurial process helps students develop competencies, including interaction with the outside world, gaining team-work experience, and facing uncertainty and ambiguity (Jones et al., 2014). In turn, these experiences contribute to forming the students' entrepreneurial identity, increasing their tolerance for ambiguity and uncertainty, and increasing their self-insight and their self-efficacy (Jones et al., 2014). Thus, the students at the VCP gain unique learning opportunities through their vast experiences (Haneberg et al., 2018).

The goal of VCPs is to develop "real" entrepreneurs (Lackéus and Middleton, 2015; Ollila and Middleton, 2011), where the students learn business development through the on-going creation of a real-life venture. This is why this thesis focuses on VCPs. The purpose of this thesis is to learn how entrepreneurship students can be driven and enabled to co-create with entrepreneurs at the BoP. In order to fulfill the purpose, the students need to create actual ventures, rather than "just" study entrepreneurship, because the overall goal is to take action and co-create (more on this in section 3.2.3). Additionally, this will help maintain a balanced relationship, where each participant is considered an equal, as both the participants from the VCP and the BoP are entrepreneurs. This, in turn, is important as co-creation requires mutual dependence between both participants (Holm et al., 1999), and unbalanced interdependencies can lead to power-based relations (Forsström and Törnroos, 2005).

Why Entrepreneurship Education and Venture Creation Programmes?

The first BoP approach, as described in section 1.1.2, has often trapped the poverty-stricken further in the poverty cycle, rather than alleviated poverty, and, furthermore, caused environmental problems, thanks to initiatives from multinational corporations (London and Hart, 2011; Nahi, 2016). Therefore, Nahi (2016) deems co-creation as vital in distinguishing the new BoP approach, focused on creating fortune *with* the BoP, from the previous BoP approach, focused on creating a fortune *at* the BoP. In this thesis, I have therefore researched academia and entrepreneurship education, rather than multinational corporations, in order to see if participation in co-creation from a venture creation programme could have potential to create a fortune with the BoP.

Entrepreneurship education and support programmes targeted at BoP youths, for example, could be a method for poverty alleviation, according to Clock and Mazzarol (2015). This is because there are high unemployment rates among the BoP segment's youth, making their situation a matter of global concern, having implications worldwide. These implications include illegal migration, hindering economic development, political unrest and crime (Clock and Mazzarol, 2015).

Engaged scholarship is a collaborative form of research where participants from both sides are able to reduce the uncertainty associated with many sustainability problems through co-producing knowledge (Dentoni and Bitzer, 2015; Van de Ven and Johnson, 2006). Engaged scholarship contributes to developing research knowledge within a given area and improving relevant research for practice (Van de Ven and Johnson, 2006). According to Van de Ven and Johnson (2006), academic researchers have been criticised for not sharing

the knowledge they produce. The criticism stems from the fact that scholars and practitioners come from different backgrounds, and by combining the knowledge they possess they can produce more insightful and valuable knowledge than knowledge produced when they are working alone (Nakagawa et al., 2017; Van de Ven and Johnson, 2006).

Wood (2016) argues that there is a need for academics to embrace research processes that are dynamic, emergent and flexible through working with participants rather than extracting data from them. Lahikainen et al. (2018) go on to say that universities could contribute to local and regional ecosystems through promoting an entrepreneurial culture, conducting research and generating and attracting talent. "A university with an entrepreneurial mission based on technology or knowledge transfer (third generation university, cf. Wissema (2009)) supports economic growth by fostering academic enterprise" (Lahikainen et al., 2018). Moreover, universities still need to learn a lot about the outside world, which is why Lahikainen et al. (2018) suggest cooperation with outsiders as a fast track to entrepreneurial learning. I have therefore researched academia in relation to co-creation and the BoP, in addition to theory on venture creation programmes and action-based entrepreneurship programmes.

I am researching a gap in the literature regarding co-creation between BoP and VCP or entrepreneurship student participants. My empirical research is therefore focused on co-creation as a way to fill the gap in the literature and existing research.

1.2 Purpose of the Thesis

Despite being economically poor, the poverty-stricken are knowledge rich. As Gupta (2016) succinctly puts it, "minds on the margin are not marginalised minds". In order to improve society as a whole, we need to work together and learn from each other to encourage and facilitate positive change and development. We need "to build bridges between the formal and informal sector that are reciprocal, responsible and respectful" (Gupta, 2016). The BoP segment is innovative, and they know their own needs and markets best (Gupta, 2016). However, Clock and Mazzarol (2015) have experienced a huge challenge with well-intended entrepreneurship training programmes. First of all, the programmes have a short duration, which means that the basic business knowledge the participants gain is limited. This, in turn, makes them ill-prepared to tackle the many challenges of the business world upon completion. Furthermore, the participants are eligible for government guaranteed loans upon completion. However, because they are ill-prepared, this leads to them spending the entire loan in the "wrong" places, such as having a business plan prepared for them, for example (Clock and Mazzarol, 2015). When the participants lack human and social capital, they are further trapped in the poverty cycle, as they cannot make full use of their training and funds (Clock and Mazzarol, 2015). On the other hand, studies that explore entrepreneurship as a means to alleviate poverty suggest that some of the challenges that nascent entrepreneurs within the BoP experience can be overcome, through working together and learning from each other, through the co-creation of ventures for example (Alvarez and Barney, 2014; Clock and Mazzarol, 2015).

The nascent entrepreneurs at the BoP are at a social disadvantage and lack resources (Clock and Mazzarol, 2015). However, in many cases they possess strong community networks and social capital, which are useful in building a venture. Co-creating could help the BoP participants benefit in multiple ways, such as improving their lives through unlocking

their economic potential (Clock and Mazzarol, 2015). Co-creating could also lead to the fostering of environmental sustainability and well-being (Nahi, 2016). Furthermore, it is often difficult for "outsiders" to to get access to local needs, networks and context through traditional market surveys or observation (Nahi, 2016). Local actors at the BoP could thus contribute with capabilities and knowledge regarding this.

Working *with* the BoP, rather than *at*, could enable the participants to jointly come up with solutions that are beneficial to them both. According to Sinha (2018), most of the world's economic growth in the next decade will take place in developing economies such as India. It is therefore vital that VCP students gain knowledge and insight into business development and growth in developing economies. Co-creating also has benefits for the VCP students, including broadening their view of the world, getting a chance to "make a difference" (Clock and Mazzarol, 2015) and gaining first-hand insight into pressing problems. Additionally, the development of the solution will likely gain more legitimacy and relevance through working together (Simba and Ojong, 2017). Moreover, the entrepreneurial process the students go through also helps contribute to forming their entrepreneurial identity (Jones et al., 2014), which is something co-creating with the BoP could contribute towards as well. Through co-creating, the VCP students could contribute with experience and knowledge regarding technology, scaling up and business.

Co-creating seems to potentially benefit both VCP students and the BoP participants. However, it is important to investigate if co-creating is even feasible, desirable or beneficial, in addition to how co-creation could be made more beneficial, and thereby making it more likely for co-creation to take place.

The purpose of the master's thesis is therefore:

How can entrepreneurship students be driven and enabled to co-create with entrepreneurs at the BoP?

1.3 Research Questions

I have broken the purpose down into three research questions (RQs) that will guide my research:

RQ 1: *What factors drive entrepreneurship students to co-create with entrepreneurs at the BoP?*

RQ 2: *What factors enable entrepreneurship students to co-create with entrepreneurs at the BoP?*

RQ 3: *What factors inhibit entrepreneurship students from co-creating with entrepreneurs at the BoP?*

Factors that 'enable' or 'drive' refer to what intrinsic and extrinsic motivators affect the students to be able to or want to co-create with the BoP. A factor that 'enables' the students to co-create is a factor that helps make co-creation possible. For example, the factor makes it easier to co-create or is a factor that supports them in the co-creative process.

A 'driver' refers to why the students want to co-create, e.g. what do they think they can achieve or gain from the co-creative process, what makes co-creating attractive or what motivates them to co-create. Factors that 'inhibit' refer to what keeps or discourages the students from participating in co-creation, both intrinsically and extrinsically.

When I have learned, or confirmed based on my theoretical framework, what factors drive, enable or inhibit the students to co-create, I will then be able to establish what needs to be in place, what needs to be taken into consideration, what needs to be highlighted and so forth in order to motivate the students to co-create with the BoP. Thus, fulfilling the purpose of the master's thesis.

To find answers to the research questions, I have reviewed relevant literature and conducted qualitative research.

1.4 Contribution

The research conducted for this master's thesis has both theoretical contributions and practical implications. These will be further elaborated on in section 5.3.1, after the discoveries I have made through my empirical research.

1.4.1 Theoretical Contribution

In the literature review I conducted for my project thesis, I discovered that co-creation with the BoP is a relatively new research topic. Co-creation between students at a VCP and entrepreneurs at the BoP, more specifically, is a new research topic. I could not find any existing models with these exact participants, which made the theoretical framework I created for my project thesis (outlined in section 3.4.1) a novel contribution.

However, Nahi (2016) calls for more research on identifying factors that facilitate co-creation. In order to investigate the factors found in my literature review further, it was deemed necessary to conduct empirical research. This was also because the factors found in the literature review were based on similar initiatives, but no research was found on the exact participants entrepreneurship students and entrepreneurs at the BoP. This master's thesis therefore builds on my theoretical framework in order to gain a deeper understanding of co-creation between these exact participants. Thus, this thesis will contribute towards filling a theoretical gap regarding co-creation between entrepreneurship students and entrepreneurs at the BoP.

This master's thesis will contribute with new theoretical understanding, as I am advancing a new theory, and empirical findings about co-creation and action-based entrepreneurship education or venture creation programmes.

1.4.2 Practical Implications

An application for the project "Network for Engaged Entrepreneurship in Developing Countries" (NEED) at NTNU (Norwegian University of Science and Technology) was approved in December 2018 (Halvorsen, 2018). I received the application from Vivek Sinha, Researcher at NTNU.

"The main objective of NEED is to create a world-leading network focused on developing knowledge addressing entrepreneurship in low and middle-income countries" (Sinha,

2018). The NEED project is a co-creative project across disciplines and across borders, as it aims to link and exchange knowledge and skills between students in Norway and entrepreneurs in low and middle-income countries. This will be done through facilitating collaboration between the participants. They will be collaborating on projects that focus on solving challenges in developing countries. The NEED network aims to contribute to training students in entrepreneurial thinking, regardless of the context they are working in (Sinha, 2018).

Sinha (2018) argues that gaining knowledge on business growth and development in developing economies is vital in order to educate Norwegian students, as they will likely interact directly with these markets in the near future. This is because developing economies like India will be home to most of the world's economic growth in the next decade or so (Sinha, 2018). Therefore, the NEED project will not only contribute to addressing challenges in developing countries, but also contribute to improving education in Norway and giving the students a broader perspective and understanding of the world.

My research will directly contribute to the NEED project, which is focused on co-creation between the same participants as this paper: the BoP and VCPs (Halvorsen, 2018). Therefore, this paper is highly relevant and addresses a need. This is also why I chose to focus on these two participants, in addition to basing my choice on research that will be elaborated on in the next chapters.

1.5   Structure of the Thesis

In the following chapter, I will present the methodology used to collect data for this master's thesis and the reasoning behind this.

Next, existing literature on co-creation, venture creation programmes and co-creation with the BoP will be presented. This chapter also includes factors found in the literature that could drive and enable students from a venture creation programme (VCP) to co-create or factors that could inhibit them from co-creating with entrepreneurs from the BoP.

Next, the empirical findings will be presented, analysed and discussed. Implications for the framework and a comparison with the theoretical framework will also be presented in this chapter.

The final chapter summarises the results of the empirical study, presents the framework developed through the empirical study, and presents the implications and recommendations for further research as a part of the conclusion.

Chapter 2

Methodology

The following chapter will elaborate on the methodology used to collect data for the master's thesis and the reasoning behind it. First, reasoning behind limitations that affected the thesis will be presented. The research design will be presented next, including why I chose a qualitative method, inductive research approach and case study research strategy. This section also outlines the selection and presentation of cases for the single case study. Next, the data acquisition is presented, including the reasoning behind the semi-structured interviews and the selection of the interview subjects. Following this, the method for data analysis is presented. Finally, the chapter is concluded by discussing reflections, challenges and limitations of the empirical study.

2.1   Reasoning Behind Limitations

Prior to this master's thesis, I conducted a literature review for my project thesis. I created a theoretical framework based on the literature outlining 26 factors that could affect entrepreneurship students' and entrepreneurs at the BoP's participation in co-creation. These were sorted into four groups: perceived benefits, resources, relational norms and external environment. These factors are outlined in chapter 3 (3.4.1).

My original plan was to test my theoretical framework empirically through my master's thesis for both sides of the co-creative process: the BoP entrepreneurs side and the entrepreneurship students side. However, once I started designing my empirical research I met a few barriers which eventually steered the direction of the master's thesis. Originally, I wanted to interview both participants from the Honey Bee Network (HBN) (see section 2.2.3) as the BoP entrepreneurs, and students from NTNU School of Entreprenuership (NSE) (see section 2.2.3) as the entrepreneurship students. During a meeting with Vivek Sinha, researcher at NTNU and main point of contact for NSE's collaboration with the HBN, I learned that the entrepreneurs from the HBN do not have access to Skype. I am not able to travel to India during the course of my master's thesis either. Therefore, I was not able to gain sufficient data regarding the entrepreneurs from the HBN.

As Saunders et al. (2009) mention, feasibility affects how the researcher's objectives and questions are defined. Time constraint, among many, is mentioned as a factor that af-

fects this. Even though travelling to India to conduct the interviews was theoretically desirable, it was not practically possible, which is a conflict that can affect fieldwork (Saunders et al., 2009). Saunders et al. (2009) go on to say that the possible always wins in the conflict between the possible and the desirable.

Futhermore, as mentioned in the introduction, Vivek Sinha got the project "Network for Engaged Entrepreneurship in Developing Countries" (NEED) approved by NTNU in December 2018 (Halvorsen, 2018). The NEED project is a cross-cultural collaboration between NTNU School of Entrepreneurship, initiatives at the BoP, university students, other professors and universities (Halvorsen, 2018). One of the BoP initiatives is the Honey Bee Network. When I spoke with Vivek Sinha he mentioned that it would be highly beneficial to learn what NTNU School of Entrepreneurship (NSE), or entrepreneurship programmes, should highlight in order to inspire students to get engaged in co-creation with entrepreneurs at the BoP for the NEED project.

After speaking with Vivek Sinha, I decided that researching mainly the NSE side of the co-creative process with the BoP was the most reasonable choice both in regards to the NEED project and the money and time constraints I had.

Finally, I also discovered that there was very little existing research conducted on co-creation between students from a VCP and entrepreneurs at the BoP, especially on the VCP side through my literature review. I have therefore gone through an exploratory process in order to find the purpose for my master's thesis.

My empirical findings have thus been analysed in comparison with my theoretical framework, where the framework has served as background information, rather than steering the entire empirical study. This will be further elaborated on in section 2.2.1.

2.2 Research Design

The purpose of this thesis is *to investigate how entrepreneurship students can be driven and enabled to co-create with entrepreneurs at the BoP*. I selected a qualitative research approach because it helps capture experiences and opinions that are difficult to measure or quantify (Dalland, 2012). This is especially relevant in this study, as my purpose entails learning about the subjective perceptions of the students' gained value of co-creating with BoP entrepreneurs. I discovered a gap in the literature regarding this topic when I conducted a literature review. I therefore chose an exploratory research approach.

The research has been collected through a single case study (Yin, 2014), with the case being selected strategically. The study is a single case study of currently enrolled students at NSE, currently employed staff at NSE, and alumni that have previous experience from the BoP context and their subjective perceptions and past experiences regarding what could affect the currently enrolled students at NSE to co-create with entrepreneurs from the Honey Bee Network (BoP actor elaborated on in section 2.2.3). Saunders et al. (2009) define a case study as a "research strategy that involves the empirical investigation of a particular contemporary phenomenon within its real-life context, using multiple sources of evidence." The case study is therefore focused on currently enrolled students and currently employed staff, in addition to data collected from alumni with previous experiences in order to build the case using multiple sources of data. This case is the best case for this thesis' purpose because I have access to data from the VCP NTNU School of Entrepreneurship where existing collaborations have already been established, meaning that I have access to insights

about past experiences and learnings from both the VCP and BoP context. This means that the data I will collect is not pure speculation. It is also a unique collaboration that I have not found elsewhere. However, neither alumni nor present students at NSE have co-created with the Honey Bee Network in the past. Some alumni have solely travelled to India and learned more about the BoP context, whereas a few staff members have had more direct contact and collaborated with the Honey Bee Network. Despite this, the NEED project has been approved and has started materialising. This means that there is an urgent need for figuring out and investigating why no students have co-created in the past, and learn what could help enable and drive them to co-create in the future.

Furthermore, I have collected data through conducting semi-structured interviews and sending out a questionnaire. The semi-structured interviews have been conducted and later transcribed, structured, compared and analysed.

2.2.1   Qualitative Method

Capturing opinions and experiences that are difficult to measure is typical for a qualitative methodology (Dalland, 2012), which is especially difficult in this study where I will be collecting subjective opinions and past experiences regarding the BoP and VCP contexts. A qualitative methodology was therefore selected for this study. The flexibility of a qualitative methodological approach (Dalland, 2012; Saunders et al., 2009) makes it suitable. Qualitative research is also important in order to capture contextual richness (Bharti et al., 2014; Corbin and Strauss, 1990), which is of particular importance in this study. Additionally, the qualitative approach helps the researcher gain an understanding of evolving social processes, according to Bharti et al. (2014).

An exploratory study is recommended when the research questions are "how" or "what" questions (Yin, 2014). I selected an exploratory study because I am attempting to clarify my understanding of what could drive and enable entrepreneurship students to co-create with entrepreneurs at the BoP (Saunders et al., 2009). I also need to gain an understanding of the nature of my study's problem or focus in order to more easily be able to come up with suitable recommendations, making an exploratory study a recommended research design according to Saunders et al. (2009). My focus has therefore started out broad, while attempting to narrow it down through the course of the research process (Saunders et al., 2009). The study has therefore been adaptable and flexible, as this has allowed me to change the direction based on new findings and data along the way (Saunders et al., 2009). I have continually re-examined the data during the research process, giving me more insight into the problem and helping me determine the findings (Saunders et al., 2009).

Inductive Research Approach

According to Saunders et al. (2009), an inductive research approach should be chosen when a research topic is new and little literature on the topic exists. Even though I created a theoretical framework and hypotheses based on my literature review, typical for a deductive research approach (Saunders et al., 2009), I decided that an inductive research approach was more suitable for this study. This is because I based my theoretical framework on assumptions derived from similar initiatives, as there was no literature on the specific topic of co-creation between entrepreneurship students and BoP entrepreneurs. The factors I found through my literature review have still been analysed in comparison with the findings

discovered through my empirical study, however, the factors found through the literature review have not steered the entire direction of the empirical study - they have rather been treated as background information for an inductive study. This has also helped broaden my data collection, and steer clear of making the interviews biased. I have thus worked inductively through generating data, analysing it, and reflecting upon the data collected empirically in comparison with my literature review, and finally seeing theoretical themes the data was indicating (Saunders et al., 2009).

2.2.2 Case Study Research Strategy

The case study research strategy helps the researcher to comprehend the dynamics present within single settings (Eisenhardt, 1989). Case studies can involve single or multiple cases and they can be used to generate theory (Eisenhardt, 1989), for example. Generating theory about entrepreneurship students' participation in co-creation with the BoP is one goal of this study in order to create a framework for enablers and drivers for co-creation, making the case study research strategy highly relevant.

Case study research should be chosen as a methodology when the researcher's goal is to study and understand a complex social phenomenon in depth in its real-world context (Yin, 2014). It is therefore important to involve contextual conditions relevant to the case when attempting to gain insight into this complex phenomenon (Yin, 2014). Research on the VCP and BoP contexts has therefore been included in the thesis as these contextual conditions are relevant for the case. Case study research is thus relevant for researching both phenomena and its context.

2.2.3 Selection and Presentation of the Cases

Single Case Study and Embedded Research Design

A single case study with an embedded research design has been chosen for this study. According to Saunders et al. (2009), a single case study can be selected when you are analysing something that few have analysed before. Additionally, a single case study was selected because I am researching a unique case (Yin, 2014). The single case study of currently enrolled students at NSE, currently employed staff at NSE, and alumni that have previous experience from the BoP context and their subjective perceptions and past experiences regarding what could affect the current students at NSE to co-create with entrepreneurs from the Honey Bee Network is a unique case. This is because this is a unique initiative for NSE students, where they are given the possibility to co-create with entrepreneurs from the Honey Bee Network. The staff have already established the collaboration, and the NEED project has been initiated. The next step is for the co-creative process to materialise between the NSE students the entrepreneurs from the Honey Bee Network. This is a unique initiative I have not found anywhere else.

There are many benefits of selecting a single case study. For example, single case studies produce better theory because the researcher gains a deeper understanding of the subject (Gustafsson, 2017). It is a wiser selection when the researcher aims to study a person or a group of people (Yin, 2014). Finally, a single case study is also not as time consuming and expensive as multiple case studies (Gustafsson, 2017), which is especially handy in my

case as I am a master's student with a time limit.

Embedded Design

Furthermore, I chose an embedded design of the single case study. This is because the research design includes different sub-units. This makes the research more complex and enables the researcher to gain more insight into the case (Yin, 2014). I have looked at factors that affect entrepreneurship students from different views, with a focus on four different sub-units under NTNU School of Entrepreneurship. Because the single case is holistic, I have not focused too much on the sub-units in order to avoid drawing attention from the main focus of the thesis (Yin, 2014).

Currently enrolled **students** at NTNU School of Entrepreneurship that are **interested** in co-creating with entrepreneurs from the bottom of the pyramid

Staff at NTNU School of Entrepreneurship

Student 6

Student 5

Student 4

PhD Candidate

Professor

Assistant Professor

Student 3

Alumni 1

Student 2

Alumni 2

Student 1

Alumni 3

Currently enrolled **students** at NTNU School of Entrepreneurship that are **not interested** in co-creating with entrepreneurs from the bottom of the pyramid

Alumni from NTNU School of Entrepreneurship

Figure 2.1: Case Sample - An Overview of What Makes Up the Case: the Sub-units and each Interview Subject per Sub-unit

The embedded single case study sample is illustrated in figure 2.1. Here, you can see what makes up the single case: four sub-units consisting of (1) currently enrolled students at NSE interested in co-creating with the BoP, (2) currently enrolled students at NSE not interested in co-creation with the BoP, (3) alumni from NSE and (4) staff at NSE. Each

sub-unit consists of three interview subjects each.

It was important to interview four different sub-units in order to gain in-depth insight regarding the topic. Even though the students have no previous experience with the BoP, it was crucial to interview them. The staff members were able to make assumptions based on their own experiences and perceptions, but when the purpose of the thesis is to understand what could drive and enable entrepreneurship *students* to co-create, it was vital to interview the students themselves. The students may also have made assumptions based on their previous experiences, but these are, however, still closer to reality than those of the staff's assumptions regarding the students - especially the students' intrinsic motivators.

It was important to interview the staff nonetheless because they could provide important insight regarding the existing collaboration with the Honey Bee Network and the Indian context. They had also worked closely with the students for several years, and would have some assumptions regarding drivers, enabler and inhibitors - and especially extrinsic motivators that the students perhaps did not consider as they had not travelled to India. Additionally, they had co-creating experience and therefore knew factors that were important to them during the co-creative process.

Finally, the alumni had both experience with the Indian BoP context, and with studying at NSE. This helped gain another perspective of the case.

The four different sub-units thus complement each other, as they provide important insight into the case from different view points. One consideration or criteria a student has, is perhaps something a professor does not have. Therefore, this sample and sub-units were the best for this case study. This will be further elaborated on in the following sections.

Selection of the Case

A case selection is determined by having sufficient data regarding the potential case (Yin, 2014). I have selected one case: currently enrolled students at NTNU School of Entrepreneurship and what could drive or enable them to co-create with entrepreneurs from the Honey Bee Network.

This is a unique case because NTNU School of Entrepreneurship is an action-based entrepreneurship education programme that has unique, already established collaborations with the BoP. This is a unique collaboration that I have not found elsewhere.

The actor at the BoP that NSE has collaborated with previously is called The Honey Bee Network (HBN). It is an innovation support system at the BoP. The entrepreneurs from the HBN do not have access to Skype, only the staff members and experts have access to Skype. Because of the time-frame and limitations of the thesis, I was not able to travel to India during the course of my master's thesis. Therefore, the entrepreneurs from the HBN were not selected as interview subjects. However, I mentioned the entrepreneurs from the HBN as examples during the interviews. They are also included in the case description on the following pages in order to get an overview of the case as a whole.

The reasoning behind the case will be elaborated on further in the next section.

The Case

In the following sub-section the case selected for the thesis will be presented. The reasoning behind the case selection will also be presented. Furthermore, I will be presenting the BoP

participant (the Honey Bee Network), even though they are not the focus in this thesis. This is in order to capture contextual richness (Bharti et al., 2014; Corbin and Strauss, 1990).

Case: Venture Creation Programme: NTNU School of Entrepreneurship

NTNU School of Entrepreneurship (NSE) offers action-based entrepreneurship education, where students aim to solve real-life problems through starting a new venture. Action-based entrepreneurship education is described as "education focused less on teaching individuals in a classroom setting and more on learning-by-doing activities in a group setting and a network context" (Rasmussen and Sørheim, 2006). NSE is considered the leader within action-based entrepreneurship education in Norway (NIFU, 2015).

NSE is also a "Venture Creation Programme" (VCP), which is an approach that "builds upon combined learning philosophies in order to allow students to 'test the water' while reflecting upon real-life situations and explore entrepreneurial behaviours when creating new ventures" (Ollila and Middleton, 2011). NSE is considered the leader within action-based entrepreneurship education in Norway (NIFU, 2015).

NSE's two-year master's programme combines academic insight with hands-on experience, and trains the students in entrepreneurial thinking. The programme is focused on technology-based entrepreneurship and business development (Lahikainen et al., 2018). All students have to develop a business idea in interdisciplinary teams of two to five over the course of three semesters (Lahikainen et al., 2018).

NSE is a combined master's degree education and incubator located at NTNU (Norwegian University of Science and Technology) in Trondheim, Norway. NTNU's core strategy areas in 2018-2025 are innovation and entrepreneurship (Sinha, 2018). NTNU's strategic vision is "knowledge for a better world". Thus the university has a focus on putting knowledge into practical use, and "aim to create societal impact through the establishment of new businesses" (Sinha, 2018). NSE combines learning about the entrepreneurial process of developing the venture with the incubation of it, typical for a VCP (Saeter et al., 2018). Thus, the ventures are used as the core learning object (Ollila and Middleton, 2011).

NSE has a deeply rooted culture of mutual support, engagement and contribution, which is further strengthened through NSE's community of current students and alumni (Lahikainen et al., 2018). Peer-to-peer learning is therefore encouraged and an important part of the students' learning process (Lahikainen et al., 2018). The students' role in developing new ventures and supporting the community is emphasised in Lahikainen et al. (2018)'s study on enterprise education at European universities. According to Lahikainen et al. (2018), NSE seeks to spread enterprise competence, such as risk tolerance, resources and seeking opportunities, across regions and study programmes. Additionally, NSE aims to be a resource for NTNU, where the programme spreads enterprise competence through an annual course, in addition to being a resource for the whole of Norway (Lahikainen et al., 2018).

Why NTNU School of Entrepreneurship?
It is vital to have sufficient access to data for the potential case (Yin, 2014). NTNU School of Entrepreneurship (NSE) was chosen as a case partly because I am a student here, which gives me sufficient access to interview subjects (Yin, 2014). Additionally, choosing NSE as a case was highly relevant for the NEED project. This is because this study will contribute to the NEED project, and NSE, and help them learn what they should highlight in order to

drive and enable students to engage in co-creation with entrepreneurs at the BoP.

Additionally, as mentioned, NSE is a unique case because I have not found any similar collaborations (between VCP students and BoP entrepreneurs) elsewhere. At the same time, other action-based entrepreneurship programmes and venture creation programmes exist, but do not collaborate as closely with BoP entrepreneurs as NSE does. The findings in this thesis could therefore be applied to other entrepreneurship programmes, given that they also find a partner in the BoP segment.

The Base of the Pyramid: The Honey Bee Network

The Honey Bee Network (HBN) was founded in India in 1985 by Professor Anil K. Gupta, and is an initiative that helps bring together and elevate grassroots innovators, in addition to helping spread these innovations. "The term grassroot refers to individual innovators, who often undertake innovative efforts to solve localised problems, and generally work outside the realm of formal organisations like business firms or research institutes" (Bhaduri and Kumar, 2010). Grassroots innovations are "innovative products or processes created at the BoP, usually due to necessity, hardship and challenges" (Hilmi, 2012). The Honey Bee Network is, in other words, an innovation support system for the BoP or a network-based knowledge sharing mechanism (Gupta, 2016).

Professor Gupta leads yearly walks, "shodhyatras" or scouting expeditions, through rural India, where he discovers innovations and innovators. He "collects" innovations from different communities where they themselves know what they need and what needs to change in order to improve their way of living - it builds upon people's knowledge of what they already know and do well. This is because Professor Gupta recognises that alleviating poverty needs to be solved by those experiencing it themselves. The network helps strengthen our respect for the poverty-stricken, as we can see how capable they are of producing something of high value through the use of few resources (Gupta, 2016).

The idea for the HBN was sparked after Professor Gupta's realisation that knowledge exchange is asymmetrical, and that the poverty-stricken are often exploited for their knowledge without receiving credit (Gupta, 2016). He executed his own idea to create a network advocating people-to-people learning, where knowledge was shared reciprocally, openly and ethically. Rural innovators' knowledge is credited to them, while they also reap benefits that result from knowledge shared with them. Professor Gupta believes that being open about all research and discoveries, will foster trust (Gupta, 2016). The network links people and ideas across sectors, despite income, in vernacular languages making the HBN a network-based knowledge sharing mechanism that promotes sustainable growth in developing countries (Gupta, 1996).

Why The Honey Bee Network?
The majority of the world's BoP population resides in India (Bharti et al., 2014). Therefore, collaborating with the HBN is a strategic choice for making an impact. Moreover, NSE has already established a collaboration with the HBN, and plans to continue this collaboration through the NEED project (Halvorsen, 2018). The HBN is also a participant in the NEED project. Over the past 8 years, the NSE and HBN have collaborated on different activities. This has resulted in highly relevant research for master's theses, doctoral theses, multiple conference papers and presentations, and publication of two papers in peer reviewed journals. Most recently, a group of 18 students, including me, from NSE participated in a two

week programme in India in March 2017. We met innovators from the HBN and spoke with Professor Gupta, for example, during our visit. We gained first-hand insight into the Indian market and the struggles the innovators face. Gaining trust is vital for a collaboration to take place (Gupta, 2016; Voorberg et al., 2015). Therefore, having already established a partnership could potentially help overcome trust-related issues. The HBN and NSE's partnership could be strengthened further through co-creating with each other - a benefit for both participants.

2.3 Data Acquisition

I have conducted semi-structured interviews as my main method of collecting data. I have also supplemented my empirical study with a literature review.

2.3.1 Semi-structured Interviews

In order to seek new insights, semi-structured interviews can be used during an exploratory study (Saunders et al., 2009). I conducted semi-structured interviews because it gave me more flexibility. The conversation and the interview subject helped steer the interview, and the semi-structured interview approach thus enabled me to adapt, change, omit or add questions and themes during the interviews (Saunders et al., 2009).

I have conducted interviews with three staff members from NTNU School of Entrepreneurship, three alumni from NSE and six students currently enrolled at NSE.

A qualitative interview typically helps the researcher understand past experiences, in addition to past and current situations (Dalland, 2012). My research has also been guided by these goals. The goal of the thesis is to understand what needs to be taken into consideration in order for students from NSE to participate in co-creation with the BoP. The interview subjects all had different experiences both with NSE and India, albeit none of the students or alumni had co-created with the BoP in the past.

The goal of the interviews with **staff members at NSE** was to learn more about the current relationship between NSE and the HBN. What is the history of the relationship, what is the goal of the collaboration through the NEED project, what do they consider important in order to participate in co-creation, have they tried co-creating in the past and if so what worked and what did not work and why, and so forth.

The goal of the interviews with the **current NSE students** was to gain an insight into if they would be willing to participate in co-creation with the BoP and, if so, what would be important for them to participate. How could they be driven to participate, why would they want to participate, what would be important for them in order for them to co-create, and so forth.

The goal of the interviews with **NSE alumni** was to understand why they have not co-created in the past, based on their previous experiences with the Indian BoP context, and what would need to be different in order for them to co-create.

The overall goal of the different interviews was thus to gain a better insight into past experiences with co-creative processes, why co-creative processes have not taken place or why the subjects did not participate in the past and why, and what could drive or enable the different participants to take part in co-creation with the other participant, typical for qualitative interviews (Dalland, 2012).

Selection of Interview Subjects

The interview subjects were selected based on their knowledge and experience, and were thus selected strategically (Dalland, 2012). Altogether I interviewed 12 subjects.

As Saunders et al. (2009) mention, access can affect the researcher's selection of a representative sample of participants. Physical access alone is likely not adequate in order to collect data that is relevant to the researcher's purpose and research questions (Saunders et al., 2009). However, if you are able to collect data that reflects the reality of current situations, for example, you will likely have sufficient access to information (Saunders et al., 2009). Therefore, I was more focused on collecting true and relevant data rather than going out of my way to travel physically to interview the different interview subjects. The data collected is also reflective of current situations, as I interviewed currently enrolled students and current staff members.

All interviews, except two, were conducted in person in Trondheim. The last two were conducted via Skype due to location of the interview subjects. All interviews, except one, were conducted in Norwegian so that the interview subjects could express themselves in their native language so as not to lose vital information in translation. The last one was held in English for the same reason. The interview guides were the same for each group of interview subjects, but differed between the groups.

The criteria for selecting interview subjects is outlined in figure 2.2 below, and will be elaborated on in the following paragraphs.

Group	Selection Critertia
NTNU School of Entrepreneurship Staff	Have worked with or are working with the BoP context/community
NTNU School of Entrepreneurship Alumni	Have travelled to India and have shown an interest in working with grassroots innovators/ BoP entrepreneurs
Students currently enrolled at NTNU School of Entrepreneurship	Interested in working with entrepreneurs at the BoP and not interested in working with entrrepreneurs at the BoP

Figure 2.2: Interview Subjects Selection Criteria

I have also included an overview of the different interview subjects and their respective areas of expertise, experience or familiarity in figure 2.3 on the next page. This figure also gives an overview of why these interview subjects were selected for this thesis, based on their expertise, experience or familiarity with the different topics.

"Expert" signifies that the interview subjects have extensive knowledge and expertise regarding the topic - they have perhaps researched it in depth, or worked at NTNU School of Entrepreneurship for several years.

"Experience" signifies that the interview subjects have experience with the topic. The students have experience with NTNU School of Entrepreneurship because they are students there, but are not experts because they have not researched it in depth. Alumni 2 is also a PhD Candidate, and has therefore also researched NSE in depth, making him an expert on

NSE and VCPs. The Assistant Professor has no experience or expertise on the Honey Bee Network, but is familiar with co-creation with the BoP because he has travelled to Kakuma Refugee Camp to see if and how NSE could work with them to develop an entrepreneurship programme in the camp.

"Familiar" signifies that the interview subjects have some familiarity with the topic, but lack in-depth knowledge and experience. For example, the alumni were introduced to the HBN and innovation at the BoP during their visit to India, and are therefore familiar with the HBN and innovation at the BoP.

Area of Expertise/ Experience/ Familiarity	NTNU School of Entrepreneurship	The Honey Bee Network	Venture Creation Programmes	Co-creation with the BoP	Co-creation Between the BoP and Academics	Innovation at the BoP
Name						
Staff at NTNU School of Entrepreneurship						
PhD Candidate	X	X	X	X	V	X
Professor	X	X	X	X	V	X
Assistant Professor	X		X	V		O
Alumni from NTNU School of Entrepreneurship						
Alumni 1	O	V	O			V
Alumni 2	X	V	X			V
Alumni 3	O	V	O			V
Current Students at NTNU School of Entrepreneurship						
Student 1	O		O			
Student 2	O		O			
Student 3	O		O			
Student 4	O		O			
Student 5	O		O			
Student 6	O		O			

X = expert

O = experience

V = familiar

Figure 2.3: Interview Subjects and their Respective Areas of Expertise, Experience and Familiarity

Interview Subjects

I interviewed three staff members from NSE (one Professor, one PhD Candidate and one Assistant Professor), three alumni from NSE and six students that are currently enrolled at NSE. I selected different groups of interview subjects in order to gain in-depth and diversified data for the case. These made up the different sub-units in the embedded design of the case. The data was collected and later compared, which will be discussed in chapter 4. I used several different criteria to select interview subjects for the study, outlined in figure 2.2.

Two of the staff members selected from NSE have experience working with the HBN and have previously conducted research on the BoP. The Assistant Professor has experience from working on and researching entrepreneurship in a refugee camp, and thus has experience from the BoP context. All three are involved in the NEED project. They have

also worked at NSE for several years as researchers and professors, giving them unique insight into NSE and contact with students at NSE. The Assistant Professor is also an NSE alumni. This is why they were the best staff interview subjects for this thesis' purpose.

The alumni from NSE were selected based on their previous experience with India and the BoP. I received a list from a researcher at NTNU detailing who travelled to India while studying at NSE as part of a delegation from NSE. I then selected three alumni that had travelled to India as part of different delegations and that had pursued projects or worked in startups that showed that they were interested in sustainability or working with entrepreneurs from the BoP.

The six students were selected through carrying out a questionnaire. I sent out a questionnaire to all students that are currently enrolled at NSE explaining that the research was for my master's thesis, that all data would be treated confidentially and that some people might be selected for interviews based on their answers. The questionnaire included one main question: "On a scale of 1-10, if you were given the opportunity to work with entrepreneurs from the "base of the pyramid" (the group that is the most economically disadvantaged in society), how likely is it that you would participate? 1 = not likely at all, 10 = most definitely." The questionnaire also included one demographic question: "which class are you in?" and finally asked them to enter their e-mail address if they agreed to be contacted if they were selected for the interview.

Current students at NTNU School of Entrepreneurship	Not interested in working with entrepreneurs at the BoP	Interested in working with entrepreneurs at the BoP
Student 1	X	
Student 2	X	
Student 3	X	
Student 4		X
Student 5		X
Student 6		X

Figure 2.4: Selection Criteria: Current Students at NTNU School of Entrepreneurship

Based on the data collected through the questionnaire, I divided the answers into two groups: one group that was interested in participating (answering 7-10 on the scale), and one group that was not interested in participating (answering 1-4 on the scale), outlined in figure 2.4. Originally, I set the criteria to 1-3 for the students not interested, but this was not possible as the students that scored lower did not want to be interviewed. The middle group (5-6) was excluded since they were not clear outliers.

I was also planning on selecting the three interview subjects from each group randomly to interview individually. However, of those that were interested in participating, four people replied yes to being interviewed. However, one of them scored 6 out of 10 and was thus excluded. I only got responses from three people from the "not interested" group to be interviewed. The choice was therefore given.

The reasoning for interviewing two groups that were interested and not interested was so that I could compare data collected and see if there was a clear difference between the

two groups, and using the group not interested as a control group. I asked all students the same questions during their interviews.

I have outlined the questionnaire results in figure 2.5 below. Figure 2.5 shows the score the students gave the question "On a scale of 1-10, if you were given the opportunity to work with entrepreneurs from the "base of the pyramid" (the group that is the most economically disadvantaged in society), how likely is it that you would participate? 1 = not likely at all, 10 = most definitely." The number 4 or 5 on each column shows which year the student is in: 4th or 5th year. S1 is student 1, S2 is student 2 and so forth. All students that I interviewed that were interested in co-creating scored 8 out of 10, and all students that were not interested scored 4 out of 10. I would have preferred to have interviewed students that had more diverse scores, but the students that had higher or lower scores did not want to be interviewed. All students I interviewed that were interested in co-creating were from the 4th year, and all students not interested were from the 5th year. I would have liked to have a mix of 4th and 5th year students here as well, but this was, again, not possible because the other students did not want to be interviewed.
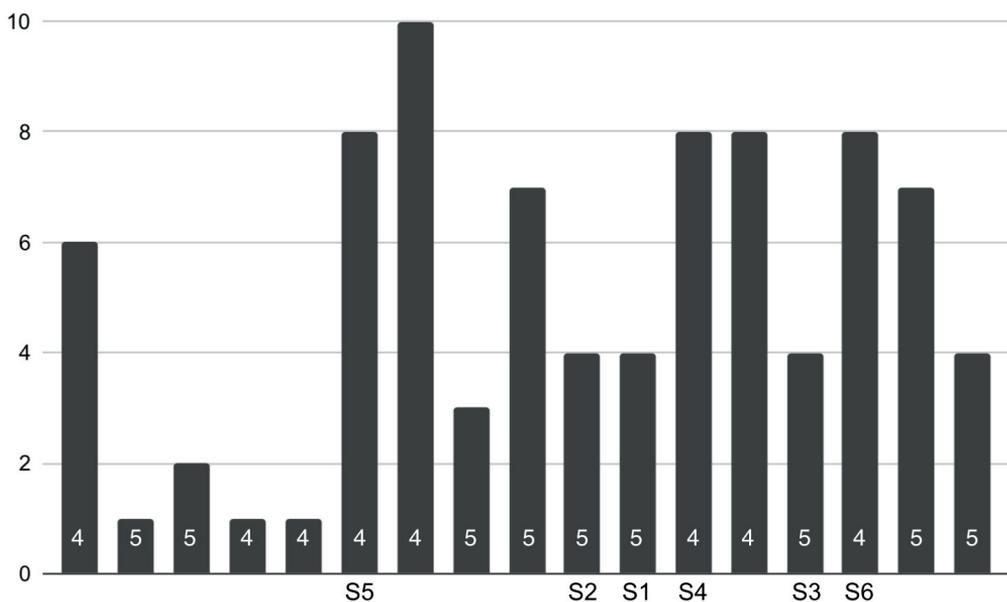
Figure 2.5: Questionnaire Results

2.4   Data Analysis

In order for the data collected through the interviews to be useful, they need to be systematically organised (Dalland, 2012) analysed and the meanings need to be understood (Saunders et al., 2009), so that others can understand how and why decisions were made (Dalland, 2012). Therefore, the process after conducting the interviews was to transform the interviews into useful data, which can be as challenging as conducting the interviews themselves (Dalland, 2012). My steps to analyse the data were as following: 1) transcribing the interviews in their entirety, 2) analysing the data, 3) categorising the data.

Transcribing

I recorded the interviews using a voice recorder, after being given permission to do so from the interview subjects. Next, I transcribed each interview in its entirety, word by word, extracting more conversational fillers such as "like" and "ehm" (Dalland, 2012), in a separate document per interview (Saunders et al., 2009). I also added any notes I took during the interview at the bottom of the document.

Analysis and Categorisation - an Iterative Process

The next step in the process is systemising the data through sorting the transcribed interview into themes and categories (Dalland, 2012). In order to categorise data you need to first, develop categories, and then, attach these categories to meaningful data (Saunders et al., 2009). The factors I found in my literature review, making up my theoretical framework, were used as categories to categorise the data found. Deriving categories from your theoretical framework is typical practice, because it helps ensure that you will end up with data and a structure that is relevant to your research project, according to Saunders et al. (2009). It also helped me determine what would be important findings when analysing the data.

Therefore, I created a table (figure 4.1) where I listed up all factors I had found in the literature review, and all interview subjects. When you are identifying relationships between data and developing categories, it is important to design a suitable matrix, or table like I did, to place the gathered data (Saunders et al., 2009). Every interview subject remained anonymous, and were given labels such as student 1 or alumni 1.

After having created the table, I analysed each document one by one. I marked anything that seemed relevant to the factors I had found in the literature review, and used the table to cross off whenever the interview subject mentioned something relating to a certain factor. Next, I read through the document again looking for new factors or patterns and noted them down both in the document and added them to the table. I repeated this for every interview.

The names used for categories derived from terms used in existing literature and theory, while the new names came mostly from terms from the data or how the interview subjects named and described them (Saunders et al., 2009). For example, 'money' was mentioned by many as an important factor and thus was called 'financial resources'. At the end, I looked at which new factors had been mentioned more often among the interview subjects. I tried to see if any new factors had similarities, and grouped them together if they did. Some also belonged under factors from the theoretical framework, and were moved there. The data analysis continues while you search for key patterns or relationships in your rearranged data (Saunders et al., 2009).

Next, I wrote down all the findings through extracting quotes relevant to each factor and pasting them all under the same factor. For example, all quotes mentioning that 'money' was an important factor were grouped together. When I did this, I read through the transcripts once again to make sure I had not missed anything. In certain cases I found some quotes that could be appropriate for the factor I was writing, so I added them accordingly. I then updated the table at the very end. The data analysis was an iterative process to ensure that I had uncovered all factors and vital information the interview subjects mentioned.

Earlier, I mentioned that my study has an inductive approach (section 2.2.1). However, as you can see, I have looked for factors found in my literature review or theoretical framework when analysing the data, in addition to looking for new factors. As Saunders et al.

(2009) point out, it is likely that the inductive approach combines some elements of deductive approach "as you seek to develop a theoretical position and then test its applicability through subsequent data collection and analysis." They also go on to say that no matter which approach you might start out with, your research will likely combine elements of both the deductive and inductive approach in practice. I therefore used a mix of predefined and emerging factors.

After having analysed that data, I have created a new and revised conceptual framework based on the findings. This will be presented in section 5.1 after the empirical findings are presented in chapter 4.

2.5 Reflections, Challenges and Limitations

The case study method has been criticised by many (Yin, 2014). One reason for this is that the case study findings can rarely be generalised (Dubois and Gadde, 2002; Yin, 2014). However, Yin (2014) argues that the goal of a case study is to expand theories, and not to deduce probabilities. My goal is also to generate theory through conducting empirical research, which is one of the goals of qualitative research (Pratt, 2009). "The interaction between a phenomenon and its context is best understood through in-depth case studies" (Dubois and Gadde, 2002).

On the other hand, Yin (2014) discusses how case study research can take too long, and lead to lengthy, unreadable documents. I have addressed this concern by limiting my empirical research to one case with 4 sub-units consisting of 3 interview subjects each. I have also worked under external time limitations, as my thesis must be completed within a certain time span.

Before starting interviewing the different subjects, I knew that changes and problems could arise. I have adapted to these changes during the course of the interviews. For example, the plan was to conduct all interviews in person in Trondheim. However, two interview subjects were not present in Trondheim, so I conducted the interviews via Skype instead.

I was also limited by a time-frame to complete my master's thesis. Additionally, I worked alone, which may have limited me to some degree, for example in the amount of interview subjects.

According to Tjora (2012), reliability and validity are used as indicators to measure quality in qualitative studies. The following sub-chapters will elaborate on these indicators in relation to my study, in addition to ethical considerations.

2.5.1 Reliability

In a study, it is impossible for a researcher to remain completely neutral (Tjora, 2012). My knowledge can be a resource, but I need to explicitly specify how this knowledge is used in an analysis. Therefore, in chapter 4, under each factor, I have first presented the empirical data, including quotes from the interview subjects, followed by an analysis and discussion where I discuss the findings with theory and my own knowledge and assumptions. This is clearly marked under each factor with the titles "empirical findings" and "analysis and discussion". This is something Tjora (2012) also suggests; that the researcher should clearly show which information is a result of the data collection, and which information is

the researcher's own analyses. Since I have recorded the interview subjects using a voice recorder, I have more easily been able to directly quote the interview subjects, making the study more reliable (Tjora, 2012).

I am a student at NSE, and therefore have a lot of knowledge about NSE and a professional relationship with some of the interview subjects. I also visited India and spoke with entrepreneurs at the BoP in 2017. I therefore have a pre-understanding of the topics. This has likely affected the interviews and my interpretation of the data. Being highly knowledgeable in the research topic could be an advantage when it comes to asking relevant questions, but a disadvantage because the researcher is likely biased (Tjora, 2012). In order to strengthen the study's reliability, I have tried making the relationship between myself and the interview subjects clear (Tjora, 2012).

On the other hand, my prior knowledge and experience with NSE could also be an asset. I feel that it has helped me more easily relate to the interview subjects, making them relax and trust me, which, I believe, has lead to more honest answers. It has also helped me pose more relevant questions. Hopefully, this has lead to a higher degree of data quality. I have also taken this into consideration when writing the interview guides. The questions were therefore open, well-formulated and well thought-out. I asked questions that I often knew, or thought I knew, the answers to beforehand in order to ensure data quality. After developing the interview guides, I sent them to my supervisor to get feedback, I then changed or adjusted them accordingly. This also helped ensure data quality. Additionally, I let the interview subjects know that I would likely ask questions they knew I already know the answers too, but explained that I wanted their view on it or explanation of it nonetheless. For example, I knew the answers to some questions regarding the curriculum at NTNU School of Entrepreneurship as I am also a student there.

Even though I have worked hard to make the interview subjects feel comfortable enough to open up to me, they may not have been honest in their replies nonetheless. This could be because they wanted to please me. I saw this as a challenge with the students that are not interested in co-creating especially, since they could feel that they did not support my research topic that I am dedicating a lot of time to. This could affect the reliability of the study. However, before I conducted the interviews I spent some time explaining that it was important that they were honest, that my intention was to gain insight into their actual thoughts and situations, and that disagreeing with a statement, for example, would not have any consequences other than making the research better.

One student I interviewed had given her interest in co-creating with BoP entrepreneurs in India a score of 4 out of 10 in the questionnaire. She was therefore placed in the "not interested" category. However, when I interviewed her I asked if she had any questions before starting. She asked me to tell her a bit more about the concept. Immediately, she lit up and was interested after all. She said that she had given it a 4 because of her current situation (not having time for anything new), not because she was not interested in co-creating with the BoP. The replies therefore seem to be situation dependent. She also said that her score of a 4 was a "medium" score, and not a low score. Many of the other students said the same, and the lowest score overall was a 4. It seems as if the students interpreted what they meant by their scores in a different way than what I did. I viewed 1-4 as low scores and 6-10 as higher scores. Additionally, not many students replied to the questionnaire, so I had to choose the ones that had scores more towards the middle of the scale. This may have affected the results. It would be preferable to choose students at the extreme ends of each scale, however, these were not available for interviews.

Additionally, I first set out not wanting to tell the students too much about the concept so as not to bias them before starting the interview. My initial plan was rather to ask them some questions first, then present the entrepreneurs, and then ask them their thoughts. However, some students asked me to clarify what I meant by BoP entrepreneurs and give examples before starting the interview, which I then did. The results may therefore vary depending on how much I told each student about the entrepreneurs and concept.

The students did not have a lot of knowledge about India and what the entrepreneurs there have access to (e.g. no immediate access to internet). It also seemed as if some students replied based on the Norwegian context and what they were used to. This is understandable, as we often base our assumptions on what we are used to and other very different contexts seem incomprehensible until you have travelled there and witnessed it first hand. That has at least been my experience. They may therefore not have thought to answer that technology, for example, was an important factor because it is something most of us take for granted. This may have affected the results. However, as one student pointed out, she said that she would have the same requirements to work with someone from India as someone in Norway, as she said that you are still working with a human being. The NSE students will likely consider their own context for any kind of collaboration, whether it is in India or Norway. The results are therefore still relevant. Because the students did not have experience from the BoP context, their answers were based on the Norwegian context, their previous experiences and their assumptions. However, this gave me important insights into what could drive or enable them to co-create, and additionally what they perceived as inhibitors. Since the goal is to drive and enable NSE students to co-create with the BoP, it was vital to interview students and understand what their subjective opinions were, in addition to their intrinsic and extrinsic motivators. Additionally, because of the students' lacking knowledge and experience, it was especially important to review the data collected in comparison with the literature, and to complement the data collected from the students with data from alumni and staff that had experience from the BoP context. The data collected over all seemed to cohere, which confirmed the overall findings.

2.5.2 Validity

Validity concerns if the answers obtained through the study actually answer the questions posed (Tjora, 2012). In order to address this, I have used secondary data as a way to validate my empirical findings (Tjora, 2012) through connecting the findings with theory. My secondary data research was limited mostly to the databases Web of Science and ABI/Inform, except for when searching for articles referred to in other articles using Google Scholar. I used these two databases because they contain research directly relevant to my thesis. According to Nahi (2016), co-creation can have value both with regards to business development and society. Therefore, co-creation is covered in the social sciences and humanities fields, relating to the societal value of co-creation, and in the business field, relating to the business development side of co-creation. ABI/Inform is extensively used within the business field and was therefore chosen because it gave me access to journals within community development, organisations and environment, and management, for example. Web of Science is extensively used within the humanities and social sciences field, and gave me access to management journals, trends within humanities and journals across various social sciences disciplines. These journals were therefore highly relevant for research on entrepreneurship education, co-creation, entrepreneurship, entrepreneurship in low-income

countries and the BoP.

I may have found more or other relevant articles if I had searched other databases. This narrowed my literature search. On the other hand, my limited time frame made limiting my search to two databases helpful. I also used snowball sampling extensively as a method to find new articles that were referred to in other articles. This yielded many relevant results in other databases, which helped me broaden my literature search. It also seemed as if I was covering my topic well, as I found references to many of the same articles.

According to Dalland (2012), both primary and secondary data must be relevant to the research question. This was why I chose a qualitative methodology because it helps capture opinions and experiences that are otherwise difficult to measure (Dalland, 2012). I also chose to conduct semi-structured interviews because of their flexibility, and because it has helped me gain insight through freely exploring new and interesting information that emerged during the interviews (Saunders et al., 2009). It is also impossible to predict what new and interesting information will be discussed during the interview, and the semi-structured approach enabled me to explore new insights rather than being restricted by pre-set questions.

The amount of interviews may have helped validate my study. Many of the subjects mentioned the same factors, meaning that the findings were confirmed multiple times.

2.5.3 Ethical Considerations

A crucial ethical aspect is how the researcher handles and stores data, especially when utilising audio recordings (Tjora, 2012). Before contacting the interview subjects, I registered my study with the Norwegian Centre for Research Data (NSD). After a few iterations, my application to collect data and conduct interviews was approved. All interview subjects were given a consent form that outlined:

- The goal of the study

- Who is responsible for the study

- What it means for the interview subject to participate and why they were selected

- That it is voluntary to participate and that the subject may withdraw their consent at any time, without it having any consequences for the interview subject or their relationship to NTNU School of Entrepreneurship

- How I would store the data (stored internally) and who has access (only I and the supervisors have access)

- That all data would be made anonymous. However, the staff's job title would be used, such as "Professor", in order to validate the study, whereas students and alumni would be labeled "alumni 1" or "student 1".

- What will happen to the data after the study has been concluded. (It will be stored for two years for potential follow-up studies)

- The interview subject's rights

- Where they can get more information

- A checkbox and place to sign for their consent in participating in the interviews, questionnaire (for the students), that the staff's title is published, and that the data would be stored until 2022.

The interview subjects also had the opportunity to ask me any questions before the interview and after the interview took place. I did not collect any sensitive data, except for recording the interview subjects' voices.

Chapter 3

Literature Review

The following chapter explores the existing literature on co-creation. This includes the definition of co-creation, the importance and purpose of co-creation, types of co-creation, in addition to the objectives, activities and outcomes of co-creation. Following this, factors found in the literature that drive and enable venture creation programme (VCP) students to or inhibit them from co-creating with entrepreneurs from the base of the pyramid (BoP) will be elaborated on. A theoretical framework will finally be presented, summarising all the factors found in the literature.

3.1 Overview of Applied Literature

Co-creation between VCP students and entrepreneurs from the BoP is a new research topic. As far as I know, there is therefore a gap in the literature both with regards to theoretical and empirical research between these two participants. Therefore, I have reviewed literature based on past initiatives at and with the BoP, academia, VCP theory and research and the BoP context. Furthermore, I have not found any previous research that implies if co-creation is even feasible between entrepreneurs at the BoP and VCP students. Therefore, this chapter presents what the literature says about factors that could enable, drive or inhibit VCP students to or from co-creating with BoP entrepreneurs.

I found the factors presented in the following chapter through broadening my scope and researching factors that affect co-creation and VCP students in relation to higher education, sustainability, social entrepreneurship, the BoP context, VCPs, and co-creation itself. These themes touch upon the goal of empowering low-income communities, while at the same time also focus on the business side of the co-creative process, making them relevant to my study. These goals will be elaborated on in section 3.2.3. The literature review forms the foundation for which factors could make co-creation possible for VCP students.

When reading the literature, I have found a variety of participants in co-creation. Some examples include discussing the relationship between customers and an organisation, and the relationship between citizens and marketers. I have therefore regarded the marketers or organisation as the VCP students, and the citizens or customers as the BoP entrepreneurs.

I am aware that the relationship between the two participants I am researching is different as compared to the participants in co-creation in the literature that I have found. However, I still consider the articles relevant because fundamental aspects of co-creation and the co-creative relationship are discussed. Furthermore, the role of the BoP is something I consider more equal and vital than what many of the articles in the literature regard the citizen or customer as, for example. The factors therefore only serve as hypotheses, and will be confirmed or disproved through the empirical study. The findings, results and analysis of the empirical study are presented in chapter 4.

Additionally, my research has focused on researching the VCP students at an individual level. This is because my research questions are focused on looking at factors that drive, enable or inhibit VCP students to or from co-creating with entrepreneurs at the BoP. It is therefore crucial to research the students at an individual level. Finally, this has also helped me limit my research.

3.2 Co-creation

In the following section, I will first present theory about co-creation, followed by a deep-dive into factors that affect VCP students to co-create with entrepreneurs at the BoP.

3.2.1 Defining Co-creation

The concept of co-creation was first defined and discussed by Prahalad and Ramaswamy (2000, 2004), according to Nahi (2016). Prahalad and Ramaswamy (2004) declared that the BoP "vision ... is the co-creation of a solution to the problem of poverty. The opportunities at the BoP cannot be unlocked if large and small firms, governments, civil society organizations, development agencies, and the poor themselves do not work together with a shared agenda."

Subsequently, co-creation has gained momentum as a way for companies "to develop business models that create value for local communities at the BOP" (London and Hart, 2011; Nahi, 2016). Furthermore, co-creation has become a central principle of newer BoP strategies (Nahi, 2016). This is because, as mentioned in the introduction (chapter 1), newer BoP strategies strive to make the BoP community active participants in socio-economic development, as they are considered valuable assets. These BoP fortune-creating approaches, according to London and Anupindi (2011), include identifying and developing opportunities for the BoP, co-creating and piloting business models in extended collaboration with the BoP community, gaining competitive advantage through becoming socially embedded in the social context, in addition to co-creating business models in order to increase mutual value creation.

Co-creation is a term that has many different definitions. There is also extensive variety within the definitions with regards to the purpose of co-creation with the BoP and the proposed participants (Nahi, 2016). According to Shams and Kaufmann (2016)'s research, for example, entrepreneurial co-creation could be defined as an entrepreneur's ability to foster an enterprising culture among key stakeholders. Taking advantage of key stakeholders' collective capabilities and resources is a crucial element of entrepreneurial co-creation, and they describe interactions and the relationship itself as essential. Taking advantage of key stakeholder's collective capabilities and resources is done in order to identify, establish,

maintain and enhance opportunities through these relationships and interactions. At the same time, each of the key stakeholders work interdependently towards their many mutually beneficial goals in order to generate value and/or neutralise business risks, which, in turn, results in greater competitive advantages for all parties (Shams and Kaufmann, 2016).

Nahi (2016) has also created a definition based on different scholars' understanding of co-creation. Co-creation is an interaction that fosters integrating different partners' capabilities and resources (Grönroos, 2011; Lusch and Vargo, 2006; Mahr et al., 2014; Prahalad and Ramaswamy, 2004). It also encourages and reflects a new balance of power (Cova et al., 2011; Potts et al., 2008; Ramaswamy, 2009), viewing consumers and companies, for example, as equals (Cova et al., 2011; Fisher and Smith, 2011; Prahalad and Ramaswamy, 2004; Payne et al., 2008). Furthermore, Cova et al. (2011) mention that the interaction and collaboration between the different partners is where the creation of value takes place. Therefore, co-creation of value can only occur if these interactions take place because it enables the parties to influence and engage in processes.

To summarise the definitions, three important aspects of co-creation are:

- Co-creation can lead to greater opportunities for all parties.

- The relationship itself and interactions are two crucial aspects of co-creation because they enable the participants to take advantage of collective capabilities and resources. Influencing and engaging in the co-creative process is only possible if the participants interact. Co-creation of value can therefore only materialise if these interactions occur.

- The power balance between each participant is equal, where each participant in the co-creative process views and treats the other as an equal.

3.2.2 The Importance of Co-creation

According to Shams and Kaufmann (2016), entrepreneurship is crucial for economic development. Nevertheless, existing entrepreneurship literature has been, and still is, mainly focused on the new ventures of individual entrepreneurs (Shams and Kaufmann, 2016). However, in order to generate and co-create value through entrepreneurial initiatives, extended collaborations between entrepreneurs and their key stakeholders are demanded in the network economy (Burns et al., 2014; Shams and Kaufmann, 2016).

Moreover, gaining an understanding of problems and attempting to come up with solutions demands us to look at real-world problems from different perspectives (Van de Ven and Johnson, 2006). A one-sided view of a problem will be generated if we do not engage in co-creation (Bartunek, 2007; Antonacopoulou, 2010). Developing collaborative research communities and learning networks to foster knowledge sharing and exchange can be used as tools for viewing problems from different perspectives. This will, in turn, help bridge the theory/practice gap and increase likeliness of acceptance of the proposed solutions (Simba and Ojong, 2017). Additionally, finding relevant solutions and researching the social part of entrepreneurship can be done through collaborating in networks (Jack et al., 2008).

Co-creation between global and local partners, including those located outside the formal economy, would contribute to creating value and improving socio-economic context. A more sustainable competitive advantage would also be a result of co-creation between

these actors, because it is more advantageous than a business model exclusively leveraging their firm's internal resources (Hart and Sharma, 2004; Sánchez and Ricart, 2010). Furthermore, the BoP segment is described as creative, meaning that co-creating with this segment could result in the creation of innovative products and new solutions, which, in turn, creates value for both parties (Karnani, 2007a; Bharti et al., 2014).

We have a responsibility to mobilise the largest economically deprived group in society that is the BoP. Determining if BoP initiatives can reach their full potential with regards to poverty alleviation without engaging in co-creation depends on your understanding of poverty (Nahi, 2016). If poverty is defined as a lack of capabilities (Sen, 1989; Nahi, 2016), co-creation that fosters the poverty-stricken to build their own skills, confidence, agency and voice is crucial in order for BoP initiatives to contribute to poverty alleviation (Ansari et al., 2012; Kolk et al., 2010; Nahi, 2016; Simanis and Hart, 2009). Thus, participation in co-creation can help empower poverty-stricken communities to challenge poverty's structural drivers and existing power relations (Nahi, 2016).

Additionally, taking part in community decision-making processes, for example, is viewed just as important as literacy and good health (Fukuda-Parr, 2003). Therefore, in order to empower poverty-stricken communities to seek social change, it is crucial for them to participate in the various processes. It is then the co-creative process itself, and not the products or services, that may bring lasting value to the BoP communities (Nahi, 2016).

Summary of the Importance of Co-creation with the Base of the Pyramid:

- Participating in the process of co-creation helps empower poverty-stricken communities to seek social change.

- Co-creation can help contribute to mobilising the BoP segment to contribute to poverty alleviation. In order for the BoP initiatives to be able to contribute to poverty alleviation, it is crucial that co-creation encourages the poverty-stricken to build their own confidence, skills, agency and voice.

- Co-creation contributes to creating value and improving socio-economic context.

- Co-creation with the BoP will result in a more sustainable competitive advantage.

- Co-creation helps us view problems from different perspectives and helps increase likeliness of acceptance of proposed solutions.

3.2.3 The Purpose of Co-creation

According to Nahi (2016), there are four different purposes of co-creation. These are: boosting corporate legitimacy and networks, building business models and ecosystems, ensuring social and environmental value, and empowering poor communities. Nahi (2016) goes on to say that "co-creation takes on different levels of necessity, depending on whether we focus on the business development or societal value." An overview of the four purposes of co-creation, between a company and the BoP, has been outlined in table 3.1 on the next page. I have created and developed the table myself in order order to summarise information and research extracted from Nahi (2016)'s literature review.

As you can see in the table, Nahi (2016) categorises co-creation as business-driven (business development in table 3.1) or empowerment-driven (societal value in table 3.1).

Level of Necessity	Purpose of Co-creation	Description
Business Development	Legitimacy Seeking	To gain access to and legitimacy in social networks
Business Development	Efficiency Seeking	To develop business models suited to BoP contexts
Societal Value	Sustainability Seeking	To ensure social and environmental value
Societal Value	Empowerment Seeking	To empower low-income communities

Table 3.1: Purposes of Co-creation based on Nahi (2016)'s research. (Table created by me)

However, this does not mean that the two are mutually exclusive. A variety of relationships, phases and co-creative events create the basis for which BoP initiatives are built, meaning that they usually strive for both profitability and development (Nahi, 2016). It is important to aim for a balance between the various forms of co-creation, in order to prevent an initiative from becoming excessively driven by either the objective of well-being or profits.

Based on the framework above (table 3.1) and after conducting a literature review, Nahi (2016) suggests that co-creation with the BoP can conclusively be defined as "iterative interaction that empowers poor communities and integrates their knowledge and capabilities with those of a company and other actors throughout the process of planning and realising novel business models and ecosystems."

One of the NEED project's goals is to develop knowledge on business development and growth in developing countries (Halvorsen, 2018). This corresponds with Nahi (2016)'s efficiency seeking purpose. Additionally, the BoP initiatives participating in the NEED project are focused on innovations that can be beneficial to the environment and society (Halvorsen, 2018), which corresponds with Nahi (2016)'s sustainability seeking purpose. Finally, engaging and empowering female entrepreneurs is a focus from the BoP participants' side in the NEED project (Halvorsen, 2018), which correlates with Nahi (2016)'s empowerment seeking purpose. The research I am conducting in this master's thesis strives for balance in the co-creative process, and is therefore focused on the business side of developing business models suited to BoP contexts, while at the same time focusing on the goal of empowering low-income communities and ensuring social and environmental value.

According to a study conducted by Lioutas et al. (2011) on rural females' willingness to participate in agricultural educational programmes, the majority of women felt that they were not viewed as equal members of society and were dissatisfied with their social status. Income, on the other hand, was not viewed as an important reason for the perception of low social status. It was their perceptions of being undervalued, marginalised and unequal, and their perceived need for improving their social status that contributed to their anxiousness regarding their status. The women were more willing to participate in the programmes in hopes of improving their statuses due to their dissatisfaction with their current social status (Lioutas et al., 2011). Therefore, it could be concluded that the goal of empowering low-income communities seems highly relevant.

3.2.4 Types of Co-creation

There are three different types of co-creation with regards to degree of citizen or participant (BoP in this case) involvement, according to Voorberg et al. (2015):

- In type 1 the participant is the *co-implementer* of the designed service. This means that only some of the implementation tasks are carried out by the participant, and these are implemented in favour of the participant/citizen.

- The participant is the *co-designer* in type 2. The initiative very often lies with the organisation (VCP in this case), according to Voorberg et al. (2015). However, the participant determines how the service is designed (content and process), and helps maintain the service in some cases.

- In type 3 the participant is the *co-initiator*, where the government is an actor that follows.

Voorberg et al. (2015) mention that they would solely use the term 'co-creation' for the type 2 and 3, co-initiator and co-design, levels with regards to degree of involvement.

The three types of involvement stem from Voorberg et al. (2015)'s research on co-creation in terms of citizen involvement in public services and social innovation. However, determining the degree of involvement from the BoP and VCP is important with regards to motivation for participation, how the co-creative relationship will take place, the development of the product or service, how the product or service is implemented and who implements it, and how to maintain the product or service. The degree of involvement from the VCP side will be explored through the empirical study conducted for this thesis.

In addition, Voorberg et al. (2015) do not know if there is a relationship between the different degrees of involvement and the outcomes of social innovations. This therefore also needs to be investigated further empirically.

Every type of co-creation has its respective challenge. With regards to business development, various authors have discussed the importance of co-creation in different business environments, industries and circumstances (Nahi, 2016). In some industries, focused co-creation between business partners, research institutions and companies has been satisfactory with regards to developing BoP businesses (Chakma et al., 2010; Nahi, 2016). Companies can avoid and get around co-creation (Nahi, 2016) through leveraging already established BoP businesses that have been established by social entrepreneurs or NGOs, and joining forces with them to build new markets that include the poverty-stricken (Seelos and Mair, 2007). Some companies may even be able to enter the BoP market without adapting their business model considerably to the BoP context, provided that they offer simple and affordable products (Sánchez and Ricart, 2010; Nahi, 2016). Finally, co-creation between competent partner organisations can sometimes be beneficial in alleviating various problems, without involving the BoP community (Seelos and Mair, 2007). As you can see, co-creation is not necessary in all circumstances, depending on the goal of co-creation.

Roles

Further research is needed to address the role of the citizen, or BoP participant, in this case, according to Voorberg et al. (2015)'s research. Only a few studies focus on the role of citizens as co-designer (type 2) or co-initiator (type 3), while most studies focus on the

citizen as the co-implementer (type 1) (Voorberg et al., 2015). Therefore, future studies should focus on type 2 and 3 (Voorberg et al., 2015). As mentioned, Voorberg et al. (2015) reserve the term 'co-creation' for type 2 and type 3 with regards to degree of involvement. This thesis is therefore more focused on researching co-creation with type 2 and type 3, and the participants' degrees of participation as a result of these respectively, in mind.

3.2.5 Objectives of Co-creation

Most articles on co-creation do not specify the objective of co-creation (Voorberg et al., 2015). Moreover, co-creation is viewed as value in itself, which means that the objective of co-creation is then to include citizens or participants in the co-creative process (Voorberg et al., 2015). As expressed in some articles, the goal of co-creation is simply the involvement of citizens (Voorberg et al., 2015). Gaining more efficiency and becoming more effective were other objectives of co-creation that were mentioned (Voorberg et al., 2015).

Gebauer et al. (2010) define value co-creation as "value co-creation (thus) involves the customer and the provider in joint problem definition and joint problem solving within an 'experience environment' in which consumers are engaged in active dialogue as they co-construct personalised experiences."

Co-creation is more focused on involving customers, for example, in the co-design of their "own service experience to suit their own personalised context" (Gebauer et al., 2010) and on creating value for both parties. This means that co-creation is equally necessary for problem identification and problem definition - not just problem solving (Bharti et al., 2015; Gebauer et al., 2010). According to Bharti et al. (2015), this definition moved away from companies solely focused on pleasing customers, and also went beyond, and elaborated on, unexplored points by Prahalad and Ramaswamy. Additionally, this definition mentioned objectives of co-creation: the creation of an 'experience environment', meaning that priority was given to experiences over value creation, and experience building (Bharti et al., 2015; Gebauer et al., 2010). Finally, Day et al. (2004) mention that "the outcome of the engagements is the co-creation of value; what is co-created is the experience."

This means that both participants, the VCP students and the BoP entrepreneurs will not only gain value from the outcome, but, maybe more importantly, will gain value from the experience of co-creating value (e.g. new knowledge or skills). Also, in order to figure out what the two parties will co-create, it will be crucial to identify what needs and problems the BoP has (since the goal is to solve problems at the BoP). This aligns with what Gebauer et al. (2010) mentioned, that co-creation is necessary in order to identify and define problems - not just with regards to problem solving. This is also why I wanted to research co-creation between these two participants: in order to find solutions to actual problems and needs of the BoP through working together, instead of making assumptions from another country and culture, which is also a goal of the NEED project.

3.2.6 Activities of Co-creation

According to Day et al. (2004) there are five activities or phases of co-creation:

1. Customer engagement

2. Self-service

3. Customer experience

4. Problem-solving

5. Co-designing

Customer engagement encompasses persuading customers through advertising and marketing with the goal of involving and activating the customer, and in this way, involving them in co-creation (Day et al., 2004; Gebauer et al., 2010; Payne et al., 2008). An example of this is when customers write about their experiences and this gets published online (Gebauer et al., 2010).

In *self-service* the work gets transferred from the firm to the customer, and thus turns the customer into the co-producer (Day et al., 2004; Payne et al., 2008). An example is self-checkout in grocery stores.

Customer experience is when an experience is created through the firm constructing the context and the customer being a part of it (Day et al., 2004; Payne et al., 2008). Disney World is an example of this. The context is driven by the firm, and the customer is engaged (Day et al., 2004).

Problem-solving refers to when the customer navigates their way through the firm's system, e.g. website or frequently asked questions page, in order to solve a problem (Day et al., 2004; Payne et al., 2008). The customer becomes an important asset in this case, because they can "co-repair" value (Gebauer et al., 2010). When the customers reach out for help with issues they also provide valuable feedback to the firm so that the firm can fix these issues for future customers.

Co-designing happens when the firm and customer co-design products or services that are suited to the customer's needs and desires (Day et al., 2004; Gebauer et al., 2010; Payne et al., 2008). In this phase, not only are creative ideas transferred, but also risk. This is because the outcome is greatly affected by the customer's knowledge and skills (Gebauer et al., 2010). Therefore, the firm is no longer entirely responsible for the outcome. Educating and guiding the customer is thus important throughout the co-design process (Gebauer et al., 2010; Payne et al., 2008).

Day et al. (2004)'s article is considered relevant for this thesis, even though they discuss customers and firms, and not VCP students and BoP entrepreneurs. This is because it is important to understand the phases or activities of co-creation in order to determine which phase this thesis is focused on. The different phases also demand different involvement from the participants, which is also important to keep in mind in this thesis. The goal of this thesis is to understand how entrepreneurship students can be driven and enabled to co-create with entrepreneurs at the BoP. As mentioned, the goal is a balanced relationship between the two parties, where both participants are equally involved, in order to solve a problem at the BoP. This correlates with phase 5, co-design. This also helps share the risk between the two parties, which could be a factor that affects the students to participate in co-creation (this will be explored in the empirical research). Sharing risk is important because if the VCP students had created a product for the BoP segment without co-creating or speaking with the BoP segment, the VCP students would be taking a greater risk because they would not know if the product was suited to the BoP context and needs.

Day et al. (2004) mention that "although work and risks increasingly are shared, the firm decides how it will engage the customer." In the VCP students' and the BoP entrepreneurs' case, this means that the VCP students will decide how the co-creative process is conducted. Day et al. (2004) go on to say that a firm-centered perspective, or a VCP-centered

perspective in this case, on how to engage the customer, or the BoP, therefore needs to be discussed. Thus, figuring out what factors could affect the BoP to participate in co-creation is important. However, I have focused on one side of the co-creative process for this thesis - the VCP students. Researching factors that affect the BoP participants will be important in further research.

3.2.7 Outcomes of Co-creation

According to Voorberg et al. (2015), the outcomes of co-creation are often not discussed in research. When outcomes are reported, however, they refer to increase or decrease in effectiveness. It is important to mentioned that in some circumstances, co-creation may not directly lead to the goal the collaboration is aiming for or may not increase effectiveness (Voorberg et al., 2015). Furthermore, because there is so little research that mentions outcomes on co-creation, it cannot be concluded whether co-creation is beneficial or not (Voorberg et al., 2015). However, co-creation is viewed as a benefit in itself (Voorberg et al., 2015), meaning that if the goal is co-creation, then the goal is achieved.

3.3 Factors

No prior research has focused on co-creation between the exact participants VCP students and entrepreneurs at the BoP. I am therefore researching a gap in the literature. As mentioned in section 3.1, I have therefore read articles on other related themes. Even though the articles researched different aspects of co-creation or different participants, many articles had similar findings. I have grouped the different factors I found into four categories, or key pillars. I grouped the factors based on similarities I found between the findings, in addition to basing it on Bharti et al. (2015)'s literature review on co-creation and proposed conceptual framework. These factors will be discussed in the following sub-chapters.

3.3.1 Perceived Benefits

Perceived benefits are the benefits the VCP students believe they can gain from co-creating, or from taking part in the co-creative process. These include a sense of ownership/being part of something, training, ability to contribute, experience and knowledge exchange.

A Sense of Ownership/ Being Part of Something

Haneberg et al. (2018) conducted research on ownership and teamwork in VCPs, specifically researching the VCP NTNU School of Entrepreneurship (NSE). Their study uncovered that the students at NSE have three types of ownership: ownership to their startup, to their academic results, and to the collaborative process itself and the opportunity to develop collaborative competencies.

Haneberg et al. (2018)'s research also uncovered that it is important for the students to have an influence on the decision-making process in order to feel like they are a part of the entrepreneurial team. This means that even though the startup they are working on is real, the collaboration within the team also needs to be perceived as real (Haneberg et al., 2018). Some examples of this includes being able to contribute to central tasks and

being able to participate in important decision-making processes. Haneberg et al. (2018) go on to say that the students need to experience mutual dependence within the team. It is therefore more important for the students to have ownership to these processes than to work on a real startup. However, when there is a big difference in the students' degrees of ownership to a project, obtaining a degree of mutual dependence within a team can be a challenge (Haneberg et al., 2018). Therefore, the team should find a project where no one feels a sense of ownership, and rather find a project where everyone can develop a sense of ownership instead (Haneberg et al., 2018).

"Motivation to engage in venture creation is often supported through financial and ownership-based incentives" (Lackéus and Middleton, 2015). According to Lackéus and Middleton (2015), one advantage of VCPs is the students' strong sense of contractual and emotional ownership of a real-life venture. This is because the students are then working on the venture because of their intrinsic motivation to accomplish something, rather than viewing it solely as "school work" (Haneberg et al., 2018).

There are many potential benefits of ownership perception, according to Lackéus and Middleton (2015). These include emotional involvement and commitment (Gibb, 1987), motivation (Savery and Duffy, 1996), responsibility (Cotton, 1991) and increased creativity (Amabile et al., 1996). Collective ownership of goals is a vital element of a functioning team (Haneberg et al., 2018) and successful collaboration (Bronstein, 2003). In collective ownership of goals, all participants are active in the entire process of goal attainment (Bronstein, 2003). A sense of ownership is therefore a factor that is important for VCP students.

Training

Often viewed as the vehicle for learning (Taylor and Thorpe, 2004), training is a factor that many authors have mentioned in regards to co-creation. Training is an investment that grows people's knowledge, skills and resources, making it an important benefit of co-creation. Training facilities need to be in place for both participants in the co-creative process in order for them to take part in co-creation (Voorberg et al., 2015). Furthermore, training local communities is especially beneficial to the VCP students, because it helps them learn about the locals' needs, reduce distribution costs and helps them empower the locals (Bharti et al., 2014).

Training also has other benefits. Entrepreneurship training, for example, helps increase and maintain passion over time, which, in turn, increases the likelihood of business creation (Gielnik et al., 2017). Those who do not master entrepreneurial skills are less likely to continue experiencing high passion for entrepreneurship in the long-term (Gielnik et al., 2017). It is thus vital to develop a sense of mastery. High passion after training is therefore important to maintain, as it will eventually lead to business creation (Gielnik et al., 2017).

Chalmer's School of Entrepreneurship is a VCP, where students develop entrepreneurial behaviour and skills (Ollila and Middleton, 2011) through action-based learning and the creation of real-life ventures. The venture creation approach is a type of training, as it prepares the students for the "real world". According to Ollila and Middleton (2011), the approach enables students to experience real-life business activities, learn by doing, develop decision-making processes and practice reflection.

Ollila and Middleton (2011) view the experiential teaching approach as fundamental, as "it draws focus to the importance of learning the process of acting entrepreneurially".

However, in order to prepare students to start a venture, more is needed in entrepreneurial education (Ollila and Middleton, 2011). "Even enterprise simulation lacks the sense of urgency and pressure created by real-world business situations, such as having multiple priorities and stakeholders, thus, leaving the student without a true-to-life experience" (Ollila and Middleton, 2011). Ollila and Middleton (2011) propose that the real business world can be incorporated through combining incubation at the university with entrepreneurial education where students start a business. This is suggested as a successful way to develop both companies and entrepreneurs (Ollila and Middleton, 2011).

One alumnus interviewed as a part of Saeter et al. (2018)'s study mentioned that the different stakeholders at their VCP said that failure is a part of the education (Saeter et al., 2018). Failure is thus used as a part of training the students to become entrepreneurs.

Co-creating with the BoP would provide the VCP students with another form of real-life experiences and action-based learning, and would act as training for the students to become entrepreneurs.

Ability to Contribute

An "I can do it" belief is vital in order to increase entrepreneurial passion - simply feeling inspired is not sufficient (Gielnik et al., 2017). This is because mastering entrepreneurial skills increases the likeliness of experiencing high passion for entrepreneurship in the long-term (Gielnik et al., 2017). Furthermore, high passion eventually leads to venture creation (Gielnik et al., 2017). This means that if a participant believes they can contribute, this could eventually result in business creation.

As mentioned in section 3.3.1 (a sense of ownership/ being part of something), in order for the participants to feel ownership, it is important that they are able to contribute to central tasks (Haneberg et al., 2018). Therefore, these two factors (a sense of ownership/ being part of something and ability to contribute) are connected.

Experience

Value emerges through experience (Grönroos and Ravald, 2011). An important source of value in the co-creation process can be the (customer's) interaction (Nambisan and Baron, 2007). Additionally, the interaction helps shape their future participation (Nambisan and Baron, 2007).

Not only do "customers *participate* in the value co-creation process by sharing their own experiences" (Bharti et al., 2014), but their participation in co-creation is *motivated* by sharing and gaining experiences during an interaction (Harwood and Garry, 2010). Additionally, sharing experiences and building long-term relationships can contribute to consumer needs being met effectively (Bharti et al., 2015).

As mentioned in section 3.2.5, the co-creation of value is the outcome of the co-creative engagement, and what is co-created is the experience (Day et al., 2004). This means that it is the experience itself that will provide value to the participants (e.g. new knowledge or skills), not just the outcome (e.g. a new product or service).

At VCPs, one of the fundamental aspects is learning through experience (Saeter et al., 2018; Ollila and Middleton, 2011; Lahikainen et al., 2018; Haneberg et al., 2018). At the VCP Chalmer's School of Entrepreneurship, the students work in a real-life startup and the activities related to their venture creation are organic (Ollila and Middleton, 2011). New

learning opportunities emerge from the real-life experiences the students encounter with regards to the venture (Ollila and Middleton, 2011). This underlines that value emerges through experience (Grönroos and Ravald, 2011) at VCPs as well. Experiencing failure, tough times and challenges is also a natural part of the learning process at VCPs, as expressed by a VCP alumnus (Saeter et al., 2018).

Saeter et al. (2018) interviewed one VCP alumna who talks about diverse experiences and how they made up a crucial part of her learning experience. She also mentions how she gained knowledge through experience. Furthermore, the alumna mentions that she learned how to work in an interdisciplinary team and find complementary skills and competence within that team. This is something you have to learn through experience, according to the alumna. When team members have broad expertise and experiences, a team's knowledge will be increased (Sutcliffe and Vogus, 2003). Those with broad capabilities for action and expertise will more easily be able to grasp variations in the environment, making experience an important factor for resilience (Sutcliffe and Vogus, 2003; Saeter et al., 2018).

When starting a venture, and in order to learn from it, you do not always know what the learning objectives of a certain activity will be (Ollila and Middleton, 2011). Learning objectives emerge from "the reflections that the students have themselves and discuss with educators" (Ollila and Middleton, 2011). Students and educators need to believe in, recognise and appreciate knowledge, even though it may develop outside pre-determined structures, in order to gain knowledge from emerging situations (Ollila and Middleton, 2011). Market interaction is one environment in which these situations can emerge (Ollila and Middleton, 2011). This means that learning emerges through experiences the environment provides.

Experience is a vital aspect of co-creation and seems to be a fundamental tool for learning and development at VCPs. It is therefore an important factor affecting the VCP students with regards to co-creation.

Knowledge Exchange

Two important drivers that influence co-creation are gaining and delivering knowledge (Bharti et al., 2014). Knowledge is the fundamental source of competitive advantage (Vargo and Lusch, 2004). However, in society each person tends to specialise in one particular area in order to make society more efficient. This, in turn, leads to unequally distributed knowledge. On the other hand, scale effects can be achieved because people specialise in certain skills. "Total services" can thus be achieved through the exchange of skills (Vargo and Lusch, 2004). In the co-creative process, each participant can complement or "complete" the other participant through the sharing and exchange of knowledge.

Co-creation is conceptualised as joint problem-solving, according to Bharti et al. (2015). This means that a transfer or exchange of knowledge happens when each party utilises their knowledge to solve a problem. Knowledge exchange benefits both parties and is reciprocal (Bharti et al., 2015).

Academics work towards solving many of the world's urgent "wicked problems" through collaboration (Dentoni and Bitzer, 2015). This is done through acting as knowledge experts in multi-stakeholder networks, making them responsible for applying and disseminating their own expertise within specific fields (Dentoni and Bitzer, 2015). VCPs also practice knowledge exchange - both between students, and alumni. For example, the VCP NSE has "a deeply rooted culture of contributing, engagement and mutual support (which) en-

ables student-to-student learning in a community of both current and previous students."
(Lahikainen et al., 2018).

Hetzel et al. (2015)'s research also shows how knowledge exchange is present at VCPs,
where each person or nascent entrepreneur specialises in different areas in order to comple-
ment one and other. One nascent entrepreneur, for example, describes knowledge transfer
happening between them and alumni startups. This nascent entrepreneur has received help
from an alumni startup which is located abroad, in order to create a contingency plan,
should they end up in a similar situation as the alumni startup (Hetzel et al., 2015).

Saeter et al. (2018)'s study also shows how the alumni from VCPs learned to work in
inter-disciplinary teams (as mentioned in section 3.3.1 'experience'). Hetzel et al. (2015)'s
master's thesis elaborated on how the nascent entrepreneurs at a VCP come from various
educational backgrounds. The nascent entrepreneurs also value the interdisciplinary ap-
proach, joyous about the fact that team mates had different backgrounds.

Gibb (1996) proposes that the learning environment in entrepreneurship education should
be characterised by peer exchange. This is something that seems to be happening at VCPs,
as they are described as a place where students seek and co-create knowledge (Ollila and
Middleton, 2011). Finally, Taylor and Thorpe (2004) explains that knowledge-transfer of-
ten has an informal social dynamic, and is a process of co-participation that always happens
in a collective manner (between more than one individual). Therefore, knowledge exchange
is connected with co-creation as it demands collective participation.

Summary of Perceived Benefits

I have created figure 3.1 below to summarise the factors presented above, and to illustrate
them in relation to co-creation. Co-creation could lead to the perceived benefits described
above for the VCP students.
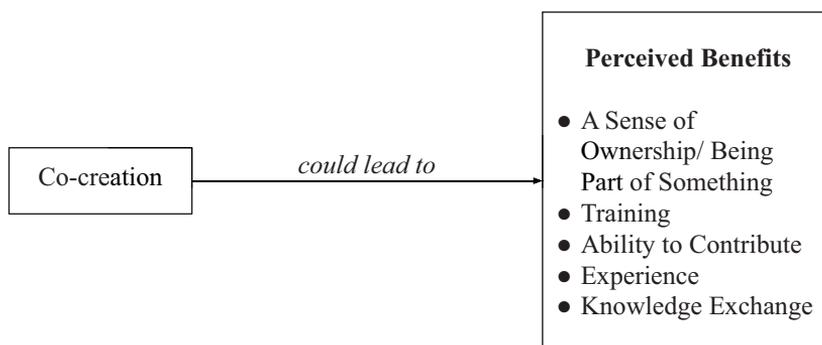
Figure 3.1: The Benefits the VCP Students Believe they can Gain from Co-creating

3.3.2 Resources

Resources are, in this case, what contribute to making co-creation possible. Resources can
either be categorised as operant or operand (Bharti et al., 2015; Day et al., 2004). Oper-
ant resources are intangible resources that are capable of creating value (Vargo and Lusch,

2008). They are typically human (e.g. the skills and knowledge of individual employees), organisational (e.g. competences, routines, controls and cultures), informational (e.g. knowledge about competitors, market segments and technology), and relational (e.g. relationships with suppliers, competitors and customers) (Day et al., 2004). Operand resources are typically tangible or physical resources such as raw materials and machinery (Day et al., 2004).

According to Bharti et al. (2015), operant and operand resources contribute to building a strong co-creative environment, and make co-creation possible. Many of the resources affect other aspects of co-creation as well. The factors under this pillar include trust, operant resources, relationship, capabilities, technology, and network and community.

Trust

Many researchers mention trust as crucial for co-creation to take place (Bharti et al., 2014, 2015; Forsström and Törnroos, 2005; Gupta, 2016; Hwee Nga and Shamuganathan, 2010; Nahi, 2016; Voorberg et al., 2015). Trust was cited numerous times as an important factor for co-creation, according to Bharti et al. (2015)'s literature review.

Romero and Molina (2011) define trust as "a bilateral process that requires mutual commitment and endeavour of organisations and customers when attempting to keep their promises (e.g. building credibility)." In an interaction, it is important that both parties are able to convey their expectations clearly to each other (Bharti et al., 2015). This is also a sign of trust. It is also critical that both participants have trust in the co-creative initiative (Voorberg et al., 2015).

Establishing trust and openness is vital in order for the participants to be willing to share information with each other, and in order to be accepted into the environment (Reed, 2012). Being granted insight and access to information is especially critical in order to identify the needs of the locals, and thereby being able to tailor solutions to the BoP.

Trust is a crucial element of co-creation, especially when co-creating with the BoP segment. This is because they are already a vulnerable group, as they have previously been taken advantage of by large corporate firms (Karnani, 2006, 2007b). Their past experiences thus make it difficult to trust those expressing an interest in working with them. Transparency is therefore an import element of building trust (Nayar, 2009). In addition, in order to avoid asymmetry of information between the participants, transparency and access to information is crucial (Day et al., 2004). Transparency and trust are important both in regards to trusting each other, and having trust in the co-creative process itself.

Every partnership and relationship is different, meaning that you cannot apply what is applicable in one relationship to another. This is because trust cannot be copied, and a relationship must build on mutual trust (Forsström and Törnroos, 2005). Trust is also a factor that will emerge over time. This is because partnerships are created through interactions over time, where trust and commitment are built through the interaction itself (Forsström and Törnroos, 2005). However, there are measures that can be taken in order to help build and generate trust. These include exchanging information, frequent interaction and establishing clear guidelines and roles (Romero and Molina, 2011; Nahi, 2016). This means that the interaction in itself helps generate trust, according to Nahi (2016). Therefore, trust is vital for participating in co-creation, and it is important to take measures in order to build trust.

Operant Resources

As mentioned in section 3.3.2 ('resources'), operant resources are typically human, such as the skills and knowledge of each person. When two actors are working together towards the same goals and vision, it opens up for partnerships (Bharti et al., 2015). Furthermore, these partnerships can lead to the exchange of both operant and operand resources, knowledge, experience and the acquisition of new skills (Bharti et al., 2015).

Operant resources, according to Vargo and Lusch (2008), are the essential drivers for all value creation. Operant resources are resources that can "purposefully" act on other resources (Vargo and Lusch, 2008), something an operand resource, such as a physical product, cannot. For example, operant resources such as services, can motivate exchange and reciprocity. Additionally, operant resources are more important for co-creation because they are responsible for achieving competitive advantage (Bharti et al., 2015). The customer and operant resources are integrated into the entire value-creation process through co-creating, which shows the importance of this factor (Bharti et al., 2015).

According to Rasmussen and Sørheim (2006), "the term entrepreneurship education can be interpreted in two ways; either learning about entrepreneurship as a phenomenon, or learning useful skills in order to become an entrepreneur." The student or entrepreneur's skills, actions and assertiveness are influenced and developed by mentors and staff at the VCP while they are facilitating startup activities and learning by doing (Hetzel et al., 2015). Additionally, mentors help the nascent entrepreneurs through *providing* skills and advice. VCP staff mentions that social skills and having a strong driving force are important enrollment criteria (Hetzel et al., 2015). Access to mentoring and sufficient infrastructure helps entrepreneurship students explore and develop their entrepreneurial skills (Rasmussen and Sørheim, 2006). Operant resources are thus important for the VCP students to develop as entrepreneurs as well as being important in the co-creative process.

Relationship

A relationship is "a bond between two or more social actors" (Scott and Carrington, 2011). A relationship is collaborative, interactive and reciprocal in nature, and value creation is reciprocal and mutual (Vargo, 2009). Therefore, collaboration and reciprocity are fundamental aspects of exchange that lead to value co-creation (Vargo, 2009; Chandler and Wieland, 2010). In this context, 'relationship' refers to the relationship between the two participants involved in the co-creative process.

Based on S-D logic (service-dominant logic), "service refers to the application of competences for the benefit of another party" (Chandler and Wieland, 2010). This means that "service is a reciprocal exchange of competences" (Chandler and Wieland, 2010). In this perspective, the collaborative interactions and processes that occur as a result of relationships where competences are exchanged, are what drive the co-creative process (Chandler and Wieland, 2010). Value can therefore only be co-created through combining both parties' resources. Because both parties are connected, they exist in a unique relationship. This relationship can be defined by the unique resources that bring them together (Chandler and Wieland, 2010). Therefore, each participant "can only integrate these unique resources because of their relationship with one another" (Chandler and Wieland, 2010).

Furthermore, both parties utilize resources from each of their unique and immediate contexts. In order to be able to reciprocally exchange value in a relationship, each party must draw on resources from their extended networks (Chandler and Wieland, 2010).

Chandler and Wieland (2010) go on to say that, "in essence, the relationship acts as a bridge that connects relationships together as a value network or service ecosystem". A reciprocal and collaborative relationship is therefore desirable in order to successfully implement co-creation (Bharti et al., 2015). As Haneberg et al. (2018) mentioned, there needs to be mutual dependence within a team. Bharti et al. (2015) go on to say that a relationship's strength is determined by its degree of closeness, and not only its duration.

When entering into any kind of relationship, you cannot assess the possible sacrifices and benefits of getting involved in advance (Forsström and Törnroos, 2005). Instead, this must be evaluated while pursuing the relationship through interaction. A successful (working) relationship is based on commitment and trust (Anderson and Narus, 1998), and is usually built through interaction over time (Anderson and Narus, 1998; Forsström and Törnroos, 2005). In a relationship, each party has the opportunity to acquire supplies, gain insight into and solve each other's problems, or gain access to each other's resources (Forsström and Törnroos, 2005). Furthermore, a relationship's possible benefits depends on each party's involvement, and if they are willing to actively react, adapt, learn and invest (Forsström and Törnroos, 2005). The degree of involvement is not either party's choice or decision, rather, it materialises through the interaction between them (Forsström and Törnroos, 2005).

Capabilities

Capabilities encompass knowledge and skills, and are essential resources in the co-creation process (Bharti et al., 2015). Value creation, according to Borys and Jemison (1989), is "the process by which the capabilities of the partners are combined so that the competitive advantage of either the hybrid or one or more of the partners is improved." Working together is therefore more advantageous than working alone. It is a joint effort that leads to an interdependence between the two participants, which is a requirement for value co-creation (Forsström and Törnroos, 2005). Capabilities are therefore a fundamental aspect of co-creation, making it an essential factor for taking part in co-creation.

Technology

Technology is mentioned as one of four factors that nurture socially driven service innovation in emerging economies (Reynoso et al., 2015), making it an essential element of social innovations (Reynoso et al., 2015). Mobile technology and the internet significantly impact and play a central role in the lives of people at the lower end of the economy (Reynoso et al., 2015). Technology has become, and acts as, a bridge. For example, previously it was practically impossible to find a reliable physical distribution channel capable of serving thousands of villages spread across vast areas. Today, however, medical services through telemedicine and weather forecasts (for farmers, for example) have been made accessible thanks to technology (Reynoso et al., 2015). Technology therefore grants access to new knowledge, services and products, overcoming previous limitations of, for example, physical distribution channels. This has also had an impact on the rest of the world, as they now have gained access to a bigger or different market to their own.

Furthermore, it is now possible for companies to directly interact with the BoP segment in order to gain customer feedback, develop products, or even diagnose a patient anywhere in the country (Bharti et al., 2014), thanks to technology. According to Prahalad

and Ramaswamy (2004), customer interaction and customer involvement are some of the most vital elements of co-creation, which technology helps make possible. Technology is therefore an important factor for co-creation, as it helps facilitate the co-creation process (Bharti et al., 2015). It is an important factor for the VCP students because it enables them to connect with, work with and learn from the BoP entrepreneurs.

Network and Community

The relationships among, competencies of and information shared with other actors in a network are what make up a value network (Bharti et al., 2015). A network of firms needs to work together in order to co-create, because a single firm cannot provide the total co-creation experience (Day et al., 2004).

Networks are also critical to entrepreneurship (Hayter, 2013). This is because entrepreneurs are given access to more resources that are important for performance, such as financial, human and technological resources, through the help of networks. Furthermore, networks provide social and intellectual capital, which can contribute to increasing the entrepreneurs' success (Smith and Lohrke, 2008)

Community and networks are often described in the literature as being important for VCPs. NSE, for example, is described as an education that facilitates student-to-student learning in a community of current students and alumni (Lahikainen et al., 2018). NSE's culture of mutual support, contributing and engagement helps foster this (Lahikainen et al., 2018). The student community, and alumni and mentor network is thus vital and strong, as described in Saeter et al. (2018)'s study. "The alumni often refer to the VCP environment, meaning the unity greater than teams" (Saeter et al., 2018).

According to Hetzel et al. (2015); Rasmussen and Sørheim (2006), mentors, funding and a well-developed network are critical factors when learning by doing. The entrepreneurship students' journeys are advanced through having access to an inspiring environment where they can find groups of entrepreneurs facing similar challenges (Rasmussen and Sørheim, 2006). This is important because they can then get advice that is specific to their nascent startup or challenges they are facing (Rasmussen and Sørheim, 2006).

One initiative that Rasmussen and Sørheim (2006) mention in their study was successful in aiding new business generations, despite receiving limited resources and backing from the university. Rather, through the help of mentors and network-building between entrepreneurs and companies in the region, the initiative was able to assist new businesses (Rasmussen and Sørheim, 2006).

Having a diverse network and being able to expand it outside of their existing network, is crucial to nascent entrepreneurs (Hetzel et al., 2015). Networking is also a necessity because it may lead to both quality and quantity (Hetzel et al., 2015).

With regards to the NEED project, networks are also crucial when it comes to collaborating and disseminating knowledge. Additionally, involving external resources contributes to giving the students real-life and up-to-date experience (Middleton et al., 2014). It also gives the students access to other and greater networks, which, in turn, helps the students develop as entrepreneurs (Middleton et al., 2014). This is also confirmed by Taylor and Thorpe (2004), who discuss how relationships or networks foster learning, for example when making decisions or solving problems.

Summary of Resources

I created figure 3.2 below to summarise the factors presented above and to illustrate them in relation to co-creation.
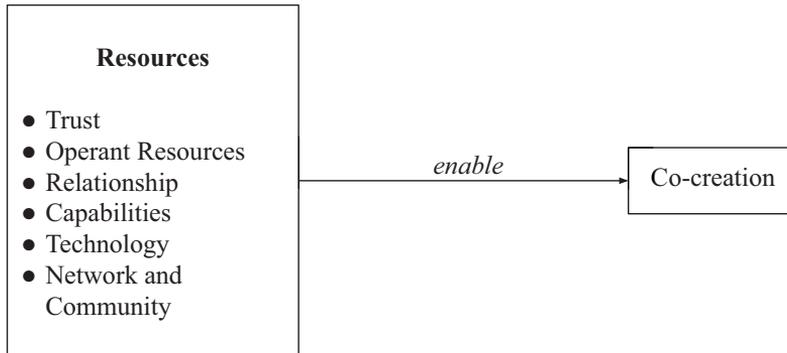
Figure 3.2: Resources that Could Make Co-Creation Possible

3.3.3 Relational Norms

Relational norms are what define the co-creative relationship itself. They determine how the co-creative relationship will be built in order to function and benefit both parties. What procedures need to be in place? How will the participants communicate? What attitudes affect the other participants and what attitudes must each participant have towards the other? How are the relationship and expectations towards each other defined? What considerations does each participant need to take? "Relational norms have the potential to form a long-term and trusting relationship, and encourage a deeper involvement of the customer in all stages of the value co-creation process" (Bharti et al., 2015). This pillar explores the following factors: commitment, reciprocity, empathy, open communication, presence of clear incentives for co-creation (win/win) and role clarity.

Commitment

A partnership is not built overnight, rather, it is built through trust, communication and commitment (Lubrica et al., 2011). Trust, commitment and communication are vital aspects of partnerships because they enhance efficiency, reduce risk, uncertainty and misunderstandings, in addition to dividing labour based on the participant's abilities and resources (Forsström and Törnroos, 2005). Therefore, the potential of co-creation is enhanced when partnerships are long-term and high-involvement relationships. Additionally, it is important to note that partnerships themselves are not the end-point. This is because interdependencies can, and should, be discovered and exploited continually, according to Lubrica et al. (2011).

The long-term commitment of a partnership creates dependence over time (Forsström and Törnroos, 2005). Therefore, dependence could be the key to value co-creation potential, but managers, for example, need to see this in order to realise the potential (Forsström and Törnroos, 2005).

Interdependence characterises long-term business relationships (Forsström and Törnroos, 2005). A close interaction leads to more interdependent choices, which, in turn, affect commitment and trust (Forsström and Törnroos, 2005). Therefore, the interdependent relationship itself affects commitment.

One potential benefit of ownership perception includes commitment (Gibb, 1987; Lackéus and Middleton, 2015). This means that the students will be more committed if they experience ownership to the task at hand. As Haneberg et al. (2018) mentioned, the students need to experience mutual dependence within the team.

According to Holm et al. (1999), mutual dependence and commitment between both participants is required in order to promote co-creation. A balanced and mutually dependent relationship where both participants are mutually committed is therefore an important factor affecting participation in co-creation.

Reciprocity

Reciprocity is a vital element of co-creation. Co-creation has many definitions, but a common trait of many of the definitions is that they describe co-creation as a reciprocal process (Bharti et al., 2015). One example is: "Co-creation of value is a reciprocal process where perceptions of value may be conditioned by considerations of responsibilities" (Williams and Aitken, 2011). Vargo (2009) also characterise a relationship as reciprocal. Therefore, a reciprocal relationship is desirable in order for the implementation of co-creation to be successful (Bharti et al., 2015).

Mutuality is also mentioned in regards to reciprocity (Bharti et al., 2015), and is an important part of co-creation. Mutuality is often called interdependency in the literature. Interdependence plays an important role in business to business relationships (Forsström and Törnroos, 2005). However, learning and/or unlearning, mutual investments and bonding are crucial in order to co-create and to be able to take advantage of mutual resources (Forsström and Törnroos, 2005). Experiencing mutual dependence within the team is also important to VCP students (Haneberg et al., 2018). Additionally, mutual dependence is often affected by their perceived degree of ownership towards a project (Haneberg et al., 2018).

Reciprocity increases willingness to participate in community-based activities (Kassahun, 2011), such as co-creation with the BoP. The definition of co-creation itself underlines the importance of reciprocity. Reciprocity is also vital for the co-creative relationship itself, and is therefore a crucial factor for participating in co-creation.

Empathy

According to Morgan et al. (1997), there is a strong link between empathy and a willingness to help. In order to convince the BoP entrepreneurs to take part in co-creation, it is vital that both participants have an empathetic attitude towards the community or cause (Bharti et al., 2015). This is because showing a desire to gain a deeper understanding of fellow human beings helps gain legitimacy, trust and helps build relationships, thereby also increasing the locals' mental well-being (Bharti et al., 2014). Even though Bharti et al. (2015) discuss empathy in regard to the BoP, it is vital for the VCP students to build trust and the relationship. And in order to do so, they need to have an empathetic attitude. Finally, having

an empathetic attitude also helps ensure that a solution is built on proper insight gained through the desire to care about and help one another.

Open Communication

The entire process environment of co-creation is held together by communication and dialogue (Bharti et al., 2015). "Value co-creation is the preferred change realised as a result of communication, planning and/or other purposeful interactions among multiple entities" according to Spohrer and Maglio (2010). This highlights the need for dialogue, rather than one-way communication, in order to co-create, as Day et al. (2004) mentions. A project's success is therefore dependent on good communication between all participants (Evans et al., 2012). The mode, frequency and intensity of communication affects the co-creative relationship and process (Bharti et al., 2015). Therefore, in order for the participants to co-create, proper communication infrastructure and procedures need to be in place (Voorberg et al., 2015).

Presence of Clear Incentives for Co-creation (Win/Win)

An important factor for co-creation from the organisational side, is having clear incentives for the co-creative process (Voorberg et al., 2015). There needs to be a benefit for both participants, or a win/win situation.

Focusing on *how* co-creation can benefit each participant is therefore important in order to create incentives for them to participate in co-creation. Some examples are being clear on how co-creation can have financial benefits (Abers, 1998), how a service can be improved by incorporating another party (Evans et al., 2012; Voorberg et al., 2015), or how co-creation can increase customer interest (Lam, 1996). The latter is explained as following: a business depends on how well they serve their customers, and therefore they are more likely to take the customers' interests into consideration (Lam, 1996).

Win/win solutions are therefore important. However, in order to find these solutions, there needs to be a balance between the parties. This is because power-based relations can form if there is an unbalance in an interdependent relationship (Forsström and Törnroos, 2005). Even when things do not go as planned, it is important to be able to learn mutually and take advantage of the acquired knowledge (Forsström and Törnroos, 2005). However, vast cultural differences can make this a challenge.

Value co-creation has potential if there is interdependence between the participants, and "if perceived benefits outweigh perceived sacrifices during the duration of the relationship for both parties involved" (Forsström and Törnroos, 2005). Clear incentives, benefits and a win/win situation therefore affects the VCP students to take part in co-creation.

Role Clarity

Before embarking on a co-creative journey, it is vital to be clear about each participant's roles in and expectations from the co-creative process (Bharti et al., 2014). This is in order to avoid role ambiguity and wasting resources (Bharti et al., 2014). According to Lengnick-Hall (1996), role clarity also makes participants more willing to participate.

Summary of Relational Norms

I have created figure 3.3 below to illustrate the factors presented above. The VCP partic-ipant and BoP participant are each represented by their respective triangular shape. Both participants, the VCP and BoP participant, have been included in the figure because the figure depicts the relational norms and a relationship consists of more than one participant. The factors are what relational norms are important to the VCP participants when build-ing the co-creating relationship between the two participants, and for the relationship to function between the participants.
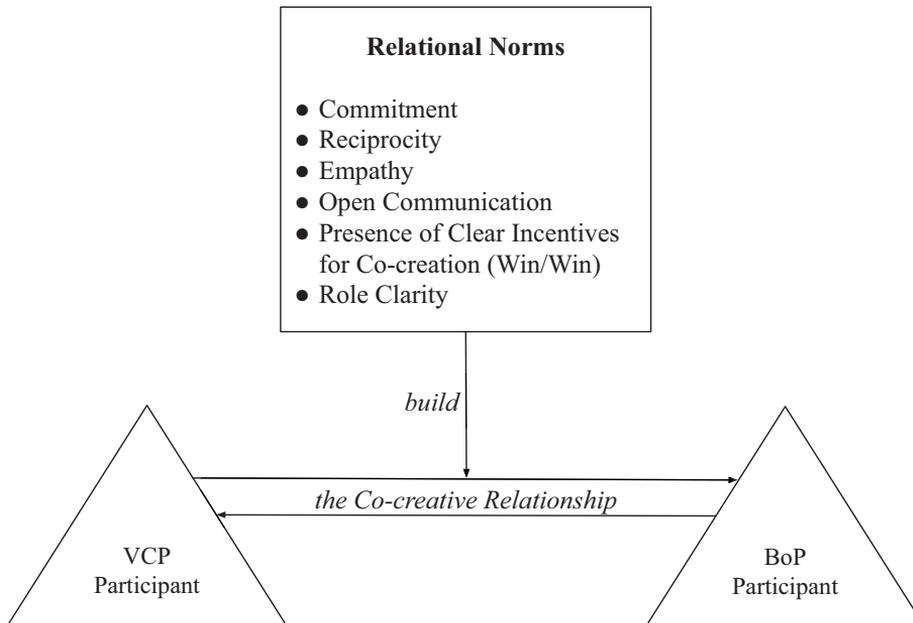
Figure 3.3: Relational Norms that Define and Build the Co-creative Relationship

3.3.4 External Environment

The external environment has an impact on the participants and the co-creative process. Even though the external factors are, to some extent, beyond the participants' control, they have still been included here. This is because the external environment affects the par-ticipants on an individual level. The external environment plays an important role in co-creation, and co-creation is therefore dependent on this environment (Bharti et al., 2015). The external factor considered in this literature review is risk tolerance and a culture for failure.

Risk Tolerance and a Culture for Failure

According to Voorberg et al. (2015), having a risk-averse culture is a factor that inhibits public-sector organisations from participating in co-creation. VCPs and entrepreneurship education, on the other hand, encourage their students to take risks. Failure is something

the students learn a lot from, which is why it is considered a natural part of VCPs (Saeter et al., 2018). At the VCP Chalmers' School of Edcucation, for example, failing and making mistakes is encouraged. This is because, as students at Chalmer's School of Education, they have a "safe" place to fail while being supported by staff, alumni, their classmates, and so forth (Ollila and Middleton, 2011).

A culture for failure is also described in Saeter et al. (2018)'s study on alumni from VCPs. One alumnus describes how they feel more prepared for challenges after having experienced tough times and failure. Failure is thus a natural part of VCPs (Saeter et al., 2018), and something the students learn a lot from.

One of NSE's goals is to spread enterprise competence through, for example, risk tolerance (Lahikainen et al., 2018). According to Ollila and Middleton (2011), coping with and enjoying uncertainty, flexibly responding to challenges and taking risky actions are behaviours associated with venture creation.

The literature on entrepreneurship education discusses learning from making mistakes and learning to tolerate uncertainty. This is something Gibb (1996) proposes, for example. He suggests that the learning environment in entrepreneurship education should be characterised by making mistakes, trial and error, and learning by doing. Risk tolerance and having a culture for failure is therefore a factor that affects the VCP students to participate in co-creation.

Summary of External Environment

I have created figure 3.4 in order to illustrate how the external factor affects the VCP student, and thus its effect on the co-creative process.
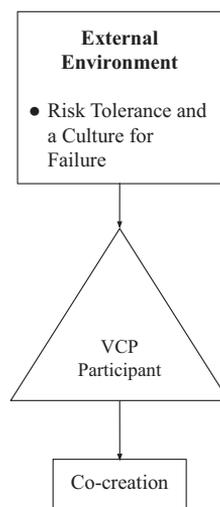
Figure 3.4: External Factors Affecting VCP Students and the Co-creative Process

3.4   Theoretical Findings

Many of the factors found in the literature are linked. The factors also affect each other, such as openness and trust, and ability to contribute and a sense of ownership/being part of something. Therefore, the factors are complementary.
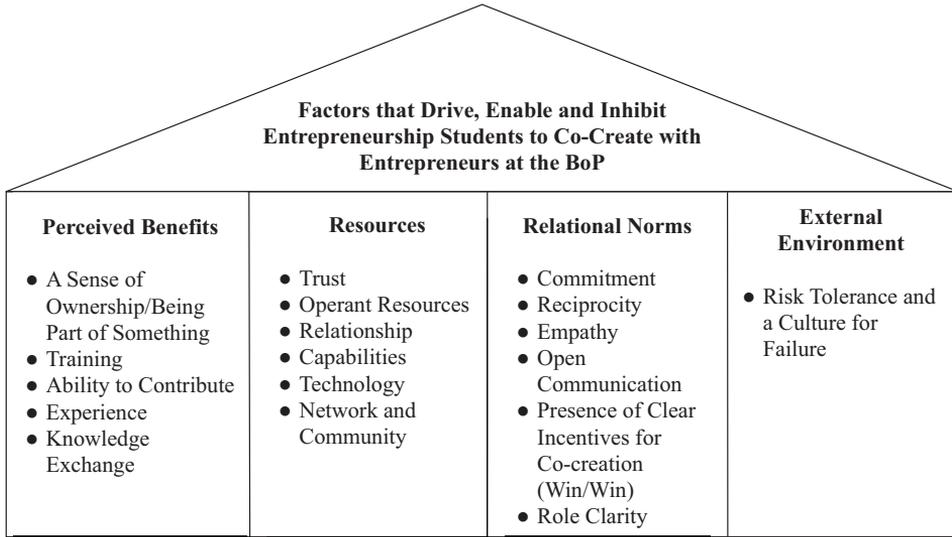
My literature review also helped me discover that there is a gap in the literature with regards to co-creation between entrepreneurship students and entrepreneurs at the BoP. There is therefore a need to research this further empirically both with regards to the NEED project and in order to advance theory within the research topic. This is because the existing theory does not encompass the exact participants entrepreneurship students and entrepreneurs at the BoP in a co-creative process.

Furthermore, it seems as if I have chosen an important research topic because, despite co-creation being a relatively new research topic, many researchers discuss the value of co-creation, both with the BoP and in academic settings. The results of co-creating may have implications such as creating sustainable business models (Biloslavo et al., 2018), making the BoP valuable participants in socio-economic development (London and Hart, 2011), improving the well-being of BoP locals (Macintosh et al., 2012; Rahman et al., 2015), as a method for poverty alleviation (Clock and Mazzarol, 2015), contributing to new, high quality research (Simba and Ojong, 2017), knowledge exchange/co-production (Van de Ven and Johnson, 2006), creating value for both business and society (Simba and Ojong, 2017), and to contribute to entrepreneurial learning (Lahikainen et al., 2018).

3.4.1   Theoretical Framework

The purpose of this thesis is *How can entrepreneurship students be driven and enabled to co-create with entrepreneurs at the BoP?* In order to attempt to find answers to this, I first read the literature related to the topic. However, I did not finding any existing theory or literature on co-creation between these exact participants. Therefore, I had to look at research on co-creation between different participants, different types of programmes and past initiatives in order to come up with some hypotheses. The framework presented in this sub-chapter aims to summarise the theoretical findings. It is conceptual in nature due to the lacking literature, and has therefore been tested empirically further on in my research process.

The factors that could affect entrepreneurship students to co-create with entrepreneurs at the BoP are outlined in figure 3.5. I was not able to sort the factors based on whether they drive, enable or inhibit co-creation because it depends on the situation, and it was not entirely clear in the literature. Gender, for example, could be an inhibitor because of societal norms, but also a driver because women express a desire to improve their social statuses through participating in educational programmes, for example (Lioutas et al., 2011). The factors outlined in figure 3.5 are therefore a summary of all factors that could affect the entrepreneurship students to co-create with entrepreneurs at the BoP, and are drivers, enablers and/or inhibitors.

Factors that Drive, Enable and Inhibit Entrepreneurship Students to Co-Create with Entrepreneurs at the BoP			
Perceived Benefits	**Resources**	**Relational Norms**	**External Environment**
- A Sense of Ownership/Being Part of Something - Training - Ability to Contribute - Experience - Knowledge Exchange	- Trust - Operant Resources - Relationship - Capabilities - Technology - Network and Community	- Commitment - Reciprocity - Empathy - Open Communication - Presence of Clear Incentives for Co-creation (Win/Win) - Role Clarity	Risk Tolerance and a Culture for Failure

Figure 3.5: Theoretical Framework: Summary of the Pillars of Co-creation and their Respective Factors (created by me)

I have created the illustration (figure 3.6) to illustrate how all the pillars from figure 3.5 are connected and how they affect co-creation or are affected by co-creation:

- The external environment affects the students and their degree of participation in co-creation, thus having an impact on the co-creative process.

- Relational norms define and help build the co-creative relationship between the VCP and BoP participants. These need to be in place in order to influence participation in co-creation, as they are required for the relationship to function.

- The resources, both operant and operand, affect co-creation, as they are what contribute to making co-creation possible.

- Through participating in co-creation, each participant will benefit in different ways; meaning that co-creation has benefits. This is an incentive for participating as perceived benefits motivate the participants to take part in co-creation (Bharti et al., 2015). Additionally, benefits enrich the quality of the co-creative process (Bharti et al., 2015).

- To summarise, all pillars of co-creation, and the factors belonging to each of them, have an effect on each participant: driving, enabling or inhibiting them from co-creating.
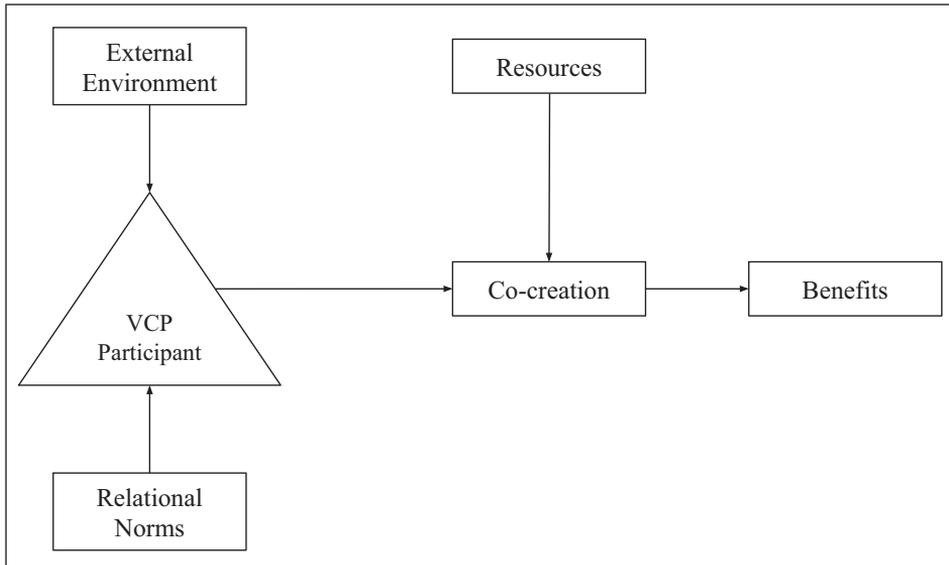
Figure 3.6: Overview of How the Pillars of Co-creation are Connected and How They Affect or Are Affected by Co-creation. (Only the VCP participant is illustrated in the figure, as they are the focus of this thesis.) (created by me)

3.4.2 Limitations of the Theoretically Developed Framework

I sorted the different factors under four pillars. These could possibly have been sorted in a different manner. First of all, many of the factors could belong under two pillars simultaneously. For example, gender could also belong under benefits, depending on if it is viewed as a driver. The factors are also very interconnected - one factor often affects or leads to another factor. For example, when when a partnership is established, it opens up for the exchange of resources (Bharti et al., 2015). These resources, in turn, could become benefits of co-creation, such as becoming part of a greater network and community.

Additionally, I cannot say if I have sorted the factors "correctly" because many of the factors can belong under several of the pillars. I based my sorting on similarities found, and based on Bharti et al. (2015)'s conceptual framework. This underlines the importance of conducting an empirical study, in order to figure out if some factors are a resource or a benefit, for example.

Bharti et al. (2015) also created a model of pillars of co-creation, consisting of various factors. They refer to their model as "the heart of co-creation" because they create a platform where the activities that take place during the process of co-creation can be conducted. I view my theoretical framework in a similar manner.

As mentioned, there is a theoretical gap on co-creation between entrepreneurship students and entrepreneurs at the BoP. Therefore, there are likely other factors that are either more important than those I have identified, or additional factors to those I have identified and presented in this chapter. This underlines the need to conduct an empirical study to gain a deeper understanding and insight into drivers, enablers and inhibitors of co-creation.

Chapter 4

Findings, Analysis and Discussion

In the following chapter, the empirical findings will be presented under each respective factor. The factors will be presented in the same order as in the literature review (chapter 3). The new factors found will be presented and discussed last in the last sub-section of the first section, (4.1). Following this, the empirical findings will be summarised and presented in a table with an overview of which interview subjects mentioned which factors as being important to them for co-creating with BoP entrepreneurs. Next, this will be compared with the theoretical framework, and changes to the theoretical framework will be presented and made based on the empirical findings.

4.1 Empirical Findings

Under each factor in this section (4.1), the empirical findings will be presented first, followed by an analysis of the findings and a discussion based on the literature. These are clearly marked under each factor with the titles "empirical findings" and "analysis and discussion". The empirical findings presented are solely the data collected from the interview subjects, including quotes from the interviews. The analysis and discussion includes findings from the literature, discussion based on theory and analysis/discussion based on my own knowledge and assumptions regarding the findings.

Even though this type of structure is more uncommon, it was the best way to present my findings. The complexity of my findings, in other words, the amount of findings and factors, made this the clearest structure for this chapter: findings followed by analysis/discussion per respective factor. Hopefully, this will make the thesis easier to read and digest for the reader.

4.1.1 Perceived Benefits

Perceived benefits are the benefits the VCP students believe they can gain from co-creating, or from taking part in the co-creative process. These include a sense of ownership/being part of something, training, ability to contribute, experience and knowledge exchange.

A Sense of Ownership/ Being Part of Something

Empirical Findings

A sense of ownership or being part of something is an important factor that every interview subject has mentioned. It is important for the students to experience mutual dependence and that both parties have something to contribute with. Student 5 says, "I think I would have been afraid of it becoming a charity, rather than a collaboration." She describes a fear of an uneven relationship, where she brings all the resources and knowledge to the table, "instead of it becoming a mutual relationship. So maybe feeling that you have just as much to give each other, could be a challenge."

For student 1 to participate in co-creation, he needs to feel that it is beneficial to him, which is something he says he does not know since he has not been there (in India). However, he says, "I don't feel like it's my responsibility. I'm thinking of it as a charity, I guess, and it's not that. I just don't understand what I'm supposed to contribute with that no one else could contribute with."

According to the PhD Candidate, the Honey Bee Network "might have multiple avenues of getting help, and I think that they already have relationships with Indian institutions as well as some foreign institutions where they work on similar ideas getting students involved, through a summer school project or something like that, where the students work on some of these ideas and promote them. So if it's an unequal relationship, then they have the upper-hand - we are just one of many that they deal with. So mostly equal (interaction). From our perspective, in this project, it is equal because we both need each other in terms of how the project is defined. But from an institutional point of view, I think that we are one of many similar partners that they have." He also describes the interaction between NSE and the Honey Bee Network as "equal in the sense that I think that we could not do this without them." He agrees with the students, that the project has to have appeal on both sides. However, when asked how the potentially unequal interaction could affect the students, he replied, "I don't think it affects them because they are professionals and they have been doing this for many years - before we got involved as well. The institution has been around for 30 odd years now. So yes, it is probably not the first priority in terms of what projects they have, but, as I said, they're professionals so if they have committed to something, they are going to work on that."

Student 5 says that it is important that "they respect my opinions and that they listen to what I have to say and what I can contribute with." Student 2 also expresses that it is important for her to feel that what she does is valuable.

Student 3 talks about inclusion in team processes, "It's important that everyone is on the same page when it comes to which direction we want to take the project in, what the idea is, what the product is... it was too divided in my previous startup. Agreements should be in place so that everyone is on the same page, so that we agree on everything." This shows how important it is for this student to have an influence on the decision-making process.

Alumni 3 says that if she were to co-create with the HBN entrepreneurs, it would important that she got to take part in the development of the project or innovation, that she was included as a part of the team, and that she could see the results or impact she had. "I don't want to end up as a consultant on the side lines. I want to be a part of the core team," she says.

Ownership is something the Assistant Professor also mentions, based on his experience from working on a project in Kakuma Refugee Camp. When asked what challenges he experienced, he replied, "There's always a question of 'who has ownership', which is more

related to project management. Who has ownership to this, who is in charge of making sure there is progress in the project, inclusion of partners, and, those kinds of things... they're difficult."

However, Alumni 2 says, "I don't think that you're supposed to take a role in all of this (the BoP entrepreneur's innovations) when you come from Norway. If you, personally, want to get something out of it economically, you'll kill the whole thing. So instead, at first at least, you can think of discussing it and work on what they're struggling with. If it's the product, or if it's something with the communication around the product for example." He also says that "the roles would probably be different than in a regular start up".

Alumni 1 views it as difficult to collaborate with entrepreneurs in India, "Because of, like we learned at Innovation Norway as well, how difficult it is to be a woman in a leading position in India. I'm not interested in going to meetings where people don't respect me. So if you want to make an impact, I'm thinking you should rather go somewhere you're heard, seen and wanted." Being part of the entrepreneurial team is important to her, which is something she sees as difficult in this context.

Alumni 2 expresses that it would be difficult and unlikely that he would have gotten involved or worked full-time with entrepreneurs from the Honey Bee Network. "I guess it's because, when you're in the 5th year you need to find something that would be smart to work on when you graduate, and I think finding your role in something like that could be challenging."

Analysis and Discussion

A sense of ownership or being part of something is a crucial factor affecting the students to participate in co-creation. It is a factor that many of them view as difficult to obtain, based on previous experiences or perceptions about the context. However, many of the perceptions are based on assumptions. These assumptions could be addressed by the staff at NSE, for example, in order for the students to understand that the existing relationship between NSE and the Honey Bee Network is not charitable, and it is, in fact possible for the students to have an impact, which is mentioned by Voorberg et al. (2015) as important for participating in co-creation.

The students also need to feel that they have something to contribute with (Haneberg et al., 2018). It might be difficult to understand that they have something to contribute with, or understand what they could contribute with because of the distance and lacking knowledge or experience from the context. Perceiving the collaboration as real (Haneberg et al., 2018) is important, and this is something the staff can do through exposing the students to the context to a greater degree.

Most likely, the students will be co-creating or working together on an existing idea that the entrepreneurs from the Honey Bee Network have come up with. However, it is easier to obtain a high degree of mutual dependence within a team when the degrees of ownership to a project are similar (Haneberg et al., 2018). Finding a project where no one feels a sense of ownership so that everyone can develop a sense of ownership, is therefore more ideal (Haneberg et al., 2018). A sense of ownership is such an important factor, that it would be important to attempt to find a project like this. This factor drives the students to co-create.

Training

Empirical Findings

Many students mention that they are interested in working in a startup or on an idea that makes a difference. However, they also mention that before embarking on a startup based on these types of ideas, they would like more experience or training. Student 5, for example, says, "right now, to me, this is a master's degree, and I'm pursuing it to get an education and to learn the process. So when I start something (a startup) in December, it'll still be an education. This has been difficult, which is why I know I need to work in a team that I get along with and a team that complements me. And then, when I've done that, if the startup goes well, that's great, and if not, I can find new things to pursue. But then I'll have a greater understanding of what I'm doing, what you should think about, what it entails. And then I'll feel more ready to take the leap of choosing an idea, and working on an idea I'm truly passionate about."

Student 6 also has similar thoughts, "choosing a startup has changed a lot since I started studying at NSE, because when I started I wanted to do something that was good for society or people - something that made a difference. But now I've realised that it isn't that easy to start something for the first time and do something really complicated, that will have a huge impact on society. So now I'm thinking that it's better to find an idea that's quicker go-to-market and instead, try to get further in the whole process - to learn more from the different steps. And when that startup most likely dies, then you can perhaps do something that's more complicated and takes more time."

Student 4 says, "Now that I've been through the feasibility course, I can't see any other possibilities for getting involved (with the Honey Bee Network) there. That would have to come later during our studies." He says that the feasibility course gives you an insight into different processes, how you should think and how to apply what you learn to different settings. He says that he thinks they will be challenged on business models and so forth after the feasibility course, which is why he thinks "it's much better to be challenged on things you've already started to understand - to not get challenged on it before you start understanding it."

However, the Assistant Professor says, "a long-term perspective is important, that it's not a 1-2 year long project, but 5 or 10 years. Because there's a lot of learning in the start, so you need to plan for that." However, student 6 says a criteria she has for working on something, is that it does not have a "heavy research and design period where you have to wait five years just to do something."

The PhD candidate also expresses that they have thought about the importance of having some entrepreneurial training beforehand when planning for the collaboration between the students and the Honey Bee Network, "We thought it was important that it is in already established existing courses, where the students are familiar with the protocol of what the theory is and what they're supposed to do. So incremental innovation in one way - you don't want to challenge and shake the system right now." Student 3 agrees with learning theory, but wants more guidance, "generally, I think NSE should have given us more theory, and a framework we can use. There's very little of that. There's a lot of 'you need to figure this out as you go along, learning through practice.' That can be exhausting in the long-run, especially when you feel like you're going in different directions and don't know where you're going."

Alumni 2 also mentions that if he had worked on an idea from the Honey Bee Network during the feasibility studies during the first semester, "then I wouldn't have the experience

from the startup that I ended up working on."

On the other hand, student 2 says that the opportunity to co-create with the BoP should be presented during the feasibility course, "because that's when you're looking for ideas. I've noticed now, in the 5th year, that it's more difficult to conduct a feasibility study. It's easier during the 4th year because you're in a team and you have to do it then." Alumni 1 thinks that if the students work on this during the feasibility course, "it should be in a late feasibility study where people are familiar with the framework and why on Earth they're doing this. The first feasibility studies are like 'okay, what are we doing? Help. We have an assignment and we're getting a grade.' And then, after a while, you get some perspective and realise 'oh, we're doing this because we're starting a business.'"

Analysis and Discussion

Training is especially important to the current students. It is also a factor that the staff see as important for the students to succeed, and is something they have experience with. It will therefore be important for NSE to invest in training the students for co-creating with the entrepreneurs from NSE, through growing their knowledge, resources and skills (Taylor and Thorpe, 2004).

The students express a passion for working on something that can make an impact, but do not want to pursue it before they have some more experience to build on. Training the students in entrepreneurial skills will also be important for them to maintain passion over time, which, in turn, increases the likelihood of business creation (Gielnik et al., 2017), the goal of NSE.

However, as student 3 mentioned, she longs for more theory and frameworks, not just learning through practice. Even though the students learn a lot through creating real-life ventures (Ollila and Middleton, 2011), equipping them with theory will be important, especially in the BoP context as this is something they will likely not have experience from. Perhaps more of the students would dare to try co-creating with the BoP earlier on if they got more support and theoretical foundations. The students definitely need training in order to consider co-creating with the BoP, and is an enabler for co-creation.

Ability to Contribute

Empirical Findings

The Professor believes that entrepreneurs have a lot to contribute with, "There is a huge need for entrepreneurs in the (BoP) context. It's obvious that the public or established businesses can't solve a few of the fundamental challenges that exist in the BoP context. And that's where entrepreneurs can have important contributions."

The Assistant Professor that worked on a project in Kakuma Refugee Camp clearly shows an "I can do it" attitude, "we thought we were doing something right". This is one of the reasons why he decided to work on the project; because he felt he had something to contribute with.

Both student 6 and student 2 are eager to co-create with the BoP if they can contribute with their competencies and knowledge. Student 4 is motivated by getting to contribute to an up and coming country like India.

Student 1, however, does not see how he could contribute. Alumni 1 says that it is important to know and be clear on what you can contribute with, "To say 'everyone can help here' is too fuzzy, but if you said 'we need help with digital marketing' or 'we need

help with establishing partnerships in that sector' then it might trigger a feeling of 'I can do that' or 'I don't know how to do that, but I can learn how'. That you get to work on a concrete problem." Clarity and being concrete on what the students can contribute with is therefore important.

Alumni 2 says, "if you can't work on the solution, and not on the market, and those types of things, what role are you supposed to take? When I look back, and think of when you land there (in India), what are you supposed to do? Having good ideas on that is very important. Probably because, after a while, you can easily feel like 'what am I doing here?'."

Analysis and Discussion

This factor is connected with 'training' and 'a sense of ownership/ being part of something'. It is also viewed as an important factor among nearly all interview subjects.

As the alumni mentioned, it is important to be clear on what you are doing and what you can contribute with in order to feel that you can contribute with something useful. The students therefore need to know what exactly they can contribute with so that they can figure out how to contribute. An "I can do it" belief is also essential to boost entrepreneurial passion, according to Gielnik et al. (2017). Through providing training to the students, their ability to contribute could be increased (Bharti et al., 2014). This factor therefore also underlines the importance of training, and is a factor that drives the students to take part in co-creation.

Experience

Empirical Findings

According to the Professor, the reason why NSE has organised trips to India with the students in the past has been that "it was a combination of that we saw that there was a need for our students to try to understand more of the context the Honey Bee Network operates in. In the rural villages in India there are completely different challenges regarding business development than in a rural village in Norway, for example. There's something about the context that makes you think in a completely different way. There's something about understanding that context, which is quite demanding and challenging, which again challenges the models you read about in text books." Travelling to India and meeting the entrepreneurs from the Honey Bee Network therefore provides the students and professors with experiences they can learn from.

The Assistant Professor also talks about how he thought things should be done in one way, but then after travelling to the refugee camp and gaining more experience, he realised "that it wasn't that easy after all."

Student 6 is interested in travelling to India to meet the entrepreneurs because "my previous experiences with travelling outside of Norway have been really good. When you see other things you learn so much." She also thinks travelling to India and meeting the entrepreneurs is an important factor for her. Student 4 also finds it "attractive to get to know new cultures, new markets and to learn more about different parts of the world." Student 3 expresses similar experiences, "I really enjoy travelling in general; experiencing new cultures and seeing different buildings and climates. So that would be motivating. And I also think that you would widen your mental capacity if you try to put yourself in someone else's shoes, by imagining how they think and work. And if they can do it with these resources, what can't I do with the resources I have? So your relationship to what

resources you have changes. I think I would develop a lot personally and that I'll view myself in a new light."

Student 1 wants to travel to India "because I've never been there. I also want to see how they live there. Maybe then I would find out if this is something for me." Student 5 thinks the previous trips to India were a good idea so that you can see what things are like in reality. She also says that "travelling there also makes you more conscious about what you are doing, or what difference you can make." Student 2 says, "I think visiting each other is really important, because there's something about having a personal relationship with people - you gain more respect as well. Once I've met someone that I'm going to work with, I gain a lot more respect for them and become more considerate and adapt myself."

Alumni 1 says that she and the BoP entrepreneurs "come from different planets, so we could help each other out and make each other better because we'll have an abundance of ideas and perspectives that you maybe don't have access to in Norway. So it's probably really exciting to get to work with people that are resourceful in a different way than us. It's just about finding a way to make each other better and to reduce the risk feeling."

"Seeing with your own eyes what difference they are making helps you see that there are many possibilities to make a positive contribution. I think that is important in order to be able to achieve something." Here, alumni 1 expresses how important it is to gain experience through meeting the innovators and seeing everything with your own eyes. This is something the Professor supports, "It's a bit like 'seeing is believing'. It's first when you meet people or see and get it on your radar that you can maybe uncover opportunities and find out 'wow, this seems really exciting.'"

Before alumni 2 travelled to India, he had tried to interview some people for his master's thesis through Skype, which did not work out. When he travelled to India, he and his group had an interpreter with them when they visited different homes. However, "it isn't that easy for the interpreter, because he doesn't know what information is important, so seeing the installations with our own eyes was maybe the most important thing." When asked if travelling to the refugee camp was critical, the Assistant Professor also said, "absolutely. It was critical to be there and to understand more."

Analysis and Discussion

Experience gained from visiting the BoP context is a factor that every interview subject mentioned. The findings confirm the findings from the literature, that gaining experiences is a huge motivator for participation in co-creation (Harwood and Garry, 2010). The interview subjects also see the value in experience, such as personal development, learning, seeing opportunities, developing respect, and so forth. This factor is therefore connected with the factor 'personal development'. This underlines how experience helps shape future participation and relationship, as argued by Nambisan and Baron (2007), such as having more respect for someone after having met them, as student 2 mentioned. It also confirms how value emerges through experience (Grönroos and Ravald, 2011). According to Sutcliffe and Vogus (2003), it is easier for someone with capabilities for action and broad expertise to be able to grasp variations in the environment, which can be developed through experience. Experience could thus provide more value to both the students and the BoP entrepreneurs.

According to co-creation literature, the experience will, in itself, provide value to the participants (such as new knowledge or skills), not just the outcome (such as a new service or product) (Day et al., 2004). NSE should therefore continue exposing the students to the

BoP context so that they can learn and develop from their experiences, making them even better entrepreneurs, and, in turn, making the students more willing to co-create with the BoP. Experience is considered a driver for co-creation.

Knowledge Exchange

Empirical Findings

The Professor explains the reasoning behind why the NSE students have been taken on exposure trips to India previously as following, "because we want our students to meet other students, preferably, and develop. When people meet, something happens, and there is often learning and development involved. Then the students can find different projects to collaborate on on their own, or learn something, so that it's not just professors meeting and talking about their things without including the students. That's the main thing. And that's what it's been like all along; that we want the students to go with us, and learn and understand a bit of the context, which is completely different to what we're used to and different from the existing literature."

The Professor also mentions mutual knowledge exchange as an important factor for co-creation, "That it's not only one party that gets to learn about the other, but that both parties learn."

Student 2 believes a benefit of co-creating with the entrepreneurs could be, "that we could provide them with resources, and they can help us with their smart ideas. That it could be win/win." Student 6 also sees co-creating as a benefit, "because I think it's exciting to work on these kinds of projects. To look at what are the opportunities, how do they work on it, what are they doing well, how can we help them do it in a better way, what can they help us with so that we can do things in a better way?" She expresses a desire for exchanging knowledge.

The PhD Candidate describes that the biggest contribution of travelling to India and meeting the grassroots entrepreneurs, has been to "expand the (students') minds" about how it is possible to make money with a low-cost solution that has a lower efficiency than what we're used to in Norway, for example, but, it is beneficial because it works for a lot of people."

The Assistant Professor talks about the benefits of students working on a project like this, "because I think through bridging local problems with the knowledge we have here (at NSE), you can achieve something very exciting together. Because sometimes it's just good to get someone from the outside with a new perspective, new eyes and a lot of knowledge to solve some of the local problems. So it's about, how can we, as an institution, facilitate these connections to take place?"

Analysis and Discussion

Knowledge exchange is a factor that most interview subjects mention, except for student 1 who is not interested in co-creating. He has expressed that he does not understand how he could benefit from co-creating or how he could contribute. That could be why he does not mention knowledge exchange as a benefit that could motivate him to co-create, because he does not perceive it as a reciprocal partnership (Bharti et al., 2015), he views it as charity work. However, the remaining interview subjects view knowledge exchange as important and beneficial to both sides (Bharti et al., 2015). Bringing awareness to how the students can contribute, and the importance of their contributions, in addition to what they will learn

or how they will benefit, will be important in order to motivate the students to participate in co-creation. NSE could play an important part here with regards to facilitating connections, as the Assistant Professor mentioned. Knowledge exchange is considered a driver for co-creation.

4.1.2 Resources

Resources are what contribute to making co-creation possible. As mentioned, resources can either be categorised as operant or operand (Bharti et al., 2015; Day et al., 2004). According to Bharti et al. (2015), operant and operand resources contribute to building a strong co-creative environment, and make co-creation possible. Many of the resources affect other aspects of co-creation as well. The factors under this pillar include trust, operant resources, relationship, capabilities, technology, and network and community.

Trust

Empirical Findings
The Professor describes an important aspect of co-creation, "collaborations and developing relations take time. It takes time to get to a place where you trust each other."

Student 6 expresses how important it is for her to work with someone she trusts, "it is extremely important for me to find someone I trust and that wants to be in it for the long-run. So I think it would be important that maybe NSE, if they're the ones starting the dialogue, that they ask the other party good questions so that they understand that we are really motivated to work on it long-term." Trust is also important to student 1 and 2. Student 1 mentions the importance of having legitimate contracts in place that are beneficial to both parties so that the other party doesn't suddenly cut you out. Student 3 says, "I need to trust the team and know that we are motivated by the same things."

Student 5 says that "the other person has to be open." She also talks about the importance of openness from both sides in a collaboration with the BoP, "it might probably require more openness and respect towards each other, and that we share our values with each other and what is important to each of us - and that they share what needs they have. That they are good at telling us about their situation - that they help us understand."

Student 3 also mentions team-building activities as important in this regard, "I've learned that it's very important to treat your startup or team almost like a partner you're in a relationship with, and that you have to really work on the relationship and make sure you spend time on doing fun things together. So that you can create a close relationship and build trust."

Analysis and Discussion
Trust was mentioned as a crucial factor by many. However, it was only mentioned by eight of the interview subjects. Many mention that they view a collaboration with the BoP in the same manner as they view a team in Norway. It may therefore not be an obvious factor to mention because they consider trust as a given.

As supported by the literature on trust (Forsström and Törnroos, 2005), the interview subjects agree that trust needs to be developed over time. They also mention the importance of clear guidelines and frequently interacting as measures to build trust, as supported by

Nahi (2016); Romero and Molina (2011), in addition to NSE's role in helping to establish trust. Trust is considered an enabler for co-creation.

Operant Resources

Empirical Findings

The Assistant Professor talks about operant resources and how important they are, "you need people on board to do this, which means that you need people with the right resources. It's also important to see your own limitations, with regards to which resources you have and which resources you need from others." Operant resources from both participants that complement each other are therefore important.

Student 4 says that he has two criteria for a teammate: that they are creative and that they have emotional intelligence. Also, "it's important to me that the other person actually has an understanding of markets, that they have an entrepreneurial understanding and that they understand what is needed to succeed."

Student 1 believes that working with the BoP means working in a place with little competition, a very small market and few resources. He says that this is an area he is not good at, "I'm good at coming up with smart solutions." He does not believe that he has the appropriate skills or knowledge for the BoP setting.

Both student 2 and student 6 express that they would be interested in co-creating if that meant exchanging resources, knowledge, skills and competencies in order to help each other.

Student 5 expresses how she does not know anything about India, but she is familiar with the Norwegian system, "and that's why I think a lot of people could be wary of collaborating, because you can't really see the opportunities there and because you don't know anything about India." She says that NSE could play an important role here, through presenting opportunities in India to the students, for example.

Alumni 2 talks about how it could have been beneficial to collaborate with partners in India in order to develop their startup at NSE, "I think that it would have been easier to test our product in a different culture if we had collaborated. I also think that we could have gained a lot of insight regarding business and gotten thorough feedback if we had collaborated with the local partners that we met on our trip to India." He mentions that collaborating with local partners would have been a good opportunity to be able to overcome the language barrier, for example.

Market knowledge is another crucial factor that alumni 2 mentions for co-creating with the BoP. He talks about his previous experiences with collaborating and working in different markets than the Norwegian market, "our market knowledge was a lot more narrow than we thought it was. We thought we had a lot more insight into how things actually worked. I think that's something you need to be wary of, especially when you're working with people in India. Because you are dependent on them, which is something they need to understand."

The PhD Candidate, however, believes that exposure to the BoP context could help you understand more about the market, "excitement happens when you get exposed to that context and you can see the potential market size. You can see that there is a need for intervention in that market." He also talks about how easily this will motivate you, because you can actually see that you can make a difference in the world if you do something in that context. The Professor also expresses that the goal behind exposing the students to the BoP context in India has been for the students to learn more and understand more about

that context. This shows how NSE has worked towards widening the students' perspectives and equipped them with more operant resources.

Moreover, alumni 2 talks about how important clear communication is. This is because it is not easy to get into the mindset of how a local uses a product or service, especially if this is very different to what you are used to. He goes on to say that it is also difficult for an outsider, like the NSE students, to evaluate which BoP innovations are worth pursuing or not, "because you don't know the market very well, which makes it difficult to choose a solution, even though many of them look and sound reasonable and impressive." Furthermore, he says, "so if you can't work on the solution, not on the market, which role are you supposed to have?" He therefore mentions that it is crucial to have a clear goal and vision before going to India to meet the entrepreneurs so that you can feel useful.

Alumni 1 supports alumni 2's views regarding goals. She says that if she were to collaborate with the BoP entrepreneurs, it would be important for her to know what they are good at, so that they can complement each other through working together. NSE could also be useful here, through pointing the students in the right direction, like encouraging them to have clear goals, as she mentions.

Analysis and Discussion

It is clear that many of the interview subjects feel that they lack the operant resources to co-create with the BoP, especially informational resources such as knowledge about competitors and market segments. Even though the students possess many operant resources, which they develop while studying at NSE, it seems as if this is a factor that could inhibit the students from co-creating if the students do not believe they have the "right" operant resources. This, however, underlines the importance of working together and complementing each other. The factors 'open communication' and 'preparation', as alumni 2 mentions, are connected with this factor, and could help the students overcome this barrier. This aligns with the literature as well, Bharti et al. (2015) mention that when both parties share the same vision, operant resources can be exchanged. Having a shared vision is therefore crucial so that both parties can develop and exchange operant resources, and learn through the experience.

Educating the students about the context also seems to be crucial in order for them to understand what resources the BoP entrepreneurs possess, and for the students to understand what they can contribute with. Student 1 for example, who is not interested in co-creating, does not understand this. If he gained a better understanding of this, perhaps he could be enabled to co-create.

Even though NSE has taken many students on exposure trips to India previously, exposing the students to the context earlier through lectures or videos would be highly beneficial. Alumni 3 mentions this; she would have liked being exposed to the HBN and NSE's collaboration with the HBN during the first semester at NSE and being given some assignments on this. Doing this could also help the students develop a vision and goal before travelling to India, which, in turn, will help them benefit more from the trip (Bharti et al., 2015).

Every interview subject mentioned operant resources, but this could likely be because this factor is broad and encompasses many other factors.

If the students believe they and the BoP entrepreneurs possess the "right" or suitable operant resources for the context, this factor is viewed as both a driver and an enabler for co-creation.

Relationship

Empirical Findings

The relationship itself is a fundamental part of co-creation. It is therefore not a surprise that this is a factor that the interview subjects mention as important as well.

Student 6 describes what she would imagine the ideal relationship to be between her and the BoP entrepreneurs as following, "it would be important to become close friends and to get to know each other really well." Student 4 agrees that he would want a friendship with his teammates, and repeatedly mentions how important the team itself is, "that they're people you actually collaborate with." Student 5 says that she will most likely want to co-create if she gets to know the other participants first. Student 3 also says that it would be crucial to get to know each other beforehand, if she were to consider co-creating. She mentions team-building activities as an important resource so that they can build trust, and that this is something NSE perhaps can facilitate. It is important for the students to not only spend time on work, but also on fun activities to get to know each other and build a solid relationship.

Because the BoP context is so different to Norway, student 5 says that it is important for her and the other party to put themselves in each other's shoes, "it's just as important for me to understand what their life is like, as it is for them to understand what my life is like." This would help build a better foundation for understanding what the other is going through. She goes on to say, "co-creating with the BoP is especially demanding, because this is something completely different and new. Not only the situation itself, but also the culture, and other factors are completely different. You have to think in a completely different way. That's why it's important to try to understand each other." Alumni 1 agrees with this and suggests setting aside extra time to spend time with each other when travelling to India, and letting them show you their culture. This would help build a sense of belonging.

Alumni 1 views developing a relationship with the BoP entrepreneurs as difficult because "you're going to work closely together, and ideas often spread over a cup of coffee. I don't know if I could work with a team where I would sit alone in Norway, with the rest of the team located in India. In that case, I would have to travel there quite often." Alumni 3 shares the same view; she thinks it would be difficult to obtain a sense of closeness, a sense of belonging and mutual dependence when the team is spread across two countries or to obtain this through digital communication. Alumni 1 also views digital communication as a barrier, "I think you feel less responsible for people you don't see on a daily basis. That's also why it's really important to respect each other and have a proper structure for collaborating." Alumni 1 also describes the relationship as crucial because you need to work with people that will have your back on good and bad days. She would also need to work with people that respected and acknowledged her.

The PhD Candidate also mentions the importance of respect in the relationship, "if you can show respect, and you can truly work in a partnership with these BoP innovators, that can be a better formula for success." The Professor shares the same view and expresses how a collaborative relationship and trust develop over time. The Assistant Professor agrees that mutual dependence is crucial.

Analysis and Discussion

The relationship and all that it entails is described as crucial, but difficult to achieve because of geographical distance, culture, language barriers and so forth - factors, to some extent, beyond the students' control.

Trust and commitment are vital ingredients of a successful relationship, as described by the interview subjects and by Anderson and Narus (1998). Developing a mutually dependent and trusting relationship also takes time, according to the professors and Anderson and Narus (1998); Forsström and Törnroos (2005). The students express a need to have a relationship that is not only professional, but that also functions as a friendship. A reciprocal and collaborative relationship is thus very important to the students (Bharti et al., 2015). They also mention mutual dependence often, supporting Haneberg et al. (2018)'s theory. The staff at NSE could therefore help facilitate team-building activities, arrange trips to visit the entrepreneurs, and perhaps guide the students regarding cultural differences in order to lower the barriers to co-create. Because a relationship is developed over time and through interaction (Anderson and Narus, 1998; Forsström and Törnroos, 2005), it may be difficult to assess the criteria for the relationship before entering the relationship. It is therefore crucial that guidance and planning is in place to prepare the students as much as possible. The relationship is considered an enabler for co-creation.

Capabilities

Empirical Findings
The findings for this factor are the same as for 'operant resources'. Student 4, for example, describes creativity as a vital capability and market knowledge as vital knowledge that the other participant must possess. The importance of the students themselves having market knowledge is mentioned by many other participants, such as alumni 2. I would suggest reading the sub-section about 'operant resources' (4.1.2) for the rest of the findings.

Analysis and Discussion
The findings are likely the same for this factor as for the factor 'operant resources' because operant resources comprise capabilities, which are skills and knowledge (Bharti et al., 2015). The similarity of the two factors became evident after conducting the interviews and analysing the data. This will likely effect the theoretical model, and will be discussed further in section 4.2.1.

Technology

Empirical Findings
If student 3 and 4 were to travel to India to work with the BoP entrepreneurs, having internet access would be crucial to them. Student 2 mentions that it could be a huge problem that the entrepreneurs from the HBN do not have access to Skype from home. She says that it would thus be even more important to get to know each other and find a good framework for collaborating.

However, alumni 3 finds greater value in connecting in person rather than digitally. Alumni 2 describes difficulties he has experienced in the past with communicating with people in India through Skype, and says that it was easier to travel there, get a translator and to see things with your own eyes.

Analysis and Discussion
Having to use technology to communicate is a result of the huge physical distance between

the entrepreneurs in India and entrepreneurship students in Norway. Technology is therefore connected with 'distance' and 'communication'.

To alumni 2 and 3, technology is not a factor that enables them to co-create, but rather acts as an inhibitor for the collaboration, development of the relationship and knowledge exchange to take place.

Technology may have been mentioned as a vital factor, that enables them to co-create, by only six interview subjects because it is perhaps something they take for granted. However, they talk about the importance of communicating, and that distance could be an inhibitor. Technology could therefore mitigate the risk distance has. It is therefore considered an important factor. However, if the BoP entrepreneurs do not have regular access to technology in order to communicate, this could affect the relationship between the students and entrepreneurs. Because the students value developing the relationship, team-building and regular phone calls to update each other, technology could inhibit the students from participating in co-creation. This is because the students will experience difficulty getting involved and interacting with the entrepreneurs (Haneberg et al., 2018; Prahalad and Ramaswamy, 2004).

A few students asked if the BoP entrepreneurs had access to Skype, for example. When I replied no, they mentioned the importance of technology. However, those that did not ask, did not get this piece of information. Therefore, this could also have affected the results.

Technology is considered both an inhibitor and enabler for co-creation.

Network and Community

Empirical Findings
Alumni 1 expresses how important the network the students have access to at NSE is. Going to work in India while studying at NSE is therefore a barrier for her, as she does not want to leave her class, team-mates and the network. This shows the importance of the network the NSE students already have access to.

Getting guidance and having access to a mentor you can learn from are crucial resources student 3 would need if she were to co-create with the BoP. Student 6 also expresses that she thinks it would be important to learn from others that have pursued similar projects in the past. She would like to potentially create and participate in a network of entrepreneurs that have co-created with the BoP before.

Alumni 3 mentions the importance of a network and community as well, "it would be very beneficial to talk to alumni from NSE that have collaborated with people in India or the BoP in the past, so you don't make the same mistakes. I would also want to learn about what has been done in Nigeria, for example, which is an up-and-coming startup scene. I would want to be part of a community across developing countries so that I can learn. Having a mentor would also be highly beneficial."

Analysis and Discussion
Network and community was not mentioned by many, but seems crucial to those that do mention it. Alumni 1 seems to consider her existing network as an inhibitor for co-creation, as she does not want to "leave it behind".

The remaining interview subjects that mention this factor talk about how beneficial a network and community comprising experienced entrepreneurs within the BoP field would be, for example in regards to learning and development. This is also discussed by Hayter

(2013). Finding or creating a new network promoting and enabling this kind of knowledge exchange could therefore be highly beneficial to the participants in the co-creative process. This is also mentioned by Hetzel et al. (2015); nascent entrepreneurs need a diverse network, and need to expand it outside of their existing network. Smith and Lohrke (2008) also agree with the interview subjects; that they will likely have a greater chance of success if they utilise their networks to gain social and intellectual capital.

Network and community is therefore viewed as both an enabler and driver for the remaining interview subjects to participate in co-creation.

4.1.3   Relational Norms

Relational norms are what define the co-creative relationship itself. They determine how the co-creative relationship will be built in order to function and benefit both parties. This pillar explores the following factors: commitment, reciprocity, empathy, open communication, presence of clear incentives for co-creation (win/win) and role clarity.

Commitment

Empirical Findings
Student 6 explains how important it is for her to work with someone who is stable. By that, she means that the other person has to be committed and not leave her or her team when they are presented with a different opportunity.

Alumni 1 mentions how important commitment is, "I couldn't just join a team in December and then leave that team to go work in India in February. I had made a commitment to the team and myself that I had to stick to. And it would be disrespectful if I didn't honour that commitment."

Student 2 says that she needs to know that the other participants are independent and can trust that they do the work they have committed to. However, this can be difficult because of the geographical distance.

The Professor says that working on a joint project is important to stay committed to working together.

Analysis and Discussion
This factor is closely tied with trust and the relationship itself. As Forsström and Törnroos (2005) mention, having a close interaction, something the students find crucial, leads to more interdependent choices, which affects commitment and trust. Commitment is therefore affected by the interdependent relationship itself. In addition, a sense of ownership was found to be a crucial factor. Commitment is a potential benefit of ownership perception (Gibb, 1987; Lackéus and Middleton, 2015); the greater experience of ownership, the more committed they will be.

Even though only four interview subjects explicitly mentioned commitment as important, it could still be an important factor. This is because commitment is tied to the relationship and having a sense of ownership, both crucial factors mentioned by all interview subjects. Some alumni and students also mention the importance of having a cooperation agreement in place before working together. This could be a way to ensure that the other participants are committed. Commitment is considered an enabler for co-creation.

Reciprocity

Empirical Findings
One factor that is inhibiting student 1 from considering co-creating with the BoP, is that he does not see how he could contribute, and how it would be beneficial to him. This shows that he needs mutuality to be present in the relationship, where mutual resources are taken advantage of and both parties can contribute.

Student 2 says, "the fact that we can help them and they can help us motivates me." The Assistant Professor also mentions the importance of reciprocal exchange of ideas and being able to contribute with knowledge from both sides in order to develop both professionally and on a personal level.

Alumni 1 ties timing into reciprocity, "The students should work on a concept like this during one of the last feasibility studies so they know what they're doing. Otherwise, I'd feel bad for the entrepreneurs in India because they'd get their hopes up while we aren't able to contribute with anything of value." Here, she expresses how important it is for her to contribute with something of value to the BoP entrepreneurs.

On the other hand, alumni 2 also mentions the feasibility studies and how the students are evaluating an idea for a team that only consists of students from NSE, "In a potential collaboration with the BoP, I think it's important that both parties have the same expectations."

Alumni 3 describes a reciprocal relationship and how important it is for her to learn from each other, "having a good platform for sharing experiences and so forth is really important." She goes on to express how important it is for her to actually be a part of the entrepreneurial journey and becoming a team member rather than a consultant.

Many of the students, such as student 4 and 5, agree with alumni 3: that they need the relationship to be reciprocal, rather than "charitable work", as they put it. Student 5, for example, is worried that collaborating with entrepreneurs from the BoP could end up as a charity rather than a collaboration, and that she would share all her resources and knowledge without it being a mutual relationship. She also mentions that having respect towards each other is important to her.

This view is supported by the PhD Candidate as well, "Another factor that is important is that you can go into this thinking that 'I'm doing good for the world', which is nice, but there are ethical considerations so to speak. Maybe you don't need to do good in the world while interacting with these kinds of contexts or these kinds of people. You have to maybe understand and respect what they're doing." He talks about if you go in with the attitude of "I'm going to help you", you can limit the participation on the other end because nobody likes being talked down to. He says that you need to truly work in a partnership, a reciprocal partnership, with the BoP entrepreneurs to succeed. The Professor also talks about respect and that you cannot work as if you are contributing to a charitable cause.

Analysis and Discussion
This factor is highly connected with 'relationship' and 'a sense of ownership/being part of something'. It is also a crucial factor for co-creation, as the definition itself calls for reciprocity. It is therefore not a surprise that this is factor mentioned by all interview subjects.

Many interview subjects mentioned that having a reciprocal relationship rather than contributing to a charitable cause would drive them to co-create. They would be inhibited to co-create if the purpose was solely to contribute to a charitable cause. This is supported in the literature, that co-creating needs to benefit both parties (Bharti et al., 2015) through,

for example, learning, mutual investments and mutual resources (Forsström and Törnroos, 2005). It is therefore important that the staff at NSE helps the students understand what and how they will be contributing and how they will benefit from co-creating with the BoP. This factor is considered both a driver and enabler for co-creation.

Empathy

Empirical Findings

What student 2, 4, 5, 6, and alumni 1 and 3, have in common, is that they are motivated by the fact that they can make a difference in other people's lives. Student 2 believes that the NSE students should use their education to help others in a difficult situation.

Student 5 shows that empathy is important to her, "in this type of collaboration it will be important to place yourself in their shoes, and vice versa, so that we can get a better understanding of each other." Alumni 1 and student 3 also show empathetic attitudes. Student 3 says, "I think travelling to India to meet the entrepreneurs would affect me in a huge way. Like when I travelled to the favelas in Rio de Janeiro... I became very emotional and realised how unfair the world is." Student 5 mentions how travelling to India could make her more aware of what difference she could make. The Assistant Professor was "triggered by the fact that I could make a positive difference in the world" when deciding to work on the project in Kakuma Refugee Camp.

Student 3 thinks that it would be interesting to conduct a feasibility study on ideas that could make a difference in people's lives, however, "you also need to conduct a feasibility study on the team and how everything will be solved practically speaking." Student 1 thinks that green or environmentally friendly solutions motivate him more than working on ideas to alleviate poverty. He does not feel that poverty alleviation is his responsibility. He also says that "there are probably some economic incentives that drive me too. I would be interested in co-creating if I could work on a business case with a business model that contributes to making a difference."

Wanting to make a difference and having an empathetic attitude could also be an inhibitor, as the PhD Candidate mentions, "if you have the attitude that "I'm going to help you" you could limit the participation on the other end. Nobody likes to be talked down to." He also says that the students need to view co-creation with the BoP as an opportunity, like you would in Norway. Furthermore, he mentions that "you can get easily motivated to do something with the entrepreneurs because you can see that you can actually make a difference in the world. So the motivation can come quite easily, but it's key to think of how you can channelise that motivation into something concrete."

As mentioned, under the factor 'training', even though many of the students are interested in making a difference, they would like more training or experience before pursuing ideas that make a difference. Student 6, for example, says that her goals have changed a lot since she started studying at NSE. Before embarking on her studies, she said that she wanted to start a business that made a positive difference for society or people. However, now, after having learned more and conducted feasibility studies throughout the semester, she thinks it would be more beneficial to choose an idea that is quicker go-to-market.

Alumni 3 expresses that she really wanted to work on an idea that made an impact, and wanted to do so through her master's thesis. However, as the months went by, her focus became more and more academic, as per NSE's requirements. She felt "an inner battle between choosing to complete my master's thesis or actually spending time on doing

something that could make a difference." She did not know exactly how to move forward, and as the pressure to think academically from NSE's side built up, she focused on handing in her thesis instead.

Analysis and Discussion

Many express an empathetic attitude, which is also a driver for co-creation with the BoP (Bharti et al., 2015). There is a strong willingness to help or make a difference among the students, which is connected with empathy (Morgan et al., 1997). However, none of the interview subjects mention empathy as being important in the relationship itself. This factor should probably belong under perceived benefits instead, as the students perceive that they can make a difference in the lives of others through co-creating.

However, even though a lot of the students say that making an impact is important to them, they still do not go down this road. Some, because they feel that they do not have the necessary experiences or training to build on, and some are risk-averse or see other limitations. Additionally, some also do not understand how they can make an income through working in an impact startup. They also feel that NSE's requirements of, for example, creating a startup that generates an income comes in the way. It is also quite interesting to see how the students feel pressured by NSE's requirements to build a business or complete their master's thesis, so much so that they do not follow their innate desires to make a difference. This is especially interesting as NSE takes pride in not being as academically focused as other master's programmes, as the students mainly learn by doing at NSE (Rasmussen and Sørheim, 2006). It seems as if the students still would like a) more guidance and b) less pressure to conform.

NSE staff could also help teach the students how to both make an impact and make an income at the same time. Many of the students are not pursuing ideas that solely make an impact because they feel pressure from the staff to make their startup financially viable, which is something they do not think they can achieve through working in an impact startup. NSE staff could contribute here by showing the students what possibilities they have and how they can navigate the impact and income field in union.

As mentioned, many of the students do not want to co-create if the purpose of co-creation is a one-sided contribution to a charitable cause. However, they show an empathetic attitude towards the BoP entrepreneurs and a desire to help or contribute, which is something they mention that drives them. A balance is important here, as the students are motivated by helping others, but also want to learn and develop on a personal level. Empathy is considered a driver for co-creation.

Open Communication

Empirical Findings

Open communication, and communication in general, was mentioned by most interview subjects, and all students as being crucial for co-creation. Alumni 1 talks about how uncertainty could, and should, be avoided through open communication, "You need to work on problems and discuss differences of opinion throughout the collaboration. Don't save everything for later. It's also important to talk openly about where we see ourselves in three or five years so that you can discover differences in plans and motivation early on. For example, if one person imagines skiing everyday, whereas another envisions moving to India, that won't work. But at least you've detected a problem early on so that you can address

it and get past any uncertainty." Student 5 also thinks that co-creating with the BoP would necessitate more openness than in a team in Norway.

Alumni 2 talks about how crucial communication is, "you need to communicate in a good way because both parties are dependent on each other. Each of us has market knowledge on our own markets, but know little about the other. So we need to communicate well to exchange knowledge and gain in-depth insight on how products or services are used, for example."

On the other hand, even though communication is important, it is also described as a challenge. The Assistant Professor talks about his project in Kakuma Refugee Camp, "We're going there with our expertise, from our context, but the people that are located there have a challenging job because they have to translate our knowledge. And a lot of misunderstandings can happen here. A lot of information might also get lost in translation, both explicit and tacit knowledge."

All of the students mention the importance of communicating, especially with regards to language barriers. All of them also describe this as a huge challenge, and something that could inhibit them from co-creating. It is also described as a challenge that must be overcome for them to co-create. "It would be crucial that they speak English so that you're not dependent on a translator, because I feel that that would inhibit us from getting closer to each other," says student 5.

Communication is also connected to distance, as mentioned by student 2. Alumni 1 expresses a fear of information getting lost in translation. Alumni 3 also talks about how difficult she finds communicating digitally.

Alumni 2 has experience from working with a translator in India, "it's not that easy for the translator because they don't know what information is important to translate, for example. It was therefore vital for us to travel to and around India so that we could see the installations we were writing our master's thesis about so that we could learn from looking at them. This helped us understand how people use them, how they're installed, and so forth."

Analysis and Discussion

As alumni 2 mentions, working with a translator might not solve communication challenges. However, a combination of travelling to India to see how things are done with your own eyes could help the students learn more. On the other hand, if the students are to co-create and work in a mutually dependent team, communication is vital (Bharti et al., 2015). Communication is crucial to co-creation and for a project to succeed as there needs to be a two-way dialogue (Day et al., 2004; Evans et al., 2012). Distance is connected with this factor, and could also make communication difficult. This is because the co-creative process and relationship is affected by the intensity, mode and frequency of communication (Bharti et al., 2015). It is even more challenging to communicate frequently when you need a translator, should see problems or physical aspects of a business in person, as alumni 2 mentions, and when the physical distance is so huge. Proper communication procedures and infrastructure therefore need to be in place for both parties to co-create (Voorberg et al., 2015), and is an enabler for co-creation.

Presence of Clear Incentives for Co-creation (Win/Win)

Empirical Findings
The PhD Candidate believes that the students, not only NSE students, but also other students at NTNU could be motivated by getting credits in a subject for working on a project with the BoP entrepreneurs. A pilot project involving students from NTNU has taken place in January 2020. The goal of this, according to the PhD Candidate, is that "the students develop an understanding of what entrepreneurial thinking is, as a result of this interaction. The best result could be that actual businesses come out of some of the ideas the students develop with regards to how to solve the challenges they're exposed to." He believes co-creating could be win/win on both ends.

The Professor agrees; that an important factor for co-creating is that there is mutual development of knowledge, "that both parties learn something." The PhD Candidate believes that it is important for the students to "exercise their knowledge and their time in a formal setting where they can gain something out of it as well."

Student 1 expresses that if he were to co-create, an important factor is that both parties would benefit, "if there was an economic benefit to co-creating, it would have to be economically beneficial to both parties." However, he does not see how co-creating would be beneficial to him because he does not know enough about the context.

Student 2 and 6 also say that the relationship and outcomes would need to be win/win and beneficial to both sides. A relationship where both parties help each other out is desirable.

When I asked the Assistant Professor why he worked on the Kakuma Project he replied, "on the one hand, I was motivated by being able to make a positive difference in the world. At the same time, I also knew I would learn a lot from it - it's exciting and you gain a lot of insight. You also develop a lot personally. So I think those two things go hand in hand." He also says that he wanted to work on the project because he felt that he had a lot of knowledge that could help others. Additionally, he expresses that he thinks the students would learn a lot from working on a similar project, such as co-creating with entrepreneurs from the BoP.

Analysis and Discussion
On the one hand, the PhD Candidate believes that the students could be motivated by getting credits. However, the students do not mention getting credits for the work, but rather view learning, development, financial benefits, business development and contributing to making a difference as win/win situations. This is supported in the literature, as Abers (1998) mention how it is important to be clear on how co-creation can have financial benefits. There also needs to be a balance between the two parties in order to find win/win solutions (Forsström and Törnroos, 2005), which is also mentioned by the interview subjects. However, at the same time, the students also express how making a difference is difficult due to the expectations NSE sets, both in regards to working in a startup that works towards generating an income, and in regards to writing an academic master's thesis. Therefore, school work does come in the way, and having an allotted time for working on a project like this could be wise.

Making a difference, as mentioned under the factor 'empathy' is also an important incentive for the students, however, they need to experience this as a win/win situation. The collaboration would need to give both parties benefits, as they do not want to contribute towards charitable work, as they put it.

This factor is highly connected with the factors 'relationship' (working in a mutual and

balanced relationship), 'empathy' and 'reciprocity'. It is considered a driver for co-creation.

Role Clarity

Empirical Findings
Roles and role clarity is a factor mentioned by five interview subjects. The Assistant Professor, for example, says "there's always a question about 'who has ownership', which is related to project management." He goes on to talk about how it is difficult to know who has responsibility for what.

Student 6 says that it will be easier to engage in a long distance relationship after having established the foundation for a good collaboration between herself and the entrepreneurs at the BoP. She mentions roles as an important aspect of establishing the collaboration's foundation.

Student 2 also mentions the importance of roles several times, "I think it's very important to have defined roles from the start." She also mentions that the students and the entrepreneurs in India may naturally have different roles because they are already very different from each other. Alumni 1 says that it's important to divide the responsibilities between everyone involved so that "everyone can contribute with what they're best at and feel that they're making a difference."

Even though alumni 2 agrees that roles are important, he expresses his concerns with it based on his own experiences with his startup. First of all, he says that he believes that what kind of role a Norwegian entrepreneurship student in this context would have is very different to a "regular startup" in the long term. This is because "in my startup we wanted to produce something in one place (another country) and sell it there. And if you add a Norwegian salary to the mix, with the costs that entails, it would be meaningless to pursue." He goes on to say that "when you're in the 5th year, your last year, you want to pursue something that you can work on after you graduate. And I think that finding your role, full-time, in this kind of thing could be a challenge." He also says he would feel like a "parasite just sitting there" if he didn't have a clear role in the project.

Analysis and Discussion
It seems as if alumni 2 does not want to waste anyone's resources by being a "parasite" that does not contribute to the team. He therefore connects having a role to being able to contribute. Alumni 2 also talks about roles in relation to contribution. Bharti et al. (2014) mention that role clarity is important in order to avoid wasting resources. Alumni 2 seems to also not want to waste resources.

The interview subjects also mention "who has ownership", "who is responsible for what", and the vast differences between the entrepreneurship students and the BoP entrepreneurs, because they are from and live in vastly different countries, as aspects that could lead to role ambiguity. Bharti et al. (2014) mention that role clarity from both parties and being clear on expectations from the co-creative process beforehand is important in order to avoid role ambiguity.

The interview subjects also describe roles and role clarity as being fundamental for the team's collaboration. Lengnick-Hall (1996) also discusses this; that participants are more willing to take part if there is role clarity.

Establishing clear roles and expectations from the co-creative process from the start will therefore be important for the students to participate in co-creation. This is also especially

important in this case, where the students will co-create with entrepreneurs from a vastly different country and background. Role clarity is considered an enabler for co-creation.

4.1.4 External Environment

The external environment has an impact on the participants and the co-creative process. Even though the external factors are, to some extent, beyond the participants' control, they have still been included here. This is because the external environment affects the participants on an individual level. The external environment plays an important role in co-creation, and co-creation is therefore dependent on this environment (Bharti et al., 2015). The external factors discussed under this pillar are gender, culture and risk tolerance and a culture for failure. Gender and culture were not included in the literature review in this master's thesis. However, they were identified as factors that could affect the BoP entrepreneurs' side during my project thesis. I have, however, found these factors to be important to the interview subjects. They have been thus been included here after all.

Gender

Empirical Findings
When I conducted the literature review for my project thesis, I concluded that gender was a factor that only affected the entrepreneurs at the base of the pyramid. However, after having conducted the interviews, gender seems to be important to the alumni as well. It has therefore been included here after all.

Alumni 1 especially talks a lot about gender, and how this is a crucial inhibitor, "when we visited Innovation Norway, we learned how difficult it was to be a woman in a leading position in India. I'm not interested in attending meetings where people don't respect me. If I want to make an impact, I'll rather go somewhere I'm respected, wanted and listened to." She also talked about many unpleasant experiences she had encountered on her trip to India. These experiences were, unfortunately, so traumatic that she would never consider working in India, at least if nothing changes. She did not feel safe in India.

Alumni 2 also mentions gender as a safety problem. When they travelled to India, the coordinator had to step in so that the girls did not travel to precarious places on their own.

Analysis and Discussion
Even though only two interview subjects mention gender, I believe it could be an important factor. This is first of all, because it is a factor that you would likely mention if you a) had travelled to India, which none of the students I interviewed had, or b) are a woman, which none of the staff are. This could therefore be a factor if more of the students had previously travelled to India or encountered similar problems to the ones alumni 1 had. Additionally, gender is an external factor, and an inhibitor that is very difficult to overcome because the culture in India cannot be changed over night. Preparing the students, especially the women and taking precautionary measures is therefore vital for co-creation with the BoP.

Additionally, the NEED project is also focused on including women. Many of the project's participants have also prioritised female innovation as a part of their policy. It could be different for the female students at NSE to co-create solely with other female entrepreneurs from the BoP. However, even so, the reality is still that the NSE students will

need to travel around in India and interact with others other than the female entrepreneurs, both in business meetings or social settings.

Gender is considered an inhibitor for co-creation based on the empirical study.

Culture

Empirical Findings

Based on the literature review I conducted for my project thesis, culture was a factor that I determined only affected the participants from the BoP. However, culture is a factor that many of the interview subjects mention, especially the students. It is therefore included here after all.

All students except student 2 mention culture as a challenge and a potential barrier. The Assistant Professor also mentions it as a barrier for co-creation. Student 4 says, "it could be difficult to test local ideas since they have a different culture, among other things." Being aware of cultural differences is something student 1 thinks is important.

When alumni 1 travelled to India, her team had difficulty setting up meetings with locals. She said that everyone they contacted were positive towards meeting up, but when they tried setting up a time and date, the locals did not respond, "maybe they were trying to be polite and didn't want to say no... maybe it's a cultural difference." She also says that this was such a huge challenge that it would inhibit her from co-creating with Indian people, "because it was so difficult to book meetings, and difficult to collaborate."

Alumni 1 goes on to say that you do not really know what to expect before you travel to India, "you won't understand the cultural aspects until you get there. You've heard about culture shock and watched the news, but I didn't know what culture shock was until I travelled there. It's something you need to experience first hand."

Analysis and Discussion

Viewing culture as a tricky barrier to overcome is also supported in the literature (Reynoso et al., 2015). Reynoso et al. (2015) say that culture could be tricky to overcome because it could promote or hinder entrepreneurship, and discourage risk taking.

Culture could be especially tricky when co-creating with the BoP context. Reynoso et al. (2015)'s study showed that the lives of people in emerging economies are strongly influenced by culture. This may not be a surprise, as culture helps unify people, including those with a limited education (Reynoso et al., 2015).

However, I would also argue that co-creating with a culture vastly different to what the NSE students are used to could be highly beneficial. This is because most best practices originate in Western cultures, making a cross-cultural perspective more important than ever (Reynoso et al., 2015). Co-creating thus helps contribute to more diverse innovations. However, based on the literature and the empirical study, culture is considered an inhibitor for co-creation.

Risk Tolerance and a Culture for Failure

Empirical Findings

The interview subjects, especially the students, seem to be quite risk averse - both in regards to their startup at NSE in general, and in regards to co-creating with the BoP.

Before embarking on her studies at NSE, student 6 wanted to start a business that made a positive difference for society or people. "But now I've come to realise that starting something isn't that easy the first time round. Especially starting something that's really complicated - complicated technology, for example, that has a huge impact on society. So now I think it'll be better to choose an idea that's quicker go-to market, get further along in the process and learn more of the steps. And when that startup most likely dies, then I might do something more complicated that takes longer. So I don't want to be part of a really heavy research and design period and wait 5 years to be able to do anything. That's a criteria I have (for joining a startup)."

Student 5 expresses similar views. She says that she's pursuing this degree first and foremost to obtain a master's degree and to learn about the different processes. She says, "if the startup I join becomes successful, that's great, but if not, I'll have to find something else to do. But then I'll have a greater understanding of what you're supposed to do, what you need to think of, and what it entails. And then I'll feel like I'll be ready to choose an idea that I'm truly passionate about."

Student 5 also thinks that many people would be afraid to co-create or collaborate with BoP entrepreneurs because "you can't really see the possibilities". She also mentions that if she were to co-create, then it would be crucial that NSE supported her and showed her which possibilities and opportunities she had. Student 3 also says that guidance from the NSE staff is crucial so as to avoid conflicts and avoid pitfalls. "I think co-creating with the BoP will be very difficult. I think we'll make a lot of mistakes. Our assumptions will be way off. And there's barely any point in doing it then," says student 1.

Working with someone you have not worked with before is very scary, according to student 3. She says, "based on previous experiences, it can work really well, or not. It's a risk." She also says that she gets very upset when these things do not work out.

Student 3 also says that the main reason she is wary of co-creating with the BoP, is because she perceives it as high risk, "there are so many unknowns." She goes on to say, "I am unsure of so many things surrounding it. Many things need to align for me to join a startup. And the more uncertainty, the harder it is for me to say that this is something I want to do."

Alumni 1 feels that co-creating with the BoP would be high risk both for the entrepreneurs at the BoP and for herself. She says, "it's high risk giving people expectations. I think that a trial period could help mitigate the risk." She also says that moving to India to work together would be high risk "because there are opportunity costs - what could you have done in the same amount of time in Norway?" She also says that NSE's programme has such a short time-span, "you want to make the most out of that time, and a lot of students are enrolled because they want to work in their startup after they graduate."

Analysis and Discussion

The findings for this factor are very interesting. In my literature review, VCP and entrepreneurship students were characterised as being risk tolerant and failure tolerant because the learning environment at VCPs encourages learning from failure (Lahikainen et al., 2018; Saeter et al., 2018). However, the students and alumni describe an attitude that is risk-averse - both towards their startup at NSE and in regards to co-creating with the BoP.

Student 5 and 6, for example, want to learn from working in a startup first, and maybe even learn from it failing, before embarking on an idea they are truly passionate about. This

shows that they want to learn from failure, but they are risk-averse towards pursuing and failing in the startup they are passionate about.

The interview subjects use words such as 'scary', 'high risk', 'challenging' and 'afraid' to describe their thoughts about co-creating with the BoP. A risk-averse attitude could inhibit the participants from taking part in co-creation (Voorberg et al., 2015). It is therefore crucial that this is addressed.

The interview subjects mentioned a few ideas that could help mitigate their feelings of risk and uncertainty in regards to co-creating with the BoP. They suggested guidance and support from NSE, NSE showing them what opportunities and possibilities exist and having a trial period. NSE staff could also encourage the students to pursue more high-risk ventures, and talk the students through what it means to co-create with the BoP, and all the aspects around it, to lower their feelings of uncertainty as much as possible.

It also seems as if NSE needs to create a safer environment for the students to fail. NSE could learn from the VCP Chalmer's School of Entrepreneurship, where Ollila and Middleton (2011) describe them as having a "safe" environment to fail while being supported by their staff, classmates, alumni and so on. Gibb (1987) also mentions that in entrepreneurship education, the learning environment should be characterised by trial and error, learning by doing and making mistakes. Perhaps NSE should have a greater focus on this.

It seems as if being risk tolerant and having a culture for failure could enable the students to co-create. This factor is crucial, and needs to be addressed by NSE in order for the students to co-create with the BoP.

4.1.5   New Factors Found

The following sub-section presents, analyses and discusses new factors found during the empirical study. These include distance; preparation: clear goal/plan/motivation; role of NSE; economic potential; time, capacity and timing; financial resources; motivation or interest; cooperation agreement and expectations; local partners and local knowledge; type of idea or concept; and personal development.

Distance

Empirical Findings
Geographical distance is a factor that is mentioned by many of the interview subjects as a challenge. The PhD Candidate says, "And, of course, the challenge of distance is always going to be there, because we are sitting here and they are there."

The Professor says that in the existing relationship between NSE staff and the HBN, there are challenges related to distance, "you can't just swing by. So it's especially important to keep the relationship going through having something to work on, so that you can work on something even when you're not together in person." He also says that it helps to meet up to be reminded of what you are working on together. Alumni 1 supports this; that you feel less responsible for people you do not see on a regular basis. She goes on to say that it is therefore very important to have good routines for working together and respecting each other's time.

The students also talk about how the logistics of the huge physical distance between them and the BoP entrepreneurs is a challenge for co-creation.

Analysis and Discussion

As mentioned previously, distance is connected with the factors 'relationship', 'experience', 'role clarity', 'a sense of ownership', 'technology', 'commitment' and 'communication'. It is therefore interconnected with many factors, and shows how distance affects the other factors.

Distance, first of all, affects the relationship between the students and entrepreneurs. This is because the physical distance could create a distance within the relationship as well. According to Anderson and Narus (1998); Forsström and Törnroos (2005), a successful (working) relationship is usually built through interaction over time. The relationship enables each party to gain insight into and solve each other's problems and to gain access to each other's resources (Forsström and Törnroos, 2005). However, the huge physical distance could make both building the relationship and sharing resources challenging.

Both the Professor and alumni 1 talk about how important it is to have good routines in place for working together, and working on a joint project both parties are committed to in order to keep the relationship going when you cannot meet as often. This could perhaps make the distance less of a challenge. In addition, travelling to India to experience what it is like being there, and speaking and working directly with the BoP entrepreneurs could also help build the relationship, through building trust and commitment (Anderson and Narus, 1998). Travelling there could also help the students understand how and what they could contribute with, and feel that they are part of the entrepreneurial team, which is important according to Haneberg et al. (2018).

Having to communicate with the help of technology is a result of the huge physical distance. Frequent, inclusive and open communication is also mentioned as an important factor for co-creating, which is made difficult thanks to having to use technology to communicate because of the distance. Many interview subjects view technology as important, but also as a challenge because you lose the daily, non-formal and tacit communication. Technology could, however, help mitigate the risk distance has because it enables communication, even though it is not the ideal form of communicating. Alumni 1 does not want to move to India either, because she does not feel safe there. Distance is considered an inhibitor for co-creating.

Preparation: Clear Goal/Plan/Motivation

Empirical Findings

Having a vision for why you want to co-create, both short-term and long-term, is important for co-creating, according to the Assistant Professor. It is also important to find students that find this interesting.

Preparation or having a plan before co-creating is crucial, according to alumni 1. While reflecting upon her trip to India, she says, "NSE should have been better at structuring it beforehand. For example being clear on 'what are your goals?', 'what do you want to achieve?', 'why are you travelling?'" She says it rather ended up in her team being given the opportunity to go to India, after having quickly sent an application without thinking it through. She says that they did not really know what they had applied for. She says, "If we were better prepared and actually knew what we were applying for, it would have made it easier for us to achieve more while we were in India."

The NSE staff are aware that they should have prepared the students more for the India

trips in the past, the Professor says "we've probably not been too good at preparing the students beforehand, and being critical enough in terms of asking the students: what their motivation to go is, what do they want to achieve, what kind of professional development do they envision, who do they want to meet?"

Alumni 1 recommends that "being prepared, and maybe having a strategy for how to follow up a valuable connection you might gain, and making a plan before travelling, is important. Otherwise, you may end up not doing anything useful."

The PhD candidate says, "The reason why I applied for this project (NEED) was because I see that a lot of students get excited about the idea, but there is no formal way of channeling that excitement into something. So when you are in India, it is all very appealing and very exciting, and I've seen minds getting opened by that, but then you come back to the reality of Norway and the courses you have, and what projects you have to work on. So this project is actually an attempt of providing the opportunity for students to actually pursue that excitement into something concrete." He goes on to say that a key factor is therefore figuring out how the students' motivation can be channelised into something concrete.

Alumni 1 agrees with the PhD Candidate, "If we had had more information beforehand, and a way of sorting the information, it would have been a lot easier. When you go there, you experience information overload: what to eat, how to dress, meetings with Innovation Norway, the Embassy, and on top of that we have school assignments and deadlines back home in Norway. If we had had more information about who we would be meeting and what we would learn from meeting them, I think it would increase the likeliness of us working together." She would also have liked to have known what the entrepreneurs needed help with, concretely, so she could see how she could contribute, and gotten to know their visions and dreams, to see if they matched hers.

Alumni 2 talks about his experiences when he travelled to India in his 5th year. Both 4th and 5th year students travelled at that time, however, he says that the 4th year students were a bit like "headless chickens" - they were all over the place, "because they didn't really know what they were doing, they wanted to do nothing and everything at the same time. I get it, but I think we were quite different because we had done research for our project thesis, and were very structured with regards to what we had to do there." He also said that the 4th year students were supposed to help him with some things, such as collecting data, for his master's thesis. However, he said this did not go too well because "we had a lot to do too so it was difficult to spend a lot of time following them up and giving them enough information in the start. So we failed a bit there."

Alumni 2 also talks about how vital it is to know how you *want* to contribute and how you *can* contribute before travelling to India, otherwise you will likely think, "what am I doing here?" upon arrival. This is similar to what alumni 1 described, when she talked about feeling useful and needing to feel like she had something to contribute with.

Student 1 says that if he knew which problems the entrepreneurs actually have, he could become interested in co-creating.

Alumni 3 remembers meeting Professor Anil K. Gupta, founder of the Honey Bee Network, but does not remember a lot from the meeting six years back. She says, "Maybe we should have spent more time with him. Everything went by so quickly. I don't think they prepared us much for it either. There's a huge focus on academic assignments, which meant that what I did in India had to be relevant for my master's thesis. Which I think was a shame."

Analysis and Discussion

As mentioned under the factor 'operant resources', developing a vision and goal before travelling to India could help the students benefit more from the trip (Bharti et al., 2015).

All the alumni and staff members agree that preparation and having a clear plan and strategy for how you want to contribute or what you want to achieve is crucial to co-creating. This is based on their previous experiences. This seems like something NSE should have been better at getting the students to do. Additionally, having the students think through how they could contribute and what they wanted to achieve in India could have helped sort out who actually had the "right motivation" for going. Sending motivated students that had a clear plan, like alumni 2 had, could have resulted in more learning and co-creation.

The interview subjects also talk about how school assignments take time away from trying to find ways to work with the BoP entrepreneurs.

The NSE staff should therefore first, explain more about the context and opportunities in order to prepare the students. And next, make the students draw up a plan and strategy for the points below in order to 1) select students that are motivated to co-create, and 2) to help the students be more productive when they travel 3) enable the students to co-create:

- What are your goals?

- What is your plan?

- What do you want to achieve, and why?

- Why are you travelling or why do you want to meet the entrepreneurs?

- What is your motivation for going?

- Who do you want to meet? How will you find them? How will you follow them up?

- What kind of professional development do you envision?

- How are you planning on executing your strategy and achieving your goals?

- How can you contribute?

Having the students draw up a plan will also help the staff understand why and how the students are motivated, and how NSE can, in turn, support them. This will also help the staff figure out how they can help channelise the students' motivation into something concrete, as the PhD Candidate said, and thus, hopefully lead to more fruitful projects.

It is also crucial that the staff give the students their plan for the trip and any relevant information. The students did not know who they would meet through NSE before arrival. In order for the students to prepare, it is important that they know what schedule NSE has set as well. It is also important that the students know what is expected of them. I would also suggest that the students spend more time with the different actors they meet, such as Professor Gupta, so that they have time to learn, digest, and come back to ask questions and learn more. Finally, NSE staff needs to follow up the students. Preparation is considered both an enabler and a driver for co-creation.

Role of NSE

Empirical Findings

This factor builds on the previous factor, 'preparation'.

The Professor says, "we haven't been good enough at communicating to the students what this (NSE's collaboration with the HBN) actually is and entails." He also says that they "haven't been good at continually following up the students that end up working on it both beforehand, and after" travelling to India.

The Assistant Professor believes that bridging local problems with the knowledge NSE students and staff have acquired can lead to something exciting. In relation to that, he says that "NSE as an institution needs to help these connections to happen." The Professor goes on to say that "in order for this topic to stay relevant, we need to work on it, and keep it warm. We need to share stories, we need students that can talk about it. And we need to have a bigger focus on it." However, he also mentions how there is a shortage of staff working on this; he and the PhD Candidate are mainly the ones from NSE that are working on it at the moment.

If student 3 were to co-create, she would want a framework for co-creating. She says, "a framework is even more important in a context like this - where you have to talk to, meet and work with people with a completely different background to your own."

Student 6 agrees with this, if she were to co-create, she would like NSE staff to explain "how we should go about it in the start to overcome differences. How to start a good collaboration, and what is important to think of before we go our separate ways. What is crucial that needs to be in place before we go our separate ways?" She describes the support she would like from NSE staff as "consultant support". Student 3 agrees with this; she says that getting mentoring and support from the staff would be crucial to her.

Student 6 also says that NSE could help her see what opportunities exist. On the other hand, student 6 thinks that NSE has a large focus on "how can you make money doing that?" She says that this is always a critical question the students are asked; if there is potential for making a profit. "Whenever they pose that question, I guess it makes me reconsider what I want to do and makes me dismiss these types of ideas because I don't think there's potential for making a profit there. It's more charitable work. But maybe we can make a profit... I don't know."

Student 5 also mentions the economic potential aspect, "in a collaboration like this, I feel it's difficult to know how you can make money doing it... because that's something we're pushed to figure out all the time - finding something that's economically viable."

On the other hand, the Assistant Professor says, "we (the staff) believe that the students would learn a lot from co-creating with this context. I doubt that it could lead to an economically viable startup, as that's more difficult. But, we don't really count how many startups are developed at NSE - the most important thing is 'how can we stimulate learning among the students?'"

Student 6 says that it is crucial for her to trust the people she is working with. It would therefore be important for her that NSE could ask the BoP participants really good questions, so that they know that the NSE students are committed and really want to contribute. She thinks this could help both parties stay committed. She also thinks NSE should do a thorough background check or due diligence on the BoP entrepreneurs so that they know they can trust each other.

Student 2 says, "I don't know how I would attempt to find out if this (co-creating with the BoP) was a possibility, which automatically makes you lose interest because you don't

know how to move forward. It's much easier to call people in Norway, because you have resources here, you know where you can find people. But how do we find these people (the BoP)?" Alumni 1 mentions that she would have liked NSE to have helped her and her team get in touch with relevant partners.

According to the PhD Candidate, so far, the existing collaboration with the Honey Bee Network that involves the NSE students "has been in the form of taking students more on exposure visits (to India), rather than any kind of formal collaboration." He goes on to say, "it has mostly been about providing exposure to the students on the kind of work they (the HBN) do. And hopefully, triggering some kind of response within students from that exposure."

However, none of the students I interviewed had previously heard about the exposure visits to India and the collaboration with the HBN. Student 4 says that he would want to know what NSE actually wants to achieve through the collaboration. He has never heard of it before, and says "I find it strange that I've never heard of it if it's a huge deal". Student 5 also says that NSE should have told the students about the initiative, and that this was an opportunity they could be a part of, "and if they (NSE) said that we don't have to think of only Norway when we innovate, but that we can help others too." Student 5 goes on to describe how not seeing the possibilities or opportunities could be an inhibitor for co-creating, "I think a lot of people can become a bit afraid of being part of this kind of collaboration because you can't really see the possibilities. So I think it would be important that NSE was able to show us what possibilities collaborating could lead to, and what opportunities we have."

Student 6 also says that NSE should show the students what possibilities exist, and the possibilities for a collaboration. "And they'll probably say that there's no money in this, but if I think of it as a passion project, that would be cool. I could have pursued that. At least now that I don't have any commitments. I think working on a project like this while studying at NSE would be really cool, and this is a period in my life when I can actually work on something like this."

The Professor also talks about the exposure trips; that "seeing is believing". He says that it is when you first meet people and it is brought to your attention, that you can see which possibilities exist. When I told the students about the existing collaboration, many of them became excited, student 6, for example, said, "wow, is that possible?"

Student 2 says that she thinks that step 1 for making co-creating with the HBN easier would be to make the students aware of the opportunity. Alumni 1 says the exact same thing and that making the students aware of the opportunity would get the ball rolling, "then you would start thinking of what you could contribute with, what you could achieve, what is it the BoP entrepreneurs are good at." She thinks this sort of mental preparation is far more important to start off with than asking straightaway, "do you want to collaborate?" Because then she would think, "what? Why should I collaborate with them? Who are they?" A steady introduction, followed by meeting the BoP entrepreneurs, talking to them, discussing possibilities and so forth, would be much more beneficial and would make co-creating easier, according to alumni 1. Alumni 1 also says, "the students at NSE have a lot of energy and a can-do attitude - they just need a direction to go in. If NSE helps give them direction and clear goals, they can achieve a lot."

Student 5 mentions that it could be a good idea to introduce the students to the HBN entrepreneurs during a feasibility study. She says she felt that answering my questions about whether she could be interested in co-creating or not was difficult when she knew nothing

about it.

"I would have liked to have known more about NSE's network beyond Chalmer's School of Entrepreneurship, which we heard of quite early on," says alumni 3. She would have like to have learned about NSE's network during the first semester at NSE. She says, "if I had heard about Professor Gupta and the HBN much earlier, I would likely have learned more. We should also have had more assignments focused on creating an impact startup; how we can contribute with value to someone in a difficult situation. I would have preferred if there was an equal focus on these kinds of things - giving back and creating value for society and the environment - not just value for the customer. And this is important to do from day 1."

When asked about how the staff could support the NSE students in collaborating with the HBN, the PhD Candidate said that "we thought it was important that it is in already established existing courses, where the students are familiar with the protocol of what the theory is and what they're supposed to do. So incremental innovation in one way - you don't want to challenge and shake the system right now. You first want to figure out whether this is appealing, whether it can be something that we can successfully work on, and if not, what is the learning from that and can we change how we set up this interaction. That's the goal of the project; to understand how this would work as well."

The PhD Candidate says, "But also, the project gives us the opportunity to actually bring in experts from the context, who could then, through Skype lectures or whatever, be able to tell the students about specific aspects about the context which will help them deliver better in that particular course or study. There is also provision in the project. So, for example, if, during the feasibility study, they find out that this is an okay project to work on, then we have the opportunity to organise project workshops where they can work directly with these grassroots innovators whose products they are trying to commercialise."

Student 1 says, "if I knew which problems the BoP entrepreneurs actually have, it would be easier to think of solutions... and that could get me interested in co-creating."

Finally, alumni 1 mentions how NSE should have prepared the students better before travelling to India, as mentioned under the factor 'preparation'. Alumni 3 mentions that "it would be really useful to learn from those at NSE that have collaborated with the BoP, so you don't make the same mistakes, and they could help you get in touch with people."

Analysis and Discussion

NSE plays a vital role that affects the students to co-create with the BoP. The interview subjects mention many different important aspects where they would like NSE's support. First of all, none of the students were aware of the possibility to co-create or meet the entrepreneurs from the HBN. This is something the Professor seems to be aware of, but blames this, to some degree, on the few staff members working on the project. Perhaps NSE could consider having one dedicated staff member that could support the students before, during and after.

Even though the PhD Candidate talks about how it will be important to incorporate the grassroots innovations into existing subjects, the students still need more theory on commercialising grassroots innovations. At NSE, students learn by doing (Rasmussen and Sørheim, 2006). However, in this context, as the students and alumni mention, getting support and relevant theory for the context is crucial. Bringing in experts from the context, as the PhD Candidate mentions, seems like a really good idea, as the students want to learn from, and work with, others with experience and connections.

The students also have a few assumptions related to financial aspects of co-creating.

The staff members therefore need to make it clear to the students that co-creating 1) would not mean charity work, 2) could have economic potential, but in a different way (and support the students in figuring out how), and 3) that it is more important that the students learn rather than create an economically viable startup. The final point needs to be underlined, as the students mention that the fact that the staff keeps telling them that their startup needs to be profitable is an inhibitor for co-creating. Student 6 for example, has a focus on profit because this is something NSE pushes the students to do, but personally, to her, money and business development is not that important to her at the moment. It seems as if this is not too important for NSE either, as the goal of co-creating is rather learning and contributing to doing something good. The staff thus need to communicate this more clearly, as there seems to be a disparity between what the students think is expected of them and what the staff actually expect. It also seems as if the staff believe they communicate something different to what they actually do.

The staff needs to do the following, according to the interview subjects, in order to enable the students to co-create:

- Create an awareness of the BoP entrepreneurs or introduce the students to the BoP entrepreneurs and the challenges they face, what they have accomplished and how the students can contribute. This could perhaps be done during the feasibility studies, but must be done early on.

- Preparation (as outlined in the factor 'preparation')

- Follow-up of the students before, during and after.

- Provide the students with theory and a framework that could support them. E.g. business development in a BoP context, how to collaborate with those different to you, how and where to find people to talk to and learn from.

- Teach business models that have an impact and focus on the environment and society.

- Introduce the students to the BoP entrepreneurs, their existing network and any other relevant contacts they could learn from.

- Communicate expectations more clearly.

NSE's role is considered an enabler and driver for co-creation.

Economic Potential

Empirical Findings
Previously, the collaboration between the Honey Bee Network and NSE has been informal, and the students have mainly travelled on 'exposure visits' to be exposed to the kind of work the HBN does. However, NSE is currently changing this. The PhD Candidate says "but now, what we're trying to do in this project is to actually use the grassroots innovations that they have documented, and see if the students, through various courses at NTNU, actually can help some of those products and innovations move along the value chain. That's the stated goal of the project."

The PhD Candidate mentions that the ideal end result of the pilot project in one course that took place in January 2020, for example, would be "that some of those ideas that the

students develop of how to solve the challenges they're exposed to leads to actual businesses." From the students' perspective, the PhD Candidate's aim for the project is to get the students excited about the opportunities, and help them understand why and how this could be a commercial opportunity.

After having worked with Professor Gupta and the HBN, the Professor says that it has helped him learn more about the context and new perspectives, which is a contrast to most textbooks you read in business school. He goes on to say, "I've also learned a lot about business development. Business models, for example, are completely different than if you have a well-functioning capitalistic market. You have to think in a completely different way."

As mentioned, under the factor 'role of NSE', the Assistant Professor believes that the learning the students would gain from co-creating would be greater than their chance of creating an economically viable startup.

Student 5 and 6 think NSE staff have a huge focus on pushing the students to figure out how they can make money doing something. Student 6 says that that makes her discount something like this, "but maybe it could turn into big business?" She also says that right now, since she is a student, she does not have many commitments and does not need to earn a living. So right now, at this point in time, this would be the perfect project for her.

Student 4 says, "I'm going to be honest and say that I would like to see potential in an idea because it's more rewarding to work on a case where you can create a new industry, or build an economically viable business. So that you don't only see a need, like improving millions of lives, but that it could also be sustainable over time. That it's not just a charity." Many of the students mention that they are afraid of this collaboration becoming a charity, which is not something they view as desirable.

Student 2 believes that many have not pursued ideas like this because they do not see it as economically viable. She says, "I guess if I'm realistic, I need to work on something I can live off, but on the other hand, it's really important to me that what I do is valuable. I guess there's more focus on economic potential at NSE, because before I enrolled I didn't really think about it. So if I had been introduced to this before NSE, I think I would be more interested in it." She expresses the same opinions as student 6, that since she is a student now she has a safety net and that she would not lose anything by co-creating with the BoP. She goes on, "And I think when you first start working on something like this, and it creates a lot of value, then maybe you won't think about the economic potential as much. But again, you need to be able to make a living from it if you're going to work on it full time."

In student 1's opinion, "this type of entrepreneurship - not a very advanced type of business development" makes him less attracted to the idea of co-creating. He goes on to say, "there are maybe some economic incentives that drive me as well. If this was a business model that could contribute to something positive, and at the same time, be a good business case, I think I would be interested in co-creating." However, he also says that he is not motivated by having a high salary, rather, he wants to work on something that leads to economic value creation.

Student 3 says that helping others drives her. She also mentions economic potential in that regard, "it has to at least be enough to live off and to grow steadily. I'm not very motivated by money; I want a stable economy, but I don't need to become a millionaire."

On the other hand, alumni 2 thinks that you should not play a huge role in this kind of collaboration. "If you want to gain economic benefits from this, you'll kill the whole idea.

So I think, at least the first time round, that the students should contribute where the BoP entrepreneurs are stuck and need help." However, he thinks that there could be potential in industrialising some of the innovations. He also says that if you put Norwegian salaries (which are really high) into the mix, the whole collaboration would be pointless.

Analysis and Discussion

It seems as if alumni 2 views 'economic potential' as an inhibitor for achieving good results through co-creation. The Assistant Professor is not sure if there is economic potential in co-creating, but he thinks learning will be a benefit. He is therefore not marked in figure 4.1 for this factor, as he neither mentions it as an enabler, driver nor an inhibitor.

Economic potential is discussed by many. As the students mention, figuring out if an idea has economic potential is something they are pushed to do from day one at NSE. This could be why they are focused on it. Additionally, the students seem to believe that working with BoP entrepreneurs could be charitable work, which would inhibit them from co-creating. This is not the goal of the project, as the PhD Candidate emphasises. Also, as the Professor mentions, the students will learn a lot about business development in a very different context to what they are used to.

It will be important that NSE shows the students how these types of ideas and collaborations can have economic potential in order for the students to co-create. Economic potential can be an enabler, driver and an inhibitor for co-creation.

Time, Capacity and Timing

Empirical Findings

Time, timing and capacity is a factor that many mention. The Professor says, "I think the students get exposed to a lot - a lot of impressions, requirements, and a lot expectations and opportunities in their daily lives." He also says that when there are a hundred other things that are both exciting or require something from you, it takes a lot of capacity to try something new. "In NSE's case, most students are busy working on their startups which means that they don't have time or capacity." The Assistant Professor agrees that it takes a lot of time, so prioritising your time is vital.

The PhD Candidate says that the students have gotten very excited about the context in India when they have travelled in the past, "but then you come back to the reality of Norway and the courses you have, and what projects you have to work on." The students seem to agree with this. Student 4, for example, says, "I need to have time. That's really important."

When student 2 filled out the questionnaire, she ended up in the group that was not interested in co-creating. She says, "the reason for that isn't that I'm not interested in the concept itself, but it's more the situation I'm in now. I've had many decisions I've had to make recently, and I just started working in a startup. So right now, I'm not interested in co-creating because I've had too many choices to make."

Student 1 said that he would have liked to have travelled to India to see if he wanted to co-create with the BoP. However, he does not have time to do it now.

Alumni 1 says that when she was in India, there was an overload of information, "and on top of that, we had assignments we had to hand in back in Norway while we were there." Alumni 3 says that she felt that she neither had the time nor the possibility to focus on working with the HBN entrepreneurs. This was mainly because she experienced a lot of

pressure academically from NSE's side.

When I asked the Assistant Professor if he would like to work on the Kakuma Project again, he said "absolutely, if there's a possibility to do so and the timing is right." Student 5 also mentions timing, "I would absolutely consider co-creating if I'm in a situation where it's possible and I don't have other commitments - if I'm not in a startup."

Student 2 says that if she had known about this concept during the feasibility studies, "or someone from India had come and pitched the idea in person or through video, I would be really motivated to work on it. So this should be introduced during the feasibility studies because that's when people are looking for ideas. It's harder to look for new ideas in the 5th year because in the 4th year you have a team around you and you just have to do it." She also says that a lot is introduced in the 4th year, but she thinks that this is a concept that most people would be interested in because of the impact it can have.

Alumni 1 says that she thinks that if she had travelled to India without working in a startup, she would likely have been interested in co-creating. She also mentions introducing it to the students during the feasibility studies, "it should be introduced a lot sooner. Because we were presented with the opportunity right after selecting our startup, which caused a lot of confusion."

According to alumni 1, it is important to respect the commitment you have made to your other teammates at NSE. Previously, the students have travelled to India in February or March during the second semester at NSE. This is too late, according to alumni 1 and 3. Out of respect for the commitments she had made to her other teammates, and the cooperation agreement she had already signed, she felt it was wrong to suddenly leave them for something new and exciting.

Alumni 2 also mentions that when he was in India, "I was in a startup so there wasn't really a question about collaborating with anyone there." Alumni 3 talks about how she did not understand how she was supposed to collaborate with the HBN entrepreneurs when she had so many other commitments and academic requirements that took time away from what she actually wanted to do, which was to make an impact.

Analysis and Discussion

It seems that the students need time and capacity to co-create. They will likely not even consider co-creating if they do not have the time, capacity or if the timing is not right. What is interesting, however, is that the students find the time to work in a startup. Could it be that the students do not regard co-creation with the BoP as a startup? That they rather view it as a project on top of their startup and academic assignments?

Timing of when the opportunity is presented is also important. It is understandable that the students that are already engaged in a startup do not want to leave it to co-create with the BoP. It is therefore important that this is presented as an opportunity early on so that the students can conduct a feasibility study on it, and know that this is an opportunity they can pursue if they leave their other startup. Another possibility could be that this is a part of the student's mandatory school work - that they must consider the possibility of co-creating. Thus, they would spend time on it to see if this is something they want to spend time pursuing.

Having time and capacity would enable the students to co-create, whereas not having time is an inhibitor. Depending on when the opportunity is presented, timing can be either an enabler or inhibitor.

Financial Resources

Empirical Findings

Financial resources is another important factor for the students. Student 4 says that NSE could support the students through giving them economic support to travel and communicate with each other. The Assistant Professor agrees, "there needs to be funding." Student 2 also says that she would want NSE to pay for a travel to India, and student 3 says financial resources would be helpful.

Student 4 also says that "in order to maintain a collaboration, you need to be able to afford it. Even though we're students, we don't have unlimited amounts of money. A plane ticket is really expensive, and I think we need at least two meetings in person per semester. So money is an important factor."

The Professor agrees that financial resources are important, "first of all, if you're travelling to India you need to stay there for at least a week. And it's costly to travel there, even though it's not an expensive country in itself, but you need financial resources. So unless you have external funding, for example, then not many people will be able to travel there."

Finally, the PhD Candidate says that "there is also provision in the project... so, for example, if they find that in the feasibility study that this is an okay project to work on, then we have the opportunity to organise project workshops where they can work directly with these grassroots innovators whose products they are trying to commercialise."

Analysis and Discussion

Financial resources seem to be important to the students, but perhaps not crucial. The staff view financial resources as more important than the students, it seems, perhaps because they have experience with the context and are more realistic. As the PhD Candidate says, there is funding available to the students. This needs to be communicated clearly to the students so that they do not worry about the economic aspects of co-creating. Financial resources can be an enabler for co-creation.

Motivation or Interest

Empirical Findings

The Professor talks about the importance of sorting out those students who are truly motivated and those who are not. The motivation among the students has varied in the past. He says, "I think some students are genuinely curious about this: how can you contribute to development in this type of context? Who is genuinely interested in the people and the situation they're in? And then there are some students who are curious about the context, and want to know what this is all about. And finally, there are those that are just tourists, that want to cross another country off their list." The latter are students he would like to sort out, and not have travel to India. The Assistant Professor also says that they need to find the people that think this is exciting.

The PhD Candidate says, "One thing we're trying to do in this project is to channelise the students' motivation. I think that's an important factor, because, excitement happens when you get exposed to that context and you can see the potential market size. You can see that there is a need for intervention in that market. And you can very easily get motivated because you can see that "if I do something here, it's going to actually make a difference in the world". So the motivation can come quite easily." He believes that motivation can

come from exposing the students to the context. This is something student 1 agrees with, "I've never been to India, and if I go there I might find out if I want to co-create."

Alumni 1 talks about an experience she had during a feasibility study, "I remember one feasibility study where people switched teams and it worked out really well because all of us were motivated to work towards the same goals." She suggests "putting together a team during the feasibility studies where everyone is interested and motivated to look at opportunities for co-creating with the BoP - where everyone wants to make a difference."

Alumni 2 talks about how important it is to have respect towards what you want to get out of this. "I think the students at NSE all have different reasons for co-creating, just like they have different reasons for enrolling in NSE, and their thoughts on a startup. There are 35 different students each year, all with 35 different ideas on what they want to do, and in regards to this project. Some might view NSE as a place where it's fun to learn, others think NSE will look good on their resume, and others may want to work on it (their startup) for the rest of their lives. And I think it's really important to think about this in regards to this project, because reality is so different for the BoP entrepreneurs than it is here."

Analysis and Discussion

On the one hand, the Professor wants to hinder students only interested in a holiday from going, and select those highly motivated to go to meet the entrepreneurs instead. Whereas the PhD Candidate thinks that motivation can come from exposure, something some students agree with - that they do not know what they would say yes to, or know if this is something they wanted, before experiencing it. It is important to figure out how to tackle this. Perhaps, as a starting point, the students should be more exposed to the context beforehand, as this has, in any case, been lacking previously. Preparing the students better, as mentioned under 'preparation', will also help filter out which students are properly motivated.

I have only included subjects that talked directly about having motivation or an interest, and the importance of it, under this factor. This is because many of the other factors have been mentioned in regards to what could affect their motivation for co-creating.

Motivation or interest is considered a driver for co-creating.

Cooperation Agreement and Expectations

Empirical Findings

A few of the interview subjects talk about the importance of having a cooperation agreement in place and talking about expectations before working together. Student 3 says that a cooperation agreement is vital to ensure that everyone is on the same page, "having concrete plans is really important, so that we're all on the same page regarding where we're going, what the idea is, what the product is, and so on." Student 1 says that a cooperation agreement is important and that it needs to be beneficial to both parties.

The PhD Candidate mentions that the process for starting a collaborative relationship is the same in India as it is in Norway; that you draw up an agreement before working together.

Alumni 1 says, "drawing up a cooperation agreement is a good idea. Not necessarily because you're going to use it for anything, because you don't really look at it ever again after signing it. But, the process of drawing it up helps us talk through what we want the relationship to be like, general guidelines and those types of things." She also says that this may help clear up or talk about cultural differences, and give each participant an arena to

talk about how they want the relationship to function.

The Assistant Professor mentions that expectations regarding project management, for example, is a crucial factor for both participants. Alumni 2 says that thorough evaluations regarding expectations towards the project, the collaboration itself and each other is crucial for both parties. Both parties need to have the same expectations towards the project, according to alumni 3.

Student 3 says that talking about expectations, and, especially, those concerning how much effort both parties would put into the collaboration and project is important to her. She says that it is important to know how you will work, "for example, if a new team member joins the team, it'll be a smoother process to get them on board if we've done a good job of talking about these expectations."

Analysis and Discussion

Drawing up a cooperation agreement and talking about expectations as a part of this is common practice at NSE. It may not have been mentioned by that many because it is viewed as a given in any type of collaboration. However, as the PhD Candidate mentions, the practice of drawing up an agreement is as common in India as it is in Norway.

All interview subjects that mention expectations say that both parties need to be on the same page regarding expectations towards the project, the other participants and the collaboration itself.

This factor is connected with 'relationship', 'commitment', 'risk tolerance' and 'reciprocity', for example. All interview subjects that talk about a cooperation agreement say that it is crucial that it is beneficial to both parties, which is also supported in the literature (Cova et al., 2011; Fisher and Smith, 2011; Payne et al., 2008; Prahalad and Ramaswamy, 2004). The cooperation agreement is a tool that can help the participants talk openly about expectations, cultural differences and relational norms, and can help develop the relationship and develop trust. It could also help mitigate and address risk associated with different aspects of the co-creation process. It is therefore an important factor that could enable the other factors, and is thus considered an enabler for co-creation.

Local Partners and Local Knowledge

Empirical Findings

Having local partners is essential, according to the Assistant Professor; "If not, it'll be more like we're coming there with a top down approach and telling them how they should do things." He also says that having a local partner is crucial because of the many barriers, such as culture, language, and so forth. If he were to continue working on the Kakuma project, he "would need to work with the right partners."

Alumni 1 agrees that having local partners is vital, especially since she found it really difficult to set up meetings and collaborate the last time she went to India.

If alumni 2 were to give a recommendation to students that wanted to co-create with the BoP, he would recommend them to work more closely with local partners that are present locally. "Because what they know and the connections they have is something we can't achieve or gain anyway. Having local partners that can show you the villages, for example, is crucial." They also have market knowledge that is crucial to the students, "we thought we knew a lot more than we actually did before we travelled to India."

Furthermore, one of the Assistant Professor's criteria for working on the Kakuma Project,

was to "be able to apply our method, but it also had to work locally - have a local perspec-
tive." However, he said that he never achieved this, and "there was no local ownership either
in the refugee camp to continue working on the project."

Analysis and Discussion

As the interview subjects mention, having a local partner could help the students overcome
many barriers the students will likely face - or at least make the challenges easier to tackle.
These barriers include 'cultural', 'language' and 'geographical distance'. This factor is
therefore connected with these. This factor is thus an enabler for co-creation.

Type of Idea or Concept

Empirical Findings

The Assistant Professor says that it is important that the students work on problems that are
relevant. Student 6 says that it would be more attractive for her to co-create with the BoP
if "I worked on an idea that I also find attractive to work on, but also, that we are shown
the possibilities around the idea."

At first, student 4 says that in order for him to co-create, it depends on what kind of
idea it is. He says, "a local idea would be really cool, but very challenging to conduct a
feasibility study on." However, on the other hand he says that the team is crucial to him,
"if you get in touch with a person in India that has an amazing idea, the idea will likely fall
through, but the person will probably be very clever so we can continue working together
to improve or change the idea."

Student 2 says that she would need to work on a concept or idea that motivates her,
"something that I would like working on, but also something that could help them (the BoP
entrepreneurs) somehow. So the concept of helping them, and them helping us motivates
me to co-create." On the other hand, she says that she might be "more motivated by the
concept of being able to help them on the way, rather than the idea itself."

Student 1 says that if the business concept was an environmental concept that was good
for the environment, he would be interested in co-creating. "Because I know people would
pay for that," he says.

Student 3 says that she would co-create depending on what idea they have. Based on
her previous experiences, "I think I need to be more passionate about the idea that I will
base my business on, because I really need to be motivated to give everything to start a
business." However, she also says that she would also need to "conduct a feasibility study
on the team and how everything will be solved practically speaking."

Alumni 1 on the other hand, says that team is everything to her, and that the idea is not
that important.

Analysis and Discussion

It seems like the idea is important to many of the interview subjects. However, the team
also seems to be important. At first, most students answer that the idea would be crucial
for them to co-create. After talking for a while, they also mentioned the team as being
important. Throughout the interviews, the subjects discussed more aspects of the team
and relationship, rather than the idea. These were separated into different factors. It could
therefore seem as if the idea is only a small part of co-creating.

The type of idea seems to be a driver for co-creation, except for for alumni 1, who says

that the team itself is more important to her. This factor has therefore not been crossed off as a factor that drives alumni 1 to co-create in figure 4.1.

Personal Development

Empirical Findings
Personal development is mentioned by some interview subjects. The Professor, says, "Anil Gupta represents perspectives and ideas that are far ahead with regards to how grassroots entrepreneurs can contribute to developing the challenges grassroots have. And I find it personally motivating to meet him. He has a lot of interesting perspectives, and I learn a lot personally every time I meet him."

The Assistant Professor says that a motivator for him, which he calls 'egotistical', is that he wanted to work on the Kakuma project because he knew he would learn and develop a lot personally.

Student 3 talks about how she developed a lot personally from a previous trip to the Favelas in Rio. She thinks she would develop a lot personally from meeting the BoP entrepreneurs as well, and this is something that motivates her.

Analysis and Discussion
It seems like the interview subjects that have some experience with the poverty-stricken enjoy the personal development part of it. This is something that motivates them, and this is something that could potentially motivate the students to co-create. It might, perhaps, motivate more of the students that have experience with the poverty-stricken, because they know that they will likely develop personally, and it could therefore perhaps appeal more to them. However, many of the students express an empathetic attitude towards the cause, as discussed under the factor 'empathy'. Personal development as a bi-product of helping others could perhaps drive the students to co-create. This factor is therefore connected with 'empathy', and is a driver for co-creation.

4.2 Summary of the Empirical Findings

| Factor	Alumni			Staff			Students Interested			Students Not Interested			Total
	A1	A2	A3	PhD Cand.	Prof.	Ass. Prof.	S4	S5	S6	S1	S2	S3	
Perceived Benefits													
A Sense of Ownership/ Being Part of Something	X	X	X	X	X	X	X	X	X	X	X	X	12
Ability to Contribute	X	X	X		X	X	X	X	X	X	X	X	11
Experience	X	X	X	X	X	X	X	X	X	X	X	X	12
Knowledge Exchange	X	X	X	X	X	X	X	X	X		X	X	11
Empathy	X		X	X	X	X	X	X	X	X	X	X	11
Economic Potential		I		X	X		X	X	X	X	X	X	9
Personal Development	X				X	X					X		4
Type of Idea or Concept		X	X			X	X		X	X	X	X	8
Resources													
Trust	X		X		X			X	X	X	X	X	8
Operant Resources	X	X	X	X	X	X	X	X	X	X	X	X	12
Relationship	X	X	X	X	X	X	X	X	X	X	X	X	12
Technology		I	I				X		X		X	X	6
Network and Community	I		X		X				X		X		5
Training	X	X		X		X	X	X	X		X	X	9
Preparation: Clear Goal/Plan/Motivation	X	X	X	X	X	X				X			7
Role of NSE	X		X	X	X	X	X	X	X	X	X	X	11
Financial Resources			X	X	X	X	X				X	X	7
Cooperation Agreement and Expectations	X	X	X	X		X				X		X	7
Local Partners and Local Knowledge	X	X				X							3
Relational Norms													
Commitment	X				X				X		X		4
Reciprocity	X	X	X	X	X	X	X	X	X	X	X	X	12
Open Communication	X	X	X			X	X	X	X	X	X	X	10
Presence of Clear Incentives for Co-creation (Win/Win)	X			X	X	X		X	X	X	X		8
Role Clarity	X	X				X			X		X		5
Motivation or Interest	X	X		X	X	X				X			6
External Environment													
Gender	X	X											2
Culture	X					X	X	X	X	X		X	7
Risk Tolerance and a Culture for Failure	X	X						X	X	X		X	6
Time, Capacity and Timing	X	X	X	X	X	X	X	X		X	X		10
Distance	X		X	X	X				X			X	6

Figure 4.1: Overview of the Empirical Findings

Figure 4.1 summarises the factors found and outlines which interview subjects mentioned which factors that affect them to participate in co-creation with the BoP. "I" signifies that the factor is an inhibitor for the respective interview subject. The total shows how many interview subjects mentioned the respective factor as important with regards to co-creation. However, this does not necessarily signify the importance of the factor. Some may have mentioned a certain factor due to their past experiences, such as 'gender'. Therefore, it may be an important factor for others if they were asked directly about it. I did not want to bias the interview subjects, and therefore I did not ask them directly about factors. This may have affected the results. Each pillar, e.g. 'perceived benefits', is coloured grey in the table. A total of 11 new factors were found.

The new factors found have been sorted under the different pillars. Additionally, based on my findings, I have discovered that some factors belong under different pillars, as compared to how they were sorted in the literature review and theoretical framework. These will be elaborated on in the next section.

4.2.1 Implications for the Conceptual Framework and Comparison with the Theoretical Framework

The figure illustrating the co-creative process remains the same as in section 3.4.1, as the co-creative process is the same, but the factors found through the empirical study differ.
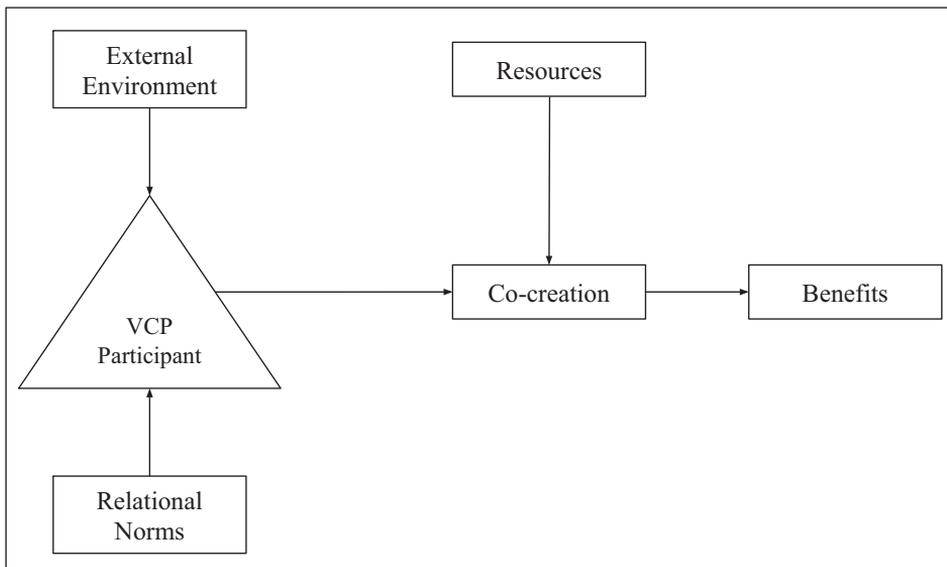

Figure 4.2: Overview of How the Pillars of Co-creation are Connected and How they Affect or are Affected by Co-creation

The two figures on the next page depict 1) the factors found through the literature review, and how they were sorted based on the literature (section 3.4.1) and 2) an updated overview of the factors found through the empirical study and sorting based on the empirical findings.
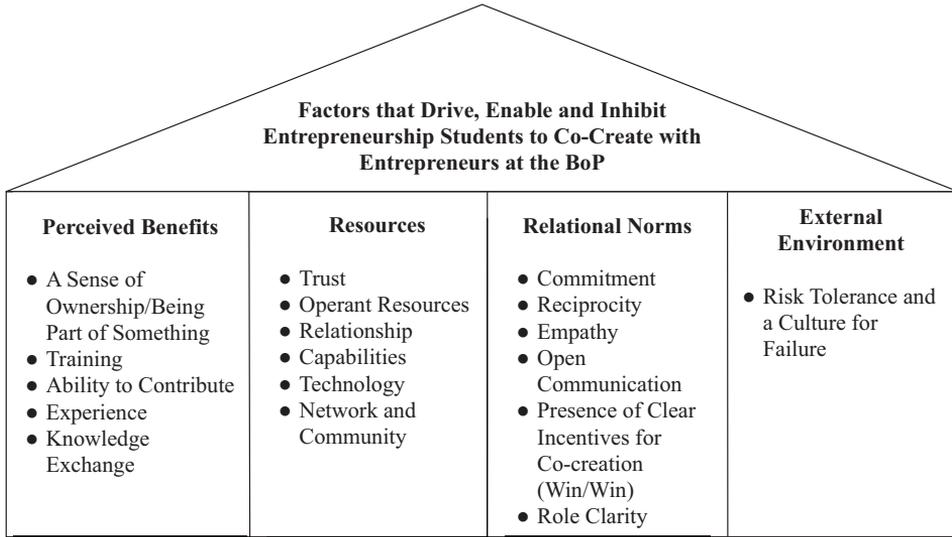
Figure 4.3: Theoretical Framework: Summary of the Pillars of Co-creation and their Respective Factors Based on the Literature (from section 3.4.1)
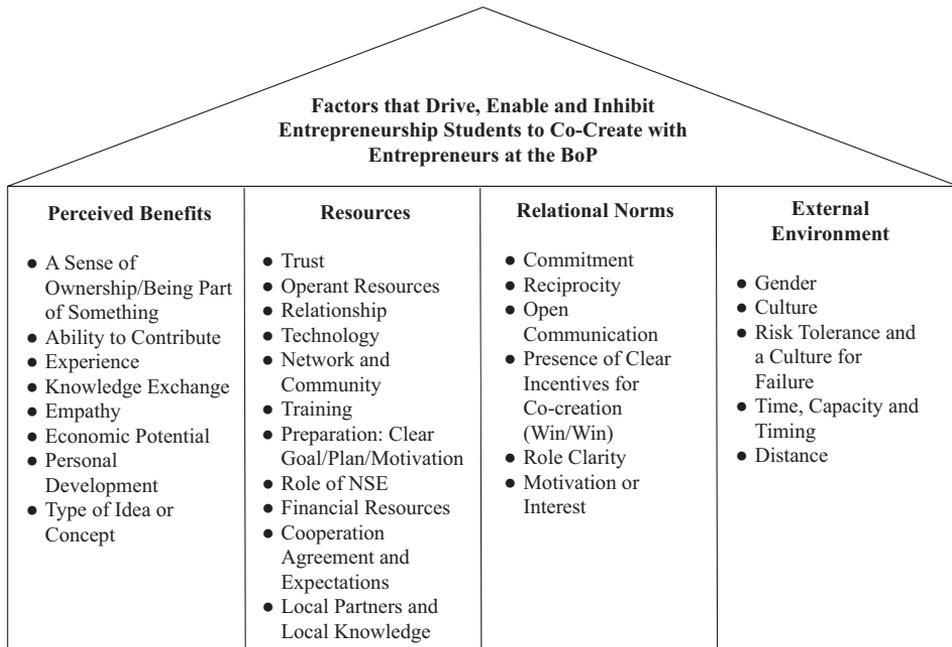
Figure 4.4: Updated Summary of the Pillars of Co-creation and their Respective Factors Based on the Empirical Findings

The changes I have made to the theoretical framework are as following:

- 'Training' has been moved from the pillar 'perceived benefits' to the pillar 'resources'. This is because the interview subjects do not seem to view training as a benefit or result of co-creating, but rather something that is necessary to be in place in order for them to be able co-create.

- 'Capabilities' has been removed because the findings under this factor were the same as for the factor 'operant resources'. Therefore, 'operant resources' represents both factors.

- 'Empathy' has been moved from the pillar 'relational norms' to the pillar 'perceived benefits'. This is because the interview subjects express an empathetic attitude, and believe that co-creating could help them contribute to doing good in the world. It is thus a benefit they express as a result from co-creating.

- In the literature review, 'gender' and 'culture' were only considered to affect the entrepreneurs from the BoP. My empirical study uncovered that these factors also affect the VCP students. They have therefore been included here.

The new factors have been sorted under the following pillars:

- Perceived Benefits: Economic potential, personal development and type of idea or concept have been added.

- Resources: Preparation: clear goal/plan/motivation, role of NSE, financial resources, cooperation agreement and expectations, and local partners and knowledge have been added.

- Relational Norms: Motivation or interest has been added.

- External Environment: Time, capacity and timing, and distance have been added.

Chapter 5

Conclusion, Implications and Further Research

In the following chapter, a final conceptual framework based on the literature and empirical findings will first be presented. Next, a summary of the findings and a discussion of the factors within the conceptual framework will be presented. The conclusion, including the thesis' theoretical contribution and practical implication, will be presented next. Finally, recommendations for further research and limitations will be elaborated on.

5.1 Framework Developed through Empirical Testing

The purpose of this thesis was to find out *How can entrepreneurship students be driven and enabled to co-create with entrepreneurs at the BoP?*

The purpose was broken down into three research questions:

RQ 1: *What factors drive entrepreneurship students to co-create with entrepreneurs at the BoP?*

RQ 2: *What factors enable entrepreneurship students to co-create with entrepreneurs at the BoP?*

RQ 3: *What factors inhibit entrepreneurship students from co-creating with entrepreneurs at the BoP?*

Factor	Driver	Enabler	Inhibitor
Perceived Benefits			
A Sense of Ownership/ Being Part of Something	X		
Ability to Contribute	X		
Experience	X		
Knowledge Exchange	X		
Empathy	X		
Economic Potential	X	X	X
Personal Development	X		
Type of Idea or Concept	X		
Resources			
Trust		X	
Operant Resources	X	X	
Relationship		X	
Technology		X	X
Network and Community	X	X	X
Training		X	
Preparation: Clear Goal/Plan/Motivation	X	X	
Role of NSE	X	X	
Financial Resources		X	
Cooperation Agreement and Expectations		X	
Local Partners and Local Knowledge		X	
Relational Norms			
Commitment		X	
Reciprocity	X	X	
Open Communication		X	
Presence of Clear Incentives for Co-creation (Win/Win)	X		
Role Clarity		X	
Motivation or Interest	X		
External Environment			
Gender			X
Culture			X
Risk Tolerance and a Culture for Failure		X	
Time, Capacity and Timing		X	
Distance			X

Figure 5.1: Conceptual Framework: Factors that Drive and Enable Entrepreneurship Students to Co-create with the BoP and Factors that Inhibit Entrepreneurship Students from Co-creating with the BoP

The answers to the research questions have been outlined in figure 5.1. In this figure, I have outlined whether the factors are drivers, enablers or inhibitors. This figure makes up my new conceptual framework. Even though figure 4.3 made up my theoretical framework, my new conceptual framework is figure 5.1 (and not figure 4.4) because it a) answers the research questions and b) I was able to understand which factors were drivers, enablers and inhibitors through the empirical study, and not through the literature review.

Even though my research was guided by three different research questions, some factors belong to more than one category. In some cases, this is because some interview subjects view the factor as an inhibitor rather than a driver or enabler - which is outlined in figure 4.1. Additionally, for example, the factor 'role of NSE' is both a driver and enabler because NSE needs to make the students aware of the opportunity, which could drive them to co-create, and they need to give the students guidance and support, which could enable them to co-create.

It is important to note that if some of the drivers and enablers are not present, they could become inhibitors for co-creating. For example, if the students do not believe they will be able to contribute to the project, they will be inhibited from co-creating.

5.2 Summary of the Findings and Discussion of the Factors within the Framework

Since I have thoroughly analysed and discussed each factor under the respective factor (chapter 4), I will only discuss and explore the findings in general in this sub-section. These will be discussed with regards to the purpose of this thesis. It is therefore important that you read the analysis and discussions under each respective factor.

How can entrepreneurship students be driven and enabled to co-create with entrepreneurs at the BoP?

In order for the students to start considering co-creating, the drivers are vital. They need to believe they will have a sense of ownership/be a part of something, that they will be able to contribute, that they will gain the necessary experience that will help them through the co-creative process, that they will exchange knowledge, that they will contribute to a good cause, that the project has economic potential, that they will develop personally, and the type of idea or concept has to motivate them. Here, it is crucial that NSE is present, and communicates, first of all, that co-creating with the BoP is a possibility, and second of all, shows them how and what they can achieve.

In order for the students to co-create, and while they co-create with the BoP entrepreneurs, they need to experience trust within the relationship. They need to have operant resources, especially informational resources such as knowledge about competitors and market segments. This is something NSE can provide the students with, or guide them in the direction towards gaining the knowledge they need, such as putting them in contact with people that have experience from the context. Additionally, the students need to develop and work in a mutually dependent, committed and trusting relationship that functions both professionally and as a friendship. The students also need to have access to technology themselves, and for the entrepreneurs to have access to technology, in order to commu-

nicate. They also need a network and community in which to learn from, and they need training, such as skills, experience and theory in order to co-create. Before the students start co-creating, they need to be prepared, both with regards to the context and what they want to achieve. NSE's role, as mentioned, is crucial and the students need their support and guidance before and during co-creating, and they need to follow-up the students after having learned more about the context or met the entrepreneurs. Financial resources could help support the students while co-creating, and a cooperation agreement and discussing expectations are crucial to support the students while co-creating, and in helping them develop the co-creative relationship. NSE staff should therefore make drawing up a cooperation agreement an obligatory exercise to complete. Local partners and knowledge could also be a good resource while co-creating.

In the relationship, the students need both parties to be committed, and the relationship needs to be reciprocal with win/win incentives for both parties. The students need open and frequent communication with the BoP entrepreneurs. However, language could be a barrier to communicating openly. The roles need to be clear, and the students need to have roles in the project, which affects their sense of ownership and ability to contribute. The students also need to be motivated in order to co-create.

The factors that are mostly beyond the students' control are gender, culture and distance. These are clear inhibitors the interview subjects express. These could be addressed by NSE staff again, and through learning more about the Indian culture, learning what considerations and precautions a woman needs to take when travelling to India, communicating with locals, participating in team-building exercises and using technology to communicate for example. Time, capacity and timing could be addressed by NSE staff, by presenting the opportunity earlier on to the students, such as during the feasibility study. The students also need to experience a low degree of risk in order to co-create, which seems quite challenging. However, more frequent and greater support from NSE staff could help lower the students' feelings of risk. NSE could also create a safer environment for failure through supporting the students to a greater degree, and perhaps, through providing the students with a network or community that they can learn from.

An interesting finding is that there seems to be a disparity between the NSE students' perception of what is expected at NSE and what the NSE staff expects. It seems as if NSE staff expresses themselves in an unclear manner as to what is expected of the students. For example, the students feel discouraged to pursue a startup that makes a difference because they a) believe it is not economically viable or perceive it as charitable work and b) believe that NSE staff will only approve them working in an economically viable startup. Thus, the students feel discouraged to pursue a startup in the BoP context. The staff, however, wants the students to pursue these kinds of startups and do not view it as charitable work. It is therefore important that NSE staff is clearer on their expectations, and perhaps explain to the students if their expectations are different if the students pursue a startup in the BoP context, as compared with a startup in the Norwegian context. To address the students' concerns that co-creation with the BoP would be charitable work, NSE staff should show the students what possibilities they have and how they can navigate the impact and income field in union.

The factors under the pillar 'relational norms' are factors that are likely not present, or apparently present to the other participant, during the start of a co-creative relationship. Trust, for example, is a factor that needs to be developed over time (Forsström and Törnroos, 2005). This could feel like a risk to the participants, especially because of the

distance and not meeting up on a regular basis. However, drawing up a cooperation agreement and talking about the relationship could help mitigate this risk. As Bharti et al. (2014) mention, if the factors are missing in the environment an actor wants to enter, e.g. the BoP segment, the other participant, e.g. the VCP students, could work together with the BoP entrepreneurs to develop the missing factors. After all, the creation of value takes place during the interaction and collaboration (Cova et al., 2011). Every relationship is also different, so 'relational norms' therefore need to be developed together, over time throughout the course of the relationship and through interacting.

5.3 Conclusion

First of all, many of the factors seem to be connected and affect each other. For example, distance affects building trust and developing the relationship, and trust and openness are connected. The factors are therefore complementary, and it is important to look at the factors and pillars together as whole, not isolated by themselves.

Furthermore, the interview subjects perceive some factors as very difficult to achieve, such as developing a relationship because of the huge geographical distance, language barriers and culture. Additionally, the students believe the collaboration to be charitable work, and do not understand how co-creating could be financially viable. The current students have also never heard of the opportunity or already established collaboration between NSE and the Honey Bee Network. Therefore, it seems as if NSE's role is the most important factor that affects all the other factors. NSE can help motivate the students to co-create, support them in the process, and help mitigate risk through setting the students up with contacts or giving them frameworks suitable for the context for example. They should also introduce the students to the opportunity early on, giving the students time and capacity to consider co-creating and working on the project. It is also vital that NSE gives the students frameworks, theoretical foundations and explains how this collaboration is a balanced relationship rather than a charitable project. However, it is also important that the students experience a sense of making a difference as this (empathy) is an important driver for them to co-create.

In my project thesis, I recommended researching the gap in the literature regarding co-creation between VCP students and entrepreneurs at the BoP. The theoretical framework I created based on the literature had similar findings to my conceptual framework with regards to the co-creative process. However, my empirical research confirmed the importance of factors I found in the literature review, but also found new, important factors. The empirical research also helped me discover which factors were drivers, enablers and inhibitors specifically, as this was unclear in the literature. Finally, my empirical research helped me sort some of the factors in a different manner, understanding that they belonged under different pillars. My conceptual framework therefore ended up building on my theoretical framework, even though my research process was explorative in nature. As Saunders et al. (2009) argued, no matter which research approach you start out with, your research will likely combine elements of both the deductive and inductive approach in practice. This has also proven to be true in my research.

According to Forsström and Törnroos (2005), if perceived benefits outweigh perceived sacrifices during the duration of the relationship for both parties involved, and if there is interdependence between the parties, there exists potential for value co-creation. It seems

as if co-creation could be desirable and possible for the students as long as the drivers and enablers in the conceptual framework (figure 5.1) are present. The students also describe a desirable relationship for co-creation as interdependent, supporting the literature (Forsström and Törnroos, 2005). It seems as if co-creating with the BoP could be desirable, beneficial or feasible.

Furthermore, the empirical findings underline the importance of co-creation; that co-creating could create value for both business and society (Simba and Ojong, 2017), could contribute to entrepreneurial learning (Lahikainen et al., 2018), could create sustainable business models (Biloslavo et al., 2018), could contribute to knowledge exchange/co-production (Van de Ven and Johnson, 2006), and could improve the well-being of locals (Macintosh et al., 2012; Rahman et al., 2015).

The findings also correlate with the purpose of co-creation outlined in 3.2.3. It is important for the students that there is a balance in the co-creative process and relationship. They therefore want to co-create in order to ensure social and environmental value and to empower low-income communities (sustainability and empowerment seeking purpose), but, at the same time, they want to focus on the business development side to develop business models suited to the BoP context (efficiency seeking purpose). Therefore, the factors in this thesis help fulfill this purpose.

5.3.1 Contribution

My research has both a theoretical contribution and practical implications. These will be elaborated on in the following sub-sections.

Theoretical Contribution

As mentioned in sub-section 1.4.1, co-creation between students at a VCP and entrepreneurs at the BoP is a new research topic. Therefore, my conceptual framework is a novel contribution and provides more theoretical understanding of the topic. Additionally, it provides deeper insight into factors that facilitate co-creation, something Nahi (2016) has called for.

Furthermore, the literature discussed in chapter 3 was based on theory on co-creation between organisations and the BoP (e.g. Bharti et al. (2015)'s conceptual framework outlining different pillars of co-creation). These findings were confirmed in the empirical study. This means that the findings in this master's thesis could prove useful in other academic settings, and for other actors, such as businesses, wanting to co-create with either VCP students or entrepreneurs at the BoP. The factors are therefore not limited to co-creation between the exact participants VCP students and BoP entrepreneurs.

Bharti et al. (2015) recommended case studies to validate the significance of their framework (five pillars of co-creation), which is a similar framework to my theoretical framework, including several of the same factors as Bharti et al. (2015)'s framework. I have validated aspects of their framework in my research, which contributes to a need expressed in the literature.

Furthermore, Voorberg et al. (2015) called for more studies on type 2 or 3 involvement in the co-creative process, as most studies have previously focused on type 1, as discussed in sub-section 3.2.4. This master's thesis also contributes to theoretical understanding of the types of co-creation and degree of involvement. The students express how they want to work in a team with the BoP entrepreneurs, in the true meaning of a team, where everyone is

an active and "equal" member that participates in all team processes and decision-making. This correlates with type 2 (co-designer) and type 3 (co-initiator) involvement.

Practical Implications

As mentioned in 1.4.2, the findings in this thesis contribute directly to the NEED project. This is because it will help the actors involved in the project understand what they should focus on to attract students, and what could help them support the students in the co-creative process with the BoP entrepreneurs.

Through co-creating with the BoP, the students will gain an insight into other markets, and their view of the world and business will be broadened. Thus, the findings in this thesis will contribute to the development of the VCP students and their entrepreneurial skills and understanding. Co-creating will also broaden the students' network and provide them with the opportunity to interact with and learn from experts, entrepreneurs and innovators from vastly different contexts to their own. This thesis could also inspire the development of similar initiatives at other VCPs, which, in turn, can have an impact on the BoP context. The VCP students' engagement in co-creation will have an effect on the BoP entrepreneurs as well, giving them access to more resources and knowledge regarding startup processes, for example.

Not all products can be co-created, and not everyone can participate in co-creation (Bharti et al., 2014). Therefore, it is important to determine who is motivated to take part in co-creation. The findings in this thesis outline different factors and ways to determine who is motivated, and outline how to prepare the students to co-create and how to support the students during the co-creative process. This could lead to a greater chance of success for all parties. This thesis could thus serve as a guide for entrepreneurship educators, entrepreneurship students, entrepreneurship education programmes and VCP students. As mentioned, the findings could also prove useful for businesses wanting to co-create with the BoP.

According to Bharti et al. (2015), practitioners often view co-creation as a complex phenomenon. This thesis could hopefully help enlighten practitioners about co-creation, its benefits, hopefully making co-creation with the BoP more common practice and less daunting. The enablers outlined in this thesis, for example, are what could make co-creation possible, and addresses this concern. The inhibitors could help prepare the practitioners for what challenges they may face, hopefully making the inhibitors more easy to overcome or address. The factors could be used as a tool to assist the participants in creating a strategy for co-creating and thus becoming more productive, successful and minimise risks.

Over time, participants from developed countries will gain a greater insight and build relationships with those in developing countries through co-creation. This will contribute to making the BoP segment a greater part of the global eco-system. Finally, inclusion of the BoP segment could help integrate them in the formal economy in the long term.

Most of the literature reviewed for the literature review in this thesis is focused on India. This is because the majority of the world's BoP population resides in India (Bharti et al., 2014) and because the Honey Bee Network is based in India. However, this thesis also has implications for other developing countries. My research could set a precedence for further co-creation with the BoP segment worldwide. It could inspire VCP students and businesses to co-create, making the co-creative process seem less daunting and complex, as mentioned. The thesis will also have implications for entrepreneurship education in

the long term. Entrepreneurship educators, and educators within business management or international marketing, for example, could learn from the thesis in order to co-create products with the BoP segment or conduct market research in a more reciprocal manner, for example. Businesses wanting to develop products for the BoP market could learn from this thesis. Additionally, businesses wanting to make a difference could exchange knowledge or resources with the BoP context, for example, rather than donating money. This, in turn, will help contribute to socio-economic development and contribute to poverty alleviation without making the BoP segment redundant and inactive participants in the development process (London and Hart, 2011).

5.3.2 Further Research

I would recommend conducting further research on co-creation between VCP students and BoP entrepreneurs, because it seems to have important implications for both parties.

With regards to the VCP students' involvement in the co-creative process, as discussed by Voorberg et al. (2015), it would be important to further investigate if there is a relationship between the different degrees of involvement and the outcomes of social innovations.

In order to determine which factors are crucial, and to explore if there are more factors that are important to the VCP students, I would recommend an iterative process. For example, after having conducted the interviews I would recommend sending out the findings to the interview subjects, and getting them to read them over. Then, I would ask for feedback regarding the factors. Are there other factors they did not mention? Are some not that important? Then, I would recommend the interview subjects to rank the factors, in order to understand which are crucial. For example, which factors *must* be in place in order to drive and enable the participants to participate? Which factors are important, but not crucial for participation? This could help gain a more extensive list of factors, and ensure validity of the findings. I did not have time to do this for my master's thesis, but would recommend further researchers to do this.

Furthermore, I would recommend conducting the same study (as in this thesis and the iterative process as described in the previous paragraph) of the BoP participants, and also understand the type of involvement (Voorberg et al., 2015) they would like both parties to have in the co-creative process. Thereafter, I would compare and contrast the findings between the two participants.

I would also recommend looking at more cases, such as other VCPs, business education programmes and businesses to see if the findings correlate or differ. This could also help ensure the validity of the findings.

Further exploring the participants' degree of involvement in the co-creative process, as mentioned in section 3.2.4, is recommended in order to understand their motivation for participation and in order to determine how the relationship will take place. However, Forsström and Törnroos (2005) argue that the degree of involvement is not either party's choice or decision, rather, it materialises through the interaction between them. Therefore, I would recommend starting the co-creative process and the NEED project immediately. Thereby, an iterative process can take place, where both the students and staff members learn through doing. In this way, the staff can also test out what factors are the most important, how the factors can be fostered, and see what else emerges through the process. As mentioned, it is the co-creative process itself that may bring lasting value to the BoP communities (Nahi, 2016), and value emerges through experience (Grönroos and Ravald,

2011).

Finally, because co-creation is a process, I would recommend conducting multiple, single and longitudinal case studies. Rich and longitudinal empirical research on co-creation that documents interactions and subjective perceptions of gained value from both participants' sides is recommended by Nahi (2016), for example. I have researched the subjective perceptions of gained value from the VCP side. However, I would recommend a multiple case study and longitudinal case studies with regards to this, as mentioned earlier. I would also recommend longitudinal case studies in order to:

- Study the nuances of the co-creative process.

- Study the co-creation process over time. How does it change and develop?

- Study the factors over time in order to learn which factors are more important in the beginning, which factors develop throughout the relationship (how do they develop and how are they nurtured), and which factors are more important later on in the process.

- Gain insight into the participants' subjective perceptions and assessments with regards to value gained from the process - both value they believe they will gain before co-creating, and value actually gained after, as a result of co-creating.

- Study the impact of co-creation and what development and learning it leads to for the participants, society, education, entrepreneurship, economic development, and so forth.

5.3.3 Limitations

During the interviews, I asked open-ended questions. I did not ask the interview subjects about certain factors because I did not want to bias the results. More interview subjects may have mentioned more of the factors if they were asked directly about them. If I had more time, I would have sent the results to the interview subjects and asked them to cross off which factors they viewed as vital and which they viewed as inhibitors in order to get even more detailed results.

Many of the factors encompass similar factors and findings. 'Capabilities' and 'operant resources' were considered two factors in the theoretical framework. However, they were merged to one factor in the conceptual framework based on the empirical study. 'Experience' and 'training' are also similar, but have not been merged because they also have some different findings. They do, however affect each other. Many of the factors affect each other. I originally wanted to create an overview of which factors affect the other, but nearly all are connected and this proved to be very time consuming and could cause confusion. It therefore underlines the importance of looking at co-creation as a whole and sum of more than one part.

There were not significant differences between the students interested in co-creating and those not interested in co-creating. This could have been because none of the interview subjects were in the "extreme" ends of the scale in the questionnaire regarding their interest in co-creating. Also, none of them had heard of the existing collaboration before, which may have affected the results. I also believe that past experience with the context, like the alumni had, was important for the results. This shows clearly under the factor "preparation" for example, where the findings are the subjects' past experience with travelling to India.

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Appendix 1: Overview of the Literature Search

Database	Keyword String	Limitations	Search Results	Abstracts Read	Articles Read	Articles Used	Author and Publication Year of Used Articles	Comments
Web of Science	"action-based entrepreneurship education"		2	2	1	1	Rasmussen and Sørheim (2006)	
Web of Science	co-creat* AND BoP		9	9	2	2	Nahi (2016); Reynoso et al. (2015)	
ABI/Inform	co-creat* AND BoP	English and Scholarly Journals	107	41	2	2	Reynoso et al. (2015); Sánchez and Ricart (2010)	
ABI/Inform	co-creat* AND "action-based entrepreneurship education"		5	5	2	2	Clock and Mazzarol (2015), Nakagawa et. al. (2017)	No results Web of Science
Web of Science	co-creat* AND "academics"		95	41	8	6	Wood (2017); Simba and Ojong (2017); Shams and Kaufmann (2016); Bharti et al. (2015); Dentoni and Bitzer (2015); Biloslavo et al. (2018)	
ABI/Inform	co-creat* AND BoP AND "entrepreneurship education"		4	3	2	2	Clock and Mazzarol (2015); Rahman et al. (2015)	No results Web of Science
ABI/Inform	co-creat* AND "bottom of the pyramid" AND "entrepreneurship education"		7	3	1	1	Hwee Nga and Shamuganathan (2010)	No results Web of Science. Same results when searched for "base of the pyramid".
ABI/Inform	BoP AND "action-based entrepreneurship education"		1	1	1	1	Clock and Mazzarol (2015)	Tried "bottom of the pyramid" and "base of the pyramid" instead of BoP. Same results for all.
Web of Science	"knowledge transfer" AND BoP		3	3	1	1	Ansari et al. (2012)	Same/ less results for "bottom of the pyramid" and same/ not relevant results for "base of the pyramid"
Web of Science	co-creat* AND factor*	Highly cited in field	5	1	1	1	Voorberg et al. (2015)	
ABI/Inform	co-creat* AND factor* AND "bottom of the		233	4	2	1	Bharti et al. (2014)	No results Web of Science
Web of Science	co-creat* AND factor* AND "BoP"		1	1	1	1	Reynoso et al. (2015)	

Figure 2: Structured Search

Appendix 2: Sources Leading to New Sources

Primary Source Found	New Source	Sources Found from the New Source	Sources Found from the New Source	Sources Found from the New Source	Sources Found from the New Source
Simba and Ojong (2017)	Macintosh et al. (2012)				
	Van de Ven and Johnson (2006)				
	Antonacopoulou (2010)				
	Bartunek (2007)				
	Jack et al. (2008)				
Nahi (2016)	Kolk et al. (2010)				
	Prahalad and Hart (2002)				
	Prahalad and Ramaswamy (2000)				
	Prahalad and Ramaswamy (2004)				
	Sánchez and Ricart (2010)				
	B.-N. Sanders and Jan Stappers (2008)				
	Grönroos (2011)				
	Lusch and Vargo (2006)				
	Mahr et al. (2014)				
	Prahalad and Ramaswamy (2004)				
	Cova et al. (2011)				
	Potts et al. (2008)				
	Ramaswamy (2009)				
	Fisher and Smith (2011)				
	Payne et al. (2008)				
	B.-N. Sanders, Jan Stappers (2008)				
	Chakma et al. (2010)				
	Seelos and Mair (2007)				
	Sánchez and Ricart (2010)	Hart and Sharma (2004)			
	Sen (1989)				
	Ansari et al. (2012)				
	Simanis and Hart (2009)				
	Fukuda-Parr (2003)				
Rahman et al. (2015)	London and Hart (2011)				
	London and Anupindi (2011)				
	Karnani (2007) b				
	Karnani (2006)				
	Crabtree (2007)				
	Simanis and Hart (2009)				
	Gupta and Khilji (2013)				
	Baumol and Strom (2007)				
	Munir et al. (2010)				

Figure 3: Sources Leading to New Sources

Primary Source Found	New Source	Sources Found from the New Source	Sources Found from the New Source	Sources Found from the New Source	Sources Found from the New Source
Clock and Mazzarol (2015)	Alvarez and Barney (2014)				
Shams and Kaufmann (2016)	Burns et al. (2014)				
	Hayter (2013)				
	Smith and Lohrke (2008)				
Bharti et al. (2014)	Gummesson and Mele (2010)				
	Reed (2012)				
	Nayar (2009)				
	Goodwin (1988)				
	Lengnick-Hall (1996)				
	Holm et al. (1999)				
	Sareen et al. (2011)				
	Morgan et al. (1997)				
	Grönroos and Ravald (2011)				
	Nambisan and Baron (2007)				
	Harwood and Garry (2010)				
	Vargo and Lusch (2004)				
	Lioutas et al. (2011)				
	Karnani (2007) a				
	Chaney (2001)				
	Füller et al. (2011)				
	Kassahun (2011)				
Bharti et al. (2015)	Gebauer et al. (2010)	Payne et al. (2008)	Prahalad and Ramaswamy (2004)		
		Day et al. (2004)			
	Lubrica et al. (2011)	Forsström and Törnroos (2005)	Anderson and Narus (1998)	Borys and Jemison (1989)	Håkansson and Persson (2004)
	Vargo and Lusch (2008)				
	Scott and Carrington (2011)				
	Vargo (2009)				
	Chandler and Wieland (2010)				
	Romero and Molina (2011)				
	Williams and Aitken (2011)				
	Spohrer and Maglio (2010)				

Figure 4: Sources Leading to New Sources (continued)

Primary Source Found	New Source	Sources Found from the New Source	Sources Found from the New Source	Sources Found from the New Source	Sources Found from the New Source
Hwee Nga and Shamuganathan (2010)	Llewellyn et al. (2003)				
	Caliendo and Kritikos (2008)				
	Ciavarella et al. (2004)				
	Springett and Kearins (2001)				
	Greve and Salaff (2003)				
	Nahapiet and Ghoshal (1998)				
	Warburton (2003)				
Voorberg et al. (2015)	Roberts et al. (2013)				
	Evans et al. (2012)				
	Abers (1998)				
	Lam (1996)				
	Wise et al. (2012)				
	Sundeen (1988)				
Reynoso et al. (2015)	Berry et al. (2006)				
	Kitayama and Cohen (2007)				
	Viswanathan and Rosa (2010)				
Hilmi (2012)	Bhaduri and Kumar (2010)				
Biloslavo et al. (2018)	Beattie and Smith (2013)				
Dentoni and Bitzer (2015)	Van de Ven and Johnson (2006)				

Figure 5: Sources Leading to New Sources (continued)

Appendix 3: Interview Guides

Interview Guide - Staff - Professor and PhD Candidate

Thank you for taking the time to let me interview you. My name is Katrine, and I am researching how entrepreneurship students could be driven and enabled to co-create or collaborate entrepreneurs from the bottom of the pyramid for my master's thesis. In order to do so, I would like to learn more about your and NTNU School of Entrepreneurship's past experiences with these types of innovators. I have prepared semi-structured questions for this interview.

I will be recording the interview. Is that ok? *(Sign consent form)*

INTRODUCTION
- Could you please introduce yourself?
- Where do you come from?
- Which countries have you lived in?
- How old are you?
- Could you please briefly describe your educational background?
- What is your current position at NTNU/NSE?
- How long have you worked at NSE?
- How long have you been interested in entrepreneurship?
- Why did you apply to work at NTNU/NSE?
- What are your areas of expertise?

MIDDLE
Background Information about the Honey Bee Network and the Collaboration between NTNU School of Entrepreneurship and the Honey Bee Network

- Could you tell me about the collaboration with the Honey Bee Network?
  - When did the collaboration with the Honey Bee Network start?
  - How did the collaboration with the Honey Bee Network start?

- How has the collaboration developed and changed through the years?
  - Why?

- Why are you collaborating with the Honey Bee Network?
  - What has the collaboration resulted in or lead to?

- Could you describe the relationship between you and the Honey Bee Network?
  - Your role?
  - What has been important for the relationship to function?

- What has been important for the collaboration to function?

- What challenges have you experienced when you have collaborated?
  - How have these been overcome?

- How could the collaboration be improved?

Figure 6: Interview Guide: Staff - Professor and PhD Candidate

- What are your future plans for the collaboration?

<u>Student Involvement with the Honey Bee Network</u>

- Could you please tell me about the students' from NTNU School of Entrepreneurship's involvement with the Honey Bee Network?
    - Why are you involving the students?
    - What have been the results of the student involvement?
    - How have you gotten the students involved or interested in the past?
    - What have been challenges with the student involvement in the past?
    - What have you done differently over the past years to get the students involved or more involved?
        - What will you do differently next time?

    - Have any students tried or wanted to get involved but you've said no to them or they haven't moved forward?
        - Why?

- Could you tell me about the student's **interest** in the Honey Bee Network or BoP entrepreneurs?

- Have any of the students collaborated with BoP entrepreneurs or the Honey Bee Network in the past?
    - If yes:
        - Why?
    - If no:
        - Why not?

- Are you working towards making the students more involved with the Honey Bee Network?
    - If yes:
        - Why?
        - How?
        - What challenges have you faced so far when you've tried to get them more involved?
        - How are you or do you plan on supporting the students in this process?
        - Is there anything that could make the opportunity more attractive?

- Based on your experience, what factors should be taken into consideration when collaborating with BoP entrepreneurs?

END

<u>Next steps</u>
- Can I e-mail you follow-up questions?

Figure 7: Interview Guide: Staff - Professor and PhD Candidate continued

Interview Guide - Staff - Assistant Professor

Thank you for taking the time to let me interview you. My name is Katrine, and I am researching how entrepreneurship students could be driven and enabled to co-create or collaborate with entrepreneurs from the bottom of the pyramid for my master's thesis. In order to do so, I would like to learn more about your past experiences. I have prepared semi-structured questions for this interview.

I will be recording the interview. Is that ok? *(Sign consent form)*

INTRODUCTION
- Could you please introduce yourself?
- Where do you come from?
- Which countries have you lived in?
- How old are you?
- Could you please briefly describe your educational background?
- What is your current position at NTNU/NSE?
- How long have you worked at NSE?
- How long have you been interested in entrepreneurship?
- Why did you apply to work at NTNU/NSE?
- What are your areas of expertise?

MIDDLE
Kakuma Refugee Camp Experience
- Could you tell me about your work with Kakuma Refugee Camp?
  - Why did you get involved?
  - What was the goal of this work? What did you hope to achieve?
  - How did you get involved?
  - What was your role?
  - What worked well?
    - Why?
  - Who else was involved?
    - What was the collaboration like?
  - Could you describe the entrepreneurs?
    - Would you say they are BoP entrepreneurs? Why?
  - What resources were important for the project?
  - What was the development of the project like?
  - What were the results?
  - What did you learn?

  - Why has the project been put on hold?
    - What could have helped you move forward?
  - Looking back, what could have changed to make the project successful?
  - What challenges did you face?
    - What challenges did you face in regards to the collaboration?

Figure 8: Interview Guide: Staff - Assistant Professor

      ○ Did you try to get the students involved in the project?
- ■ Why/why not?
- ■ How?

- Would you recommend the NSE students to pursue a similar project?
  - Why/why not?
  - How should they go about it?
    - ■ What's your advice for joining a project like this?

- Based on your experience, what factors should be taken into consideration when collaborating with BoP entrepreneurs?

END

Next steps
- Can I e-mail you follow-up questions?

Figure 9: Interview Guide: Staff - Assistant Professor continued

Interview Guide - Students at NSE

Thank you for taking the time to let me interview you. My name is Katrine, and I am researching how entrepreneurship students could be driven and enabled to co-create or collaborate with entrepreneurs from the bottom of the pyramid for my master's thesis. In order to do so, I would like to learn more about your past experiences. I have prepared semi-structured questions for this interview.

I will be recording the interview. Is that ok? *(Sign consent form)*

INTRODUCTION
- Could you please introduce yourself?
- Where do you come from?
- How old are you?
- Could you please briefly describe your educational background?
- How long have you been interested in entrepreneurship?
- Why did you apply to NTNU School of Entrepreneurship?

MIDDLE
NSE + HBN
- Are you interested in working with entrepreneurs that are economically poor, but knowledge rich?
  - Why/why not?
- What would convince you to say yes to working together?
- Have you ever collaborated with these types of entrepreneurs before?
  - If yes:
    - Could you please tell me more about this?
    - Why did you choose to collaborate?
    - Could you please describe your relationship?
    - What convinced you to work together?
    - What was the outcome?
    - What worked well? Why?
    - What was challenging and why?
    - What would you do differently next time?
    - Based on your experience, what factors should be taken into consideration when collaborating with BoP entrepreneurs?
  - If no:
    - Why not?

- Did you know that NSE has worked with BoP entrepreneurs in India for many years, and that a delegation gets sent to India every couple of years to meet them and learn more about each other?
  - If yes:
    - How did you hear about it?
    - What are your thoughts on it?
    - Would you like to be part of it?
      - Why/why not?

Figure 10: Interview Guide: NTNU School of Entrepreneurship Students

- How?
- ■ Have you tried to get yourself involved?
    - How?
    - Why/why not?
- ■ Is there anything that could have made the opportunity more attractive?

- ○ If no:
    - ■ What are your thoughts on it?
    - ■ Would you like to be part of it?
        - Why/why not?
    - ■ Is there anything that could have made the opportunity more attractive?

- Have you been given an opportunity to collaborate with BoP innovators in the past that you said no to?
    - ○ Why?
    - ○ Is there anything that could have made the opportunity more attractive?

- Based on your experience, what factors should be taken into consideration when collaborating with BoP entrepreneurs?

END

Next steps
- Can I e-mail you follow-up questions?

Figure 11: Interview Guide: NTNU School of Entrepreneurship Students continued

Interview Guide - Alumni from NSE

Thank you for taking the time to let me interview you. My name is Katrine, and I am researching how entrepreneurship students could be driven and enabled to co-create or collaborate with entrepreneurs from the bottom of the pyramid for my master's thesis. In order to do so, I would like to learn more about your past experiences. I have prepared semi-structured questions for this interview.

I will be recording the interview. Is that ok? *(Sign consent form)*

INTRODUCTION
- Could you please introduce yourself?
- Where do you come from?
- How old are you?
- Could you please briefly describe your educational background?
- What is your current position?
  - Why?
- How long have you been interested in entrepreneurship?
- Why did you apply to NTNU School of Entrepreneurship?

MIDDLE
The Honey Bee Network/ India Trip
- Could you tell me about your trip to India with NTNU School of Entrepreneurship?
  - Why did you go to India?
  - What did you do there?
  - What was the outcome of the trip?
  - How did you hear about the opportunity?
- Did you meet entrepreneurs from the Honey Bee Network?
  - If yes:
    - After having met the entrepreneurs, did you consider collaborating with them?
      - If yes:
        - Why?
        - What happened next?
          - Moved forward
            - What happened?
          - Didn't move forward
            - Why didn't you move forward?
            - What could have helped you move forward?
            - Is there anything that could have made the opportunity more attractive?

      - If no:
        - Why not?
        - What could have helped you move forward?
        - Is there anything that could have made the opportunity more attractive?

Figure 12: Interview Guide: Alumni from NTNU School of Entrepreneurship

- ○ If no:
  - ■ Explain what the Honey Bee Network is.
    - ● What are your thoughts on it?

<u>BoP experience</u>
- ● Did you ever collaborate with BoP innovators while studying at NSE?
  - ○ If yes:
    - ■ Could you please tell me more about this? Examples?
    - ■ Why did you choose to collaborate?
    - ■ Could you please describe your relationship?
    - ■ What was the outcome?
    - ■ What worked well? Why?
    - ■ What was challenging and why?
    - ■ What would you do differently next time?
  - ○ If no:
    - ■ Why not?
    - ■ What could have helped you collaborate?
    - ■ Is there anything that could have made the opportunity more attractive?
    - ■ What did you view as difficult?

- ● Based on your experience, what factors should be taken into consideration when collaborating with BoP entrepreneurs?

- ● Have you been given an opportunity to collaborate withBoP innovators in the past that you said no to?
  - ○ Why did you say no?
  - ○ Is there anything that could have made the opportunity more attractive?

END
<u>Next steps</u>
- ● Can I e-mail you follow-up questions?

Figure 13: Interview Guide: Alumni from NTNU School of Entrepreneurship continued